

EASTERN KERN AIR POLLUTION CONTROL DISTRICT



**MAJOR SOURCE
PERMIT TO OPERATE**

2700 "M" Street, Suite 302
Bakersfield, CA 93301-2370
Bakersfield: (661) 862-5250
Field Office: (661) 823-9264

Permittee: Edwards Air Force Base (AFB) – 412 Test Wing (412 TW)

Location: 412th Civil Engineer Group
Environmental Management Division, Compliance Branch
120 N. Rosamond Boulevard
Edwards Air Force Base CA 93524

Permit No: 9002-V-2000-1

Issuance Date: Month XX, 2015

Expiration Date: Month XX, 2020

Nature of Business: Edwards Air Force Base

This permit is issued pursuant to, and is conditioned upon, compliance with provisions of the Eastern Kern Air Pollution Control District (District) Rules and Regulations as authorized by the California Health and Safety Code (CH&SC), Section 39002. This permit is subject to accuracy of all information submitted relating to the permit application and to conditions appended hereto. It is valid from date of issuance until date of expiration unless renewed and shall be made readily available for inspection at any reasonable time to any and all persons who may request to see it.

Pursuant to the Clean Air Act Amendments of 1990 (CAAA), all conditions of this permit are federally enforceable by United States Environmental Protection Agency (EPA) and District. Those provisions, which are not required by the CAAA are considered to be District provisions and are not federally enforceable by EPA.

By:

Glen Stephens, P.E.
Air Pollution Control Officer

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0127297	Abrasive Blast System
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External Combustion

Emission Unit	Description of Source
0129099	Chain Driven Char Broiler
0131020	Permit Exempt Subpart DDDDD Package Boilers
0144002	Boiler, Natural Gas, 5.3 MMBtu/hr

Fuel loading/Gasoline Storage/Fuel Dispensing

Emission Unit	Description of Source
0126005	Gasoline Storage & Dispensing System
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Internal Combustion – Diesel

Emission Unit	Description of Source
0129008	Emergency Use Piston Engine with Generator, Diesel, 61 BHP
0129009	Emergency Use Piston Engine with Hangar Deluge Pump #1, Diesel, 400 BHP
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0129095	Emergency Generator Driven By 382 BHP Piston Engine
0129096	Emergency Use Piston Engine with Generator, Diesel, 208 BHP
0129097	Emergency Use Piston Engine with Generator, Diesel, 755 BHP

0129098	Emergency Use Piston Engine with Generator, Diesel, 170 BHP
0129100	Emergency Use Piston Engine with Generator, Diesel
0129101	Emergency Use Piston Engine with Generator, Diesel
0129102	Emergency Use Piston Engine with Generator, Diesel
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0129104	Emergency Use Piston Engine with Generator, Diesel
0129105	Emergency Use Piston Engine with Generator, Diesel
0129107	Emergency Use Engine, Firewater Pump, Diesel, 71 BHP
0129108	IC Generator, Emergency Use, Diesel, 2937 BHP
0129109	Emergency Use Piston Engine with Generator, Diesel, 591 BHP
0129110	Emergency Use Piston Engine with Generator, Diesel, 158 BHP
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0129121	Emergency Use Piston Engine with Generator, Diesel, 385 BHP
0130011	Emergency Use Piston Engine with Generator, Diesel, 170 BHP
0130012	Emergency Use Piston Engine with Firewater Pump, Diesel, 105 BHP
0130013	Emergency Use Piston Engine with Generator, Diesel, 535 BHP
0130014	Emergency Use Piston Engine with Generator, Diesel, 103 BHP
0132006	Emergency Use Piston Engine with Generator #1, Diesel, 1,482 BHP
0132007	Emergency Use Piston Engine with Generator #2, Diesel, 1,482 BHP
0132047	Emergency Use Piston Engine with Firewater Pump #1, Diesel, 420 BHP
0132050	Emergency Use Piston Engine with Firewater Pump #3, Diesel, 420 BHP
0132051	Emergency Use Piston Engine with Firewater Pump #5, Diesel, 420 BHP
0132052	Emergency Use Piston Engine with Firewater Pump #2, Diesel, 420 BHP
0132056	Emergency Use Piston Engine with Firewater Pump #4, Diesel, 420 BHP
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0132105	Emergency Use Piston Engine with Generator, Diesel, 470 BHP
0132108	Emergency Use Piston Engine with Generator, Diesel, 2937 BHP
0129113	Emergency Use Piston Engine with Generator, Diesel, 900 BHP
0129114	Emergency Use Piston Engine with Generator, Diesel, 184 BHP
0129115	Emergency Use Piston Engine with Generator, Diesel, 440 BHP
0129117	Emergency Use Piston Engine with Generator, Diesel, 102 BHP
0135016	Emergency Use Piston Engine with Firewater Pump, Diesel, 55 BHP
0138064	Emergency Use Piston Engine with Generator
0140018	Emergency Use Piston Engine with Generator
0140019	Emergency Use Piston Engine with Generator
0141004	Piston Engine with Emergency Use Generator, Diesel, 56 BHP
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Internal Combustion – Gasoline

Emission Unit	Description of Source
0132092	Piston Engine with Welder, Unleaded, 58 BHP

Internal Combustion – Natural Gas

Emission Unit	Description of Source
0129076	Emergency Use Piston Engine with Generator, Natural Gas, 126 BHP
0129077	Emergency Use Piston Engine with Generator, Natural Gas, 164 BHP
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Jet Engine Testing

Emission Unit	Description of Source
0127016	Jet Engine Test Cell
0127017	Jet Engine Test Cell
0127018	Jet Engine Test Cell
0127019	Jet Engine Test Cell
0137006	Jet Engine Test Cell
0147002	Jet Engine Test Stand
0147006	Jet Engine Test Stand
0137007	Start Cart Powered by Gas Turbine Engine, JP-8, 160 Bhp
0137008	Start Cart Powered by Gas Turbine Engine, JP-8, 160 Bhp
0147048	Start Cart Powered by Gas Turbine Engine, JP-8, 160 Bhp

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Emission Unit	Description of Source
0131017	Trommel Screen
0131019	Municipal Class III Sanitary Landfill

Open Burn/Open Detonation Operation

Emission Unit	Description of Source
0131015	Open Burn/Open Detonation Operation

Paper Shredding

Emission Unit	Description of Source
0132094	Paper Shredder, Electric
0132095	Paper Shredder, Electric

Rocket Motor Testing

Emission Unit	Description of Source
0139022	Rocket Motor Setup and Testing

Surface Coating - Booth

Emission Unit	Description of Source
0127028	Paint Spray Booth
0127187	Hangar Paint Spray Insert (Aircraft Stripping/Spray Booth)
0127188	Paint Spray Booths (two)
0127189	Surface Coating Operation
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Surface Coating – Non-Booth

Emission Unit	Description of Source
0127027	Outside Aircraft Painting Operation
0127289	Electric Oven for Curing Painted Parts
0127299	Outside Aircraft Painting Operation
0132013	Aircraft Paint Spray Operation
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Emission Unit	Description of Source
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0129111	Woodworking Operation
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0141006	Woodworking Operation
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Federal Regulations

40 CFR Part 60

Subpart A	General Provisions
Subpart WWW	Municipal Solid Waste Landfills

40 CFR Part 61

Subpart C	Beryllium
Subpart D	Beryllium Rocket Motor Firing
Subpart M	Asbestos

40 CFR Part 63

Subpart A	General Provisions
Subpart GG	Aerospace Manufacturing and Rework Facilities
Subpart AAAA	Municipal Solid Waste Landfills
Subpart ZZZZ	Stationary Reciprocating Internal Combustion Engines
Subpart DDDDD	Industrial, Commercial, and Institutional Boilers and Process Heaters

Appendices

Appendix A	Greenhouse Gas Facility Wide Reporting
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General Permit Conditions

In accordance with CH&SC, Sections 39002 and 42301.10 through 42301.12 and all applicable District Rules and Regulations, the conditions which are listed below are hereby contained in and made a part of this permit:

	Federally Enforceable Conditions	Reg/Rule
1.	<p><u>Inspections</u></p> <p>Inspections shall be made by the enforcement agency for the purpose of obtaining information necessary to determine whether air pollution sources are in compliance with applicable rules and regulations, including authority to require record keeping and to make inspections and conduct tests of air pollution sources.</p>	Reg. I, Rule 107
2.	<p><u>Stack Monitoring</u></p> <p>Upon the request of and as directed by the Control Officer, the owner shall provide, install, and operate continuous monitoring equipment on such operations as directed. The owner shall maintain, calibrate, and repair the equipment and shall keep the equipment operating at design capabilities.</p>	Reg. I, Rule 108
3.	<p><u>Source Sampling</u></p> <p>Upon the request of the Control Officer and as directed by him the owner of any source operation which emits or may emit air contaminants, for which emission limits have been established, shall provide the necessary and proper facilities for source sampling.</p> <p>The applicable test method, if not specified in the rule, shall be conducted in accordance with Title 40 CFR, Subpart 60, Appendix A - Reference Methods, except particulate matter (PM₁₀) for compliance with Rule 210.1 requirements shall be conducted in accordance with Title 40 CFR, Subpart 51, Appendix M, Method 201 or 201A. Where no test method exists in the preceding references for a source type source sampling shall be conducted in accordance with California Air Resources Board (CARB) approved methods.</p>	Reg. I, Rule 108.1
4.	<p><u>Equipment Breakdown</u></p> <p>An occurrence which constitutes a breakdown condition, and which persists only until the end of the production run or 24-hours, whichever is sooner (except for continuous monitoring equipment, for which the period shall be ninety-six (96) hours), shall constitute a violation of any applicable emission limitation or restriction prescribed by these Rules and Regulations; however, no enforcement action may be taken provided the owner or operator demonstrates to the Control Officer that a breakdown condition exists and the proper requirements are met.</p>	Reg. I, Rule 111

	Federally Enforceable Conditions	Reg/Rule
5.	<p><u>Severability</u></p> <p>If any provision, clause, sentence, paragraph, section or part of these Regulations or application thereof to any person or circumstance shall for any reason be adjudged by a court of competent jurisdiction to be unconstitutional or invalid, such judgment shall not affect or invalidate the remainder of this Regulation and the application of such provision to other persons or circumstances, but shall be confined in its operation to the provision, clause, sentence, paragraph, section or part thereof directly involved in the controversy in which such judgment shall have been rendered and to the person or circumstance involved, and it is hereby declared to be the intent of the Eastern Kern Air Pollution Control Board that these Regulations would have been issued in any case had such invalid provision or provisions not been included.</p>	Reg. I, Rule 114
6.	<p><u>Applicability of Federally Enforceable Conditions</u></p> <p>Federally Enforceable Conditions <u>shall apply</u> to Design Conditions, Operational Conditions, Special Conditions, Compliance Testing Requirements, and Emission Limits. Any District or State-only condition (not required by the EPA) does not apply.</p>	Reg. II, Rule 201.1
7.	<p><u>Compliance with Permit Conditions</u></p> <p>A. Edwards AFB shall comply with all permit conditions;</p> <p>B. Permit does not convey any property rights or any exclusive privilege;</p> <p>C. Non-compliance with any permit condition shall be grounds for permit termination, revocation and reissuance, modification, enforcement action or denial of permit renewal;</p> <p>D. Edwards AFB shall not use “need to halt or reduce a permitted activity in order to maintain compliance” as a defense for non-compliance with any permit condition;</p> <p>E. Pending permit action or notification of anticipated non-compliance does not stay any permit condition; and</p> <p>F. Within a reasonable time period, Edwards AFB shall furnish any information requested by the APCO, in writing, for purpose of determining: 1) compliance with the permit, or 2) whether or not cause exists for a permit or enforcement action.</p>	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
8.	<p><u>Permit Life</u></p> <p>The life of this permit shall be five years from the date of issuance.</p>	Reg. II, Rule 201.1
9.	<p><u>Administrative Permit Amendment and Minor Permit Modification</u></p> <p>Administrative Permit Amendment and Minor Permit Modification are those actions taken by the District as defined in Rule 201.1.</p>	Reg. II, Rule 201.1
10.	<p><u>Emergency Provisions</u></p> <p>A. Edwards AFB shall comply with the requirements of Rule 111 and the emergency provisions contained in all permit streamlining requirements imposed in accordance with Subsection VI.J. all District-only rules which apply in accordance with Subsection VI.K.1. and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules;</p> <p>B. Within two weeks of an emergency event, an owner or operator of the source shall submit to the District a properly signed, contemporaneous log or other relevant evidence which demonstrates that:</p> <ol style="list-style-type: none"> 1) An emergency occurred; 2) The permittee can identify the cause(s) of the emergency; 3) The facility was being properly operated at the time of the emergency; 4) All steps were taken to minimize the emissions resulting from the emergency; and 5) Within two working days of the emergency event, the permittee provided the District with a description of the emergency and any mitigating or corrective actions taken; <p>C. In any enforcement proceeding, the permittee has the burden of proof for establishing that an emergency occurred.</p>	Reg. II, Rule 201.1

	<u>Federally Enforceable Conditions</u>	Reg/Rule
11.	<p><u>Record Keeping</u></p> <p>A. Recording of maintenance of all monitoring and support information associated with all permit streamlining requirements imposed in accordance with Rule 201.1, Subsection VI.J., all District-only rules which apply in accordance with Rule 201.1, Subsection VI.K.1., and all applicable federal requirements not submitted by such permit streamlining requirement(s) or District-only rules, including:</p> <ol style="list-style-type: none"> 1) Date, place, and time of sampling; 2) Operating conditions at time of sampling; 3) Date, place, and method of analysis; and 4) Results of analysis; <p>B. Retention of records of all required monitoring data and support information for a period of at least five years from the date of sample collection, measurement, report, or application; and</p> <p>C. Any other record keeping deemed necessary by the APCO to ensure compliance with all permit streamlining requirements imposed in accordance with Rule 201.1, Subsection VI.J., all District-only rules which apply in accordance with Rule 201.1, Subsection VI.K.1., and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules.</p>	Reg. II, Rule 201.1
12.	<p><u>Referencing of District and Applicable Requirements</u></p> <p>Pursuant to Rule 201.1.VI.C. District hereby references the following documents which are clearly identified and available to the District and to the public:</p> <p>Each reference shall include, at a minimum, title or document number, author and recipient if applicable, date, citation of relevant sections of the Rule or document, and identification of specific source activities or equipment for which the referencing applies.</p>	Reg. II, Rule 201.1

	<u>Federally Enforceable Conditions</u>	Reg/Rule
13.	<p><u>Reporting</u></p> <p>A. Any non-conformance with permit requirements, including any attributable to emergency conditions (as defined in Rule 201.1) shall be promptly reported to the APCO and in accordance with Rule 111;</p> <p>B. Monitoring report shall be submitted at least every six months identifying any non-conformance with permit requirements, including any previously reported to the APCO;</p> <p>C. All reports of non-conformance with permit requirements shall include probable cause of non-conformance and any preventative or corrective action taken;</p> <p>D. Progress report shall be made on a compliance schedule at least semi-annually and including:</p> <ol style="list-style-type: none"> 1) Date when compliance will be achieved, 2) Explanation of why compliance was not, or will not be achieved by the scheduled date, and 3) Log of any preventative or corrective action taken; and <p>E. Each monitoring report shall be accompanied by a written statement from the responsible official certifying the truth, accuracy, and completeness of the report.</p>	Reg. II, Rule 201.1
14.	<p><u>Right of Entry</u></p> <p>Edwards AFB shall allow entry of District, CARB, or U.S. EPA officials for purpose of inspection and sampling, including:</p> <p>A. Inspection of the stationary source, including equipment, work practices, operations, and emission-related activity;</p> <p>B. Inspection and duplication of records required by the permit to operate; and</p> <p>C. Source sampling or other monitoring activities.</p>	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
15.	<p><u>Periodic Monitoring</u></p> <p><u>Non-Point</u></p> <p>Edwards AFB shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all active non-point sources. This testing will be the basis for determining compliance with the visible emission standard in District Rule 401. If no emissions are observed utilizing Method 22, the non-point source shall be deemed to be in compliance with the visible emission standard. If emissions are observed from any non-point source and that source is not operating under breakdown condition as defined in and allowed for in District Rule 111, Edwards AFB shall conduct testing on that non-point source within 24 hours of the Method 22 testing in accordance with EPA Method 9 to verify compliance with the visible emission standard.</p> <p>NOTE: This requirement does not apply to fugitive emissions resulting from activities not covered by a permit to operate unless the source is subject to District Rule 210.1 (NSR) requirements.</p> <p><u>Point</u></p> <p>Edwards AFB shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all active/in use point sources. This testing will be the basis for determining compliance with the visible emission standard in District Rule 401. If no emissions are observed utilizing Method 22, the point source shall be deemed to be in compliance with the visible emission standard. If emissions are observed from any point source and that point source is not operating under breakdown condition as defined in and allowed for in District Rule 111, Edwards AFB shall conduct testing on that point source:</p> <p>A. Within 24 hours of the Method 22 testing in accordance with EPA Method 9 to verify compliance with the visible emission standard. If compliance is not documented:</p> <p>B. Within 30 days of the Method 9 testing in accordance with EPA Method 5 or 5D to verify compliance with the requirements of District Rules 404.1, 405, 406 and/or 210.1.</p>	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
16.	<p><u>Additional Monitoring</u></p> <p>Diesel standby and emergency piston engines do not require opacity monitoring if utilizing California diesel or other low-sulfur, low aromatic fuel. Fuel records shall be kept for verification purposes and an operational log for hours of operation.</p> <p>All control equipment shall be inspected annually for proper operation. Edwards AFB shall maintain all records of control equipment maintenance for a period of five years.</p> <p>Monitoring shall be the responsibility of the source; however, a visible emissions inspection or Method 9 conducted by a District inspector may be counted as meeting the requirement for the source to conduct same if the information and records generated by the inspector meets the requirements of the permit and a copy of the records are maintained by the source for a period of five years.</p> <p>Record keeping provisions associated with all monitoring requirements shall include the following information:</p> <ul style="list-style-type: none"> A. Identification of stack or emission point being monitored; B. Operational conditions at the time of monitoring; C. Records of any monitoring conducted, including records of emission or operational parameter values and the date, place and time of sampling or measurement; and D. Where corrective action is triggered, description of the corrective action and the date, time and results of any corrective action. <p><u>Testing</u></p> <p>The testing of identical units may be limited to testing one unit per group of units after establishing correlation of NO_x emissions and key operating parameters and keeping records of these data for each affected unit.</p> <p>Records shall be maintained for at least five calendar years on site and shall be made readily available to District personnel.</p> <p>Compliance test data and results collected shall be submitted to District within 60 days of collection.</p>	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
16.	<p>Units that exceed annual heat input of 90,000 therms or more during one or more of the three preceding years of operation shall be tested to determine compliance with applicable requirements not less than once every 12 months. An owner/operator of gaseous fuel-fired units demonstrating compliance for two consecutive years can, if desired, demonstrate compliance once every thirty-six months.</p> <p>Test results from an individual unit may be used for other units at the same location provided manufacturer, model number, rated capacity, fuel type, and emission control provisions are identical and key operating parameters such as stack gas oxygen, fuel consumption, etc. are monitored and established to correlate with NO_x emissions from unit tested.</p> <p>Fuel HHV shall be certified by third party fuel supplier or determined by:</p> <p>A. ASTM D 240-87 or D 2382-88 for liquid fuels; and</p> <p>B. ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels.</p> <p>Oxides of nitrogen (ppmv) - EPA Method 7E, or CARB Method 100. Carbon monoxide (ppmv) - EPA Method 10, or CARB Method 100. Stack gas oxygen - EPA Method 3 or 3A, or CARB Method 100.</p> <p>NO_x emission rate (heat input basis) - EPA Method 19, or CARB Method 100 and data from fuel flow meter.</p> <p>Period monitoring may also be performed based on CARB's June 24, 1999 Periodic Monitoring Guidelines.</p>	
17.	<p><u>Monitoring, Testing, Record Keeping Requirements</u> (GDF Phase I) Applies to EU 0126005, 0126006, 0126025, 0126030, 0126031, 0132004, 0132005, 0126032B, 0139019, and 0144010.</p> <p>All data necessary to demonstrate qualifications for the exemptions allowed in District Rule 412 shall be maintained on the premise at all times and shall be submitted for District review upon request. Such records shall include exemption status and volume delivered to each stationary storage container serviced.</p> <p>A. Compliance with the vapor recovery requirements of District Rule 412 shall be demonstrated using California Air Resources Board (CARB) Method 202;</p> <p>B. True vapor pressure shall be determined using Reid vapor pressure ASTM Method No. D-323-82 at storage temperature; and</p> <p>C. The test method to determine vapor tightness of delivery vessels shall be EPA Method 27.</p>	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
18.	<p><u>Monitoring, Testing, Record Keeping Requirements</u> (GDF Phase II) Applies to EU 0126005, 0126006, 0126025, 0126030, 0132004, 0132005, 0126032B.</p> <p>Each gasoline dispensing facility exempt pursuant to District Rule 412.1, Section III shall maintain gasoline throughput records allowing gasoline throughput for any 30-day period to be continuously determined. These records shall be available upon request to the Air Pollution Control Officer and maintained on the premises for five years.</p> <p>Verification that each CARB-certified Phase II Vapor Recovery System meets or exceeds the requirements of tests specified in District Rule 412.1, Subsection V.C. shall be maintained. These test results shall be dated and shall contain the names, addresses, and telephone numbers of person(s) responsible for system installation and testing.</p> <p>Facility shall be pressure tested to determine proper installation and function before startup, and thereafter as directed by the Control Officer if not consistently operated leak-free or a major modification is implemented.</p> <p>Tests shall be conducted in accordance with test procedures found in CARB's "Test Procedures for Determination of the Efficiency of Gasoline Vapor Recovery Systems at Service Stations".</p>	<p>Reg. II, Rule 201.1</p> <p>Reg. IV, Rule 412</p>
19.	<p><u>Conditional Approval</u></p> <p>The Control Officer shall issue an Authority to Construct or a Permit to Operate, subject to conditions to insure compliance of the operation of any article, machine, equipment or other contrivance within the standards of Rule 208 and 208.1, in which case the conditions shall be specified in writing. Commencing work under such Authority to Construct or operation under such Permit to Operate shall be deemed acceptance of all conditions so specified. The Control Officer shall issue an Authority to Construct or Permit to Operate with revised conditions upon receipt of a new application, if the applicant demonstrates the article, machine, equipment or other contrivance can be operated within the standards of Rule 208 and 208.1 under the revised conditions.</p>	<p>Reg. II, Rule 209</p>

	<u>Federally Enforceable Conditions</u>	Reg/Rule
20.	<p><u>Standards for Authority to Construct</u></p> <p>A. Edwards AFB may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:</p> <ol style="list-style-type: none"> 1) The Permittee has obtained all permits and approvals required by District Rules 201 and 210.1 (unless the change is exempt under District Rule 202); 2) The change is not subject to any requirements under Title IV of the Clean Air Act; 3) The change is not a Title I modification; and 4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of this permit. <p>B. For a change that qualified under this section, the Permittee shall provide contemporaneous written notice to the District and the U.S. EPA (except for a change that is exempt under District Rule 202). This written notice shall describe the change, including the date it was made, and shall contain other information as required to determine new applicable requirements of the Clean Air Act that apply as a result of the change;</p> <p>C. Upon satisfying the requirements of paragraph B above, the Permittee may make the proposed change;</p> <p>D. Changes that qualify under this section are not subject to the requirements for Part 70 revisions;</p> <p>E. The Permittee shall include each off-permit change made under this section in the application for renewal of this Part 70 permit; and</p> <p>F. The permit shield(s) provided in this permit do not apply to off-permit changes made under this section.</p>	Reg. II, Rule 210.1 Section IV. D.3
21.	<p><u>Prevention of Significant Deterioration (PSD)</u></p> <p>Edwards AFB may be subject to District Rule 210.4, Prevention of Significant Deterioration (PSD) if it undergoes major modification(s).</p>	Reg. II, Rule 210.4

	Federally Enforceable Conditions	Reg/Rule
22.	<p><u>Permit Fees</u></p> <p>Every applicant for an Authority to Construct or a Permit to Operate shall pay a filing fee. For issuance of an Authority to Construct, or an initial Permit to Operate, the applicant shall pay fees as prescribed in Rule 301. For issuance of an Authority to Construct, application processing fees shall also be paid as prescribed in Rule 303. The applicant shall receive credit for filing fees paid.</p> <p>Annually on the anniversary of issuance of a Permit to Operate, the permittee shall pay a renewal fee as prescribed in Rule 301. Fees collected pursuant to Rule 201.1, Section VIII.B. shall supplement applicable Rules 301 and 301.3 fee requirements.</p> <p><u>Payment of Supplemental Fee</u></p> <p>An owner or operator, or his designee, shall pay an annual supplemental fee for a permit to operate pursuant to Rule 201.1 as determined by the calculation method in Subsection VIII.B.3., to provide a District-wide fee rate of \$25 per ton of fee-based emissions (CPI-adjusted) for all facilities subject to Rule 201.1, unless Rule 201.1 VIII.B.2. applies.</p>	<p>Reg. III, Rule 301</p> <p>Rule 201.1 Section VIII. B.</p>
23.	<p><u>Greenhouse Gas Fee</u></p> <p>Any stationary source that has actual GHG emissions, in the prior calendar year, greater than or equal to 100,000 tons of CO₂e, as calculated in accordance with 40 CFR Part 98, shall pay a Consumer Price Index (CPI) adjusted GHG fee per ton of CO₂e being emitted. Sources subject to this Rule shall submit an annual report of GHG emissions to the District no later than the thirty-first day of March.</p>	Reg. III, Rule 301.4
24.	<p><u>Visible Emissions</u></p> <p>Unless otherwise stated in equipment specific permits, the following limits apply:</p> <p><u>Limits</u></p> <p>A person shall not discharge into the atmosphere, from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:</p> <p>A. As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or</p> <p>B. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Subsection A.</p>	Reg. IV, Rule 401

	Federally Enforceable Conditions	Reg/Rule
25.	<p><u>Particulate Matter Concentration - Desert Basin</u></p> <p>A. A person shall not discharge into the atmosphere from any single source operation, in service on the date this Rule is adopted, particulate matter in excess of 0.2 grains per cubic foot of gas at standard conditions.</p> <p>B. A person shall not discharge into the atmosphere from any single source operation, the construction or modification of which commenced after the adoption of this Rule, particulate matter in excess of 0.1 grains per cubic foot of gas at standard conditions.</p>	Reg. IV, Rule 404.1
26.	<p><u>Particulate Matter - Emission Rate</u></p> <p>A person shall not discharge into the atmosphere from any source operation, particulate matter in excess of the limits set forth in the allowable particle emissions based on process weight rate table included in Rule 405.</p>	Reg. IV, Rule 405
27.	<p><u>Sulfur Compounds</u></p> <p>A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 percent by volume calculated as sulfur dioxide (SO₂).</p>	Reg. IV, Rule 407
28.	<p><u>Fuel Burning Equipment - Combustion Contaminants</u></p> <p>A. Fuel burning equipment, the construction or modification of which is commenced after August 17, 1971, shall not discharge into the atmosphere particulate matter, sulfur dioxide or nitrogen oxides in excess of the Environmental Protection Agency Standard of Performance.</p> <p>B. A person shall not discharge into the atmosphere combustion contaminants exceeding in concentration at the point of discharge: 0.1 grain per cubic foot of gas calculated to 12 percent of carbon dioxide (CO₂) at standard conditions.</p>	Reg. IV, Rule 409
29.	<p><u>Organic Solvents</u></p> <p>A person shall not discharge into the atmosphere more organic materials in any one day from any article, machine, equipment or other contrivance in which any organic solvent or any material containing organic solvent is utilized unless the emissions are controlled or reduced as outlined in the organic solvent rule (410).</p>	Reg. IV, Rule 410

	Federally Enforceable Conditions	Reg/Rule
30.	<p><u>Disposal and Evaporation of Solvents</u></p> <p>A person shall not during any one day disposed of a total of more than 1½ gallons of any photochemically reactive solvent as defined in Rule 410.2, or of any material containing more than 1½ gallons of any such photochemically reactive solvent into the atmosphere.</p>	Reg. IV, Rule 410.2
31.	<p><u>Organic Solvent Degreasing Operation</u></p> <p>A person shall not operate any organic solvent degreasing operation unless the equipment utilized complies with all applicable requirements of Rule 410.3.</p>	Reg. IV, Rule 410.3
32.	<p><u>Metal, Plastic, and Pleasure Craft Parts and Products Coating Operations</u></p> <p>Edwards AFB may be subject to provisions of Rule 410.4 that apply to surface coating of metal parts or products, large appliances parts or products, metal furniture, and plastic parts or products including automotive, transportation, and business machine, and pleasure crafts, and to the cleaning, storage, and disposal of all organic solvents and waste solvent materials associated with such coating operations.</p>	Reg. IV, Rule 410.4
33.	<p><u>Motor Vehicle and Mobile Equipment Refinishing Operations</u></p> <p>Edwards AFB may be subject to provisions of Rule 410.4A that apply to the use or application of any automotive coating or associated solvent within the District.</p>	Reg. IV, Rule 410.4A
34.	<p><u>Aerospace Assembly and Coating Operations</u></p> <p>Edwards AFB shall comply with all applicable requirements of Rule 410.8.</p>	Reg. IV, Rule 410.8
35.	<p><u>Wood Products Surface Coating Operations</u></p> <p>Edwards AFB may be subject to provisions of Rule 410.9 that apply to surface coating of wood products.</p>	Reg. IV, Rule 410.9
36.	<p><u>Storage of Organic Liquids</u></p> <p>A person shall not use equipment to store organic liquids and petroleum distillates with a true vapor pressure greater than 1.5 psia unless provisions are made for controlling organic vapors.</p>	Reg. IV, Rule 411

	Federally Enforceable Conditions	Reg/Rule
37.	<p><u>Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants</u></p> <p>A person shall not transfer gasoline into storage or delivery vessels unless provisions are made to recover 95% of the displaced vapors.</p>	Reg. IV, Rule 412
38.	<p><u>Transfer of Gasoline into Vehicle Fuel Tanks</u></p> <p>No person shall transfer gasoline into vehicle fuel tanks unless CARB-Certified Phase II dispensing equipment is utilized and maintained in correct working order.</p>	Reg. IV, Rule 412.1
39.	<p><u>Open Burning</u></p> <p><u>Applicability</u></p> <p>This Rule shall apply to all burning activities not confined to an incinerator which meets requirements of Rule 418 (Incinerators), but shall not apply to combustion of fuels in a device designed to produce useful energy and which meets all applicable parts of Regulation IV.</p> <p><u>Prohibition</u></p> <p>No person shall burn any refuse or other material in an open outdoor fire within the boundaries of the District, unless any of the exceptions in Rule 416 apply. Burning of Federal facility materials must comply with applicable requirements of Section V of Rule 416.</p>	Reg. IV, Rule 416
40.	<p><u>Nuisance</u></p> <p>A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.</p>	Reg. IV, Rule 419

	Federally Enforceable Conditions	Reg/Rule
41.	<p><u>Federal New Source Performance Standards (NSPS)</u></p> <p>Provisions of Part 60, Chapter 1, Title 40, Code of Federal Regulations, in effect September 5, 1996, are hereby adopted by reference and made a part hereof. All new and modified sources shall comply with applicable standards, criteria and requirements set forth therein.</p> <p>All applicable requirements of 40 CFR Part 60, Subparts A (General Requirements) and WWW (Municipal Solid Waste Landfills) apply to this facility.</p>	Reg. IV, Rule 422
42.	<p><u>National Emission Standards for Hazardous Air Pollutants and Source Categories (NESHAPS)</u></p> <p>Provisions of Title 40, Chapter 1, Parts 61 and 63, Code of Federal Regulations, in effect November 7, 2002, are hereby adopted by reference and made a part hereof. All sources of hazardous air pollution shall comply with applicable standards, criteria and requirements set forth herein.</p> <p>All applicable requirements of 40 CFR Part 61, Subparts M (Asbestos), C (Beryllium), and D (Beryllium Rocket Motor Firing); and 40 CFR Part 63, Subparts A (General Provisions), GG (Aerospace Manufacturing and Rework Facilities), AAAA (Municipal Solid Waste Landfills), ZZZZ (RICE), and DDDDD (Industrial, Commercial, and Institutional Boilers and Process Heaters) apply to this facility.</p> <p>The RICE NESHAP does not apply to portable or transportable (has wheels, skids, carrying handles, dolly, trailer, or platform), which do not remain in one location within the facility for more than 12 months.</p>	Reg. IV, Rule 423
43.	<p><u>Boilers, Steam Generators, and Process Heaters (Oxides of Nitrogen)</u></p> <p>An owner/operator of any emission unit with annual heat input of 90,000 therms or more during one or more of the three preceding years of operation shall comply with applicable NOx emission limit(s) listed in Section V, Requirements of Rule 425.2.</p>	Reg. IV, Rule 425.2
44.	<p><u>Propellant Combustion and Rocket Testing</u></p> <p>Edwards AFB shall comply with all applicable requirements of Rule 431.</p>	Reg. IV, Rule 431
45.	<p><u>Polyester Resin Operations</u></p> <p>Edwards AFB shall comply with all applicable requirements of Rule 432.</p>	Reg. IV, Rule 432

	Federally Enforceable Conditions	Reg/Rule
46.	<p><u>Beryllium and Beryllium Rocket Motor Firing</u></p> <p>Edwards AFB shall not engage in any activities subject to requirements of 40 CFR 61, Subparts C and D (Beryllium and Beryllium Rocket Motor Firing) without first applying for and receiving approval as specified in District Rule 201.1.</p>	40 CFR 61 Subparts C and D
47.	<p><u>National Emission Standard for Asbestos</u></p> <p>Edwards AFB shall comply with the applicable requirements of Sections 61.145 through 61.147 of the National Emission Standard for Asbestos for all demolition and renovation projects.</p>	40 CFR 61 Subpart M
48.	<p><u>Risk Management Plan</u></p> <p>Should this stationary source, as defined in 40 CFR section 68.3, become subject to the accidental release prevention regulations in part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in section 68.10 and shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 CFR part 70 or 71.</p>	40 CFR 68
49.	<p><u>Compliance Certification</u></p> <p>The owner/operator shall comply with the following procedures for compliance certification:</p> <ul style="list-style-type: none"> A. Submittal of a compliance certification by the owner or operator to the U.S. EPA and copy to the APCO within 60 days after end of compliance certification period; B. Compliance certification period shall begin 1 March of each year and end the last day of February of the following year; C. The Annual Compliance Certification also satisfies the second semi-annual Monitoring Report requirement; D. Such compliance certification shall identify the basis for each permit term or condition, e.g., specify the emissions limitation, standard or work practice, and a means of monitoring compliance with the term or condition; E. Such compliance certification shall include compliance status and method(s) used to determine compliance for the current time period and over entire reporting period; and 	40 CFR 70.5d

	<u>Federally Enforceable Conditions</u>	Reg/Rule
	<p>F. Such compliance certification shall include any additional inspection, monitoring or entry requirement promulgated pursuant to Sections 114(a) and 504(b) of the CAA.</p> <p>Any application form, report, or compliance certification submitted pursuant to these regulations shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.</p> <p>U.S. EPA's Mailing Address: Director, Air Division 75 Hawthorne Street AIR-3 San Francisco, CA 94105</p>	40 CFR 70.5d
50.	<p><u>Protection of Stratospheric Ozone</u></p> <p>Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156.</p> <p>Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR §82.158. Persons performing maintenance, service, repair or disposal of appliances must be certified by a certified technician pursuant to 40 CFR §82.161.</p>	40 CFR 82

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List of Insignificant Air Pollutant Emitting Equipment

Abrasive Blasting:

- Cabinets (Water-suspended Abrasive),
- Cabinets $\leq 50 \text{ ft}^3$ (Manually-Operated with Dust Filter),
- Enclosed Equipment at Subzero Temperatures,
- Shot Peening (No Surface Removal), and
- Portable Sand/Water Blaster

Air Conditioning Equipment Used for Comfort

Architectural Surface Coatings

Atomic Absorption

Autoclave

Boilers, Steam Generators & Heaters $< 5 \text{ MM Btu/hr}$

Brazing, Soldering, Welding Equipment

Bunsen Burners

Compression Molding (No Plasticizer)

Cooling Towers

Solvent Cleaning Operations (Small, Unheated and UnconveyORIZED)

Electric Baking Oven

Electric Fired Kiln

Emissions Unit Emitting $< 2 \text{ lbs}$ in any 24 hr Period

Emissions Unit Emitting:

- $< 10 \text{ lbs}$ of NO_x or VOC in any 24 hr Period, and
- $< 180 \text{ lbs-NO}_x$ or VOC in any quarter

Emissions Unit (Not Replacement Unit)

- Operated < 45 days and
- Emitting $< 2 \text{ tons/yr}$

Extrusion (No Blowing Agent or Plasticizer)

Food Processing Equipment

IC Engines $< 50 \text{ bhp}$

Inductively Coupled Plasma

Laboratory Hood

List of Insignificant Air Pollutant Emitting Equipment

Loading Racks and Equipment

Motor Vehicles as Defined in the CH&SC

Plastic/Rubber Processing Equipment

Portable Engines - California Registered

Printing and Reproduction Equipment

Small Turbine Engine Test Stand

Space Heating Equipment

Space Heaters, Natural Gas or LPG

Spectro Photometer

Steam Cleaners, Natural Gas

Storage Vessels for Certain Materials

Turbine Engines < 3 MM Btu/hr

Unvented Pressure Vessels Associated with Exempt Source Operation

Vehicles

Wastewater Separator

Wet Scrubber

Sanding and Abrasive Operations

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Emission Unit 0127032 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127032	Enclosed Sanding Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Enclosed Sanding Operation, including following equipment:

- A. One environmental control sanding booth, 174 in. wide x 90 in. deep x 87 in. high;
- B. Four 5 hp 3,600 rpm three-phase electric blower motors;
- C. Twenty-four 12 3/4 in. dia. x 26 in. high cartridge filter assemblies; and
- D. Four 2.6 cu. ft. removable dust storage drawers.

OPERATIONAL CONDITIONS:

1. Compressed air used for filter cleaning shall not exceed 100 psig. (Rule 209)
2. Sanding dust collection system shall maintain ventilation rate of at least 100 fpm across face of booth during operation of sanding equipment. (Rule 209)
3. Waste/dust drums shall be covered with dust-tight shipping covers when transported to waste disposal facility. (Rule 209)
4. Booth shall exhaust only through sanding booth ventilation and particulate control system. (Rule 210.1)
5. Dust collected by ventilation system filters shall be transferred to dust storage containers in manner preventing emissions to atmosphere. (Rule 209)
6. Disposal of collected dust shall take place in manner to avoid re-entrainment of dust particulates to atmosphere. (Rule 210.1)
7. Equipment shall not operate more than 12 hours in any day without prior District approval. (Rule 210.1)
8. Filters and ventilation equipment shall be cleaned and replaced as necessary to achieve optimum performance. (Rule 210.1)
9. Ventilation system shall be operated when sanding equipment is in operation. (Rule 210.1)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.10 lb/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Emission Unit 0127032 Permit Conditions

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209, 210.1, and 201.1)

SPECIAL CONDITION:

Edwards Air Force Base shall keep accurate daily records of operation and make such records readily available to District upon request. (Rule 107)

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Emission Unit 0127033 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127033	Abrasive Blasting Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Abrasive Blasting Operation, including following equipment:

- A. 15' wide by 20' long by 12' high blast room with a full floor recovery system and control panel;
- B. RAM 11 blast generator with:
 - 1. 24 ft³ storage hopper;
 - 2. Cyclone separator;
 - 3. One 7.5 hp, 900 cfm booster blower; and
 - 4. Blast media hoses.
- C. Used blast media loading hopper; and
- D. 12,000 cfm dust collector with:
 - 1. 5,400 ft² of cartridge cellulose filters;
 - 2. Automatic reverse pulse cleaning mechanism;
 - 3. 20 hp ventilation blower; and
 - 4. Dust drum.

OPERATIONAL CONDITIONS:

- 1. Filtration efficiency shall be at least 95% for particulate matter with an aerodynamic diameter of greater than 2.0 microns. (Rule 210.1)
- 2. All emissions from blasting operation shall vent only to dust collector. (Rule 210.1)
- 3. Dust collector shall be equipped with continuously monitored operational differential pressure indicator. (Rule 209)
- 4. Abrasive blast booth door shall remain closed and dust-tight during blasting operation. (Rule 209)
- 5. Fabric collector shall be operated whenever blasting equipment is operated. (Rule 210.1)
- 6. The owner/operator shall not depaint more than 6 completed aerospace vehicles in a calendar year on a facility-wide basis. (Rule 201.1)
- 7. Use of blasting material other than plastic is prohibited without prior approval of Control Officer. (Rule 210.1)
- 8. Fabric collector shall be operated and maintained in accordance with manufacturer's recommendations. (Rule 209)
- 9. Collection material shall be stored only in covered drums with dust-tight shipping covers. (Rule 209)
- 10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419)

COMPLIANCE TESTING REQUIREMENTS:

Compliance with particulate emission limit shall be demonstrated by District-witnessed sample collection by independent testing laboratory if abrasive blasting booth exhibits visible emissions greater than 5% opacity, with official test results and field data submitted within 30 days thereafter. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

- 0.01 grains/dscf (of PM) (BACT)
- 1.03 lbm/hr (of PM₁₀)
- 24.70 lbm/day (of PM₁₀)
- 4.51 ton/yr (of PM₁₀)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209, 210.1, and 201.1)

SPECIAL CONDITIONS:

- aa. Edwards Air Force Base shall dispose of material collected in fabric collector in manner preventing re-entrainment to atmosphere. (Rule 210.1)
- bb. Edwards Air Force Base shall keep daily records of hours of operation, as well as types and amounts of abrasive material used in blasting booth. (Rule 107)

Emission Unit 0127185 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127185	Plastic Media Blast Cabinet

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Plastic Media Blast Cabinet, including following equipment:

- A. One cabinet style bead blaster, overall dimensions 75 in. high x 60 in. wide x 60 in. deep;
- B. Dust collector, 2 cartridge type paper filter bags with total 450 sq. ft.;
- C. One 2 hp, 3-phase blower motor delivering air flow rate of 840 cfm to dust collector and cyclone reclaimer;
- D. Storage hopper with 1 cu. ft. capacity (50 lb of media); and
- E. One blasting nozzle with 1/4 in. tungsten carbide, venturi nozzle.

OPERATIONAL CONDITIONS:

1. Abrasive blast booth door shall remain closed and shut-tight during blasting operation. (Rule 209)
2. Fabric collector shall be operated whenever blasting equipment is operated. (Rule 210.1)
3. Only plastic blasting material shall be used unless prior approval is granted by Control Officer. (Rule 210.1)
4. Fabric collector shall be operated and maintained in accordance with manufacturer's recommendations. (Rule 209)
5. Collection material shall be stored only in covered drums with disposal method that prevents re-entrainment of collected material into atmosphere. (Rule 209)
6. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.02 lb/hr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209, 210.1, and 201.1)

Emission Unit 0127297 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127297	Enclosed Sanding Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Abrasive Blast System, including following equipment:

- A. One 5' by 4' by 3' abrasive blasting cabinet;
- B. One cyclone separator for media and fines;
- C. Media storage hopper;
- D. Pressure vessel;
- E. One 1200 cfm dust collector equipped with three manually activated reverse pulse air jet cleaned filter canisters with total filter area of 732 ft²; and
- F. One 7.5 hp radial blade centrifugal motor.

OPERATIONAL CONDITIONS:

1. Filters shall be cleaned once per hour. (Rule 209 and manufacturer's recommendations)
2. There shall be no visible emissions. (Rule 210.1 BACT)
3. Exhaust gas particulate matter concentration shall be no more than 0.02 gr/scf. (Rule 210.1 BACT)
4. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 209)
5. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

- 0.02 grains/dscf (of PM)
- 0.24 lb/hr (of PM₁₀)
- 1.06 ton/yr (of PM₁₀)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Emission Unit 0127297 Permit Conditions

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209 and 210.1)

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Emission Unit 0127300 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127300	Abrasive Blasting Cabinet

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Abrasive Blasting Cabinet, including following equipment:

- A. One 5' by 4' by 3' abrasive blasting cabinet;
- B. One 1,200 cfm two-stage cyclone separator for media and fines;
- C. Media storage hopper;
- D. Pressure vessel;
- E. One 1200 cfm dust collector equipped with pulse cleaned filter canisters; and
- F. One 7.5 hp blower.

OPERATIONAL CONDITIONS:

1. Filters shall be cleaned per manufacturer's recommendations. (Rule 210.1)
2. There shall be no visible emissions. (Rule 210.1 BACT)
3. Exhaust gas particulate matter concentration shall be no more than 0.01 gr/scf. (Rule 210.1 BACT)
4. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 209)
5. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

If source testing is required to verify compliance with emission limits, then testing shall be performed pursuant to Rule 108.1 and District Guideline for Compliance Testing. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

- 0.24 lbm/hr (of PM₁₀)
- 5.78 lbm/day (of PM₁₀)
- 1.0 ton/yr (of PM₁₀)

Emission Unit 0127300 Permit Conditions

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 209 and 210.1)

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Emission Unit 0127301 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127301	Abrasive Blasting Cabinet

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Abrasive Blasting Cabinet, including following equipment:

- A. One 5' by 4' by 3' abrasive blasting cabinet;
- B. One 1,200 cfm two-stage cyclone separator for media and fines;
- C. Media storage hopper;
- D. Pressure vessel;
- E. One 1200 cfm dust collector equipped with pulse cleaned filter canisters with total filter area of 732 ft²; and
- F. One 7.5 hp blower.

OPERATIONAL CONDITIONS:

1. Filters shall be cleaned per manufacturer's recommendations. (Rule 210.1)
2. There shall be no visible emissions. (Rule 210.1 BACT)
3. Exhaust gas particulate matter concentration shall be no more than 0.01 gr/scf. (Rule 210.1 BACT)
4. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 209)
5. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Emission Unit 0127301 Permit Conditions

Particulate Matter:

0.01 gr/scf (BACT)
0.09 lbm/hr (of PM₁₀)
1.62 lbm/day (of PM₁₀)
0.21 ton/yr (of PM₁₀)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

External Combustion

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Emission Unit 0129099 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129099	Chain Driven Char Broiler

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Chain Driven Char Broiler, including following equipment:

0.111, MMBtu/hr natural gas fueled chain driven char-broiler with catalytic oxidizer.

OPERATIONAL CONDITIONS:

1. Charbroiler shall be fueled exclusively with PUC quality natural gas. (Rule 210.1 BACT)
2. Charbroiler exhaust shall be equipped with catalytic oxidizer. (Rule 210.1 BACT Requirement)
3. Visible emissions from charbroiler exhaust stack shall not exceed 10% opacity or Ringelmann ½. (Rule 210.1 BACT Requirement)
4. Charbroiler shall not operate without installed, operational catalytic oxidizer. (Rule 210.1)
5. Amount of meat cooked in this chain-driven char-broiler shall not exceed 280,000-lb/year without prior District approval.
6. Operator shall maintain monthly records of amount of meat purchased (in pounds). All records shall be retained on premises for a period of at least five years, and shall be made available for District inspection upon request. (Rule 210.1)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed following limits:

<u>Particulate Matter (PM₁₀):</u>	0.76	lb/day
	0.18	ton/yr
<u>Sulfur Oxides (SO_x as SO₂):</u>	0.001	lb/day
	0.001	ton/yr
<u>Oxides of Nitrogen (NO_x as NO₂):</u>	0.25	lb/day
	0.05	ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.23	lb/day
	0.05	ton/yr
<u>Carbon Monoxide:</u>	0.06	lb/day
	0.01	ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0131020 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0131020	Permit Exempt Subpart DDDDD Package Boilers

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Permit Exempt Subpart DDDDD Package Boilers, including following equipment:

Natural gas (NG) and propane (LPG) fueled, permit exempt boiler installed after June 4, 2010. (ATC No. 0131020)

Item	Building	Manufacturer	Model No.	Fuel	Rated Heat Input (Btu/hr)	Installed
A	8620	Fulton VMP	VMP80	LPG	3,200,000	6/5/10

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall not exceed 0.1-grains/scf calculated to 12% CO₂. (Rule 407.2)
3. Boiler exhaust concentration of sulfur oxides (calculated as SO₂) shall not exceed 2000 parts per million on a volume basis (ppmv). (Rule 407)
4. Boiler listed in this permit unit shall have a maximum heat input rating less than 5,000,000-Btu/hour (gross). (Rule 202)
5. Boiler listed in this permit unit shall be fueled exclusively with liquefied petroleum gas or any combination thereof, provided the fuel contains no more than 5 percent by weight hydrocarbons heavier than butane (as determined by test method ASTM-E-260-73) and no more than 30 grains of total sulfur per 100 standard cubic feet of gas (as determined by test method ASTM D-1072-80. (Rule 202)
6. Permittee shall conduct a biennial tune-up of the boiler as specified in 40 CFR Part 63.7540 (a)(10)(i) through (a)(10)(vi). (40 CFR Part 63, Subpart DDDDD)
7. Permittee is approved to install or remove packaged boiler used for nonindustrial purposes (e.g. building heat) as required, given boiler rating does not exceed 5,000,000-Btu/hr. (Rule 202)
8. Permittee shall notify Easter Kern Air Pollution Control District (District) of each installation or removal prior to or within seven calendar days of such installation or removal. (Rule 202)
9. Operator shall comply with applicable monitoring and record keeping requirements of 40 CFR Part 63, Subpart DDDDD. (40 CFR Part 63, Subpart DDDDD)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH & SC 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

Emission Unit 0144002 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0144002	Boiler, Natural Gas, 5.3 MMBtu/hr

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Boiler, Natural Gas, 5.3 MMBtu/hr, including following equipment:

One 5.3 MMBtu/hr natural gas fired boiler including low NO_x burner with forced draft flue gas recirculation.

OPERATIONAL CONDITIONS:

1. Only natural gas shall be used as fuel for this unit, and there shall be no provisions for firing on fuel oil. (Rule 210.1)
2. Boiler described above shall be equipped with low NO_x burner and forced draft flue gas recirculation and be in accordance with manufacturer=s specifications. (Rule 210.1)
3. Visible emissions from broiler shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
4. Exhaust gas particulate matter concentration shall be no more than 0.1 grains/scf calculated to 12% CO₂. (Rule 409)
5. Boiler shall be fired exclusively with public utility commission regulated quality natural gas. (Rule 210.1)
6. No more than 127,200 scf per day of natural gas shall be burned as fuel. (Rule 210.1)
7. Unit shall comply with Rule 425.2 NO_x minimization tuning procedure or shall operate in manner maintaining stack gas oxygen content at no more than 3% by volume. (Rule 425.2)
8. NO_x and CO emissions, referenced at dry stack conditions and 3% by volume stack gas oxygen, shall not exceed following:

Oxides of Nitrogen:	30 ppmv (gaseous fuel)	(Rule 210.1)
Carbon Monoxide:	400 ppmv	(Rule 425.2)
9. Operator shall comply with applicable monitoring, testing, and record keeping requirements of Rule 425.2. (Rule 425.2)
10. Operator shall maintain annual records of fuel use. (Rule 425.2)
11. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
12. There shall be no odors detectable at or beyond property boundary. (Rule 419)
13. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
14. Permittee shall conduct a biennial tune-up of the boiler as specified in 40 CFR Part 63.7540 (a)(10)(i) through (a)(10)(vi). (40 CFR Part 63, Subpart DDDDD)
15. Operator shall comply with applicable monitoring and record keeping requirements of 40 CFR Part 63, Subpart DDDDD. (40 CFR Part 63, Subpart DDDDD)

COMPLIANCE TESTING REQUIREMENTS:

Boiler shall be tested according to schedule in Subsection VI.C. of Rule 425.2. (Rule 425.2)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (as PM₁₀):

0.06 lb/hr
1.53 lb/day
0.3 ton/yr

Sulfur Oxides (SO_x as SO₂):

0.00 lb/hr
0.08 lb/day
0.0 ton/yr

Oxides of Nitrogen (NO_x as NO₂): (Rule 210.1 Requirement)

30.0 ppmv @ 3% O₂
0.19 lb/hr
4.64 lb/day
0.8 ton/yr

Volatile Organic Compounds (VOC): (as defined in Rule 210.1)

0.03 lb/hr
0.67 lb/day
0.1 ton/yr

Carbon Monoxide:

1.57 lb/hr
37.64 lb/day
6.9 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Fuel loading/Gasoline Storage/Fuel Dispensing

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Emission Unit 0126005 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0126005	Gasoline Storage & Dispensing System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Gasoline Storage & Dispensing System, including following equipment:

- A. 15,000 gallon regular unleaded gasoline Trusco Super Vault tank with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filling,
- B. Phase I (filling of storage tank) 2-point vapor collection system (VR-401-C) including separate vapor riser with:

<u>Component</u>	<u>Manufacturer/Model Number</u>
1. Liquid Fill Adapter	OPW 1612 AN-0300
2. Liquid Fill Cap	OPW 643B-0180
3. Vapor Adapter	OPW 1611AV-1620
4. Vapor Cap	OPW 1711T-7085-EVR
5. Drop Tube	OPW 61FT-0309
6. Drop Tube Overfill Prevention	OPW 61fSTOP-3050T
7. Pressure Vacuum Relief Valve	Husky 5885
8. Emergency Vent Valve	OPW 301-2080

- C. Healy Phase II (refueling of motor vehicles) gasoline vapor control system, installed in compliance with CARB Executive Order G-70-187, consisting in following equipment:

<u>Component</u>	<u>Manufacturer/Model Number</u>
1. Product dispensing/vapor collection nozzle	Healy Model 400ORVR
2. Vapor pumps	9000-01 series Mini-Jet Pump
3. Vapor check valve	Healy Model 9466
4. System monitor	Model 6280
5. Pressure switch	Model 9800-1
6. Vent sensor	Model 6275
7. Healy P/V Valve	HPV 1.5, (shared with PTO 0126006F);
8. Inverted coaxial hoses	Healy Model 75B (3/4 in. ID);
9. Hose adaptors	Healy Model series CX6- followed by suffix letter(s) "VV1"
10. Breakaway couplings	Healy Model 8701 VV
11. Certified valves	OPW 523 or any CARB certified P/V valve which meets required pressure/vacuum specification
12. Flow control units	Healy Model 1301 (for 1 3 in. straight fitting)
13. Dispenser	Gasboy 9152

Emission Unit 0126005 Permit Conditions

OPERATIONAL CONDITIONS:

1. Storage/dispensing facility shall be equipped with California Air Resources Board "certified" Phase I (filling of storage tanks) and Phase II (fueling of vehicle) gasoline vapor control systems. (Rules 412 and 412.1)
2. Gasoline storage tanks shall be equipped with two-point Phase I vapor control system. (Rule 412)
3. Tank shall be equipped with pressure/vacuum relief valve set to within 10% of maximum working pressure of tank. (Rule 412)
4. Gasoline usage for gasoline storage tank shall not exceed 480,000 gallons per year without prior District approval. (Rule 210.1)
5. Vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated, and maintained in accordance with manufacturer's recommendation to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 412 and 412.1)
6. All Phase I (filling of storage tank) vapor collection equipment shall be used when tanks are filled. (Rule 412)
7. Phase II (filling of vehicle tank) vapor collection equipment shall be maintained according to manufacturer's recommendations and used when vehicles tanks are filled. (Rule 412)
8. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
9. Retail stations shall post the following: Illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 412.1)
10. Tanks shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
11. The Phase II Vapor Recovery System shall be installed, started up, maintained and repaired only by person(s) certified by the system manufacturer(s) to perform such work. A copy of such person's certification shall be kept in the facility's repair log. (Rule 412.1)
12. The vapor recovery systems and their components shall be operated and maintained in accordance with the State certification requirements. (Rules 412 and 412.1)
13. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo tank which attests to the vapor integrity of the tank. (Rule 412)
14. Vapor recovery systems and gasoline dispensing equipment shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000-ppm as equivalent methane as determined by EPA Test Method 21. (Rule 412.1)
15. Permittee shall perform and pass a pressure integrity test on all pressure/vent (PV) vales at the facility in accordance with ARB Test Procedure TP-201.1E at least every 12 months. (Rule 210.1)
16. Permittee shall conduct, and pass, a Static Pressure Decay Test (EO G-70-187 Exhibit 3), Vapor Return Line Vacuum Integrity Test (EO G-70-187 Exhibit 4), and Vapor Pressure Regulation Test (EO G-70-187 Exhibit 5) at least once in each twelve month period. (Executive Order G-70-187)
17. The permittee shall perform the required maintenance as specified in ARB-Approved Installation and Maintenance Manual for the Phase I Vapor Recovery System. (Rule 412)
18. The operator shall maintain monthly gasoline throughput records, all records required by this permit shall be retained on-site for a period of at least five years, and shall be made available for inspection upon request. (Rule 412.1)

Emission Unit 0126005 Permit Conditions

19. Any tank with vapor recovery system having defect shall not be operated until defect has been repaired, replaced, or adjusted as necessary to correct defect, and District has re-inspected system or has authorized its use pending re-inspection. All such defects shall be tagged "out of service" upon detection. (Rules 412 and 412.1)
20. The District shall be notified by the permittee 30 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (District Rule 108.1)
21. The District shall be notified within 24 hours of the facility's pass/fail status after the performance of each test. (District Rule 108.1)
22. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

SPECIAL CONDITIONS:

- aa. Vapor-return and/or vapor control systems used to comply with requirements of this Permit to Operate shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations. (Rule 412)
- bb. Equipment shall be installed and tested in accordance with attached CARB Executive Orders VR-401-C, VR-301-E and G-70-187. (Rule 412.1)
- cc. System and components shall be of California Air Resources Board Certified design, any component changes shall be approved in advance by District. (Rule 412)

EMISSION LIMITS:

Maximum emissions rate of each air contaminant from this emission unit shall not exceed following limits:

Volatile Organic Compounds (VOC):

0.25 lb/hr
2.03 lb/day
0.37 ton/year

Emission Unit 0126006 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0126006	Gasoline Storage & Dispensing System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Gasoline Storage & Dispensing System, including following equipment:

- A. 15,000 gallon regular unleaded gasoline Trusco Super Vault tank with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filling,
- B. Phase I (filling of storage tank) 2-point vapor collection system (VR-401-C) including separate vapor riser with:

<u>Component</u>	<u>Manufacturer/Model Number</u>
1. Liquid Fill Adapter	OPW 1612AN-0300
2. Liquid Fill Cap	OPW 634B-0180
3. Vapor Adapter	OPW 1611AV-1620
4. Vapor Cap	OPW 1711T-7085-EVR
5. Drop Tube	OPW 61FT-0309
6. Drop Tube Overfill Prevention	OPW 61fSTOP-30500T
7. Pressure Vacuum Relief Valve	Husky 5885
8. Emergency Vent Valve	OPW 301-8160

- C. Healy Phase II (refueling of motor vehicles) gasoline vapor control system, installed in compliance with CARB Executive Order G-70-187, consisting in following equipment:

<u>Component</u>	<u>Manufacturer/Model Number</u>
1. Product dispensing/vapor collection nozzle	Healy Model 400ORVR
2. Vapor pumps	9000-01 series Mini-Jet Pump
3. Vapor check valve	Healy Model 9466
4. System Monitor	Model 6280
5. Pressure Switch	Model 9800-1
6. Vent Sensor	Model 6275
7. Healy P/V Valve	HPV 1.5, (shared with PTO 0126006F);
8. Inverted coaxial hoses	Healy Model 75B (3/4 in. ID);
9. Hose adaptors	Healy Model series CX6- followed by suffix letter(s) "VV1"
10. Breakaway couplings	Healy Model 8701 VV
11. Certified valves	OPW 523 or any CARB certified P/V valve which meets required pressure/vacuum specification
12. Flow control units	Healy Model 1301 (for 1 3 in. straight fitting)
13. Dispenser	Gasboy 9152

OPERATIONAL CONDITIONS:

1. Gasoline usage for gasoline storage tank shall not exceed 480,000 gallons per year without prior District approval. (Rule 210.1)
2. Storage/dispensing facility shall be equipped with California Air Resources Board "certified" Phase I (filling of storage tanks) and Phase II (fueling of vehicle) gasoline vapor control systems. (Rules 412 and 412.1)
3. Gasoline storage tanks shall be equipped with two-point Phase I vapor control system. (Rule 412)
4. Tank shall be equipped with pressure/vacuum relief valve set to within 10% of maximum working pressure of tank. (Rule 412)
5. Vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated, and maintained in accordance with manufacturer's recommendation to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 412 and 412.1)
6. All Phase I (filling of storage tank) vapor collection equipment shall be used when tanks are filled. (Rule 412)
7. Phase II (filling of vehicle tank) vapor collection equipment shall be maintained according to manufacturer's recommendations and used when vehicles tanks are filled. (Rule 412)
8. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
9. Retail stations shall post the following: Illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 412.1)
10. Tanks shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
11. The Phase II Vapor Recovery System shall be installed, started up, maintained and repaired only by person(s) certified by the system manufacturer(s) to perform such work. A copy of such person's certification shall be kept in the facility's repair log. (Rule 412.1)
12. The vapor recovery systems and their components shall be operated and maintained in accordance with the State certification requirements. (Rules 412 and 412.1)
13. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo tank which attests to the vapor integrity of the tank. (Rule 412)
14. Vapor recovery systems and gasoline dispensing equipment shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000-ppm as equivalent methane as determined by EPA Test Method 21. (Rule 412.1)
15. Permittee shall perform and pass a pressure integrity test on all pressure/vent (PV) valves at the facility in accordance with ARB Test Procedure TP-201.1E at least every 12 months. (Rule 210.1)
16. Permittee shall conduct, and pass, a Static Pressure Decay Test (EO G-70-187 Exhibit 3), Vapor Return Line Vacuum Integrity Test (EO G-70-187 Exhibit 4), and Vapor Pressure Regulation Test (EO G-70-187 Exhibit 5) at least once in each twelve month period. (Executive Order G-70-187)
17. The permittee shall perform the required maintenance as specified in ARB-Approved Installation and Maintenance Manual for the Phase I Vapor Recovery System. (Rule 412)
18. The operator shall maintain monthly gasoline throughput records, all records required by this permit shall be retained on-site for a period of at least five years, and shall be made available for inspection upon request. (Rule 412.1)

Emission Unit 0126006 Permit Conditions

19. Any tank with vapor recovery system having defect shall not be operated until defect has been repaired, replaced, or adjusted as necessary to correct defect, and District has re-inspected system or has authorized its use pending re-inspection. All such defects shall be tagged "out of service" upon detection. (Rules 412 and 412.1)
20. The District shall be notified by the permittee 30 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (District Rule 108.1)
21. The District shall be notified within 24 hours of the facility's pass/fail status after the performance of each test. (District Rule 108.1)
22. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

SPECIAL CONDITIONS:

- aa. Vapor-return and/or vapor control systems used to comply with requirements of this Permit to Operate shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations. (Rule 412)
- bb. Equipment shall be installed and tested in accordance with attached CARB Executive Orders VR-401-C, VR-301-E and G-70-187. (Rule 412.1)
- cc. System and components shall be of California Air Resources Board Certified design, any component changes shall be approved in advance by District. (Rule 412)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Volatile Organic Compounds (VOC):

0.25 lbm/hr
2.03 lbm/day
0.37 ton/yr

Emission Unit 0126025 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0126025	Gasoline Bulk Loading Facility

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Gasoline Bulk Loading Facility, including following equipment:

- A. 10,000 gallon gasoline protected aboveground storage tank with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filling (Phase I).
- B. Phase I (filling of storage tank) vapor collection system (VR-401-C and VR-301-E) including the following CARB certified components:

<u>Component</u>	<u>Manufacturer/Model Number</u>
1. Liquid Dust Cap	OPW 634B-0180
2. Liquid Adaptor	OPW 1612 AN-0300
3. Vapor Dust Cap	OPW 1711T-7085-EVR
4. Vapor Adaptor	OPW 1611AV-1620
5. Drop Tube Overfill Prevention Device	OPW 61fSTOP-1000T
6. Drop Tube	OPW 61T-0206
7. Port Adaptor	OPW 633AST-0200
8. Port Drop Tube	OPW 61T-0207
9. Port Cap	OPW 634B-0150
10. Port Gage	OPW 2042247
11. Emergency Vent Valve	OPW 301-8160
12. Pressure/Vacuum Vent Valve	Husky 5885

- C. Hirt VCS-200 vacuum assist-type phase II (refueling of motor vehicles) gasoline vapor control system, installed in compliance with CARB Executive Order G-70-139, consisting of the following equipment:

<u>Component</u>	<u>Manufacturer/Model Number</u>
1. Product dispensing/vapor collection nozzle	One Emco Wheaton A4005
2. Vapor hoses (nozzles to risers)	Goodyear
3. Vapor risers (vapor hoses to piping)	3/4 in. ID, or larger
4. Component: Dispenser	Dresser Wayne
5. Multiplane nozzle swivels	OPW 43
6. Control panel	Bryant Fuel Systems Control
7. Vapor processing unit	Hirt VCS-200-1 compressed air operated
8. Vapor lines (dispenser to tanks)	1½ in. ID, or larger sloped toward tanks or sloped to buried vapor-tight knockout pot or trap
9. Vacuum gage	Factory Set

OPERATIONAL CONDITIONS:

1. Gasoline usage for gasoline storage tanks shall not exceed 480,000 gallons per year without prior District approval. (Rule 210.1)
2. Storage/dispensing facility shall be equipped with California Air Resources Board "certified" Phase I (filling of storage tanks) and Phase II (fueling of vehicle) gasoline vapor control systems. (Rules 412 and 412.1)
3. Gasoline storage tanks shall be equipped with two-point Phase I vapor control system. (Rule 412)
4. Tank shall be equipped with pressure/vacuum relief valve set to within 10% of maximum working pressure of tank. (Rule 412)
5. Vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated, and maintained in accordance with manufacturer's recommendation to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 412 and 412.1)
6. All Phase I (filling of storage tank) vapor collection equipment shall be used when tanks are filled. (Rule 412)
7. Phase II (filling of vehicle tank) vapor collection equipment shall be maintained according to manufacturer's recommendations and used when vehicles tanks are filled. (Rule 412)
8. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
9. Retail stations shall post the following: Illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 412.1)
10. Tanks shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
11. The Phase II Vapor Recovery System shall be installed, started up, maintained and repaired only by person(s) certified by the system manufacturer(s) to perform such work. A copy of such person's certification shall be kept in the facility's repair log. (Rule 412.1)
12. The vapor recovery systems and their components shall be operated and maintained in accordance with the State certification requirements. (Rules 412 and 412.1)
13. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo tank which attests to the vapor integrity of the tank. (Rule 412)
14. Vapor recovery systems and gasoline dispensing equipment shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000-ppm as equivalent methane as determined by EPA Test Method 21. (Rule 412.1)
15. Permittee shall perform and pass a pressure integrity test on all pressure/vent (PV) valves at the facility in accordance with ARB Test Procedure TP-201.1E at least every 12 months. (Rule 210.1)
16. Permittee shall conduct, and pass, Hirt VCS 200 Liquid Removal Test (EO G-70-139 Exhibit 2), and Hirt VCS 200 Pressure Test (EO G-70-139 Exhibit 2) at least once in each twelve month period. (Executive Order G-70-139)
17. The permittee shall perform the required maintenance as specified in ARB-Approved Installation and Maintenance Manual for the Phase I Vapor Recovery System. (Rule 412)
18. The operator shall maintain monthly gasoline throughput records, all records required by this permit shall be retained on-site for a period of at least five years, and shall be made available for inspection upon request. (Rule 412.1)

Emission Unit 0126025 Permit Conditions

19. Any tank with vapor recovery system having defect shall not be operated until defect has been repaired, replaced, or adjusted as necessary to correct defect, and District has re-inspected system or has authorized its use pending re-inspection. All such defects shall be tagged "out of service" upon detection. (Rules 412 and 412.1)
20. The District shall be notified by the permittee 30 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (District Rule 108.1)
21. The District shall be notified within 24 hours of the facility's pass/fail status after the performance of each test. (District Rule 108.1)
22. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to the District within 30 days after test completion. (Rule 108.1 and 210.1)

SPECIAL CONDITION:

- aa. Vapor-return and/or vapor control systems used to comply with requirements of this Authority to Construct shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations. (Rule 412)
- bb. Equipment shall be installed and tested in accordance with attached CARB Executive Orders VR-401-C, VR-301-E and G-70-139. (Rule 412.1)
- cc. System and components shall be of California Air Resources Board Certified design, any component changes shall be approved in advance by EKAPCD. (Rule 412)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Volatile Organic Compounds (VOC):

2.03 lb/day

0.37 ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0126030 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0126030	E85 Gasoline Storage & Dispensing Facility

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: E85 Gasoline Storage & Dispensing Facility, including following equipment:

- A. A. 12,000-gallon E85 gasoline storage tank with a permanently affixed fill tube terminating no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filling;
- B. Storage tank filling vapor control system, including the following components:
- | <u>Component</u> | <u>Manufacturer/Model Number</u> |
|---------------------------------|----------------------------------|
| 1. Liquid Fill Adapter | OPW 1679AN-SS30 |
| 2. Liquid Fill Cap | OPW 634B |
| 3. Vapor Adapter | OPW1611AV |
| 4. Vapor Cap | OPW 1711T |
| 5. Pressure Vacuum Relief Valve | Husky 5885 |
| 6. Drop Tube | OPW 61FT |
| 7. Overfill Protection | OPW 61-F Stop |
| 8. Remote Fill/Spill Container | Pomeco/OPW 211R |
| 9. Gauge High Level Alarm | Morrison 918 |
| 10. E-Vents | Morrison 244 |
- C. Dresser Wayne, model G6200 (Reliance Series) dispenser equipped with one product nozzle for a total of one non-vapor recovery nozzle;
- D. Tank refueling with one nozzle, including the following UL® E85 listed components:
- | <u>Component</u> | <u>Manufacturer/Model Number</u> |
|----------------------|-------------------------------------|
| 1. Nozzle | OPW 21Ge |
| 2. Swivel | NA |
| 3. Flow Limiter | Included with dispenser |
| 4. Vapor Check Valve | NA |
| 5. Non-Coaxial Hose | Goodyear Flexsteel Futura Ethan-ALL |
| 6. Breakaway Fitting | OPW 66V-0492 |
| 7. Dispensers | Dresser Wayne G6200 Reliance Series |

OPERATIONAL CONDITIONS:

- Storage/dispensing facility shall be equipped with Underwriter Laboratories (UL®) listed E85 compatible components for storage tank filling and vehicle refueling gasoline vapor control systems. (Rules 210.1)
- Gasoline storage tanks shall be equipped with two-point storage tank filling vapor control system. (Rule 210.1)

Emission Unit 0126030 Permit Conditions

3. Tank shall be equipped with pressure/vacuum relief valve set to within 10% of maximum working pressure of tank. (Rule 412)
4. Gasoline usage for gasoline storage tank shall not exceed 480,000 gallons per year without prior District approval. (Rule 210.1)
5. Vapor control system shall be designed, installed, operated, and maintained in accordance with manufacturer's recommendation to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 210.1, 412)
6. Storage tank filling vapor control equipment shall be used when tanks are filled. (Rule 412)
7. Vehicle tank refueling vapor control equipment shall be maintained according to manufacturer's recommendations and used when vehicles tanks are filled. (Rules 210.1 and 412.1)
8. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
9. If subject facility is or converted to a retail station the following shall be posted: Illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 412.1)
10. Tanks shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
11. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo tank which attests to the vapor integrity of the tank. (Rule 412)
12. Vapor recovery systems and gasoline dispensing equipment shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000-ppm as equivalent methane as determined by EPA Test Method 21. (Rule 210.1)
13. The permittee shall perform and pass a Determination of Static Pressure Performance of Vapor Recovery Systems at Gasoline Dispensing Facilities Using Aboveground Storage Tanks at the facility in accordance with ARB Test Procedure TP-206.3 at least once every 12 months. (Rule 210.1)
14. The permittee shall perform and pass a Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves at the facility in accordance with ARB Test Procedure TP-201.1E at least once every 12 months. (Rule 210.1)
15. The operator shall conduct periodic maintenance inspections based on the amount of gasoline dispensed by the facility in a calendar month as follows:
 - a. Less than 25,000 gallons per month - one day per week; and
 - b. Greater than or equal to 25,000 gallons per month - five days per week.All inspections shall be documented within the O&M manual. (Rule 210.1)
16. The operator shall maintain monthly gasoline throughput records. (Rule 210.1)
17. All records required by this permit shall be retained on-site for a period of at least five years, and shall be made available for inspection upon request. (Rule 210.1)
18. Any tank with vapor recovery system having defect shall not be operated until defect has been repaired, replaced, or adjusted as necessary to correct defect, and District has re-inspected system or has authorized its use pending re-inspection. All such defects shall be tagged "out of service" upon detection. (Rules 412)
19. The District shall be notified by the permittee 30 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (Rule 108.1)
20. The District shall be notified within 24 hours of the facility's pass/fail status after the performance of each test. (Rule 108.1)

Emission Unit 0126030 Permit Conditions

21. The operator shall maintain on the premises a log of any repairs made to the storage tank filling vapor control system or vehicle dispensing equipment. The repair log shall include the following:
 - a. Date and time of each repair;
 - b. Name of the person(s) who performed the repair, and if applicable, the name, address and phone number of the person's employer;
 - c. Description of service performed;
 - d. Each component that was repaired, serviced, or removed;
 - e. Each component that was installed as replacement, if applicable; and
 - f. Receipts or other documents for parts used in the repair and, if applicable, work orders which shall include the name and signature of the person responsible for performing the repairs. (Rule 210.1)
22. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
23. Vapor-return and/or vapor control systems used to comply with requirements of this Authority to Construct shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations. (Rule 412)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

<u>Volatile Organic Compounds (VOC):</u>	7.13	lb/day
<u>(as defined in Rule 210.1)</u>	1.30	ton/yr

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0126031 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0126031	Aviation Fuel Storage Tank and Pump Skid

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Aviation Fuel Storage Tank and Pump Skid, including following equipment:

- A. 12,000 gallon aviation gasoline storage tank with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filling (Phase I)
- B. Phase I (filling of storage tank) vapor collection system (G-70-162-A) including the following CARB certified components:

Component	Manufacturer/Model Number
Liquid Fill Adapter	OPW 633-AST
Liquid Fill Cap	OPW 634-B
Vapor Adapter	OPW 1611 AV
Vapor Cap	OPW 1711 T
Drop Tube with Overfill Protection	Morrison 419
Overfill Protection	OPW 61F STOP-1000
Pressure Vacuum Relief Valve	Husky 5885

- C. Poppet-Type Valve Underwing Refueling Nozzle.

OPERATIONAL CONDITIONS:

- 1. General exterior of tank shall be white in color. (Rule 210.1)
- 2. Tank shall be equipped with pressure-vacuum valve set to within 10% of maximum allowable working pressure of tank. (Rule 412)
- 3. Maximum annual fuel throughput shall not exceed 25,000 gallons per calendar year without prior District approval. (Rule 210.1)
- 4. Fuel storage facility shall be equipped with California Air Resources Board "certified" Phase I (filling of storage tanks) system. (Rule 412)
- 5. System shall be installed, operated, and maintained in accordance with manufacturer's recommendation. (Rules 209 and 412)
- 6. Phase I (filling of storage tank) vapor collection equipment shall be used when tank is filled. (Rules 209 and 412)
- 7. This fuel storage and dispensing facility shall only be used for aircraft (i.e. no motor vehicles). (Rule 210.1)
- 8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 0126031 Permit Conditions

9. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

Volatile Organic Compounds (VOC)

14.96	lb/day
0.02	ton/year

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0132004 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132004	Gasoline Storage & Dispensing System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Gasoline Storage & Dispensing System, including following equipment:

- A. 2,500 gallon regular unleaded gasoline storage tanks with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filling.
- B. Phase I (filling of storage tank) 2-point vapor collection system (VR-401-C) including separate vapor riser with:

	<u>Component</u>	<u>Manufacturer/Model Number</u>
1.	Liquid Fill Adapter	1611 AN-0300
2.	Liquid Fill Cap	OPW 643B-180
3.	Vapor Adapter	OPW 1611AV-1620
4.	Vapor Cap	OPW 1711T-7085-EVR
5.	Drop Tube	OPW 61FT-0304
6.	Drop Tube Overfill Prevention	OPW 61fSTOP-3050T
7.	Tank Gauge Port Tube	OPW 61T-0206
8.	Pressure Vacuum Relief Valve	Husky 5885
9.	Emergency Vent Valve	OPW 301-8160

- C. Hirt VCS-200 vacuum assist-type phase II (refueling of motor vehicles) gasoline vapor control system, installed in compliance with CARB Executive Order G-70-139, consisting of the following equipment:

	<u>Component</u>	<u>Manufacturer/Model Number</u>
1.	Product dispensing/vapor collection nozzle	Four Emco Wheaton A4005 EVR
2.	Vapor hoses (nozzles to risers)	Goodyear
3.	Vapor risers (vapor hoses to underground piping)	3/4 in. ID, or larger
4.	Multiplane nozzle swivels	Goodyear
5.	Island/dispenser swivels	Goodyear
NOTE: The following equipment is shared in common with 0132004 and 0132005		
6.	Control panel	Hirt Control Panel
7.	Vapor processing unit	Hirt VCS-200-1 compressed air operated
8.	Vapor lines (dispenser to tanks)	1 ½ in. ID, or larger sloped toward tanks or sloped to buried vapor-tight knockout pot or trap
9.	Vacuum gage	Factory Set
10.	Dispenser	Gasboy

OPERATIONAL CONDITIONS:

1. Gasoline usage for gasoline storage tanks shall not exceed 109,500 gallons per year without prior District approval. (Rule 210.1)
2. Storage/dispensing facility shall be equipped with California Air Resources Board "certified" Phase I (filling of storage tanks) and Phase II (fueling of vehicle) gasoline vapor control systems. (Rules 412 and 412.1)
3. Gasoline storage tanks shall be equipped with two-point Phase I vapor control system. (Rule 412)
4. Tank shall be equipped with pressure/vacuum relief valve set to within 10% of maximum working pressure of tank. (Rule 412)
5. Vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated, and maintained in accordance with manufacturer's recommendation to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 412 and 412.1)
6. All Phase I (filling of storage tank) vapor collection equipment shall be used when tanks are filled. (Rule 412)
7. Phase II (filling of vehicle tank) vapor collection equipment shall be maintained according to manufacturer's recommendations and used when vehicles tanks are filled. (Rule 412)
8. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
9. Retail stations shall post the following: Illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 412.1)
10. Tanks shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
11. The Phase II Vapor Recovery System shall be installed, started up, maintained and repaired only by person(s) certified by the system manufacturer(s) to perform such work. A copy of such person's certification shall be kept in the facility's repair log. (Rule 412.1)
12. The vapor recovery systems and their components shall be operated and maintained in accordance with the State certification requirements. (Rules 412 and 412.1)
13. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo tank which attests to the vapor integrity of the tank. (Rule 412)
14. Vapor recovery systems and gasoline dispensing equipment shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000-ppm as equivalent methane as determined by EPA Test Method 21. (Rule 412.1)
15. Permittee shall perform and pass a pressure integrity test on all pressure/vent (PV) valves at the facility in accordance with ARB Test Procedure TP-201.1E at least every 12 months. (Rule 210.1)
16. Permittee shall conduct, and pass, Hirt VCS 200 Liquid Removal Test (EO G-70-139 Exhibit 2), and Hirt VCS 200 Pressure Test (EO G-70-139 Exhibit 2) at least once in each twelve month period. (Executive Order G-70-139)
17. The permittee shall perform the required maintenance as specified in ARB-Approved Installation and Maintenance Manual for the Phase I Vapor Recovery System. (Rule 412)
18. The operator shall maintain monthly gasoline throughput records, all records required by this permit shall be retained on-site for a period of at least five years, and shall be made available for inspection upon request. (Rule 412.1)

Emission Unit 0132004 Permit Conditions

19. Any tank with vapor recovery system having defect shall not be operated until defect has been repaired, replaced, or adjusted as necessary to correct defect, and District has re-inspected system or has authorized its use pending re-inspection. All such defects shall be tagged "out of service" upon detection. (Rules 412 and 412.1)
20. The District shall be notified by the permittee 30 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (District Rule 108.1)
21. The District shall be notified within 24 hours of the facility's pass/fail status after the performance of each test. (District Rule 108.1)
22. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

SPECIAL CONDITIONS:

- aa. Vapor-return and/or vapor control systems used to comply with requirements of this Permit to Operate shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations. (Rule 412)
- bb. Equipment shall be installed and tested in accordance with attached CARB Executive Orders VR-401-C, VR-301-E and G-70-139. (Rule 412.1)
- cc. System and components shall be of California Air Resources Board Certified design, any component changes shall be approved in advance by District. (Rule 412)

EMISSION LIMITS:

Maximum emissions rate of each air contaminant from this emission unit shall not exceed following limits:

Volatile Organic Compounds (VOC)

0.06	lb/hr
0.46	lb/day
0.08	ton/year

Emission Unit 0132005 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132005	Gasoline Storage & Dispensing System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Gasoline Storage & Dispensing System, including following equipment:

- A. 2,500 gallon regular unleaded gasoline storage tanks with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filling.
- B. Phase I (filling of storage tank) 2-point vapor collection system (VR-401-C) including separate vapor riser with:

	<u>Component</u>	<u>Manufacturer/Model Number</u>
1.	Liquid Fill Adapter	1612 AN-0300
2.	Liquid Fill Cap	OPW 643B-180
3.	Vapor Adapter	OPW 1611AV-1620
4.	Vapor Cap	OPW 1711T-7085-EVR
5.	Drop Tube	OPW 61FT-0304
6.	Drop Tube Overfill Prevention	OPW 61fSTOP-3050T
7.	Tank Gauge Port Adaptor	OPW 633 AST-0200
8.	Tank Gauge Port Tube	OPW 61T-0206
9.	Pressure Vacuum Relief Valve	Husky 5885
10.	Emergency Vent Valve	OPW 301-8160

- C. Hirt VCS-200 vacuum assist-type phase II (refueling of motor vehicles) gasoline vapor control system, installed in compliance with CARB Executive Order G-70-139, consisting of the following equipment:

	<u>Component</u>	<u>Manufacturer/Model Number</u>
1.	Product dispensing/vapor collection nozzle	Four Emco Wheaton A4005 EVR
2.	Vapor hoses (nozzles to risers)	Goodyear
3.	Vapor risers (vapor hoses to underground piping)	3/4 in. ID, or larger
4.	Nozzle swivels	Goodyear
5.	Island/dispenser swivels	Goodyear
NOTE: The following equipment is shared in common with 0132004 and 0132005		
6.	Control panel	Hirt Control Panel
7.	Vapor processing unit	Hirt VCS-200-1 compressed air operated
8.	Vapor lines (dispenser to tanks)	2 in. ID, or larger sloped toward tanks or sloped to buried vapor-tight knockout pot or trap
9.	Vacuum gage	Factory Set
10.	Dispenser	Gasboy

OPERATIONAL CONDITIONS:

1. Storage/dispensing facility shall be equipped with California Air Resources Board "certified" Phase I (filling of storage tanks) and Phase II (fueling of vehicle) gasoline vapor control systems. (Rules 412 and 412.1)
2. Gasoline storage tanks shall be equipped with two-point Phase I vapor control system. (Rule 412)
3. Tank shall be equipped with pressure/vacuum relief valve set to within 10% of maximum working pressure of tank. (Rule 412)
4. Gasoline usage for gasoline storage tanks shall not exceed 109,500 gallons per year without prior District approval. (Rule 210.1)
5. Vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated, and maintained in accordance with manufacturer's recommendation to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 412 and 412.1)
6. All Phase I (filling of storage tank) vapor collection equipment shall be used when tanks are filled. (Rule 412)
7. Phase II (filling of vehicle tank) vapor collection equipment shall be maintained according to manufacturer's recommendations and used when vehicles tanks are filled. (Rule 412)
8. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
9. Retail stations shall post the following: Illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 412.1)
10. Tanks shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
11. The Phase II Vapor Recovery System shall be installed, started up, maintained and repaired only by person(s) certified by the system manufacturer(s) to perform such work. A copy of such person's certification shall be kept in the facility's repair log. (Rule 412.1)
12. The vapor recovery systems and their components shall be operated and maintained in accordance with the State certification requirements. (Rules 412 and 412.1)
13. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo tank which attests to the vapor integrity of the tank. (Rule 412)
14. Vapor recovery systems and gasoline dispensing equipment shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000-ppm as equivalent methane as determined by EPA Test Method 21. (Rule 412.1)
15. Permittee shall perform and pass a pressure integrity test on all pressure/vent (PV) valves at the facility in accordance with ARB Test Procedure TP-201.1E at least every 12 months. (Rule 210.1)
16. Permittee shall conduct, and pass, Hirt VCS 200 Liquid Removal Test (EO G-70-139 Exhibit 2), and Hirt VCS 200 Pressure Test (EO G-70-139 Exhibit 2) at least once in each twelve month period. (Executive Order G-70-139)
17. The permittee shall perform the required maintenance as specified in ARB-Approved Installation and Maintenance Manual for the Phase I Vapor Recovery System. (Rule 412)
18. The operator shall maintain monthly gasoline throughput records, all records required by this permit shall be retained on-site for a period of at least five years, and shall be made available for inspection upon request. (Rule 412.1)

Emission Unit 0132005 Permit Conditions

19. Any tank with vapor recovery system having defect shall not be operated until defect has been repaired, replaced, or adjusted as necessary to correct defect, and District has re-inspected system or has authorized its use pending re-inspection. All such defects shall be tagged "out of service" upon detection. (Rules 412 and 412.1)
20. The District shall be notified by the permittee 30 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (District Rule 108.1)
21. The District shall be notified within 24 hours of the facility's pass/fail status after the performance of each test. (District Rule 108.1)
22. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

SPECIAL CONDITIONS:

- aa. Vapor-return and/or vapor control systems used to comply with requirements of this Permit to Operate shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations. (Rule 412)
- bb. Equipment shall be installed and tested in accordance with attached CARB Executive Orders VR-401-C, VR-301-E and G-70-139. (Rule 412.1)
- cc. System and components shall be of California Air Resources Board Certified design, any component changes shall be approved in advance by District. (Rule 412)

EMISSION LIMITS:

Maximum emissions rate of each air contaminant from this emission unit shall not exceed following limits:

Volatile Organic Compounds (VOC)

0.06	lb/hr
0.46	lb/day
0.08	ton/year

Emission Unit 0126032 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0126032	Gasoline Storage & Dispensing System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Gasoline Storage & Dispensing System, including following equipment:

- A. 10,000 gallon regular unleaded gasoline tanks with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filling;
- B. Phase I (filling of storage tank) 2-point vapor collection system (VR-401-C) including separate vapor riser with:

<u>Component</u>	<u>Manufacturer/Model Number</u>
1. Liquid Fill Adapter	OPW 1612-AN-0300
2. Liquid Fill Cap	OPW 643B-0180
3. Vapor Adapter	OPW 1611AV-1620
4. Vapor Cap	OPW 1711T-7085-EVR
5. Drop Tube	OPW 61FT-0305
6. Drop Tube Overfill Prevention	OPW 61fSTOP-3050T
7. Pressure Vacuum Relief Valve	Husky 5885
8. Emergency Vent Valve	OPW 301-8160

- C. Healy Phase II (refueling of motor vehicles) gasoline vapor control system, installed in compliance with CARB Executive Order G-70-187, consisting in following equipment:

<u>Component</u>	<u>Manufacturer/Model Number</u>
1. Product dispensing/vapor collection nozzle	Healy Model 400ORVR
2. Vapor hoses (nozzles to risers) coaxial hose assembly	Healy Coaxial 75B (3/4 in.), maximum hose length of 13 ft.
3. High retractor dispensers	Gasboy 915 RDX TWIC
4. Vacuum Unit (Jet Pump)	Healy 9000
5. Vapor hose adaptor	Healy CX6 - VVI
6. Vapor check valve	Healy 9466
7. Breakaway coupling	Healy 8701VV
8. System Monitor	Healy 6280
9. Pressure Switch	Healy 9800-1
10. Vent sensor	Healy 6275
11. System Monitor P/V valve	Healy HPV 1.5

OPERATIONAL CONDITIONS:

1. Storage/dispensing facility shall be equipped with California Air Resources Board "certified" Phase I (filling of storage tanks) and Phase II (fueling of vehicle) gasoline vapor control systems. (Rules 412 and 412.1)
2. Gasoline storage tanks shall be equipped with two-point Phase I vapor control system. (Rule 412)
3. Tank shall be equipped with pressure/vacuum relief valve set to within 10% of maximum working pressure of tank. (Rule 412)
4. Vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated, and maintained in accordance with manufacturer's recommendation to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 412 and 412.1)
5. All Phase I (filling of storage tank) vapor collection equipment shall be used when tanks are filled. (Rule 412)
6. Phase II (filling of vehicle tank) vapor collection equipment shall be maintained according to manufacturer's recommendations and used when vehicles tanks are filled. (Rule 412)
7. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
8. Retail stations shall post the following: Illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 412.1)
9. Tanks shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
10. The Phase II Vapor Recovery System shall be installed, started up, maintained and repaired only by person(s) certified by the system manufacturer(s) to perform such work. A copy of such person's certification shall be kept in the facility's repair log. (Rule 412.1)
11. The vapor recovery systems and their components shall be operated and maintained in accordance with the State certification requirements. (Rules 412 and 412.1)
12. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo tank which attests to the vapor integrity of the tank. (Rule 412)
13. Vapor recovery systems and gasoline dispensing equipment shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000-ppm as equivalent methane as determined by EPA Test Method 21. (Rule 412.1)
14. Permittee shall perform and pass a pressure integrity test on all pressure/vent (PV) valves at the facility in accordance with ARB Test Procedure TP-201.1E at least every 12 months. (Rule 210.1)
15. Permittee shall conduct, and pass, a Static Pressure Decay Test (EO G-70-187 Exhibit 3), Vapor Return Line Vacuum Integrity Test (EO G-70-187 Exhibit 4), and Vapor Pressure Regulation Test (EO G-70-187 Exhibit 5) at least once in each twelve month period. (Executive Order G-70-187)
16. The permittee shall perform the required maintenance as specified in ARB-Approved Installation and Maintenance Manual for the Phase I Vapor Recovery System. (Rule 412)
17. The operator shall maintain monthly gasoline throughput records, all records required by this permit shall be retained on-site for a period of at least five years, and shall be made available for inspection upon request. (Rule 412.1)
18. Any tank with vapor recovery system having defect shall not be operated until defect has been repaired, replaced, or adjusted as necessary to correct defect, and District has re-inspected system or has authorized its use pending re-inspection. All such defects shall be tagged "out of service" upon detection. (Rules 412 and 412.1)

Emission Unit 0126032 Permit Conditions

19. The District shall be notified by the permittee 30 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (District Rule 108.1)
20. The District shall be notified within 24 hours of the facility's pass/fail status after the performance of each test. (District Rule 108.1)
21. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

SPECIAL CONDITIONS:

- aa. Vapor-return and/or vapor control systems used to comply with requirements of this Permit to Operate shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations. (Rule 412)
- bb. Equipment shall be installed and tested in accordance with attached CARB Executive Orders VR-401-C, VR-301-E and G-70-187. (Rule 412.1)
- cc. System and components shall be of California Air Resources Board Certified design, any component changes shall be approved in advance by District. (Rule 412)

EMISSION LIMITS:

Maximum emissions rate of each air contaminant from this emission unit shall not exceed following limits:

Volatile Organic Compounds (VOC)

0.07	lb/hr
0.53	lb/day
0.10	ton/year

Emission Unit 0139019 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0139019	Gasoline Storage & Dispensing System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Gasoline Storage & Dispensing System, including following equipment:

- A. 5,000 gallon regular unleaded gasoline storage tanks with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filling (0139019C),
- B. Phase I (filling of storage tank) 2-point vapor collection system (VR-401-C) including separate vapor riser with:

<u>Component</u>	<u>Manufacturer/Model Number</u>
1. Spill Containers	OPW 332-AST-W74
2. Liquid Fill Adapter	OPW 1611-AN-2040
3. Liquid Fill Cap	OPW 634B-0160
4. Vapor Adapter	OPW 1611-AV-1620
5. Vapor Cap	OPW 1711T-7085-EVR
6. Drop Tube	OPW 61FT-0206
7. Drop Tube Overfill Prevention	OPW 61fSTOP-1000T
8. Tank Gauge Port Adaptor	633AST-0200
9. Tank Gauge Drop Tube	OPW 61T-0206
10. Pressure Vacuum Relief Valve	Husky 5885
11. Emergency Vent Valve	OPW 301-8060

- C. Healy Phase II (refueling of motor vehicles) gasoline vapor control system, installed in compliance with CARB Executive Order G-70-187, consisting in following equipment:

<u>Component</u>	<u>Manufacturer/Model Number</u>
1. Product dispensing/vapor collection nozzle	Healy Model 400ORVR w/ 100 Jet Pum (2 per nozzle)
2. Vapor check valve	Healy Model 9466
3. Pressure Switch	Model 9800-1
4. Vent Sensor	Model 6275
5. Healy P/V Valve	HPV 1.5
6. Inverted coaxial hoses	Healy Model 75B (3/4 in. ID)
7. Breakaway couplings	Healy Model 8701VV
8. Certified valves	OPW 523
9. Flow control units	Healy Model 1301 (for 1 3 in. straight fitting) or Healy Model 1302

OPERATIONAL CONDITIONS:

1. Gasoline usage for gasoline storage tanks shall not exceed 120,000 gallons per year without prior District approval. (Rule 210.1)
2. Storage/dispensing facility shall be equipped with California Air Resources Board "certified" Phase I (filling of storage tanks) and Phase II (fueling of vehicle) gasoline vapor control systems. (Rules 412 and 412.1)
3. Gasoline storage tanks shall be equipped with two-point Phase I vapor control system. (Rule 412)
4. Tank shall be equipped with pressure/vacuum relief valve set to within 10% of maximum working pressure of tank. (Rule 412)
5. Vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated, and maintained in accordance with manufacturer's recommendation to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 412 and 412.1)
6. All Phase I (filling of storage tank) vapor collection equipment shall be used when tanks are filled. (Rule 412)
7. Phase II (filling of vehicle tank) vapor collection equipment shall be maintained according to manufacturer's recommendations and used when vehicles tanks are filled. (Rule 412)
8. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
9. Retail stations shall post the following: Illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 412.1)
10. Tanks shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
11. The Phase II Vapor Recovery System shall be installed, started up, maintained and repaired only by person(s) certified by the system manufacturer(s) to perform such work. A copy of such person's certification shall be kept in the facility's repair log. (Rule 412.1)
12. The vapor recovery systems and their components shall be operated and maintained in accordance with the State certification requirements. (Rules 412 and 412.1)
13. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo tank which attests to the vapor integrity of the tank. (Rule 412)
14. Vapor recovery systems and gasoline dispensing equipment shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000-ppm as equivalent methane as determined by EPA Test Method 21. (Rule 412.1)
15. Permittee shall perform and pass a pressure integrity test on all pressure/vent (PV) valves at the facility in accordance with ARB Test Procedure TP-201.1E at least every 12 months. (Rule 210.1)
16. Permittee shall conduct, and pass, a Static Pressure Decay Test (EO G-70-187 Exhibit 3), Vapor Return Line Vacuum Integrity Test (EO G-70-187 Exhibit 4), and Vapor Pressure Regulation Test (EO G-70-187 Exhibit 5) at least once in each twelve month period. (Executive Order G-70-187)
17. The permittee shall perform the required maintenance as specified in ARB-Approved Installation and Maintenance Manual for the Phase I Vapor Recovery System. (Rule 412)
18. The operator shall maintain monthly gasoline throughput records, all records required by this permit shall be retained on-site for a period of at least five years, and shall be made available for inspection upon request. (Rule 412.1)

Emission Unit 0139019 Permit Conditions

19. Any tank with vapor recovery system having defect shall not be operated until defect has been repaired, replaced, or adjusted as necessary to correct defect, and District has re-inspected system or has authorized its use pending re-inspection. All such defects shall be tagged "out of service" upon detection. (Rules 412 and 412.1)
20. The District shall be notified by the permittee 30 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (District Rule 108.1)
21. The District shall be notified within 24 hours of the facility's pass/fail status after the performance of each test. (District Rule 108.1)
22. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

SPECIAL CONDITIONS:

- aa. Vapor-return and/or vapor control systems used to comply with requirements of this Permit to Operate shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations. (Rule 412)
- bb. Equipment shall be installed and tested in accordance with attached CARB Executive Orders VR-401-C, VR-301-E and G-70-187. (Rule 412.1)
- cc. System and components shall be of California Air Resources Board Certified design, any component changes shall be approved in advance by District. (Rule 412)

EMISSION LIMITS:

Maximum emissions rate of each air contaminant from this emission unit shall not exceed following limits:

Volatile Organic Compounds (VOC)

0.06	lb/hr
0.51	lb/day
0.09	ton/year

Emission Unit 0141003 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0141003	Aviation Fuel Storage & Dispensing System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Aviation Fuel Storage & Dispensing System, including following equipment:

- A. One 4,000 gallon aboveground fuel storage tank;
- B. Storage tank filling vapor collection system including separate fill and vapor line and:
 - 1. Fill tubes OPW 61T;
 - 2. Fill adaptors OPW 633T with 634TT fill cap;
 - 3. Vapor adaptors OPW 1611AV with OPW 1711T vapor cap;
 - 4. Vent line pressure relief valves OPW 523;
 - 5. Float vent valve OPW 53VML; and
 - 6. Overfill Protection OPW 6150-400C.
- C. Permanently affixed fill tube in tank terminating no more than six inches from bottom of tank.

OPERATIONAL CONDITIONS:

- 1. System shall be of California Air Resources Board "certified" design. (Rule 412)
- 2. Storage/dispensing facility shall be equipped with California Air Resources Board "certified" phase I (filling of storage tanks). (Rules 209 and 412)
- 3. System shall be installed, operated, and maintained in accordance with manufacturer's recommendation. (Rules 209 and 412)
- 4. Phase I (filling of storage tank) vapor collection equipment shall be used when tank is filled. (Rules 209 and 412)
- 5.. Maximum annual fuel throughput shall not exceed 38,800 gallons per calendar year. (Rule 210.1)
- 6. This fuel storage and dispensing facility shall only be used for aircraft (i.e. no motor vehicles). (Rule 209)
- 7. General exterior of tank shall be white in color. (Rule 209)
- 8. Tank shall be equipped with pressure-vacuum valve set to within 10% of maximum allowable working pressure of tank. (Rule 412)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to EKAPCD within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed following limits:

<u>Volatile Organic Compounds(VOC):</u>	18.70 lb/day
	0.36 ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0144010 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0144010	Gasoline Storage & Dispensing System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Gasoline Storage & Dispensing System, including following equipment:

- A. 2,000 gallon unleaded grade aboveground gasoline storage tank serving one nozzle;
- B. CARB-certified Phase I (filling of storage tank) vapor collection system(s), including all CARB certified components;
- C. Permanently affixed fill tube in tank terminating no more than six inches from bottom of tank; and
- D. Balance-type Phase II (refueling of motor vehicles) gasoline vapor control system, including:
 1. Product dispensing/vapor collection nozzles: EW A4005;
 2. Vapor hoses (nozzles to risers) coaxial hose assembly: CARB approved;
 3. Retractor swivels: Searly Leather and Packing B-1399.
 4. Overhead hose retractors: CARB approved; and
 5. Dispensers: Fill Rite.

OPERATIONAL CONDITIONS:

1. Annual gasoline throughput shall not exceed 48,000 gallons per year without prior District approval. (Rule 210.1)
2. Permittee shall perform and pass a pressure integrity test on all pressure/vent (PV) valves at the facility in accordance with ARB Test Procedure TP-201.1E at least once every 12 months. (Rule 210.1)
3. Vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated, and maintained in accordance with manufacturer's recommendation to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 209, 412, and 412.1)
4. All Phase I (filling of storage tank) vapor collection equipment shall be used when tank is filled. (Rules 209 and 412)
5. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1) 4. Retail stations shall post following: illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 209)
6. All lines, fittings, adapters, caps, and connections shall be maintained leak-free. (Rule 412.1)
7. Tank shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
8. Any tank with vapor recovery system having defect shall not be operated until defect has been repaired, replaced, or adjusted as necessary to correct defect, and District has reinspected system or has authorized its use pending reinspection. All such defects shall be tagged "out of service" upon detection. (Rules 412 and 412.1)
9. General exterior of tank shall be white in color pursuant to the requirements detailed in CARB EO 201D. (Rule 412.1)

Emission Unit 0144010 Permit Conditions

10. Tank shall be equipped with pressure-vacuum valve set to within 10% of maximum allowable working pressure of tank. (Rule 412)
11. A copy of Executive Order 301D (or subsequent updates) and the ARB Approved Installation, Operation and Maintenance Manual for Standing Loss Control Vapor Recovery System for Existing Installation of Aboveground Storage Tanks shall be maintained at each Gasoline Dispensing Facility (GDF) where a certified Standing Loss Vapor Recovery System is installed.

SPECIAL CONDITIONS:

- aa. Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)
- bb. System and components shall be of California Air Resources Board certified design, any component changes shall have prior District approval. (Rule 412)

Internal Combustion – Diesel

DRAFT

Emission Unit 0129008 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129008	Emergency Use Piston Engine with Generator, Diesel, 61 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 61 BHP, including following equipment:

One 61 bhp emergency use piston engine powering electrical generator.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours

Emission Unit 0129009 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129009	Emergency Use Piston Engine with Hangar Deluge Pump #1, Diesel, 400 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Hangar Deluge Pump #1, Diesel, 400 BHP, including following equipment:

One 400 bhp emergency use piston engine powering hangar deluge pump #1.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0129010 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129010	Emergency Use Piston Engine with Hangar Deluge Pump #2, Diesel, 400 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Hangar Deluge Pump #2, Diesel, 400 BHP, including following equipment:

One 400 bhp emergency use piston engine powering hangar deluge pump #2.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0129014 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129014	Emergency Use Piston Engine with Generator, Diesel, 685 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 685 BHP, including following equipment:

One 685 bhp emergency use piston engine powering electrical generator.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide

(SO₂). (Rule 407)

4. Engine operation shall be no more than 200 hours per year. (Rule 427)

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Emission Unit 0129018 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129018	Emergency Generator, Diesel, 275 Bhp

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Generator, Diesel, 275 Bhp, including following equipment:

One 275 bhp diesel-fueled piston engine equipped with aftercooled turbocharger and crankcase ventilation.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system or equivalent control device or emission factor of less than 0.05 grams of hydrocarbon per brake horsepower hour. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
3. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
4. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
5. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
6. Engine visible emissions shall be less than 5% opacity or Ringelmann No. $\frac{1}{4}$ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
12. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.04 gm/bhp-hr (of PM) (CCR Title 17 § 93115)
0.02 lbm/hr (of PM₁₀)
0.58 lbm/day (of PM₁₀)
0.002 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.003 lbm/hr
0.07 lbm/day

Oxides of Nitrogen (as NO₂):

3.3 gm/bhp-hr (BACT)
2.00 lbm/hr
48.02 lbm/day
0.20 ton/yr

Volatile Organic Compounds (VOC):

0.05 gm/bhp-hr (BACT)
0.03 lbm/hr
0.72 lbm/day
0.003 ton/yr

Carbon Monoxide:

0.23 lbm/hr
5.52 lbm/day
0.02 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129019 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129019	Emergency Use Piston Engine with Water Pump #4, Diesel, 266 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Water Pump #4, Diesel, 266 BHP, including following equipment:

One 266 bhp emergency use piston engine powering water pump #4.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0129020 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129020	Emergency Use Piston Engine with Water Pump #3, Diesel, 266 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Water Pump #3, Diesel, 266 BHP, including following equipment:

One 266 bhp emergency use piston engine powering water pump #3.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0129021 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129021	Emergency Use Piston Engine with Water Pump #2, Diesel, 266 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Water Pump #2, Diesel, 266 BHP, including following equipment:

One 266 bhp emergency use piston engine powering water pump #2.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0129022 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129022	Emergency Use Piston Engine with Water Pump #1, Diesel, 266 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Water Pump #1, Diesel, 266 BHP, including following equipment:

One 266 bhp emergency use piston engine powering water pump #1.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0129027 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129027	Emergency Use Piston Engine with Generator, Diesel, 465 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 465 BHP,
including following equipment:

One 465 bhp emergency use piston engine powering electrical generator.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0129028 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129028	Emergency Use Piston Engine with Generator, Diesel, 390 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 390 BHP,
including following equipment:

One 390 bhp emergency use piston engine powering electrical generator.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0129034 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129034	Emergency Use Piston Engine with Generator, Diesel, 227 HP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 227 HP, including following equipment:

One 227 Bhp emergency use diesel piston engine power an electrical generator Model DSGAC.

OPERATIONAL CONDITIONS:

1. Operating hours shall not exceed 50 hours per year for maintenance and testing. (Rule 210.1 and CCR Title 17 § 93115)
2. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
3. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
4. Engine shall be equipped with after-cooled (intercooled) turbocharger. (Rule 210.1 BACT Requirement)
5. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT Requirement)
6. Visible emissions shall not exceed Ringelmann No. 1/4 or 5% opacity after engine achieves normal operating temperature. (Rule 210.1 BACT Requirement)
7. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
8. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
9. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft³ of gas at standard conditions. (Rule 404.1)
10. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and Rule 209)
11. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
12. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.15 g/bhp-hr (Title 17 CCR § 93115)
0.08 lbm/hr (of PM₁₀)
1.82 lbm/day (of PM₁₀)
0.01 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.10 lbm/hr
2.21 lbm/day
0.01 ton/yr

Oxides of Nitrogen (as NO₂):

2.80 g/bhp-hr
1.41 lbm/hr
33.94 lbm/day
0.14 ton/yr

Volatile Organic Compounds (VOC):

0.10 lbm/hr
2.42 lbm/day
0.01 ton/yr

Carbon Monoxide:

1.31 lbm/hr
31.51 lbm/day
0.13 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129036 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129036	Emergency Use Piston Engine with Generator, Diesel, 160 HP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 160 HP, including following equipment:

One 160 bhp (250 bhp-name plate) diesel-fueled piston engine equipped with aftercooled turbocharger and crankcase ventilation

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system or equivalent control device or emission factor of less than 0.11 grams of hydrocarbon per brake horsepower hour. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
3. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
4. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
5. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
6. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
12. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.07 gm/bhp-hr (of PM) (CCR Title 17 § 93115)
0.03 lbm/hr (of PM₁₀)
0.60 lbm/day (of PM₁₀)
0.003 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.002 lbm/hr
0.05 lbm/day

Oxides of Nitrogen (as NO₂):

2.0 gm/bhp-hr (BACT)
0.71 lbm/hr
16.92 lbm/day
0.07 ton/yr

Volatile Organic Compounds (VOC): 0.01 lbm/hr

0.26 lbm/day
0.001 ton/yr

Carbon Monoxide:

0.18 lbm/hr
4.32 lbm/day
0.02 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129046 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129046	Emergency Use Piston Engine with Generator, Diesel, 380 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 380 BHP,
including following equipment:

- A. One 380 bhp 4-cycle turbocharged and aftercooled emergency use diesel piston engine;
- B. Brushless 250 kW AC alternator;
- C. Crankcase blow-by emissions absorber; and
- D. Elapsed time meter (or approved equivalent) for engine use measurement.

OPERATIONAL CONDITIONS:

- 1. Engine shall be equipped with turbocharger and aftercooler. (Rule 210.1 BACT Requirement)
- 2. Engine shall be equipped with Nelson crankcase emissions absorber with 90% efficiency. (Rule 210.1 BACT)
- 3. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
- 4. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
- 5. Injection timing shall be retarded at least 4 degrees relative to standard timing. (Rule 210.1 BACT Requirement)
- 6. Engine operation shall be no more than 200 hours per year. (Rule 427)
- 7. Operation of engine for other than maintenance and test purposes shall be limited to actual interruptions of power by utility company or emergencies and shall not be used in conjunction with any utility voluntary demand reduction program. (Rule 210.1)
- 8. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), check(s) and certification(s) of injection timing. (Rules 209 and 210.1)
- 9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
- 10. All equipment included in Equipment Description shall be maintained and shall be operational when engine is in use. (Rules 209 and 210.1)

COMPLIANCE TESTING REQUIREMENTS:

Compliance with particulate emission limit shall be demonstrated by District-witnessed sample collection by independent testing laboratory if engine exhibits visible emissions of 5% opacity or greater when under load. Official test results and field data shall be submitted within 30 days thereafter. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

<u>Particulate Matter (PM₁₀):</u>	0.42	lb/hr
	10.05	lb/day
	0.04	ton/yr
<u>Sulfur Oxides (SO_x as SO₂):</u>	0.13	lb/hr
	3.15	lb/day
	0.01	ton/yr
<u>Oxides of Nitrogen (NO_x as NO₂):</u>	9.3	gm/bhp-hr
	7.79	lb/hr
	187.02	lb/day
	0.78	ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.40	lb/hr
	9.65	lb/day
	0.04	ton/yr
<u>Carbon Monoxide:</u>	0.84	lb/hr
	20.11	lb/day
	0.08	ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129047 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129047	Emergency Use Piston Engine with Generator, Diesel, 166 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 166 BHP, including following equipment:

One 166 bhp, 6 cylinder, 4 cycle emergency use diesel piston engine, turbocharged and after-cooled with crankcase emissions control device, powering 100 kw electrical generator.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with after-cooled (intercooled) turbocharger. (Rule 210.1 BACT Requirement)
2. Engine crankcase vent shall be equipped with positive ventilation system. (Rule 210.1 BACT Requirement)
3. Injection timing shall be retarded at least 4 degrees relative to standard timing. (Rule 210.1 BACT Requirement)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)
5. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
6. Visible emissions from engine exhaust shall be no more than 5% opacity during normal operation. (Rule 210.1 BACT Requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 209)
8. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
9. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/dscf (of PM) (Rule 404.1)
0.30 lbm/hr (of PM₁₀)
7.13 lbm/day (of PM₁₀)
0.03 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.28 lbm/hr
6.64 lbm/day
0.03 ton/yr

Oxides of Nitrogen (as NO₂):

4.19 lbm/hr
100.44 lbm/day
0.42 ton/yr

Volatile Organic Compounds (VOC):

0.34 lbm/hr
8.10 lbm/day
0.03 ton/yr

Carbon Monoxide:

0.90 lbm/hr
21.64 lbm/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129048 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129048	Emergency Use Piston Engine with Generator, Diesel, 135 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 135 BHP,
including following equipment:

- A. One 135 bhp, 4-cycle emergency use piston engine, turbocharged, intercooled/aftercooled;
- B. One 80 kw generator;
- C. Elapsed time meter; and
- D. Positive crankcase ventilation or 90% capture efficiency of crankcase emissions.

OPERATIONAL CONDITIONS:

- 1. All equipment included in equipment description shall be maintained and shall be in operation when engine/generator is used. (Rules 209 and 210.1)
- 2. Crankcase emissions shall be controlled at efficiency of 90%. (Rule 210.1 BACT Requirement)
- 3. Engine operation shall be no more than 200 hours per year. (Rule 210.1 NSR and BACT Requirement)
- 4. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
- 5. Operation of engine for other than test and maintenance purposes shall be limited to actual interruptions of power by utility company or due to emergency and shall not be used in conjunction with any utility voluntary demand reduction program. (Rule 210.1)
- 6. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rules 209 and 210.1 BACT Requirement)
- 7. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel and sulfur content of fuel oil supplied to engine, elapsed time, and date(s) of inspection(s), and certification(s) of ignition timing. (Rules 209 and 210.1 BACT Requirement)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀): (Rule 404.1)

0.1 grains/scf
0.29 lbm/hr (of PM₁₀)

Nitrogen Oxides:

8.40 gms/hp-hr
2.50 lb/hr (as NO₂)

Sulfur Dioxide:

0.93 gm/hp-hr
0.28 lbm/hr (of SO₂)

Carbon Monoxide:

3.03 gm/hp-hr
0.90 lbm/hr

Hydrocarbons:

1.12 gm/hp-hr
0.33 lbm/hr (of NMHC)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129049 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129049	Emergency Use Piston Engine with Generator, Turbo, Diesel, 277 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Turbo, Diesel, 277 BHP, including following equipment:

- A. One 277 bhp, 4-cycle emergency use piston engine, turbocharged, intercooled/aftercooled;
- B. One 150 kw generator;
- C. Elapsed time meter; and
- D. Positive crankcase ventilation or 90% capture efficiency of crankcase emissions.

OPERATIONAL CONDITIONS:

1. All equipment included in equipment description shall be maintained and shall be in operation when engine/generator is used. (Rules 209 and 210.1)
2. Crankcase emissions shall be controlled at an efficiency of 90%. (Rule 210.1 BACT Requirement)
3. Engine operation shall be no more than 200 hours per year. (Rule 210.1 NSR and BACT Requirement)
4. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
5. Operation of engine for other than test and maintenance purposes shall be limited to actual interruptions of power by utility company or due to emergency and shall not be used in conjunction with any utility voluntary demand reduction program. (Rule 210.1)
6. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rules 209 and 210.1 BACT Requirement)
7. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel and sulfur content of fuel oil supplied to engine, elapsed time, and date(s) of inspection(s), and certification(s) of ignition timing. (Rules 209 and 210.1 BACT Requirement)

COMPLIANCE TESTING REQUIREMENTS:

Compliance with particulate emission limit shall be demonstrated by District-witnessed sample collection by independent testing laboratory if engine exhibits visible emissions of 5% opacity or greater. Official test results and field data shall be submitted within 30 days thereafter. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.1 grains/scf (Rule 404.1)
0.58 lbm/hr (of PM₁₀)

Nitrogen Oxides:

8.40 gms/hp-hr
5.12 lb/hr (as NO₂)

Sulfur Dioxide:

0.93 gm/hp-hr
0.42 lbm/hr (of SO₂)

Carbon Monoxide:

3.03 gm/hp-hr
1.86 lbm/hr

Hydrocarbons:

1.12 gm/hp-hr
0.69 lbm/hr (of NMHC)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129053 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129053	Emergency Use Piston Engine with Generator, Diesel, 1,041 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 1,041 BHP, including following equipment:

One 1,041 bhp emergency use diesel piston engine powering 700 kw generator at 60 Hz, equipped with twin turbocharger and aftercooler, Oildex closed crankcase dual ventilation control system, and Omega totalizer fuel meter mounted on generator control panel.

OPERATIONAL CONDITIONS:

1. Engine shall be used to provide emergency standby power and as needed for periodic maintenance. (Rule 210.1 Offset Exemption)
2. Engine shall burn diesel fuel satisfying CARB reformulated diesel specifications. (Rule 210.1 BACT Requirement)
3. Fuel injection timing shall be retarded 4 degrees relative to standard timing. (Rule 210.1 BACT Requirement)
4. Operation of this unit shall not exceed 200 hours per year (if not equipped with elapsed time meter, compliance may be shown with fuel meter indicating use does not exceed 9,820 gallons per year). (Rule 210.1 BACT Requirement)
5. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
6. Compliance with all operational conditions shall be verified by appropriate record keeping, including, records of operational data and fuel delivery records needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.1 grains/scf @12% CO₂ (Rule 409)
1.38 lb/hr (of PM₁₀)
0.60 gm/hp-hr (of PM)

Sulfur Oxides (as SO₂):

0.42 lb/hr
0.19 gm/hp-hr

Oxides of Nitrogen (as NO₂):

22.26 lb/hr
9.70 gm/hp-hr

Volatile Organic Compounds (VOC):

0.26 lb/hr
0.11 gm/hp-hr

Carbon Monoxide:

2.82 lb/hr
1.23 gm/hp-hr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted. Unit is not subject to offsets as it is for emergency use only.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129055 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129055	Emergency Use Piston Engine with Generator, Diesel, 102 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 102 BHP, including following equipment:

One 102 bhp emergency use diesel piston engine powering generator equipped with turbocharged and aftercooled engine, fuel injection timing retarded 4 degrees relative to standard timing, 90% efficient control device for crankcase emissions, and run time hour meter.

OPERATIONAL CONDITIONS:

1. Engine shall burn diesel fuel satisfying CARB reformulated diesel specifications. (Rule 210.1 BACT Requirement)
2. Engine operation shall be no more than 200 hours per calendar year. (Rule 210.1 BACT Requirement)
3. Engine injection timing shall be retarded 4 degrees relative to standard. (Rule 210.1 BACT Requirement)
4. Equipment shall be used exclusively for emergency standby power generation and shall not be used in conjunction with any utility voluntary demand reduction program. (Rule 210.1 Offset Exemption)
5. Operator shall establish method of record keeping to demonstrate compliance with hours of operation (such as fuel use records, elapsed time meter, maintenance log, etc.) and compliance with CARB reformulated diesel specifications. (Rule 209)
6. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
7. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
8. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.1 grains/scf (of PM) (Rule 404.1)

0.22 lb/hr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.04 lb/hr

Oxides of Nitrogen (as NO₂):

2.20 lb/hr

Volatile Organic Compounds (VOC):

0.26 lb/hr

Carbon Monoxide:

0.68 lb/hr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129067 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129067	Emergency Use Piston Engine with Firewater Pump #1, Diesel, 801 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Firewater Pump #1, Diesel, 801 BHP, including following equipment:

One 801 bhp emergency use diesel piston engine powering firewater pump #1.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf. (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter: 0.50 lbm/hr

Sulfur Dioxide: 1.10 lbm/hr

Nitrogen Oxides: 11.10 lbm/hr

Hydrocarbons: 0.30 lbm/hr

Carbon Monoxide: 1.50 lbm/hr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129068 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129068	Emergency Use Piston Engine with Firewater Pump #2, Diesel, 801 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Firewater Pump #2, Diesel, 801 BHP, including following equipment:

One 801 bhp emergency use diesel piston engine powering firewater pump #2.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf. (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀): 0.50 lbm/hr

Sulfur Dioxide: 1.10 lbm/hr

Nitrogen Oxides: 11.10 lbm/hr

Hydrocarbons: 0.30 lbm/hr

Carbon Monoxide: 1.50 lbm/hr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129069 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129069	Emergency Use Piston Engine with Generator, Diesel #3, 801 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel #3, 801 BHP, including following equipment:

One 801 bhp emergency use diesel piston engine powering firewater pump #3.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf. (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀): 0.50 lbm/hr

Sulfur Dioxide: 1.10 lbm/hr

Nitrogen Oxides: 11.10 lbm/hr

Hydrocarbons: 0.30 lbm/hr

Carbon Monoxide: 1.50 lbm/hr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129070 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129070	Emergency Use Piston Engine with Generator, Diesel, 390 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 390 BHP,
including following equipment:

One 390 bhp emergency use piston engine powering generator.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0129071 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129071	Emergency Use Piston Engine with Generator, Diesel, 207 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 207 BHP,
including following equipment:

One 207 bhp emergency use piston engine powering generator.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0129080 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129080	Emergency Use Piston Engine with Generator, Diesel, 475 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 475 BHP, including following equipment:

One 475 bhp emergency use diesel piston engine, lean burn design, turbocharged and aftercooled with crankcase emissions control device, powering generator.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with turbocharger and aftercooler. (Rule 210.1 BACT Requirement)
3. Engine injection timing shall be retarded at least 4 degrees relative to standard timing. (Rule 210.1 BACT Requirement)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)
5. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
6. Visible emissions from engine exhaust shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.1 grains/dscf (of PM) (Rule 404.1)
0.10 lbm/hr (of PM₁₀)
2.43 lbm/day (of PM₁₀)

Sulfur Oxides (as SO₂):

0.16 lbm/hr
3.97 lbm/day

Oxides of Nitrogen (as NO₂):

9.13 lbm/hr
219.03 lbm/day
0.91 ton/yr

Volatile Organic Compounds (VOC): (as defined in Rule 210.1)

0.20 lbm/hr
4.87 lbm/day
0.02 ton/yr

Carbon Monoxide:

0.81 lbm/hr
19.47 lbm/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129085 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129085	Emergency Use Piston Engine with Generator, Diesel, 1,135 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 1,135 BHP, including following equipment:

One, 1,135 hp 12 cylinder emergency use diesel piston engine equipped with turbocharger, aftercooler, and positive crankcase ventilation, powering 750 kw electrical generator.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase emissions. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with turbocharger, aftercooler, and injection timing advance of not more than 16° before top dead center. (Rule 210.1 and 427)
3. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hour of engine operating time. (Rules 210.1 and 427)
4. Engine shall be operated only for maintenance, testing, and required regulatory purpose, and during emergency situation. (Rule 210.1)
5. Engine operation shall be no more than 200 hours per year (excluding routine maintenance/check startups). (Rule 210.1)
6. Visible emissions from engine exhaust shall not exceed Ringelmann No. 3 or equivalent 5% opacity after engine achieves normal operating temperature. (Rule 210.1 BACT Requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
9. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.23 lbm/hr
5.41 lbm/day
0.02 ton/yr

Sulfur Oxides (as SO₂):

0.39 lbm/hr
9.43 lbm/day
0.04 ton/yr

Oxides of Nitrogen (as NO₂):

19.95 lbm/hr
478.71 lbm/day
2.00 ton/yr

Volatile Organic Compounds (VOC): (as defined in Rule 210.1)

0.46 lbm/hr
11.10 lbm/day
0.05 ton/yr

Carbon Monoxide:

0.35 lbm/hr
8.41 lbm/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129087 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129087	Emergency Use Piston Engine with Generator, Diesel, 68 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 68 BHP, including following equipment:

One 68 bhp 4 cylinder emergency use diesel piston engine with positive crankcase ventilation, powering 35 kw electrical generator.

OPERATIONAL CONDITIONS:

1. Engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. (Rule 210.1)
2. Engine operation shall be no more than 200 hours per year (excluding routine maintenance/check startups). (Rule 210.1)
3. Visible emissions from engine exhaust shall not exceed Ringelmann No. 1/4 or equivalent 5% opacity after engine achieves normal operating temperature. (Rule 210.1 BACT Requirement)
4. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
5. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
6. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
7. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.06 lbm/hr
1.44 lbm/day
0.01 ton/yr

Sulfur Oxides (as SO₂):

0.02 lbm/hr
0.55 lbm/day
0.00 ton/yr

Oxides of Nitrogen (as NO₂):

6.90 g/bhp-hr (Rule 210.1 BACT Requirement)
1.04 lbm/hr
24.83 lbm/day
0.10 ton/yr

Volatile Organic Compounds (VOC):

0.13 lbm/hr (as defined in Rule 210.1)
3.02 lbm/day
0.01 ton/yr

Carbon Monoxide:

1.27 lbm/hr
30.59 lbm/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129089 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129089	Emergency Use Piston Engine with Generator, Diesel, 102 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 102 BHP, including following equipment:

One 102 bhp emergency use diesel piston engine, equipped with turbocharger and crankcase ventilation control device, powering 60 kW generator.

OPERATIONAL CONDITIONS:

1. Engine visible emissions shall be less than 5% opacity or Ringelmann No. 3 during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT Requirement)
2. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
3. Engine operation shall be no more than 200 hours per year. (Rule 210.1)
4. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
5. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
6. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rule 210.1)
7. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
8. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/dscf (of PM) (Rule 404.1)
0.05 lbm/hr (of PM₁₀)
1.08 lbm/day (of PM₁₀)
0.01 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.03 lbm/hr
0.80 lbm/day

Oxides of Nitrogen (as NO₂):

6.9 gm/bhp-hr
1.55 lbm/hr
37.24 lbm/day
0.16 ton/yr

Volatile Organic Compounds (VOC):

0.23 lbm/hr
4.40 lbm/day
0.02 ton/yr

Carbon Monoxide:

1.91 lbm/hr
45.87 lbm/day
0.19 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129090 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129090	IC Generator, Turbo Charged (Emergency), Diesel, 170 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: IC Generator, Turbo Charged (Emergency), Diesel, 170 BHP, including following equipment:

One 170 bhp diesel piston engine equipped with turbocharger and crankcase ventilation control device.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with turbo-charger. (Rule 210.1 BACT Requirement).
3. Engine visible emissions shall be less than 5% opacity or Ringelmann No. 3 during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
4. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
5. Operating hours shall not exceed 200 hours per year. (Rules 210.1 and 427)
6. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)
7. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
8. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
9. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/dscf (of PM) (Rule 404.1)
0.08 lbm/hr (of PM₁₀)
1.80 lbm/day (of PM₁₀)
0.01 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.11 lbm/hr
2.52 lbm/day
0.01 ton/yr

Oxides of Nitrogen (as NO₂):

6.9 gm/bhp-hr
2.59 lbm/hr
62.06 lbm/day
0.26 ton/yr

Volatile Organic Compounds (VOC):

0.07 lbm/hr
1.70 lbm/day
0.01 ton/yr

Carbon Monoxide:

0.56 lbm/hr
13.39 lbm/day
0.06 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129091 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129091	IC Emergency Generator Set, Diesel, 765 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: IC Emergency Generator Set, Diesel, 765 BHP, including following equipment:

One 765 bhp diesel piston engine equipped with turbocharger and crankcase filtration system.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with crankcase vent control device. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with turbocharger. (Rule 210.1 BACT Requirement)
3. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
4. Hours of operation shall not exceed 200 hours per year. (Rule 210.1)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
6. Visible emissions shall not exceed Ringelmann 3 or 5% opacity during normal operation. (Rule 210.1 BACT Requirement)
7. Emergency use engine shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)
8. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, and annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and DISTRICT Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/dscf (of PM) (Rule 404.1)
0.05 lbm/hr (of PM₁₀)
1.13 lbm/day (of PM₁₀)
0.01 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.27 lbm/hr
6.43 lbm/day
0.03 ton/yr

Oxides of Nitrogen (as NO₂):

4.3 gm/bhp-hr
7.25 lbm/hr
174.05 lbm/day
0.73 ton/yr

Volatile Organic Compounds (VOC):

0.17 lbm/hr
3.96 lbm/day
0.02 ton/yr

Carbon Monoxide:

1.16 lbm/hr
27.94 lbm/day
0.12 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 209)

Emission Unit 0129092 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129092	IC Emergency Generator Set, Diesel, 765 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: IC Emergency Generator Set, Diesel, 765 BHP, including following equipment:

One 765 bhp diesel piston engine equipped with turbocharger and crankcase filtration system.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with crankcase vent control device. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with turbocharger. (Rule 210.1 BACT Requirement)
3. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
4. Hours of operation shall not exceed 200 hours per year. (Rule 210.1)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
6. Visible emissions shall not exceed Ringelmann 3 or 5% opacity during normal operation. (Rule 210.1 BACT Requirement)
7. Emergency use engine shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)
8. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, and annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/dscf (of PM) (Rule 404.1)
0.05 lbm/hr (of PM₁₀)
1.13 lbm/day (of PM₁₀)
0.01 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.27 lbm/hr
6.43 lbm/day
0.03 ton/yr

Oxides of Nitrogen (as NO₂):

4.3 gm/bhp-hr
7.25 lbm/hr
174.05 lbm/day
0.73 ton/yr

Volatile Organic Compounds (VOC):

0.17 lbm/hr
3.96 lbm/day
0.02 ton/yr

Carbon Monoxide:

1.16 lbm/hr
27.94 lbm/day
0.12 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129093 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129093	Piston Engine with Generator, Emergency, 207 BHP, Diesel

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Piston Engine with Generator, Emergency, 207 BHP, Diesel, including following equipment:

One 207 bhp turbocharged, aftercooled diesel piston engine powering 154 kW generator.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with turbocharger and aftercooler. (Rule 210.1)
3. An elapsed time meter shall be installed and maintained indicating in cumulative hours amount of engine operating time. (Rule 210.1)
4. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not exceed 5% opacity or Ringelmann No. 1/4 for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
5. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft³ of gas at standard conditions. (Rule 404.1)
6. Fuel for diesel piston engine shall conform to California Air Resource Board standards for reformulated diesel fuel (low sulfur, 0.05% by weight and low aromatic hydrocarbon, 20% by weight). (Rule 210.1 BACT Requirement)
7. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 210.1 and Rule 209)
8. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
10. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with diesel piston engine emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.10 lb/hr
2.41 lb/day
0.01 ton/yr

Sulfur Oxides (SO₂):

0.08 lb/hr
2.03 lb/day
0.01 ton/yr

Oxides of Nitrogen (NO₂):

2.58 lb/hr
60.00 lb/day
0.26 ton/yr

Volatile Organic Compounds (VOC):

0.15 lb/hr
3.51 lb/day
0.01 ton/yr

Carbon Monoxide:

0.25 lb/hr
6.02 lb/day
0.03 ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129094 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129094	Emergency Generator Driven By 170 BHP Diesel Piston Engine

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Generator Driven By 170 BHP Diesel Piston Engine,
including following equipment:

One 170 bhp, turbocharged, diesel piston engine powering 80 kW generator.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with turbocharger. (Rule 210.1)
3. Engine shall have an elapsed time meter indicating cumulative hours amount of engine operating time. (Rules 209 and 210.1)
4. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not exceed 5% opacity or Ringelmann No. 1/4 for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
5. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft³ of gas at standard conditions. (Rule 404.1)
6. Fuel for diesel piston engine shall conform to California Air Resource Board standards for reformulated diesel fuel (low sulfur, 0.05% by weight and low aromatic hydrocarbon, 20% by weight). (Rule 210.1 BACT Requirement)
7. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 210.1 and Rule 209)
8. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
10. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with diesel piston engine emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.05 lb/hr
1.26 lb/day
0.01 ton/yr

Sulfur Oxides (SO₂):

0.07 lb/hr
1.66 lb/day
0.01 ton/yr

Oxides of Nitrogen (NO₂):

4.90 gms/bhp-hr
1.84 lb/hr
44.08 lb/day
0.18 ton/yr

Volatile Organic Compounds (VOC):

0.08 lb/hr
1.89 lb/day
0.01 ton/yr

Carbon Monoxide:

0.22 lb/hr
5.40 lb/day
0.02 ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129095 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129095	Emergency Generator Driven By 382 BHP Piston Engine

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Generator Driven By 382 BHP Piston Engine, including following equipment:

One 382 bhp diesel-fueled piston engine equipped with turbocharger (aftercooled) and crankcase ventilation control device.

OPERATIONAL CONDITIONS:

1. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
2. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 427)
3. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
4. Visible emissions shall not exceed Ringelmann No. or 5% opacity after engine achieves normal operating temperature. (Rule 210.1 BACT Requirement)
5. Emergency use engine shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)
6. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
8. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
9. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), check(s) and certification(s) of injection timing. (Rules 209 and 210.1)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/dscf (of PM) (Rule 404.1)
0.06 lbm/hr (of PM₁₀)
1.32 lbm/day (of PM₁₀)
0.01 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.14 lbm/hr
3.24 lbm/day
0.01 ton/yr

Oxides of Nitrogen (as NO₂):

4.30 lbm/hr
103.08 lbm/day
0.43 ton/yr

Volatile Organic Compounds (VOC):

0.12 lbm/hr
2.83 lbm/day
0.01 ton/yr

Carbon Monoxide:

0.95 lbm/hr
22.85 lbm/day
0.10 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129096 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129096	Emergency Use Piston Engine with Generator, Diesel, 208 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 208 BHP, including following equipment:

One 208-bhp diesel piston engine powering 125-kW generator.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1)
2. Engine shall be equipped with turbocharger and aftercooler. (Rule 210.1)
3. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
4. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not exceed 5% opacity or Ringelmann No. 1/4 for more than 3 minutes in any one hour. (Rule 210.1)
5. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft³ of gas at standard conditions. (Rule 404.1)
6. Fuel for diesel piston engine shall conform to California Air Resource Board standards for reformulated diesel fuel (low sulfur, 0.05% by weight and low aromatic hydrocarbon, 20% by weight). (Rule 210.1)
7. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 210.1 and Rule 209)
8. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
10. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with diesel piston engine emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.10 gm/bhp-hr
0.05 lb/hr
1.10 lb/day
0.00 ton/yr

Sulfur Oxides (SO₂):

0.17 gm/bhp-hr
0.08 lb/hr
1.88 lb/day
0.01 ton/yr

Oxides of Nitrogen (NO₂):

4.89 gm/bhp-hr
2.24 lb/hr
53.83 lb/day
0.22 ton/yr

Volatile Organic Compounds (VOC):

0.20 gm/bhp-hr (as defined in Rule 210.1)
0.09 lb/hr
2.20 lb/day
0.01 ton/yr

Carbon Monoxide:

0.36 gm/bhp-hr
0.17 lb/hr
3.96 lb/day
0.02 ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129097 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129097	Emergency Use Piston Engine with Generator, Diesel, 755 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 755 BHP, including following equipment:

One 755 bhp diesel-fueled piston engine equipped with turbocharger and crankcase ventilation control device.

OPERATIONAL CONDITIONS:

1. Operating hours shall not exceed 50 hours per year for maintenance and testing. (Rule 210.1 and CCR Title 17 § 93115)
2. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
3. Engine shall be equipped with after-cooled (intercooled) turbocharger. (Rule 210.1 BACT Requirement)
4. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT Requirement)
5. Visible emissions shall not exceed Ringelmann No. ¼ or 5% opacity after engine achieves normal operating temperature. (Rule 210.1 BACT Requirement)
6. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft³ of gas at standard conditions. (Rule 404.1)
9. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and Rule 209)
10. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.15 g/bhp-hr (Title 17 CCR § 93115)
0.25 lbm/hr (of PM₁₀)
6.00 lbm/day (of PM₁₀)
0.03 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.01 lbm/hr
0.12 lbm/day
0.001 ton/yr

Oxides of Nitrogen (as NO₂):

4.8 g/bhp-hr
7.99 lbm/hr
191.74 lbm/day
0.80 ton/yr

Volatile Organic Compounds (VOC):

1.66 lbm/hr
39.94 lbm/day
0.17 ton/yr

Carbon Monoxide:

4.33 lbm/hr
103.87 lbm/day
0.43 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129098 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129098	Emergency Use Piston Engine with Generator, Diesel, 170 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 170 BHP,
including following equipment:

One 170 bhp diesel-fueled piston engine equipped with turbocharger, aftercooler and crankcase ventilation

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
3. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
4. Total hours of operation shall not exceed 200 hours per year without prior District approval (Rule 210.1)
5. Engine visible emissions shall be less than 5% opacity or Ringelmann No. $\frac{1}{4}$ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
6. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
8. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
9. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
11. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.15 g/bhp-hr (of PM) (CCR 93115)
0.10 grains/dscf (of PM) (Rule 404.1)
0.05 lbm/hr (of PM₁₀)
1.25 lbm/day (of PM₁₀)
0.005 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.05 lbm/hr
1.13 lbm/day
0.005 ton/yr

Oxides of Nitrogen (as NO₂):

4.9 g/bhp-hr (BACT)
1.84 lbm/hr
44.06 lbm/day
0.18 ton/yr

Volatile Organic Compounds (VOC):

0.08 lbm/hr
1.90 lbm/day
0.008 ton/yr

Carbon Monoxide:

0.23 lbm/hr
5.40 lbm/day
0.023 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129100 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129100	Emergency Use Piston Engine with Generator, Diesel

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, including following equipment:

One diesel-fueled piston engine equipped with turbocharger, aftercooler and positive crankcase ventilation

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
3. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
4. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
5. Total hours of operation shall not exceed 200 hours per year without prior District approval (Rule 210.1)
6. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
11. Exhaust gas particulate matter concentration shall not exceed 0.1 gr/dscf. (Rule 404.1)
12. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
13. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.14 g/bhp-hr (of PM) (CCR 93115)
0.03 lbm/hr (of PM₁₀)
0.74 lbm/day (of PM₁₀)
0.003 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.02 lbm/day

Oxides of Nitrogen (as NO₂):

5.07 g/bhp-hr (BACT)
1.11 lbm/hr
26.57 lbm/day
0.11 ton/yr

Volatile Organic Compounds (VOC):

0.22 lbm/hr
5.23 lbm/day
0.02 ton/yr

Carbon Monoxide:

0.08 lbm/hr
1.95 lbm/day
0.01 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129101 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129101	Emergency Use Piston Engine with Generator, Diesel

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, including following equipment:

One diesel-fueled piston engine equipped with turbocharger, aftercooler and positive crankcase ventilation.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
3. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
4. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
5. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
6. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
11. Exhaust gas particulate matter concentration shall not exceed 0.1 gr/dscf. (Rule 404.1)
12. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
13. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.14 g/bhp-hr (of PM) (CCR 93115)
0.03 lbm/hr (of PM₁₀)
0.74 lbm/day (of PM₁₀)
0.003 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.02 lbm/day

Oxides of Nitrogen (as NO₂):

5.07 g/bhp-hr (BACT)
1.11 lbm/hr
26.57 lbm/day
0.11 ton/yr

Volatile Organic Compounds (VOC):

0.22 lbm/hr
5.23 lbm/day
0.02 ton/yr

Carbon Monoxide:

0.08 lbm/hr
1.95 lbm/day
0.01 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210)

Emission Unit 0129102 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129102	Emergency Use Piston Engine with Generator, Diesel

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, including following equipment:

One diesel-fueled piston engine equipped with turbocharger, aftercooler and positive crankcase ventilation

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
3. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
4. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
5. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
6. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
11. Exhaust gas particulate matter concentration shall not exceed 0.1 gr/dscf. (Rule 404.1)
12. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
13. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.14 g/bhp-hr (of PM) (CCR 93115)
0.03 lbm/hr (of PM₁₀)
0.74 lbm/day (of PM₁₀)
0.003 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.02 lbm/day

Oxides of Nitrogen (as NO₂):

5.07 g/bhp-hr (BACT)
1.11 lbm/hr
26.57 lbm/day
0.11 ton/yr

Volatile Organic Compounds (VOC):

0.22 lbm/hr
5.23 lbm/day
0.02 ton/yr

Carbon Monoxide:

0.08 lbm/hr
1.95 lbm/day
0.01 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129103 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129103	Emergency Use Piston Engine with Generator, Diesel

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, including following equipment:

One diesel-fueled piston engine equipped with turbocharger, aftercooler and crankcase ventilation.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
3. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
4. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
5. Total hours of operation shall not exceed 200 hours per year without prior District approval (Rule 210.1)
6. Engine visible emissions shall be less than 5% opacity or Ringelmann No. $\frac{1}{4}$ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
12. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.14 g/bhp-hr (of PM) (CCR 93115)
0.10 grains/dscf (of PM) (Rule 404.1)
0.03 lbm/hr (of PM₁₀)
0.74 lbm/day (of PM₁₀)
0.003 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.02 lbm/day

Oxides of Nitrogen (as NO₂):

5.07 g/bhp-hr (BACT)
1.11 lbm/hr
26.57 lbm/day
0.11 ton/yr

Volatile Organic Compounds (VOC):

0.22 lbm/hr
5.23 lbm/day
0.02 ton/yr

Carbon Monoxide:

0.08 lbm/hr
1.95 lbm/day
0.01 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129104 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129104	Emergency Use Piston Engine with Generator, Diesel

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, including following equipment:

One diesel-fueled piston engine equipped with turbocharger, aftercooler and crankcase ventilation.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
3. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
4. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
5. Total hours of operation shall not exceed 200 hours per year without prior District approval (Rule 210.1)
6. Engine visible emissions shall be less than 5% opacity or Ringelmann No. $\frac{1}{4}$ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
12. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.14 g/bhp-hr (of PM) (CCR 93115)
0.10 grains/dscf (of PM) (Rule 404.1)
0.03 lbm/hr (of PM₁₀)
0.74 lbm/day (of PM₁₀)
0.003 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.02 lbm/day

Oxides of Nitrogen (as NO₂):

5.07 g/bhp-hr (BACT)
1.11 lbm/hr
26.57 lbm/day
0.11 ton/yr

Volatile Organic Compounds (VOC):

0.22 lbm/hr
5.23 lbm/day
0.02 ton/yr

Carbon Monoxide:

0.08 lbm/hr
1.95 lbm/day
0.01 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129105 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129105	Emergency Use Piston Engine with Generator, Diesel

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, including following equipment:

One diesel-fueled piston engine equipped with turbocharger, aftercooler and crankcase ventilation.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
3. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
4. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
5. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
6. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
12. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.14 g/bhp-hr (of PM) (CCR 93115)
0.10 grains/dscf (of PM) (Rule 404.1)
0.03 lbm/hr (of PM₁₀)
0.74 lbm/day (of PM₁₀)
0.003 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.02 lbm/day

Oxides of Nitrogen (as NO₂):

5.07 g/bhp-hr (BACT)
1.11 lbm/hr
26.57 lbm/day
0.11 ton/yr

Volatile Organic Compounds (VOC):

0.22 lbm/hr
5.23 lbm/day
0.02 ton/yr

Carbon Monoxide:

0.08 lbm/hr
1.95 lbm/day
0.01 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129107 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129107	Emergency Use Engine, Firewater Pump, Diesel, 71 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Engine, Firewater Pump, Diesel, 71 BHP, including following equipment:

One 71 bhp diesel-fueled piston engine equipped with crankcase ventilation.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
3. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
4. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
5. Engine visible emissions shall be less than 5% opacity or Ringelmann No. $\frac{1}{4}$ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
6. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
8. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
9. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
11. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.18 g/bhp-hr (of PM) (CCR 93115)
0.10 grains/dscf (of PM) (Rule 404.1)
0.03 lbm/hr (of PM₁₀)
0.67 lbm/day (of PM₁₀)
0.003 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.02 lbm/day

Oxides of Nitrogen (as NO₂):

3.85 g/bhp-hr (BACT)
0.60 lbm/hr
14.47 lbm/day
0.06 ton/yr

Volatile Organic Compounds (VOC):

0.09 lbm/hr
2.26 lbm/day
0.01 ton/yr

Carbon Monoxide:

0.44 lbm/hr
10.51 lbm/day
0.04 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129108 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129108	IC Generator, Emergency Use, Diesel, 2937 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: IC Generator, Emergency Use, Diesel, 2937 BHP, including following equipment:

One 2937 bhp diesel-fueled piston engine equipped with turbocharger, aftercooler and crankcase ventilation.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system or equivalent control device. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
3. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
4. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
5. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
6. Engine visible emissions shall be less than 5% opacity or Ringelmann No. $\frac{1}{4}$ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
12. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.07 g/bhp-hr (of PM) (CCR 93115)
0.10 grains/dscf (of PM) (Rule 404.1)
0.45 lbm/hr (of PM₁₀)
10.87 lbm/day (of PM₁₀)
0.05 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.72 lbm/day

Oxides of Nitrogen (as NO₂):

3.95 g/bhp-hr (BACT)
25.58 lbm/hr
613.82 lbm/day
2.56 ton/yr

Volatile Organic Compounds (VOC):

6.48 lbm/hr
155.4 lbm/day
0.65 ton/yr

Carbon Monoxide:

4.34 lbm/hr
104.11 lbm/day
0.43 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129109 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129109	Emergency Use Piston Engine with Generator, Diesel, 591 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 591 BHP, including following equipment:

One 591 bhp (755 bhp-name plate) diesel-fueled piston engine equipped with crankcase ventilation.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
3. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
4. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
5. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
6. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
8. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
9. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
11. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.05 g/bhp-hr (of PM) (CCR 93115)
0.10 grains/dscf (of PM) (Rule 404.1)
0.06 lbm/hr (of PM₁₀)
1.56 lbm/day (of PM₁₀)
0.007 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.01 lbm/hr
0.14 lbm/day

Oxides of Nitrogen (as NO₂):

4.85 g/bhp-hr (BACT)
6.32 lbm/hr
151.66 lbm/day
0.63 ton/yr

Volatile Organic Compounds (VOC):

0.08 lbm/hr
1.87 lbm/day
0.01 ton/yr

Carbon Monoxide:

0.56 lbm/hr
13.44 lbm/day
0.06 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129110 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129110	Emergency Use Piston Engine with Generator, Diesel, 158 Bhp

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 158 Bhp,
including following equipment:

One 158 bhp, diesel-fueled, piston engine equipped with crankcase ventilation.

OPERATIONAL CONDITIONS:

1. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
2. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
3. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
4. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
7. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
8. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
10. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 036A.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 036A.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.14 g/bhp-hr (of PM) (CCR 93115)
0.10 grains/dscf (of PM) (Rule 404.1)
0.05 lbm/hr (of PM₁₀)
1.18 lbm/day (of PM₁₀)
0.005 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.002 lbm/hr
0.05 lbm/day

Oxides of Nitrogen (as NO₂):

2.78 g/bhp-hr (BACT)
0.97 lbm/hr
23.23 lbm/day
0.10 ton/yr

Volatile Organic Compounds (VOC):

0.03 lbm/hr
0.74 lbm/day
0.003 ton/yr

Carbon Monoxide:

0.47 lbm/hr
11.21 lbm/day
0.05 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129112 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129112	Emergency Use Piston Engine with Generator, Diesel, 65 Bhp

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 65 Bhp, including following equipment:

One 65-bhp (45-kW) Cummins Model, diesel-fueled piston engine powering 35-kW electrical generator set.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger and intercooler. (Rule 210.1 BACT Requirement)
2. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
3. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not equal or exceed 5% opacity or Ringelmann No. $\frac{1}{4}$ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
4. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur, 0.0015% by weight and low aromatic hydrocarbon, 20% by weight). (Rule 210.1 BACT Requirement)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1 and Rule 209)
7. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
8. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of five years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, date(s) fuel was supplied, and engine check(s) including: air filters, fuel filters, oil filters, engine oil, exhaust system, coolant, and spark plugs (if so equipped) (Rules 209 and 210.1)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC 41700)
10. Engine operation for maintenance and testing shall not exceed 50 hours per year without prior District approval. (Rule 210.1)
11. Engine operation for shall not exceed 200 hours per year without prior District approval. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with diesel-fueled piston engine emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

Particulate Matter (PM₁₀):

0.30	gm/bhp-hr
0.04	lb/hr
1.03	lb/day
0.004	ton/yr

Sulfur Oxides (Sox as SO₂):

0.001	lb/hr
0.02	lb/day
0.0001	ton/yr

Oxides of Nitrogen (NO₂):

3.3	gm/bhp-hr
0.47	lb/hr
11.35	lb/day
0.05	ton/yr

Volatile Organic Compounds (VOC):
(as defined in Rule 210.1)

0.2	gm/bhp-hr
0.03	lb/hr
0.69	lb/day
0.003	ton/yr

Carbon Monoxide:

3.7	gm/bhp-hr
0.53	lb/hr
12.73	lb/day
0.05	ton/yr

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129121 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129112	Emergency Use Piston Engine with Generator, Diesel, 385 Bhp

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 385 Bhp,
including following equipment:

250 kW Kohler emergency generator set, Model 250REOZJE, driven by John Deere, Model 6090HF484B, EPA Certified Tier 3 engine rated at 385 bhp diesel fueled piston engine equipped with turbocharger and aftercooler.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system or equivalent control device. (Rule 210.1 BACT Requirement)
2. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rule 209 and 210.1)
3. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.0)
4. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
7. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
9. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)
10. Edwards AFB must operate the emergency stationary IC engine according to the requirements specified in 40 CFR Part 60, Subpart III. In order for the engine to be considered an emergency stationary IC engine, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited. (40 CFR Part 60, Subpart III).

DISTRICT-ONLY OPERATIONAL CONDITIONS:

- aa. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
- bb. Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

Emission Unit 0129121 Permit Conditions

- cc. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel.

Record shall include:

- a. Emergency use hours of operation;
- b. Maintenance and testing hours of operation;
- c. Hours of operation for all uses other than those specified in sections 93115.10(g)(1)(A) through (D); and
- d. The fuel used. (CCR Section 93115)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveals conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and EKAPCD Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

<u>Particulate Matter (PM₁₀):</u>	0.15	gm/bhp-hr
	0.13	lb/hr
	3.06	lb/day
	0.001	ton/yr

<u>Sulfur Oxides (Sox as SO₂):</u>	0.004	lb/hr
	0.09	lb/day
	0.0000	ton/yr

<u>Oxides of Nitrogen (NO₂):</u>	2.8	gm/bhp-hr
	2.38	lb/hr
	57.04	lb/day
	0.24	ton/yr

<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.2	gm/bhp-hr
	0.17	lb/hr
	4.07	lb/day
	0.02	ton/yr

<u>Carbon Monoxide:</u>	2.6	gm/bhp-hr
	2.21	lb/hr
	52.96	lb/day
	0.22	ton/yr

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Emission Unit 0129121 Permit Conditions

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 210.1)

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Emission Unit 0130011 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0130011	Emergency Use Piston Engine with Generator, Diesel, 170 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 170 BHP,
including following equipment:

One 170 bhp, diesel-fueled, piston engine equipped with turbocharger and crankcase ventilation control device.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with positive crankcase ventilation or equivalent 90% efficient control device. (Rule 210.1 BACT Requirement)
3. Engine visible emissions shall be less than 5% opacity or Ringelmann No. during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
4. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
5. Operating hours shall not exceed 200 hours per year. (Rules 210.1 and 427)
6. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)
7. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
8. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
9. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10	grains/dscf (of PM) (Rule 404.1)
0.08	lbm/hr (of PM ₁₀)
1.80	lbm/day (of PM ₁₀)
0.01	ton/yr (of PM ₁₀)

Sulfur Oxides (as SO₂):

0.22	lbm/hr
5.30	lbm/day
0.02	ton/yr

Oxides of Nitrogen (as NO₂):

2.80	lbm/hr
67.20	lbm/day
0.28	ton/yr

Volatile Organic Compounds (VOC):

0.07	lbm/hr
1.70	lbm/day
0.01	ton/yr

Carbon Monoxide:

0.56	lbm/hr
13.39	lbm/day
0.06	ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0130012 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0130012	Emergency Use Piston Engine, Diesel, 105 BHP with Firewater Pump

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine, Diesel, 105 BHP with Firewater Pump, including following equipment:

One 105 bhp, turbocharged, diesel piston engine powering firewater pump set.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with turbocharger. (Rule 210.1)
3. Engine shall have an elapsed time meter indicating cumulative hours amount of engine operating time. (Rules 209 and 210.1)
4. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not exceed 5% opacity or Ringelmann No. 1/4 for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
5. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft³ of gas at standard conditions. (Rule 404.1)
6. Fuel for diesel piston engine shall conform to California Air Resource Board standards for reformulated diesel fuel (low sulfur, 0.05% by weight and low aromatic hydrocarbon, 20% by weight). (Rule 210.1 BACT Requirement)
7. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 210.1 and Rule 209)
8. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
10. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with diesel piston engine emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.02 lb/hr
0.39 lb/day
0.00 ton/yr

Sulfur Oxides (SO₂):

0.03 lb/hr
0.61 lb/day
0.00 ton/yr

Oxides of Nitrogen (NO₂):

1.32 lb/hr
31.67 lb/day
0.13 ton/yr

Volatile Organic Compounds (VOC):

0.06 lb/hr
1.50 lb/day
0.01 ton/yr

Carbon Monoxide:

0.07 lb/hr
1.72 lb/day
0.01 ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0130013 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0130013	Emergency Use Piston Engine with Generator, Diesel, 535 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 535 BHP, including following equipment:

One 535-bhp, diesel piston engine powering 350-kW generator set.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with turbocharger. (Rule 210.1)
3. An elapsed time meter shall be installed and maintained indicating in cumulative hours amount of engine operating time. (Rule 210.1)
4. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not exceed 5% opacity or Ringelmann No. 1/4 for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
5. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft³ of gas at standard conditions. (Rule 404.1)
6. Fuel for diesel piston engine shall conform to California Air Resource Board standards for reformulated diesel fuel (low sulfur, 0.05% by weight and low aromatic hydrocarbon, 20% by weight). (Rule 210.1 BACT Requirement)
7. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 210.1 and Rule 209)
8. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
10. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with diesel piston engine emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.08 gm/bhp-hr
0.09 lb/hr
2.27 lb/day
0.01 ton/yr

Sulfur Oxides (SO₂):

0.14 gm/bhp-hr
0.17 lb/hr
4.05 lb/day
0.02 ton/yr

Oxides of Nitrogen (NO₂):

5.80 gm/bhp-hr
6.84 lb/hr
164.21 lb/day
0.68 ton/yr

Volatile Organic Compounds (VOC):

0.17 gm/bhp-hr
0.20 lb/hr
4.76 lb/day
0.02 ton/yr

Carbon Monoxide:

0.40 gm/bhp-hr
0.47 lb/hr
11.33 lb/day
0.05 ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

SPECIAL CONDITIONS:

- aa. Upon implementation of this Authority to Construct, Permit to Operate (PTO) 0129086 is no longer valid and is reissued as PTO 0130013. (Rule 203)
- bb. Existing generator set (PTO 0130005) with 760-bhp diesel piston engine shall be transferred to Building 2601 as PTO 0129097. (Rule 210.1)

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Emission Unit 0130014 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0130014	Emergency Use Piston Engine with Generator, Diesel, 103 Bhp

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 103 Bhp,
including following equipment:

One 103 bhp, diesel piston engine equipped with turbocharger and crankcase ventilation

OPERATIONAL CONDITIONS:

1. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
2. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
3. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
4. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
7. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
8. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
10. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 036A.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 036A.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.06 g/bhp-hr (of PM) (CCR 93115)
0.10 grains/dscf (of PM) (Rule 404.1)
0.01 lbm/hr (of PM₁₀)
0.34 lbm/day (of PM₁₀)
0.001 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.001 lbm/hr
0.02 lbm/day

Oxides of Nitrogen (as NO₂):

2.37 g/bhp-hr (BACT)
0.54 lbm/hr
12.91 lbm/day
0.05 ton/yr

Volatile Organic Compounds (VOC):

0.01 lbm/hr
0.22 lbm/day
0.001 ton/yr

Carbon Monoxide:

0.11 lbm/hr
2.74 lbm/day
0.01 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0132006 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132006	Emergency Use Piston Engine with Generator #1, Diesel, 1,482 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator #1, Diesel, 1,482 BHP, including following equipment:

One 1,482 bhp, 12 cylinder, 4 cycle, 3,158 cu. in. emergency use diesel piston engine, water-cooled and turbocharged, powering 1,000 kw electrical generator.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Unit shall be fired on fuel satisfying CARB reformulated diesel specifications. (Rule 210.1)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀): 2.65 lbm/hr

Oxides of Sulfur (SO₂): 4.10 lbm/hr

Oxides of Nitrogen (NO₂): 37.04 lbm/hr

Hydrocarbons: 2.97 lbm/hr

Carbon Monoxide: 8.02 lbm/hr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0132007 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132007	Emergency Use Piston Engine with Generator #2, Diesel, 1,482 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator #2, Diesel, 1,482 BHP, including following equipment:

One 1,482 bhp, 12 cylinder, 4 cycle, 3,158 cu. in. emergency use piston engine, water-cooled and turbocharged, powering 1,000 kw electrical generator.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Unit shall be fired on fuel satisfying CARB reformulated diesel specifications. (Rule 210.1)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀): 2.65 lbm/hr

Oxides of Sulfur (SO₂): 4.10 lbm/hr

Oxides of Nitrogen (NO₂): 37.04 lbm/hr

Hydrocarbons: 2.97 lbm/hr

Carbon Monoxide: 8.02 lbm/hr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 210.1 and 209)

Emission Unit 0132047 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132047	Emergency Use Piston Engine with Firewater Pump #1, Diesel, 420 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Firewater Pump #1, Diesel, 420 BHP, including following equipment:

One 420 bhp, emergency use diesel piston engine powering firewater pump #1.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0132050 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132050	Emergency Use Piston Engine with Firewater Pump #3, Diesel, 420 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Firewater Pump #3, Diesel, 420 BHP, including following equipment:

One 420 bhp, emergency use diesel piston engine powering firewater pump #3.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0132051 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132051	Emergency Use Piston Engine with Firewater Pump #5, Diesel, 420 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Firewater Pump #5, Diesel, 420 BHP, including following equipment:

One 420 bhp, emergency use diesel piston engine powering firewater pump #5.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0132052 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132052	Emergency Use Piston Engine with Firewater Pump #2, Diesel, 420 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Firewater Pump #2, Diesel, 420 BHP, including following equipment:

One 420 bhp, emergency use diesel piston engine powering firewater pump #2.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0132056 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132056	Emergency Use Piston Engine with Firewater Pump #4, Diesel, 420 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Firewater Pump #4, Diesel, 420 BHP, including following equipment:

One 420 bhp, emergency use diesel piston engine powering firewater pump #4.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)

Emission Unit 0132104 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132104	Emergency Use Piston Engine with Generator, Diesel, 207 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 207 BHP,
including following equipment:

One 207 bhp, 6 cylinder, 4 cycle, turbocharged diesel piston engine equipped with crankcase ventilation device.

OPERATIONAL CONDITIONS:

1. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210)
2. Engine shall be equipped with positive crankcase ventilation system or equivalent control device. (Rule 210.1 BACT Requirement)
3. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
4. Operating hours for maintenance and testing shall not exceed 50 hours per year. (Rules 210.1, 427 and CCR Title 17 Section 93115)
5. Total operation, including emergency use, shall not exceed 200 hours without prior District approval (Rule 210.1)
6. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)
11. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
12. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft³ of gas at standard conditions. (Rule 404.1)
13. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.06 lbm/hr (of PM₁₀)
1.42 lbm/day (of PM₁₀)
0.01 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.002 lbm/hr
0.05 lbm/day

Oxides of Nitrogen (as NO₂):

4.8 g/bhp-hr (Title 17 CCR § 93115)
2.19 lbm/hr
52.56 lbm/day
0.22 ton/yr

Volatile Organic Compounds (VOC):

0.46 lbm/hr
10.94 lbm/day
0.05 ton/yr

Carbon Monoxide:

0.27 lbm/hr
6.58 lbm/day
0.03 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0132105 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132105	Emergency Use Piston Engine with Generator, Diesel, 470 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 470 BHP, including following equipment:

One 470 bhp, diesel-fueled piston engine equipped with crankcase ventilation.

OPERATIONAL CONDITIONS:

1. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
2. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
3. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
4. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT requirement)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
7. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
8. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
10. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 036A.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 036A.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.04 g/bhp-hr (of PM) (CCR 93115)
0.10 grains/dscf (of PM) (Rule 404.1)
0.04 lbm/hr (of PM₁₀)
0.98 lbm/day (of PM₁₀)
0.004 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.005 lbm/hr
0.12 lbm/day

Oxides of Nitrogen (as NO₂):

2.59 g/bhp-hr (BACT)
2.68 lbm/hr
64.42 lbm/day
0.27 ton/yr

Volatile Organic Compounds (VOC):

0.08 lbm/hr
1.99 lbm/day
0.01 ton/yr

Carbon Monoxide:

0.08 lbm/hr
1.99 lbm/day
0.01 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0132108 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132108	Emergency Use Piston Engine with Generator, Diesel, 2937 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 2937 BHP,
including following equipment:

One 2937-bhp, diesel-fueled piston engine powering 2000-kW electrical generator set.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with turbocharger and intercooler. (Rule 210.1 BACT Requirement)
2. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
3. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not equal or exceed 5% opacity or Ringelmann No. $\frac{1}{4}$ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
4. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur, 0.0015% by weight and low aromatic hydrocarbon, 20% by weight). (Rule 210.1 BACT Requirement)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1 and Rule 209)
7. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
8. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of five years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, date(s) fuel was supplied, and engine check(s) including: air filters, fuel filters, oil filters, engine oil, exhaust system, coolant, and spark plugs (if so equipped) (Rules 209 and 210.1)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC 41700)
10. Engine operation for maintenance and testing shall not exceed 50 hours per year without prior District approval. (Rule 210.1)
11. Engine operation for shall not exceed 200 hours per year without prior District approval. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with diesel-fueled piston engine emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

Particulate Matter (PM₁₀):

0.15	gm/bhp-hr
0.97	lb/hr
23.30	lb/day
0.10	ton/yr

Sulfur Oxides (SO_x as SO₂):

0.03	lb/hr
0.76	lb/day
0.003	ton/yr

Oxides of Nitrogen (NO₂):

4.56	gm/bhp-hr
29.53	lb/hr
708.74	lb/day
2.95	ton/yr

Volatile Organic Compounds (VOC):
(as defined in Rule 210.1)

0.24	gm/bhp-hr
1.56	lb/hr
37.32	lb/day
0.16	ton/yr

Carbon Monoxide:

2.6	gm/bhp-hr
16.84	lb/hr
404.15	lb/day
1.68	ton/yr

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129113 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129113	Emergency Use Piston Engine with Generator, Diesel, 900 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 900 BHP,
including following equipment:

One 900 bhp, turbocharged, aftercooled emergency use diesel piston engine powering 500 kw electrical generator.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Operator shall maintain record of annual hours of operation for minimum of two years. (Rule 210.1 Offset Exemption)
5. Engine operation shall be no more than 200 hours per year. (Rule 210.1 Offset Exemption)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

- 0.1 grains/scf @ 12% CO₂ at standard conditions (of PM) (Rule 409)
- 1.00 grams/hp-hr (of PM₁₀)
- 1.98 lb/hr (of PM₁₀)

Sulfur Oxides (as SO₂):

- 0.2 by volume (Rule 407)
- 0.19 grams/hp-hr
- 0.36 lb/hr

Oxides of Nitrogen (as NO₂):

- 9.80 grams/hp-hr
- 19.45 lb/hr

Emission Unit 0129113 Permit Conditions

Volatile Organic Compounds (VOC):

1.14 gm/hp-hr

2.26 lb/hr

Carbon Monoxide:

3.0 grams/hp-hr

6.01 lb/hr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129114 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129114	Emergency Use Piston Engine with Generator, Diesel, 184 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 184 BHP,
including following equipment:

One 184 bhp, diesel-fueled, piston engine powering electrical generator.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Operator shall maintain record of annual hours of operation for minimum of two years. (Rule 210.1 Offset Exemption)
5. Engine operation shall be no more than 200 hours per year. (Rule 210.1 Offset Exemption)

Emission Unit 0129115 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129115	Emergency Use Piston Engine with Generator, Diesel, 440 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 440 BHP, including following equipment:

One 440 bhp, diesel-fueled, piston engine equipped with turbocharger with aftercooler, blowby adsorber for control of crankcase emissions, elapsed time meter, and fuel injection timing retarded 4 degrees relative to standard timing powering emergency generator.

OPERATIONAL CONDITIONS:

1. All equipment included in equipment description shall be maintained and shall be in operation when engine/generator is used. (Rule 209)
2. Crankcase emissions shall be controlled at an efficiency of 90%. (Rule 210.1 BACT Requirement)
3. Engine operation shall be no more than 200 hours per year. (Rule 210.1 NSR and BACT Requirement)
4. Engine shall burn only diesel fuel with sulfur content not to exceed 0.05%. (Rule 210.1 BACT Requirement)
5. Operation of engine for other than test and maintenance purposes shall be limited to actual interruptions of power by utility company or due to emergency and shall not be used in conjunction with any utility voluntary demand reduction program. (Rule 210.1)
6. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rule 210.1 BACT Requirement)
7. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum: days, hours, and reason for operation, amount of fuel and sulfur content of fuel oil supplied to engine, elapsed time, and date(s) of inspection (s), and certification(s) of ignition timing. (Rule 210.1 BACT Requirement)

COMPLIANCE TESTING REQUIREMENTS:

If engine exhibits visible emission of 5% opacity or greater during normal operation, compliance with particulate emission limit shall be demonstrated by District-witnessed sample collection by independent testing laboratory. The official test results and field data shall be submitted within 30 days thereafter. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.06 gm/hp-hr (Rule 404.1)
0.57 lbm/hr (of PM₁₀)

Nitrogen Oxides:

5.30 gms/hp-hr
5.14 lbm/hr (as NO₂)

Sulfur Dioxide:

0.93 gm/hp-hr
0.66 lbm/hr (of SO₂)

Carbon Monoxide:

22.00 gm/hp-hr
21.34 lbm/hr

Hydrocarbons:

1.50 gm/hp-hr
1.45 lbm/hr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129117 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129117	Emergency Use Piston Engine with Generator, Diesel, 102 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Diesel, 102 BHP, including following equipment:

One 102 bhp, 4 cylinder, 4 cycle, diesel-fueled piston engine, turbocharged and aftercooled with crankcase emissions control device and injection timing retard, powering emergency use generator.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbocharger. (Rule 210.1 BACT Requirement)
3. Injection timing of engine shall be retarded at least 4 degrees relative to standard timing. (Rule 210.1 BACT Requirement)
4. Engine operation shall be no more than 200 hours per year. (Rule 210.1)
5. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
6. Visible emissions from engine exhaust shall be no more than 5% opacity during normal operation. (Rule 210.1 BACT Requirement)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
9. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.015 grains/dscf
0.06 lbm/hr
1.35 lbm/day
0.01 ton/yr

Sulfur Oxides (as SO₂):

0.04 lbm/hr
0.99 lbm/day
0.00 ton/yr

Oxides of Nitrogen (as NO₂):

2.70 lbm/hr
64.77 lbm/day
0.27 ton/yr

Volatile Organic Compounds (VOC):

0.09 lbm/hr
2.16 lbm/day
0.01 ton/yr

Carbon Monoxide:

0.34 lbm/hr
8.10 lbm/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0135016 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0135016	Emergency Use Piston Engine with Firewater Pump, Diesel, 55 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Abrasive Blasting Operation, including following equipment:

One 55 bhp, diesel-fueled piston engine equipped with crankcase ventilation control device and configured for injection timing limited to 4° from standard.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation. (Rule 210.1 BACT Requirement)
2. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
3. Engine operation shall not exceed 200 hours per year. (Rule 210.1)
4. Injection timing shall be retarded at least 4 degrees relative to standard timing. (Rule 210.1 BACT Requirement)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
6. Visible emissions shall not be greater than Ringelmann ¼ or 5% opacity after reaching normal operating temperature. (Rule 210.1 BACT Requirement).
7. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
8. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
10. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, and annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
12. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/dscf (of PM). (Rule 404.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.01 lbm/hr (of PM₁₀)
0.19 lbm/day (of PM₁₀)
0.00 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.02 lbm/hr
0.53 lbm/day
0.00 ton/yr

Oxides of Nitrogen (as NO₂):

5.40 gm/bhp-hr
0.66 lbm/hr
15.72 lbm/day
0.07 ton/yr

Volatile Organic Compounds (VOC):

0.04 lbm/hr
0.96 lbm/day
0.00 ton/yr

Carbon Monoxide:

0.17 lbm/hr
4.13 lbm/day
0.02 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0138064 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0138064	Emergency Use Piston Engine with Generator

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, including following equipment:

One 150 kW generator set driven by EPA Certified Tier 4 engine rated at 314 bhp diesel fueled piston engine equipped with turbocharger and aftercooler.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with Dripless Crankcase Breather System or equivalent control device. (Rule 210.1 BACT Requirement)
2. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rule 209 and 210.1)
3. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.0)
4. Engine visible emissions shall be less than 5% opacity or Ringelmann No. $\frac{1}{4}$ during normal operation, except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
7. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
9. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)
10. Edwards AFB must operate the emergency stationary IC engine according to the requirements specified in 40 CFR Part 60, Subpart IIII. In order for the engine to be considered an emergency stationary IC engine, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited. (40 CFR Part 60, Subpart IIII).

DISTRICT-ONLY OPERATIONAL CONDITIONS:

- aa. Maintenance and testing shall be limited to no greater than 50 hours per year. (CCR Section 93115)
- bb. Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)
- cc. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel.

Emission Unit 0138064 Permit Conditions

Record shall include:

- a. Emergency use hours of operation;
- b. Maintenance and testing hours of operation;
- c. Hours of operation for all uses other than those specified in sections 93115.10(g)(1)(A) through (D); and
- d. The fuel used. (CCR Section 93115)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveals conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and EKAPCD Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

- 0.15 grains/dscf (of PM) (Rule 404.1)
- 0.01 lbm/hr (of PM₁₀)
- 0.25 lbm/day (of PM₁₀)
- 0.001 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

- 0.003 lbm/hr
- 0.08 lbm/day
- 0.000 ton/yr

Oxides of Nitrogen (as NO₂):

- 0.21 lbm/hr
- 4.99 lbm/day
- 0.02 ton/yr

Volatile Organic Compounds (VOC):

- 0.01 lbm/hr
- 2.33 lbm/day
- 0.01 ton/yr

Carbon Monoxide:

- 1.81 lbm/hr
- 43.37 lbm/day
- 0.18 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of

three years. (Rules 209 and 210.1)

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Emission Unit 0140018 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0140018	Emergency Use Piston Engine with Generator

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, including following equipment:

One 2,220 bhp, diesel-fueled engine equipped with turbocharger, aftercooler and crankcase ventilation control device powering 1,500 kW emergency use electrical generator.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
3. Engine visible emissions shall be less than 5% opacity or Ringelmann No. 3 during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT Requirement)
4. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
5. Operating hours shall not exceed 200 hours per year. (Rules 210.1 and 427)
6. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
7. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
8. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
10. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/dscf (of PM) (Rule 404.1)
0.98 lbm/hr (of PM₁₀)
7.83 lbm/day (of PM₁₀)
0.10 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.74 lbm/hr
5.88 lbm/day
0.07 ton/yr

Oxides of Nitrogen (as NO₂):

33.77 lbm/hr
270.16 lbm/day
3.38 ton/yr

Volatile Organic Compounds (VOC):

4.89 lbm/hr
39.15 lbm/day
0.49 ton/yr

Carbon Monoxide:

41.60 lbm/hr
332.80 lbm/day
4.16 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0140019 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0140019	Emergency Use Piston Engine with Generator

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, including following equipment:

One 2,220 bhp, diesel-fueled engine equipped with turbocharger, aftercooler and crankcase ventilation control device powering 1,500 kW emergency use electrical generator.

OPERATIONAL CONDITIONS:

1. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with after-cooled (intercooled) turbo-charger. (Rule 210.1 BACT Requirement)
3. Engine visible emissions shall be less than 5% opacity or Ringelmann No. during normal operation, except for not more than three minutes in any one hour. (Rule 210.1 BACT Requirement)
4. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
5. Operating hours shall not exceed 200 hours per year. (Rules 210.1 and 427)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
7. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
8. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
10. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/dscf (of PM) (Rule 404.1)
0.98 lbm/hr (of PM₁₀)
7.83 lbm/day (of PM₁₀)
0.10 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.74 lbm/hr
5.88 lbm/day
0.07 ton/yr

Oxides of Nitrogen (as NO₂):

33.77 lbm/hr
270.16 lbm/day
3.38 ton/yr

Volatile Organic Compounds (VOC):

4.89 lbm/hr
39.15 lbm/day
0.49 ton/yr

Carbon Monoxide:

41.60 lbm/hr
332.80 lbm/day
4.16 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0141004 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0141004	Piston Engine with Emergency Use Generator, Diesel, 56 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Piston Engine with Emergency Use Generator, Diesel, 56 BHP, including following equipment:

One 56 bhp, 4 cylinder, 4 cycle, lean burn, turbocharged diesel-fueled piston engine equipped with PCV valve and communication equipment providing prevention of accidental use.

OPERATIONAL CONDITIONS:

1. Operating hours for maintenance and testing shall not exceed 20 hours per year. (Rules 210.1, 427 and CCR Title 17 Section 93115)
2. Total operation, including emergency use, shall not exceed 200 hours without prior District approval. (Rule 210.1)
3. Engine crankcase vent shall be equipped with positive ventilation system. (Rule 210.1 BACT Requirement)
4. Visible emissions from engine exhaust shall be less than 20% opacity or Ringelmann No.1 except for not more than three minutes in any one hour. (Rule 401)
5. Exhaust gas particulate matter concentration shall be no more than 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
6. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1)
7. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

1.60 lbm/hr (of PM₁₀)
38.40 lbm/day (of PM₁₀)
0.16 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.00 lbm/hr
0.02 lbm/day

Oxides of Nitrogen (as NO₂):

7.3 g/bhp-hr (Title 17 CCR § 93115)
0.90 lbm/hr
21.62 lbm/day
0.09 ton/yr

Volatile Organic Compounds (VOC):

0.12 lbm/hr
2.95 lbm/day
0.01 ton/yr

Carbon Monoxide:

0.22 lbm/hr
5.33 lbm/day
0.02 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0141005 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0141005	Piston Engine with Generator, Diesel, 56 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Piston Engine with Generator, including following equipment:

One 56 bhp, diesel-fueled piston engine, 4-cycle, turbocharged and intercooled with crankcase emissions control device powering 35 kW electrical generator.

OPERATIONAL CONDITIONS:

1. Total hours of operation for maintenance and testing shall not exceed 50 hours per year. (Rule 210.1 and 17CCR93115)
2. Total hours of operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
3. Engine crankcase vent shall be equipped with positive ventilation system or equivalent 90% efficient crankcase emission control device. (Rule 210.1 BACT Requirement)
4. Injection timing shall be retarded at least 4 degrees relative to standard timing. (Rule 210.1 BACT Requirement)
5. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
6. Visible emissions shall be limited to no greater than Ringelmann ¼ or 5% opacity after engine achieves normal operating temperature. (Rule 210.1 BACT)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 209)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
9. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/dscf (of PM) (Rule 404.1)
0.15 g/bhp-hr (17CCR93115)
0.02 lbm/hr (of PM₁₀)
0.38 lbm/day (of PM₁₀)
0.002 ton/yr (of PM₁₀)

Sulfur Oxides (as SO₂):

0.001 lbm/hr
0.02 lbm/day

Oxides of Nitrogen (as NO₂):

0.90 lbm/hr
21.62 lbm/day
0.09 ton/yr

Volatile Organic Compounds (VOC):

0.12 lbm/hr
2.95 lbm/day
0.01 ton/yr

Carbon Monoxide:

0.22 lbm/hr
5.33 lbm/day
0.02 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Internal Combustion – Gasoline

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Emission Unit 0132092 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132092	Piston Engine with Welder, Unleaded, 58 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Piston Engine with Welder, Unleaded, 58 BHP, including following equipment:

One 58 bhp, gasoline-fueled piston engine powering portable welder.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. With exception of emergency standby equipment, if engine is operated at same location within facility for more than one year, such unit shall comply with Rule 427. (Rule 427)

Internal Combustion – Natural Gas

DRAFT

Emission Unit 0129076 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129076	Emergency Use Piston Engine with Generator, Natural Gas, 126 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Natural Gas, 126 BHP, including following equipment:

One 126 bhp, emergency use LPG or natural gas fueled piston engine powering 60 kw electrical generator.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with non-selective 3-way (NO_x, HC, CO) catalytic reduction (NSCR) with oxygen controller. (Rule 210.1 BACT Requirement)
3. Engine shall be equipped to fire on gaseous fuels only. (Rules 209 and 210.1)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)
5. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
7. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
8. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
9. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf. (Rule 404.1)
10. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/dscf (of PM) (Rule 404.1)
0.05 lbm/hr (of PM₁₀)
1.20 lbm/day (of PM₁₀)

Oxides of Nitrogen (as NO₂):

0.42 lbm/hr
10.00 lbm/day
0.04 ton/yr

Volatile Organic Compounds (VOC):

0.42 lbm/hr
10.00 lbm/day
0.04 ton/yr

Carbon Monoxide:

0.56 lbm/hr
13.34 lbm/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129077 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129077	Emergency Use Piston Engine with Generator, Natural Gas, 164 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Natural Gas, 164 BHP, including following equipment:

One 164 bhp, emergency use LPG or natural gas fueled piston engine powering 85 kw electrical generator.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with non-selective 3-way (NO_x, HC, CO) catalytic reduction (NSCR) with oxygen controller. (Rule 210.1 BACT Requirement)
3. Engine shall be equipped to fire on gaseous fuels only. (Rules 209 and 210.1)
4. Engine shall be equipped with turbocharger. (Rule 210.1 BACT Requirement)
5. Engine operation shall be no more than 200 hours per year. (Rule 427)
6. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
8. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
9. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
10. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf. (Rule 404.1)
11. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/dscf (of PM) (Rule 404.1)
0.07 lbm/hr (of PM₁₀)
1.56 lbm/day (of PM₁₀)

Oxides of Nitrogen (as NO₂):

0.54 lbm/hr
13.02 lbm/day
0.05 ton/yr

Volatile Organic Compounds (VOC):

0.54 lbm/hr
13.02 lbm/day
0.05 ton/yr

Carbon Monoxide:

0.72 lbm/hr
17.36 lbm/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129078 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129078	Emergency Use Piston Engine with Generator, Natural Gas, 126 BHP

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, Natural Gas, 126 BHP, including following equipment:

One 126 bhp, emergency use LPG or natural gas fueled piston engine powering generator.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT Requirement)
2. Engine shall be equipped with non-selective 3-way (NO_x, HC, CO) catalytic reduction (NSCR) with oxygen controller. (Rule 210.1 BACT Requirement)
3. Engine shall be equipped to fire on gaseous fuels only. (Rules 209 and 210.1)
4. Engine operation shall be no more than 200 hours per year. (Rule 427)
5. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
6. Particulate matter emissions discharged into atmosphere shall be no more than 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
7. Visible emissions from engine exhaust shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.1 grains/dscf (of PM) (Rule 404.1)
0.05 lbm/hr (of PM₁₀)
1.20 lbm/day (of PM₁₀)

Oxides of Nitrogen (as NO₂):

0.42 lbm/hr
10.00 lbm/day
0.04 ton/yr

Volatile Organic Compounds (VOC):

0.42 lbm/hr
10.00 lbm/day
0.04 ton/yr

Carbon Monoxide:

0.56 lbm/hr
13.34 lbm/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0138060 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0138060	Emergency Use Piston Engine with Generator, 383 BHP Natural Gas

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator, 383 BHP Natural Gas, including following equipment:

One 383-bhp, 14 liter, natural gas-fueled piston engine with 3-way non-selective catalytic converter powering 225-kW electrical generator set.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system or a 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT requirement)
2. Engine shall be equipped with catalytic converter and oxygen controller. (Rule 210.1 BACT Requirement)
3. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1))
4. Operation Generator set shall not exceed 200-hours per year without prior District approval. (Rule 210.1)
5. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not equal or exceed 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
6. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
7. Natural gas for subject piston engine shall conform to PUC quality natural gas (including sulfur content not to exceed 0.6-grains per 100 cubic feet as determined by NPGA Volatile Sulfur Test). (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1 and Rule 209)
9. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
10. Operational records for this equipment shall include the following: day and hours of operation, amount and date of fuel oil supplied to the engine, and dates of engine checks.
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.003 lb/hr
0.06 lb/day
0.0003 ton/yr

Sulfur Oxides (SO_x as SO₂):

0.01 lb/hr
0.12 lb/day
0.0005 ton/yr

Oxides of Nitrogen (NO_x as NO₂):

1.51 gm/bhp-hr
1.28 lb/hr
30.65 lb/day
0.13 ton/yr

Volatile Organic Compounds (VOC):
(as defined in Rule 210.1)

0.18 lb/hr
4.26 lb/day
0.02 ton/yr

Carbon Monoxide:

0.10 lb/hr
2.37 lb/day
0.01 ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0138061 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0138061	Emergency Use Generator with Natural Gas Engine

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Generator with Natural Gas Engine, including following equipment:

One 452 bhp piston engine equipped with turbocharger aftercooled three-way catalyst, air fuel ratio controller and crankcase ventilation.

OPERATIONAL CONDITIONS:

1. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210)
2. Engine shall be equipped with selective catalytic reduction with three-way catalyst and air fuel controller. (Rule 210.1BACT)
3. Engine shall be equipped with positive crankcase ventilation system. (Rule 210.1 BACT Requirement)
4. Operating hours shall not exceed 200 hours per year. (Rules 210.1 and 427)
5. Engine shall exhibit no visible emissions after achieving normal operating temperature. (Rule 210.1 BACT requirement)
6. Unit shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
8. Operating records for this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), and check(s). (Rules 209 and 210.1)
9. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rules 209 and 210.1)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/dscf (of PM) (Rule 404.1)
0.33 lbm/hr
7.82 lbm/day
0.03 ton/yr

Sulfur Oxides (as SO₂):

0.27 lbm/hr
6.41 lbm/day
0.03 ton/yr

Oxides of Nitrogen (as NO₂):

2.0 g/bhp-hr (BACT)
1.99 lbm/hr
47.83 lbm/day
0.20 ton/yr

Volatile Organic Compounds (VOC):

1.00 lbm/hr
23.90 lbm/day
0.10 ton/yr

Carbon Monoxide:

3.99 lbm/hr
95.66 lbm/day
0.40 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0138062 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0138062	Emergency Use Generator with Natural Gas Engine

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Generator with Natural Gas Engine, including following equipment:

One 475 bhp, natural gas, piston engine equipped with three-way catalyst, air fuel ratio controller and crankcase ventilation.

OPERATIONAL CONDITIONS:

1. Engine crankcase vent shall be equipped with positive ventilation system or a 90% efficient control device for crankcase VOC emissions. (Rule 210.1 BACT requirement)
2. Engine shall be equipped with catalytic converter and oxygen controller. (Rule 210.1 BACT Requirement)
3. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
4. Operation Generator set shall not exceed 200-hours per year without prior District approval. (Rule 210.1)
5. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not equal or exceed 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
6. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
7. Natural gas for subject piston engine shall conform to PUC quality natural gas (including sulfur content not to exceed 0.6-grains per 100 cubic feet as determined by NPGA Volatile Sulfur Test). (Rule 210.1 BACT Requirement)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1 and Rule 209)
9. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
10. Operational records for this equipment shall include the following: day and hours of operation, amount and date of fuel oil supplied to the engine, and dates of engine checks.
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.003 lb/hr
0.08 lb/day
0.0003 ton/yr

Sulfur Oxides (SO_x as SO₂):

0.01 lb/hr
0.15 lb/day
0.0006 ton/yr

Oxides of Nitrogen (NO_x as NO₂):

1.51 gm/bhp-hr
1.58 lb/hr
38.01 lb/day
0.16 ton/yr

Volatile Organic Compounds (VOC):
(as defined in Rule 210.1)

0.22 lb/hr
5.28 lb/day
0.02 ton/yr

Carbon Monoxide:

0.12 lb/hr
2.94 lb/day
0.01 ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Jet Engine Testing

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Emission Unit 0127016 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127016	Jet Engine Test Cell

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Jet Engine Test Cell, including following equipment:

One jet engine test cell.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)

Emission Unit 0127017 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127017	Jet Engine Test Cell

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Jet Engine Test Cell, including following equipment:

One jet engine test cell.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)

Emission Unit 0127018 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127018	Jet Engine Test Cell

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Jet Engine Test Cell, including following equipment:

One jet engine test cell.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)

Emission Unit 0127019 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127019	Jet Engine Test Cell

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Jet Engine Test Cell, including following equipment:

One jet engine test cell.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)

Emission Unit 0137006 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0137006	Jet Engine Test Cell

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Jet Engine Test Cell, including following equipment:

One jet engine test cell.

OPERATIONAL CONDITIONS:

1. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf and visible emissions from any single emission point shall be less than 20% opacity. (Rules 404.1 and 401)
2. Sulfur compound emissions shall be no more than 2,000 ppm as SO₂. (Rule 407)
3. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 0147002 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0147002	Jet Engine Test Stand

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Jet Engine Test Stand, including following equipment:

Three jet engine test stands. Only one is capable of being operated at any time.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)

Emission Unit 0147006 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0147006	Jet Engine Test Stand

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Jet Engine Test Stand, including following equipment:

- A. One environmental control sanding booth, 174 in. wide x 90 in. deep x 87 in. high;

OPERATIONAL CONDITIONS:

1. Compressed air used for filter One jet engine test stand capable of being operated at any time.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)

Emission Unit 0137007 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0137007	Start Cart Powered by Gas Turbine Engine, JP-8, 160 Bhp

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Start Cart Powered by Gas Turbine Engine, JP-8, 160 Bhp, including following equipment:

One Air Start Cart, driven by 160-bhp JP-8 fueled gas turbine engine.

OPERATIONAL CONDITIONS:

1. An elapsed time meter shall be installed and maintained indicating in cumulative hours of engine operating time, or District approved equivalent method shall be utilized to indicate cumulative hours of engine operation. (Rule 210.1)
2. Sulfur content of JP-8 fuel shall not exceed 0.3%. (Rule 210.1)
3. Visible emissions from engine exhaust shall not exceed 5% opacity or Ringelmann No. ¼ during normal operation. (Rule 210.1 BACT Requirement)
4. Engine fuel shall be JP-8 only, unless prior District approval is obtained. (Rule 210.1)
5. Engine operation shall not exceed 120 hours per year without prior District approval. (Rule 210.1)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1 BACT Requirement)
7. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
9. This permit operates as a stationary source at Building 1735; however, shall operate as TSE when located at flight line. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

<u>Particulate Matter (PM₁₀):</u>	0.09	lb/hr
	0.38	lb/day
	0.01	ton/yr

<u>Sulfur Oxides (SO_x as SO₂):</u>	1.27	lb/hr
	5.06	lb/day
	0.08	ton/yr

<u>Oxides of Nitrogen (NO_x as NO₂):</u>	1.26	lb/hr
	5.03	lb/day
	0.08	ton/yr

<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.06	lb/hr
	0.25	lb/day
	0.004	ton/yr

<u>Carbon Monoxide:</u>	5.03	lb/hr
	20.11	lb/day
	0.30	ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0137008 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0137008	Start Cart Powered by Gas Turbine Engine, JP-8, 160 Bhp

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Start Cart Powered by Gas Turbine Engine, JP-8, 160 Bhp, including following equipment:

One Air Start Cart, driven by 160-bhp JP-8 fueled gas turbine engine,

OPERATIONAL CONDITIONS:

1. An elapsed time meter shall be installed and maintained indicating in cumulative hours of engine operating time, or District approved equivalent method shall be utilized to indicate cumulative hours of engine operation (Rule 210.1)
2. Sulfur content of JP-8 fuel shall not exceed 0.3%. (Rule 210.1)
3. Visible emissions from engine exhaust shall not exceed 5% opacity or Ringelmann No. ¼ during normal operation. (Rule 210.1 BACT Requirement)
4. Engine fuel shall be JP-8 only, unless prior District approval is obtained. (Rule 210.1)
5. Engine operation shall not exceed 120 hours per year without prior District approval. (Rule 210.1)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1 BACT Requirement)
7. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
9. This permit operates as a stationary source at Building 1735; however, shall operate as TSE when located at flight line. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

<u>Particulate Matter (PM₁₀):</u>	0.09	lb/hr
	0.38	lb/day
	0.01	ton/yr

<u>Sulfur Oxides (SO_x as SO₂):</u>	1.27	lb/hr
	5.06	lb/day
	0.08	ton/yr

<u>Oxides of Nitrogen (NO_x as NO₂):</u>	1.26	lb/hr
	5.03	lb/day
	0.08	ton/yr

<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.06	lb/hr
	0.25	lb/day
	0.004	ton/yr

<u>Carbon Monoxide:</u>	5.03	lb/hr
	20.11	lb/day
	0.30	ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and recordkeeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0147048 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0147048	Start Cart Powered by Gas Turbine Engine, JP-8, 160 Bhp

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Start Cart Powered by Gas Turbine Engine, JP-8, 160 Bhp, including following equipment:

One Air Start Cart, driven by 160-bhp JP-8 fueled gas turbine engine

OPERATIONAL CONDITIONS:

1. An elapsed time meter shall be installed and maintained indicating in cumulative hours of engine operating time, or District approved equivalent method shall be utilized to indicate cumulative hours of engine operation (Rule 210.1)
2. Sulfur content of JP-8 fuel shall not exceed 0.3%. (Rule 210.1)
3. Visible emissions from engine exhaust shall not exceed 5% opacity or Ringelmann No. ¼ during normal operation. (Rule 210.1 BACT Requirement)
4. Engine fuel shall be JP-8 only, unless prior District approval is obtained. (Rule 210.1)
5. Engine operation shall not exceed 120 hours per year without prior District approval. (Rule 210.1)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 BACT Requirement)
7. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
9. This permit operates as a stationary source at Building 1899; however, shall operate as TSE when located at flight line. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with JP-8 fueled turbine engine emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

<u>Particulate Matter (PM₁₀):</u>	0.09	lb/hr
	0.38	lb/day
	0.01	ton/yr

<u>Sulfur Oxides (SO_x as SO₂):</u>	1.27	lb/hr
	5.06	lb/day
	0.08	ton/yr

<u>Oxides of Nitrogen (NO_x as NO₂):</u>	1.26	lb/hr
	5.03	lb/day
	0.08	ton/yr

<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	0.06	lb/hr
	0.25	lb/day
	0.004	ton/yr

<u>Carbon Monoxide:</u>	5.03	lb/hr
	20.11	lb/day
	0.30	ton/yr

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Landfill Operations

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Emission Unit 0131017 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0131017	Trommel Screen

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Trommel Screen, including following equipment:

- A. Power screen (trommel);
- B. Conveyor;
- C. 49 bhp diesel piston engine (exempt); and
- D. 25 hp gasoline piston engine to power conveyor (exempt).

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf . (Rule 404.1)
- 3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
- 4. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 0131019 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0131019	Municipal Class III Sanitary Landfill

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Municipal Class III Sanitary Landfill, including following equipment:

- A. Landfill cells;
- B. Access roads;
- C. Borrow pits and/or dirt stockpiles; and
- D. Earth moving equipment (permit exempt).

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity except for: 1) not more than three minutes in any one hour, and 2) during periods when reasonably available control measures cannot be employed, or are employed, but are not effective. (Rules 209, 401, and 419)
- 2. No emission shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any persons or have natural tendency to cause injury or damage to business or property. (CH&SC, Sec 41700)
- 3. Facility shall not receive friable asbestos. (Rule 423 and 40 CFR 61, Subpart M)
- 4. Landfill cover material shall only be material approved by Kern County Environmental Health Services. (Rule 209)

Open Burn/ Open Detonation Operation

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Emission Unit 0131015 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0131015	Open Burn/Open Detonation Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: PIRA Open Burn/Open Detonation (OB/OD) Operation, including following equipment:

- A. Open burn kettle (8 ft. x 8 ft. x 4 ft.) with drip safety pan, steel grate, and cover; and
- B. Open burn pan (15 ft. x 15 ft. x 2 ft. deep) supported by steel legs on concrete pad for structural support with removable steel cover.

OPERATIONAL CONDITIONS:

- 1. Open burn/open detonation (OB/OD) operation to treat unwanted materials may not be conducted without prior approval from Control Officer through approval of OB/OD burn plan. Burn plan approval shall not be valid for more than one year, but may be renewed annually by Control Officer. (Rule 416)
- 2. Open burning/open detonation shall not be conducted on "no burn" days as specified by CARB or when such burning is prohibited by Control Officer for public health reasons. (Rule 416)
 - a. Before OB/OD operation takes place, a plan shall be submitted by Base Commanding Officer or by his designated representative to Control Officer and any other designated agencies having jurisdiction over proposed OB/OD operations. This plan shall:
 - 1.) Specify methods to be used to achieve detonation or combustion.
 - 2.) Limit category and amount of waste propellants, explosives, munitions, and pyrotechnics to be disposed of each year to amount with projected lifetime toxic cancer risk less than one-in-one million and limit daily disposal amounts to that level not causing impact above acute toxic thresholds. Toxic risks shall be demonstrated with modeling approved by Control Officer.
 - 3.) Limit open burn/open detonation operations or provide for mitigation when meteorological conditions could cause emissions to result in or contribute to exceedance of any state or federal ambient air quality standard or cause public nuisance.
 - 4.) Require waste propellants, explosives, munitions, and pyrotechnics (PEMP) treated to be free of non-PEMP materials, except for those materials necessary to safely store, handle, or treat PEMP or intimately-related materials also requiring treatment.
 - 5.) Require waste propellants, explosives, munitions, and pyrotechnics to be in condition facilitating combustion, assuring safe operation, and minimizing amount of emissions emitted during treatment.
 - 6.) Include following information:
 - a. Location of proposed treatment operation;
 - b. Category and amount of waste propellants, explosives, munitions, and pyrotechnics to be treated;

Emission Unit 0131015 Permit Conditions

- c. Directions and distances to nearby receptor areas;
 - d. Air quality impact analysis showing expected impacts with respect to state and federal ambient air quality standards;
 - e. Risk assessment for acute and chronic health effects;
 - f. Meteorological criteria developed for the project;
 - g. Projected schedule or frequency of OB/OD events;
 - h. Specifications for monitoring and recording of critical project parameters; and
 - i. Specifications for reporting and disseminating project information.
- 7.) Material to be treated shall be limited to PEMP generated from operations at federal facility where OB/OD operation is to take place.
 - 8.) Open burn/open detonation operations shall be allowed on normal business days for District, or on such other days as District may approve.
 - 9.) All open burn/open detonation operations shall conform to applicable jurisdictional fire codes.
 - 10.) Open burn/open detonation operations shall not be initiated if emissions may drift into populated area or create public nuisance.
- 3. Total amount of material treated in any one day may be limited by District, taking into consideration potential for creation of threat to public health. (Rule 416)
 - 4. Records shall be maintained for type and amount of PEMP for each open burn/open detonation operation and shall be submitted to District no more than 60 days prior to end of burn plan approval period. Records shall be maintained for five years. (Rule 416)
 - 5. District staff shall be permitted, when accompanied by appropriate personnel: (Rule 416)
 - a. To enter premises where OB/OD site is located or in which any records are required to be kept under requirements of burn plan.
 - b. To inspect any equipment, operation, or method required by burn plan. District shall also have authority to require collection and analysis of emission samples from source.
 - 6. Summary of data required to determine compliance with applicable provisions of Rule 416 shall be submitted to, and as prescribed by, Control Officer. (Rule 416)

NOTE:

All conditions are from District Rule 416, Section V (Treatment of Federal Facility Materials).

Paper Shredding

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Emission Unit 0132094 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132094	Paper Shredder, Electric

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Document Shredder, including following equipment:

- A. Security Engineered Machinery Disintegrator Model 1424; and
- B. 40 cloth tube filter/cyclone separator.

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf. (Rule 404.1)

Emission Unit 0132095 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132095	Paper Shredder, Electric

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Document Shredder, including following equipment:

- A. Security Engineered Machinery Disintegrator Model 1012; and
- B. Single cloth bag filter.

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf. (Rule 404.1)

Rocket Motor Testing

DRAFT

Emission Unit 0139022 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0139022	Rocket Motor Setup and Testing

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Rocket Test Stand (RVITS), including following equipment:

Test stand for rocket motor testing using RP-1 and JP-8 as fuel and Lox and hydrogen peroxide as oxidizer.

OPERATIONAL CONDITIONS:

1. Particulate emissions shall be no more than 0.1 gr/scf calculated to 12% CO₂. (Rule 404.1)
2. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
3. Modification of equipment or usage shall require application for Authority to Construct. (Rule 209)
4. Records including dates and duration of usage shall be kept and made available to District upon request. (Rule 209)

Surface Coating - Booth

DRAFT

Emission Unit 0127028 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127028	Paint Spray Booth

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Paint Spray Booth, including following equipment:

- A. Two 60,000 cfm 50 hp air make-up units;
- B. Two 60,000 cfm evaporative coolers;
- C. Application equipment necessary for H.V.L.P., H.E.L.P., electro deposition, electrostatic, flow, roll, dip, brush coating, or other method which is approved by Control Officer and is demonstrated to achieve 65% transfer efficiency;
- D. 322 - 20 in. x 20 in. x 1.5 in. sliding filter doors or equivalent system;
- E. Two-stage particulate filtration system meeting requirements of 40 CFR 63.745(g);
- F. Activated carbon filters;
- G. Three 40 hp 40,000 cfm vaneaxial exhaust fans; and
- H. Aircraft-sized spray booth.

OPERATIONAL CONDITIONS:

- 1. Provided the equipment described above is operated in compliance with all of the federally enforceable conditions listed below, a permit shield is granted from applicability and enforcement action for the following applicable requirements: 40 CFR Part 63 Subpart GG. (Rule 201.1)
- 2. Except as provided in 40 CFR 63.745 (g) (4), fans shall be designed to deliver no less than 110,865 cfm. (Rule 210.1)
- 3. Except as provided in 40 CFR 63.745 (g) (4), hangar doors shall remain closed and ventilation shall continue for minimum of 15 minutes following application of coatings. (Rule 210.1)
- 4. Except as provided in 40 CFR 63.745 (g) (4), exhaust air shall pass through particulate filters and carbon bank prior to being exhausted to air. The particulate filters shall be certified in accordance with EPA Method 319 as required by 40 CFR 63.750 (o). (Rules 210.1 and 201.1)
- 5. The following activities may be conducted in this operation without the exhaust fan and control system operating:
 - a. Touch-up of scratched surfaces or damaged paint;
 - b. Hole daubing for fasteners;
 - c. Touch-up of trimmed edges;
 - d. Coating prior to joining dissimilar metal components;
 - e. Stencil operations performed by brush or air brush;
 - f. Section joining;
 - g. Touch-up of bushings and other similar parts;
 - h. Sealant detackifying; and
 - i. The use of hand-held spray can application methods. (Rule 210.1)

Emission Unit 0127028 Permit Conditions

6. Each dry filter system shall be equipped with differential pressure gauge which shall be monitored to determine need for filter change-out. The owner/operator shall read and record the pressure drop across the filter once per shift during coating operations. If the pressure drop across the dry particulate filter system falls outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, shut down the operation immediately and take corrective action. (Rules 210.1 and 201.1)
7. Equipment, including particulate filters, shall be maintained in accordance with manufacturer's recommendations to maintain design control efficiencies below:
 - a. Exhaust system shall achieve 90% capture efficiency of VOCs to be achieved by maintaining air flow rate within spray insert of 100 fpm while coating operations are taking place.
 - b. Carbon filter bank shall achieve minimum 95% control of captured VOCs.
 - c. Particulate filtration system shall meet the efficiency requirements of 40 CFR 63.745(g).
8. Application methods shall be such that minimum transfer efficiency of 65%. (Rule 210.1 BACT)
9. VOC detection and carbon breakthrough shall be determined by a District-approved Carbon Sampling Plan. (Rule 210.1)
10. Owner/ operator shall replace activated carbon in accordance with a District-approved Carbon Sampling. (Rule 210.1)
11. Except for touch-up performed with brushes and rollers, no coating application operations shall be performed during sampling and testing, or replacement of associated activated carbon. (Rule 210.1)
12. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content level and VOC content level of primers, applied to aerospace components, shall be limited to no more than 350 g/l (2.9 lb/gal) of primer as applied. (Rule 201.1)
13. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content level and VOC content level of topcoats and self-priming topcoats, applied to aerospace components, shall be limited to no more than 420 g/l (3.5 lb/gal) of topcoats and self-priming topcoats as applied. (Rule 210.1)
14. Condition #s 12 and 13, above, do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at the facility does not exceed 50 gal, and the combined annual total of all such coatings used at the facility does not exceed 200 gal, as long as the daily and annual emissions limits specified in this permit are not exceeded. (Rule 201.1)
15. Coatings applied to non-aerospace components shall meet the requirements of Rules 410-4 or 410-4A, as applicable. (Rule 201.1)
16. VOC containing materials used for surface cleaning or clean-up, excluding stripping and equipment cleaning shall satisfy the following:
 - a. If used in aerospace applications, solvents shall contain 200 grams or less of VOC per liter of material, and meet the aqueous solvent composition requirements listed in Table 1 of 40 CFR Section 63.744 (b)(1), OR meet a VOC composite partial pressure of 45 mm Hg or less at a temperature of 20 °C (68 °F). (Rule 201.1 and Rule 210.1 BACT Requirements)
 - b. If used in non-aerospace applications, solvents shall contain 200 grams of VOC per liter of material or less. [Rules 410.4A (mobile) and 410.4 (non-mobile)]
17. VOC containing material used for stripping shall satisfy the following:
 - a. If used in aerospace applications, stripping material shall contain 300 grams of VOC per liter of material or less OR VOC composite partial pressure of 9.5 mm Hg or less at a temperature of 20°C (68 °F). (Rule 210.1 BACT Requirements)
 - b. If used in non-aerospace applications, stripping material shall contain 200 grams of VOC per liter of material. [Rules 410.4A (mobile) and 410.4 (non-mobile)]

Emission Unit 0127028 Permit Conditions

VOC containing material for equipment cleaning shall satisfy the following:

- c. If used for cleaning of polyester resin application equipment, solvents shall satisfy:
 1. VOC content of 200 grams per liter of material or less OR;
 2. VOC content of 1100 grams per liter of material or less and a VOC composite partial pressure of 1.0 mm Hg or less at 20°C (68 °F). (Rules 410.4, 410.4A, and Rule 210.1 BACT Requirements)
- d. If used for cleaning of coating and adhesives application equipment, solvents shall contain 950 grams of VOC per liter of material or less and a VOC composite partial pressure of 35 mm Hg or less at 20°C (68 °F); OR a VOC composite partial pressure of 7 mm Hg or less at 20°C (68 °F). (Rules 410.4, 410.4A and Rule 210.1 BACT Requirements)
18. All solvents and solvent containing materials, or solvent-laden applicators shall be kept in closed containers when not in use. The design of the container shall prevent the escape of vapor to the atmosphere and the container is to be kept closed except when depositing or removing material from the container. (Rules 210.1, 201.1 and 410. 2)
19. Enclosed gun cleaning system shall be used initially for all spray equipment. If further cleaning is necessary, the cleaning methods allowed in Condition No.21 shall be permitted providing no solvent is atomized. (Rule 210.1 BACT Requirements)
20. Unless enclosed gun cleaning system utilizes solvent containing HAP and VOC below the de minimis levels specified in 40 CFR Section 63.741(f), on a monthly basis, the owner/operator shall inspect each enclosed system that uses HAP-containing solvents for leaks. If any leaks are found, repair within 15 days or remove solvent and shut down system until leak is repaired. (Rule 210.1 BACT Requirements, Rule 201.1 and Rule 410.4)
21. Cleaning or cleanup operations using VOC-containing material shall utilize at least one of the following:
 - a. Hand, rag (wipe cleaning) and brush cleaning using solvent container that is kept closed except during actual cleaning;
 - b. Spray bottles or containers with maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;
 - c. Cleaning equipment in a solvent container that is kept closed during cleaning operations, except when depositing and removing objects to be cleaned, and closed during non-operation except during maintenance and repair of cleaning equipment itself;
 - d. Remote reservoir cold cleaner operated in conformance with Rule 410.3;
 - e. Enclosed system totally enclosing spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures;
 - f. Non-atomized solvent flow method collecting solvent in container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container; or
 - g. Solvent flushing methods discharging solvent into container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container. Discharged solvent from such equipment shall be collected into containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping. (Rule 210.1 BACT Requirements)
22. Owner/operator shall conduct the handling and transfer of cleaning solvents, primers, topcoats and waste, except for hazardous waste that are determined to be hazardous under RCRA, which are exempt [40 CFR 63.741(e)], to or from enclosed systems, vats, waste containers, piping systems, and other equipment in such a manner that minimizes spills. (Rule 201.1)

Emission Unit 0127028 Permit Conditions

23. The owner/operator shall not de-paint more than 6 completed aerospace vehicles in a calendar year on a facility-wide basis. (Rule 201.1)
24. On each and every day the coating operation is used, the owner/operator shall maintain record of types and volume of all coatings and solvents used including solvents used for clean-up. Additionally, for each coating and solvent used/stored at this location, records shall be maintained on site and include the following:
 - a. The name, vapor pressure, weight fraction, and specific gravity of each organic HAP and VOC constituent;
 - b. VOC content, and organic HAP content as applied of all coatings and solvents;
 - c. The mass of organic HAP and VOC emitted per unit volume;
 - d. VOC composite vapor pressure of each coating and solvent;
 - e. flash point of all aqueous solvents used (solvents that contain at least 80% water); and
 - f. All data, calculations and/or test results that demonstrate the cleaning solvent and/or coating meet either composition or content requirements.Records shall be kept on each day operation is used as well as on a monthly and annual basis and maintained in such a manner that coating or solvent may be readily identified and VOC emissions determined upon District request. (Rules 210.1 and 201.1)
25. Operator shall maintain records necessary to verify compliance with operational conditions. (Rule 210.1)
26. Operator shall maintain record of all leaks from enclosed spray gun cleaning that uses with solvents exceeding HAP and VOC de minimis levels specified in 40 CFR Section 63.741(f), including source identification; date leak was discovered; and date leak was repaired operational conditions. (Rule 201.1)
27. On a semiannual basis, the Owner/Operator shall report to the District and EPA the following information:
 - a. Any instance where the primer and topcoat application operation applied to aerospace parts exceeded the applicable limits specified here;
 - b. Any instance where a noncompliant cleaning solvent is used for hand-wipe cleaning related to aerospace operations, except those listed in 40 CFR 63.744 (e)- Exempt Cleaning Operations;
 - c. A list of any new cleaning solvents used for hand-wipe cleaning in aerospace operations in the previous 6 months and information on the composite vapor pressure of the new solvent or notification they comply with the composition requirements specified in 63.744(b)(1); and
 - d. Instances when operation was not immediately shut down when the pressure drop across a dry particulate filter system was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures. (Rule 201.1)
28. If required by applicable law, regulations, or order, particulate filters shall be disposed of as hazardous waste. In any event, handling of filters shall be in manner, which prevents entrainment in atmosphere. (Rules 419 and 210.1)
29. The above-permit conditions do not apply to hand-held spray can (including aerosol coating products) application methods for touch up and repair operations.
30. Average Daily emissions are calculated based on the total emissions (VOC or PM₁₀) emitted per calendar month divided by the number of days coating operations were conducted in that calendar month. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS WITHIN SPRAY BOOTH:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

<u>Particulate Matter (PM₁₀):</u>	0.1	gr/scf (Rule 404.1)
	0.28	lb/day –Average Daily
	0.05	ton/yr
<u>Volatile Organic Compounds (VOC):</u>	17.31	lb/day –Average Daily
	2.25	ton/yr

EMISSIONS LIMITS FROM UNCONTROLLED TOUCH-UP WITHIN SPRAY BOOTH:

<u>Particulate Matter (PM₁₀):</u>	3.50	lb/day –Average Daily
	0.013	ton/yr
<u>Volatile Organic Compounds (VOC):</u>	10.00	lb/day –Average Daily
	0.36	ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with daily emission rate limits shall be verified by source operator through daily records (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0127187 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127187	Hangar Paint Spray Insert (Aircraft Stripping/Paint Spray Booth)

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Hangar Paint Spray Insert (Aircraft Stripping/Paint Spray Booth), including following equipment:

- A. Air make-up units: Eight – 61,600 CFM, 3.985-MMBtu/hr, gas fired heaters with 1 ¾ in. static pressure, 40 hp motors for main booth;
- B. Evaporative coolers: Eight units for main booth;
- C. Application equipment necessary for H.V.L.P., electrodeposition, electrostatic, flow, roll, dip, or brush coating; where dipping operation consists of four tanks;
- D. Emissions control equipment:
 1. 1,232 - Frontline, or equivalent, 20 in. x 20 in. polyester tackified blue air intake filters;
 2. Three-stage particulate filtration system meeting requirements of 40 CFR 63.745(g);
 3. Activated carbon filters: (shared with 0127188 and 0127189);
 4. Exhaust units: Eight (60 in. dia., 61,600 CFM, 75 hp motor, 4 in. total static pressure);
 5. Dimensions corrosion control area: 185 ft. long x 176 ft. wide x 28 ft. high;
 6. Number of stacks: Eight at 61,600 CFM each;
 7. Stack height: 68 ft.; and
 8. Stack diameter: 60 inches.

CONFINED AND UNCONFINED:

1. Provided the equipment described above is operated in compliance with all of the federally enforceable conditions listed below, a permit shield is granted from applicability and enforcement action for the following applicable requirements: 40 CFR Part 63 Subpart GG. (Rule 201.1)
2. Owner/operator shall conduct the handling and transfer of cleaning solvents, primers, topcoats and waste, except for hazardous waste that are determined to be hazardous under RCRA, which are exempt [40 CFR 63.741(e)], to or from enclosed systems, vats, waste containers, piping systems, and other equipment in such a manner that minimizes spills. (Rule 201.1)
3. Application methods shall be such that minimum transfer efficiency is 65%. (Rule 210.1 BACT Requirements)
4. VOC containing materials used for surface cleaning or clean-up, excluding stripping and equipment cleaning shall satisfy the following:
 - a. If used in aerospace applications, the solvents shall contain 200 grams or less of VOC per liter of material, and meet the aqueous solvent composition requirements listed in Table 1 of 40 CFR Section 63.744 (b)(1) OR meet a VOC composite partial pressure of 45 mm Hg or less at a temperature of 20 °C (68 °F). (Rule 201.1 and Rule 210.1 BACT Requirements)
 - b. If used in non-aerospace operations, solvents shall contain 200 grams of VOC per liter of material or less. [Rules 410.4A (mobile) and 410.4 (non-mobile)]

Emission Unit 0127187 Permit Conditions

5. VOC containing materials used for stripping shall satisfy the following:
 - a. If used in aerospace applications, stripping material shall contain 300 grams of VOC per liter of material or less OR VOC composite partial pressure of 9.5 mm Hg or less at a temperature of 20 °C (68 °F). (Rule 210.1 BACT Requirements)
 - b. If used in non-aerospace applications, stripping material shall contain 200 grams of VOC per liter of material. [Rules 41 0.4A (mobile) and 410.4 (non-mobile)]
6. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content level and VOC content level of primers, applied to aerospace components, shall be limited to no more than 350 g/l (2.9 lb/gal) of primer as applied. (Rule 201.1)
7. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content level and VOC content level of topcoats and self-priming topcoats, applied to aerospace components, shall be limited to no more than 420 g/l (3.5 lb/gal) of topcoats and self-priming topcoats as applied. (Rule 201.1)
8. Condition #s 6 and 7, above, do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at the facility does not exceed 50 gallons, and the combined annual total of all such coatings used at the facility does not exceed 200 gal, as long as the daily and annual emissions limits specified in this permit are not exceeded. (Rule 201.1)
9. Coatings applied to non-aerospace components shall meet the requirements of Rules 410.4 or 410.4A, as applicable. (Rule 201.1)
10. VOC containing material for equipment cleaning shall satisfy the following:
 - a. If used for cleaning of polyester resin application equipment, solvents shall satisfy:
 1. VOC content of 200 grams per liter of material or less; OR
 2. VOC content of 1100 grams per liter of material or less and a VOC composite partial pressure of 1.0 mm Hg or less at 20 °C (68 °F). (Rules 410.4, 410.4A, and Rule 210.1 BACT Requirements)
 - b. If used for cleaning of coating and adhesives application equipment, solvents shall contain 950 grams of VOC per liter of material or less and a VOC composite partial pressure of 35 mm Hg or less at 20°C (68 °F); OR a VOC composite partial pressure of 7 mm Hg or less at 20°C (68 °F). (Rules 410-4, 410-4A and Rule 210.1 BACT Requirements)
11. All solvents, solvent-containing materials, or solvent-laden applicators shall be kept in closed containers when not in use. The design of the container shall prevent the escape of vapor to the atmosphere and the container is to be kept closed except when depositing or removing material from the container. (Rules 209, 210.1, 201.1 and 410.2)
12. Enclosed gun cleaning system shall be used initially for all spray equipment. If further cleaning is necessary, the cleaning methods allowed in Condition No.14 shall be allowed providing no solvent is atomized. (Rule 210.1 BACT Requirements)
13. Unless enclosed gun cleaning system utilizes solvent containing HAP and VOC below the de-minimis levels specified in 40 CFR Section 63.741(f), on a monthly basis, the owner/operator shall inspect each enclosed system that uses HAP-containing solvents for leaks. If any leaks are found, repair within 15 days or remove solvent and shut down system until leak is repaired. (Rule 210.1 BACT Requirements, Rule 201.1 and Rule 410.4)
14. Cleaning or cleanup operations using VOC-containing material shall utilize at least one of the following:

Emission Unit 0127187 Permit Conditions

- a. Hand, rag (wipe cleaning) and brush cleaning using solvent container that is kept closed except during actual cleaning;
 - b. Spray bottles or containers with maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;
 - c. Cleaning equipment in a solvent container that is kept closed during cleaning operations, except when depositing and removing objects to be cleaned, and closed during non-operation except during maintenance and repair of cleaning equipment itself;
 - d. Remote reservoir cold cleaner operated in conformance with Rule 410.3;
 - e. Enclosed system totally enclosing spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures;
 - f. Non-atomized solvent flow method collecting solvent in container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container; or
 - g. Solvent flushing methods discharging solvent into container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container. Discharged solvent from such equipment shall be collected into containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping. (Rule 210.1 BACT Requirements)
15. The owner/operator shall not depaint more than 6 completed aerospace vehicles in a calendar year on a facility-wide basis. (Rule 201.1)
16. On each and every day the coating operation is used, the owner/operator shall maintain record of types and volume of all coatings and solvents used including solvents used for clean-up. Additionally, for each coating and solvent used/stored at this location, records shall be maintained on site and include the following:
- a. The name, vapor pressure, weight fraction, and specific gravity of each organic HAP and VOC constituent;
 - b. VOC content, and organic HAP content as applied of all coatings and solvents;
 - c. The mass of organic HAP and VOC emitted per unit volume;
 - d. VOC composite vapor pressure of each coating and solvent;
 - e. Flash point of all aqueous solvents used (solvents that contain at least 80% water); and
 - f. All data, calculations and/or test results that demonstrate the cleaning solvent and/or coating meet either composition or content requirements.
- Records shall be kept on each day operation is used as well as on a monthly and annual basis and maintained in such a manner that coating or solvent may be readily identified and VOC emissions determined upon District request. (Rules 210.1 and 201.1)
17. Owner/operator shall maintain records necessary to verify compliance with operational conditions. (Rule 210.1)
18. Operator shall maintain record of all leaks from enclosed spray gun cleaning that uses solvents exceeding HAP and VOC de minimis levels specified in 40 CFR Section 63.741(f), including source identification; date leak was discovered; and date leak was repaired. (Rule 201.1)
19. On a semiannual basis, the owner/operator shall report to the District and EPA the following information:
- a. Any instance where the primer and topcoat application operation applied to aerospace parts exceeded the applicable limits specified here;
 - b. Any instance where a noncompliant cleaning solvent is used for hand-wipe cleaning related to aerospace operations, except those listed in 40 CFR 63.744 (e)- Exempt Cleaning Operations;

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- c. A list of any new cleaning solvents used for hand-wipe cleaning in aerospace operations in the previous 6 months and information on the composite vapor pressure of the new solvent or notification they comply with the composition requirements specified in 40 CFR 63.744(b)(1); and
 - d. Instances when operation was not immediately shut down when the pressure drop across a dry particulate filter system was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures. (Rule 201.1)
20. If required by applicable law, regulations, or order, particulate filters shall be disposed of as hazardous waste. In any event, handling of filters shall be in manner, which prevents entrainment in atmosphere. (Rules 419 and 210.1)
21. The above-permit conditions do not apply to hand-held spray can (including aerosol coating products) application methods for touch up and repair operations.

CONFINED:

22. Except as provided in 40 CFR 63.745(g)(4), exhaust air shall pass through particulate filters and carbon bank prior to being exhausted to air and the particulate filters shall be certified in accordance with EPA Method 319 as required by 40 CFR 63.750 (o). (Rule 201.1 and 210.1)
23. The following activities may be conducted in this operation without the exhaust fan and control system operating:
- a. Touch-up of scratched surfaces or damaged paint;
 - b. Hole daubing for fasteners;
 - c. Touch-up of trimmed edges;
 - d. Coating prior to joining dissimilar metal components;
 - e. Stencil operations performed by brush or air brush;
 - f. Section joining;
 - g. Touch-up of bushings and other similar parts;
 - h. Sealant detackifying; and
 - i. The use of hand-held spray can application methods. (Rule 209)
24. Each dry filter system shall be equipped with differential pressure gauge which shall be monitored to determine need for filter change-out. The owner/operator shall read and record the pressure drop across the filter once per shift during coating operations. If the pressure drop across the dry particulate filter system falls outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, shut down the operation immediately and take corrective action. (Rules 210.1 and 201.1)
25. Equipment including particulate filters shall be maintained in accordance with manufacturer's recommendations to maintain design control efficiencies below:
- a. Average air flow within the paint booth shall be maintained above 100 fpm during coating operations to ensure 90% capture efficiency.
 - b. Carbon filter bank shall achieve minimum 95% control of captured VOCs.
 - c. Particulate filtration system shall meet the efficiency requirements of 40 CFR 63.745(g).
26. VOC detection and carbon breakthrough shall be determined by a District-approved Carbon Sampling Plan. (Rule 210.1)
27. Owner/operator shall replace activated carbon in accordance with a District-approved Carbon Sampling Plan. (Rule 210.1)
28. Except for touch-up performed with brush and rollers, no coating application operations shall be performed during sampling and testing, or replacement of associated activated carbon. (Rule 210.1)

Emission Unit 0127187 Permit Conditions

29. Average Daily emissions are calculated based on the total emissions (VOC or PM₁₀) emitted per calendar month divided by the number of days coating operations were conducted in that calendar month. (Rule 210.1)

UNCONFINED:

30. Operation may be used for repair and corrosion control after main coating process. (Rule 210.1)
31. The owner/operator shall not spray inorganic HAP-containing primers, topcoats, and self-priming topcoats in this operation, except as provided in 40 CFR 63.745(g)(4)(i) through (g)(4)(x). (Rule 201.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

MAKE-UP AIR HEATERS

Total combustion emissions shall not exceed following limits:

<u>Particulate Matter (PM₁₀):</u>	2.30	lb/day
	0.42	ton/yr
<u>Sulfur Oxides (as SO₂):</u>	0.31	lb/day
	0.06	ton/yr
<u>Volatile Organic Compounds (VOC):</u>	2.96	lb/day
	0.02	ton/yr
<u>Nitrogen Oxides (as NO₂):</u>	51.04	lb/day
	0.42	ton/yr
<u>Carbon Monoxide:</u>	10.71	lb/day
	0.01	ton/yr

Emission Unit 0127187 Permit Conditions

HANGAR PAINT SPRAY INSERT (0127187C) combined with AGE PREP BOOTH (0127188D) and AGE PAINT BOOTH (0127189F) –Excluding Uncontrolled Touchup

Total emission rate of each air contaminant (excluding combustion emissions) from this emission unit, AGE Prep Booth (0127188D), and AGE Paint Booth (0127189F) shall not exceed following limits:

<u>Particulate Matter:</u>	0.1	gr/scf (of PM) (Rule 404.1)
	0.0525	lb/day (of PM ₁₀) –Average Daily
<u>Volatile Organic Compounds (VOC):</u>	26.32	lb/day –Average Daily
	1.65	ton/yr
<u>Copper:</u>	3.30 E -8	lb/hr (Rule 419)
	2.94 E -4	lb/yr (Rule 419)
<u>Hexavalent Chromium:</u>	1.20 E -5	lb/hr (Rule 419)
	0.11	lb/yr (Rule 419)
<u>Manganese:</u>	6.17 E -9	lb/hr (Rule 419)
	5.41 E -5	lb/yr (Rule 419)
<u>Nickel:</u>	7.28 E -9	lb/hr (Rule 419)
	6.38 E -5	lb/yr (Rule 419)
<u>Toluene:</u>	5.29 E -2	lb/hr (Rule 419)
	463.00	lb/yr (Rule 419)
<u>Zinc:</u>	9.02 E -6	lb/hr (Rule 419)
	7.90 E -3	lb/yr (Rule 419)
<u>Methylene Chloride:</u>	6.64 E -3	lb/hr (Rule 419)
	58.20	lb/yr (Rule 419)

UNCONFINED SURFACE COATING: -Including Uncontrolled Touch-Up performed within hangar paint spray insert

Total maximum unconfined surface coating emissions shall not exceed following limits:

<u>Particulate Matter:</u>	3.50	lb/day (of PM ₁₀) – Average Daily
	0.64	ton/yr
<u>Volatile Organic Compounds (VOC):</u>	10.00	lb/day –Average Daily
	1.83	ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

SPECIAL CONDITION:

Toxic air contaminants listed in Subsection (b) of Section 112 of the most recent update of Federal Act (42 U.S. Code Section 7412 (b)) or referenced in most recent update of Section 93000, California Administrative Code shall not be emitted with exception of toxics listed in Analysis Validation section above and in quantities stated in this section. (Rule 210.1)

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Emission Unit 0127188 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127188	Paint Spray Booths (two)

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Paint Spray Booths, two, including following equipment:

- A. Spray Booth Dimensions: 35 ft. long x 22 ft. wide x 12 ft. high;
- B. Three-stage particulate filtration system meeting requirements of 40 CFR 63.745(g);
- C. Activated carbon filters: (shared with 0127187 and 0127189);
- D. Exhaust ducting: 48 in. dia. entering main booth ahead of carbon filter bank;
- E. Two 15 hp 48 in. Vaneaxial exhaust blowers (27,900 cfm each, 4.1 in. static pressure): One blower drawing from roof of booth, second located after carbon filter bank in main spray booth;
- F. 48 in. exhaust stack, 68 ft. high located in main spray booth;
- G. Air make-up unit: 13.5 hp with 1.15 MMBtu/hr gas-fired heater;
- H. Application equipment necessary for HVLP, electrodeposition, electrostatic, flow, roll, dip, or brush coating;
- I. Powder coating booth with interior dimensions: 10' wide x 9' high x 11' deep, 3 hp exhaust fan motor, and 3-stage filter system;
- J. 440Vac- 3 phase electric oven with approximate exterior dimensions 6' deep x 7' wide x 10' tall; and
- K. Powder coating equipment or equivalent, including spray guns, control modules, 5 lb hopper, and all required hoses/fittings/equipment mounted on mobile cart unit.

OPERATIONAL CONDITIONS:

- 1. Provided the equipment described above is operated in compliance with all of the federally enforceable conditions listed below, a permit shield is granted from applicability and enforcement action for the following applicable requirements: 40 CFR Part 63 Subpart GG. (Rule 201.1)
- 2. Except as provided in 40 CFR 63.745 (g)(4), 27,900 cfm exhaust fans located both in booth and in carbon chamber shall be in operation when coating operations are taking place and operation shall continue for minimum of 15 minutes following application of coatings. (Rules 210.1)
- 3. Except as provided in 40 CFR 63.745 (g)(4), exhaust air shall pass through particulate filters and carbon bank prior to being exhausted to air. (Rule 210.1)
- 4. The following activities may be conducted in this operation without the exhaust fan and control system operating:
 - a. Touch-up of scratched surfaces or damaged paint;
 - b. Hole daubing for fasteners;
 - c. Touch-up of trimmed edges;
 - d. Coating prior to joining dissimilar metal components;
 - e. Stencil operations performed by brush or air brush;
 - f. Section joining;

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- g. Touch-up of bushings and other similar parts;
 - h. Sealant detackifying; and
 - i. The use of hand-held spray can application methods. (Rule 210.1)
5. Each dry filter system shall be equipped with differential pressure gauge which shall be monitored to determine need for filter change-out. (Rule 210.1)
 6. Equipment including particulate filters shall be maintained in accordance with manufacturer's recommendations to maintain design control efficiencies below:
 - a. Average air flow within the paint booth shall be maintained above 100 fpm during coating operations to ensure 90% capture efficiency;
 - b. Carbon filter bank shall achieve minimum 95% control of captured VOCs; and
 - c. Particulate filtration system shall meet the efficiency requirements of 40 CFR 63.745(g).
 7. Application methods shall be such that minimum transfer efficiency is 65%. (Rule 210.1 BACT)
 8. VOC detection and carbon breakthrough shall be determined by a District-approved Carbon Sampling Plan. (Rule 210.1)
 9. Owner/operator shall replace activated carbon in accordance with a District-approved Carbon Sampling Plan. (Rule 210.1)
 10. Except for touch-up performed with brushes and rollers, no coating application operations shall be performed during sampling and testing, or replacement of associated activated carbon. (Rule 210.1)
 11. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content level and VOC content level of primers, applied to aerospace components, shall be limited to no more than 350 g/l (2.9 lb/gal) of primer as applied. (Rule 201.1)
 12. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content level and VOC content level of topcoats and self-priming topcoats, applied to aerospace components, shall be limited to no more than 420 g/l (3.5 lb/gal) of topcoats and self-priming topcoats as applied. (Rules 201.1, 410.4 and Rule 410.4A)
 13. Condition #s 11 and 12, above, do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at the facility does not exceed 50 gal, and the combined annual total of all such coatings used at the facility does not exceed 200 gal, as long as the daily and annual emissions limits specified in this permit are not exceeded. (Rule 201.1)
 14. Coatings applied to non-aerospace components shall meet the requirements of Rules 410.4 or 410.4A, as applicable. (Rule 201.1)
 15. VOC containing materials used for surface cleaning or clean-up, excluding stripping and equipment cleaning shall satisfy the following:
 - a. If used in aerospace applications, solvents shall contain 200 grams or less of VOC per liter of material, and meet the aqueous solvent composition requirements listed in Table 1 of 40 CFR Section 63.744 (b)(1), OR meet a VOC composite partial pressure of 45 mm Hg or less at a temperature of 20 °C (68 °F). (Rule 201.1 and Rule 210.1 BACT Requirements).
 - b. If used in non-aerospace applications, solvents shall contain 200 grams of VOC per liter of material or less. [Rules 410.4A (mobile) and 410.4 (non-mobile)]

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16. VOC containing material used for stripping shall satisfy the following:
 - a. If used in aerospace applications, stripping material shall contain 300 grams of VOC per liter of material or less or VOC composite partial pressure of 9.5 mm Hg or less at a temperature of 20 °C (68 °F). (BACT 95-01)
 - b. If used in non-aerospace applications, stripping material shall contain 200 grams of VOC per liter of material or less. [Rules 410.4A (mobile) and 410.4 (non-mobile)]
17. VOC containing material for equipment cleaning shall satisfy the following:
 - a. If used for cleaning of polyester resin application equipment, solvents shall satisfy:
 1. VOC content of 200 grams per liter of material or less; or
 2. VOC content of 1100 grams per liter of material or less and a VOC composite partial pressure of 1.0 mm Hg or less at 20 °C (68 °F). (Rules 410.4, 410.4A, and BACT 95-01)
 - b. If used for cleaning of coating and adhesives application equipment, solvents shall contain 950 grams of VOC per liter of material or less and a VOC composite partial pressure of 35 mm Hg or less at 20 °C (68 °F). (Rules 410.4, 410.4A, and BACT 95-01)
18. All solvents and solvent containing materials shall be kept in closed containers when not in use. The design of the container shall prevent the escape of vapor to the atmosphere and the container is to be kept closed except for depositing or removing material from container. (Rules 209, 210.1 and 410.2)
19. Enclosed gun cleaning shall be used initially for all spray equipment. If further cleaning is necessary, other cleaning methods are allowed provided no solvent is atomized. (Rule 210.1)
20. Unless enclosed gun cleaning system utilizes solvent containing HAP and VOC below the de minimis levels specified in 40 CFR Section 63.741(f), on a monthly basis, the owner/operator shall inspect each enclosed system that uses HAP-containing solvents for leaks. If any leaks are found, repair within 15 days or remove solvent and shut down system until leak is repaired. (Rule 210.1 BACT Requirements, Rule 201.1 and Rule 410.4)
21. Cleaning or cleanup operations using VOC-containing material shall utilize at least one of the following: Hand, rag (wipe cleaning) and brush cleaning using solvent container that is kept closed except during actual cleaning;
 - a. Spray bottles or containers with maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;
 - b. Cleaning equipment in a solvent container that is kept closed during cleaning operations, except when depositing and removing objects to be cleaned, and closed during non-operation except during maintenance and repair of cleaning equipment itself;
 - c. Remote reservoir cold cleaner operated in conformance with Rule 410.3;
 - d. Enclosed system totally enclosing spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures;
 - e. Non-atomized solvent flow method collecting solvent in container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container; or
 - f. Solvent flushing methods discharging solvent into container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container.
22. Owner/operator shall conduct the handling and transfer of cleaning solvents, primers, topcoats and waste, except for hazardous waste that are determined to be hazardous under RCRA, which are exempt [40 CFR 63.741(e)], to or from enclosed systems, vats, waste containers, piping systems, and other equipment in such a manner that minimizes spills. (Rule 201.1)

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23. The owner/operator shall not de paint more than 6 completed aerospace vehicles in a calendar year on a facility wide basis. (Rule 201.1)
24. On each and every day the coating operation is used, the owner/operator shall maintain record of types and volume of all coatings and solvents used including solvents used for clean-up. Additionally, for each coating and solvent used/stored at this location, records shall be maintained on site and include the following:
 - a. the name, vapor pressure, weight fraction, and specific gravity of each organic HAP and VOC constituent;
 - b. VOC content, and organic HAP content as applied of all coatings and solvents;
 - c. the mass of organic HAP and VOC emitted per unit volume;
 - d. VOC composite vapor pressure of each coating and solvent;
 - e. flash point of all aqueous solvents used (solvents that contain at least 80% water); and
 - f. all data, calculations and/or test results that demonstrate the cleaning solvent and/or coating meet either composition or content requirements.

Records shall be kept on each day operation is used as well as on a monthly and annual basis and maintained in such a manner that coating or solvent may be readily identified and VOC emissions determined upon District request. (Rules 210.1 and 201.1)

25. Exhaust gas particulate matter concentration shall not exceed 0.1 gr/scf. (Rule 404.1)
26. Operator shall maintain records necessary to verify compliance with operational conditions. (Rule 209)
27. On a semiannual basis, the owner/operator shall report to the District and EPA the following information:
 - a. Any instance where the primer and topcoat application operation applied to aerospace parts exceeded the applicable limits specified here;
 - b. Any instance where a noncompliant cleaning solvent is used for hand-wipe cleaning related to aerospace operations, except those listed in 40 CFR 63.744 (e)- Exempt Cleaning Operations;
 - c. A list of any new cleaning solvents used for hand-wipe cleaning in aerospace operations in the previous 6 months and information on the composite vapor pressure of the new solvent or notification they comply with the composition requirements specified in 40 CFR 63.744(b)(1);
28. If required by applicable law, regulations, or order, particulate filters shall be disposed of as hazardous waste. In any event, handling of filters shall be in manner, which prevents entrainment in atmosphere. (Rules 419 and 210.1)
29. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
30. Average Daily emissions are calculated based on the total emissions (VOC or PM₁₀) emitted per calendar month divided by the number of days coating operations were conducted in that calendar month. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS FROM MAKE-UP HEATERS:

Maximum combustion emissions from air make-up unit heater shall not exceed following limits:

<u>Particulate Matter (PM₁₀):</u>	0.08	lbm/day
	0.01	ton/yr
<u>Sulfur Oxides:</u>	0.01	lbm/day
	0.002	ton/yr
<u>Volatile Organic Compounds (VOC):</u>	0.11	lbm/day
	0.001	ton/yr
<u>Nitrogen Oxides (as NO₂):</u>	1.84	lbm/day
	0.015	ton/yr
<u>Carbon Monoxide:</u>	0.39	lbm/day
	0.07	ton/yr

EMISSION LIMITS FROM SPRAY BOOTH:

Total maximum emission rate of each air contaminant (excluding combustion emissions) from this emission unit combined with emissions from 0127187 (Hanger Spray Insert Booth) and 0127189 (AGE Prep Booth) shall not exceed following limits:

<u>Particulate Matter:</u>	0.0525	lbm/day (of PM ₁₀) – Average Daily
	0.01	ton/yr
<u>Volatile Organic Compounds (VOC):</u>	26.32	lbm/day – Average Daily
	1.65	ton/yr
<u>Copper:</u>	3.30 E -8	lbm/hr (Rule 419)
	2.94 E -4	lbm/yr (Rule 419)
<u>Hexavalent Chromium:</u>	1.20 E -5	lbm/hr (Rule 419)
	0.11	lbm/hr (Rule 419)
<u>Manganese:</u>	6.17 E -9	lbm/hr (Rule 419)
	5.41 E -5	lbm/yr (Rule 419)
<u>Nickel:</u>	7.28 E -9	lbm/hr (Rule 419)
	6.38 E -5	lbm/yr (Rule 419)
<u>Toluene:</u>	5.29 E -2	lbm/hr (Rule 419)
	463.00	lbm/yr (Rule 419)

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<u>Zinc:</u>	9.02 E -6	lbm/hr (Rule 419)
	7.90 E -3	lbm/yr (Rule 419)

<u>Methylene Chloride:</u>	6.64 E -3	lbm/hr (Rule 419)
	58.20	lbm/yr (Rule 419)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with daily emission rate limits shall be verified by source operator through daily records (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 210.1)

Compliance with hazardous air pollutant emission rate limitations shall be verified by operator pursuant to Rule 108.1 should non-compliance be suspected. (Rule 108.1)

EMISSIONS LIMITS FROM UNCONTROLLED TOUCH-UP WITHIN SPRAY BOOTH:

<u>Particulate Matter (PM₁₀):</u>	3.50	lb/day –Average Daily
	0.13	ton/yr

<u>Volatile Organic Compounds (VOC):</u>	10.00	lb/day –Average Daily
	0.36	

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

SPECIAL CONDITION:

Toxic air contaminants listed in Subsection (b) of Section 112 of the most recent update of Federal Act (42 U.S. Code Section 7412 (b)) or referenced in most recent update of Section 93000, California Administrative Code shall not be emitted with exception of toxics listed in Analysis Validation section above and in quantities stated in this section. (Rule 210.1)

Emission Unit 0127189 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127189	Surface Coating Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Surface Coating Operation, including following equipment:

- A. Spray booth, 40 ft. long x 30 ft. wide x 16 ft. high;
- B. Three-stage particulate filtration system meeting requirements of 40 CFR 63.745(g);
- C. Activated carbon filters (shared with 0127187 and 0127188);
- D. Exhaust ducting: 48 in. dia., entering main booth ahead of carbon filter bank;
- E. 15 hp 48 in. Vaneaxial exhaust blowers (30,400cfm each, 2 in. static pressure): ducted to carbon filter bank in main booth pulling from roof of main booth;
- F. 48 in. exhaust stack: 68 ft. high located in main spray booth;
- G. Air make-up unit: 15 hp with 1.15 MMBtu/hr gas-fired heater; and
- H. Application equipment necessary for HVLP, electrodeposition, electrostatic, flow, roll, dip, or brush coating.

OPERATIONAL CONDITIONS:

- 1. Provided the equipment described above is operated in compliance with all of the federally enforceable conditions listed below, a permit shield is granted from applicability and enforcement action for the following applicable requirements: 40 CFR Part 63 Subpart GG. (Rule 201.1)
- 2. Except as provided in 40 CFR 63.745 (g)(4), 30,400 cfm exhaust fan shall be in operation when coating operations are taking place and operation shall continue for minimum of 15 minutes following application of coatings. (Rules 209 and 210.1)
- 3. Except as provided in 40 CFR 63.745 (g)(4), Exhaust air shall pass through particulate filters and carbon bank prior to being exhausted to air and the particulate filters shall be certified in accordance with EPA Method 319 as required by 40 CFR 63.750(o). (Rule 210.1)
- 4. The following activities may be conducted in this operation without the exhaust fan and control system operating:
 - a. Touch-up of scratched surfaces or damaged paint;
 - b. Hole daubing for fasteners;
 - c. Touch-up of trimmed edges;
 - d. Coating prior to joining dissimilar metal components;
 - e. Stencil operations performed by brush or air brush;
 - f. Section joining;
 - g. Touch-up of bushings and other similar parts;
 - h. Sealant detackifying; and
 - i. The use of hand-held spray can application methods. (Rule 210.1)

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5. Each dry filter system shall be equipped with differential pressure gauge which shall be monitored to determine need for filter change-out. The owner/operator shall read and record the pressure drop across the filter once per shift during coating operations. If the pressure drop across the dry particulate filter system falls outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, shut down the operation immediately and take corrective action. (Rules 210.1 and 201.1)
6. Equipment including particulate filters shall be maintained in accordance with manufacturer's recommendations to maintain design control efficiencies below:
 - a. Average air flow within the paint booth shall be maintained above 100 fpm during coating operations to ensure 90% capture efficiency;
 - b. Carbon filter bank shall achieve minimum 95% control of captured VOCs; and
 - c. Particulate filtration system shall meet the efficiency requirements of 40 CFR 63.745(g).
7. Application methods shall be such that minimum transfer efficiency is 65%. (Rule 210.1 BACT)
8. VOC detection and carbon breakthrough shall be determined by a District-approved Carbon Sampling Plan. (Rules 209 and 210.1)
9. Owner/ operator shall replace activated carbon in accordance with a District-approved Carbon Sampling Plan. (Rules 209 and 210.1)
10. Except for touchup using roller and brushes, no coating application operations shall be performed during sampling and testing, or replacement of associated activated carbon. (Rules 209 and 210.1)
11. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content and VOC content level of primers, applied to aerospace components, shall be limited to no more than 350 g/l (2.9 lb/gal) of primer as applied. (Rule 201.1)
12. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content and VOC content level of topcoats and self-priming topcoats, applied to aerospace components, shall be limited to no more than 420 g/l (3.5 lb/gal) of topcoats and self-priming topcoats as applied. (Rule 201.1)
13. Condition #s 11 and 12, above, do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at the facility does not exceed 50 gal, and the combined annual total of all such coatings used at the facility does not exceed 200 gal, as long as the daily and annual emissions limits specified in this permit are not exceeded. (Rule 201.1)
14. Coatings applied to non-aerospace components shall meet the requirements of Rules 410.4 or 410.4A, as applicable. (Rule 201.1)
15. VOC containing materials used for surface cleaning or clean-up, excluding stripping and equipment cleaning shall satisfy the following:
 - a. If used in aerospace applications, the solvents shall contain 200 grams or less of VOC per liter of material, and meet the aqueous solvent composition requirements listed in Table 1 of 40 CFR Section 63.744 (b)(1) **OR** meet a VOC composite partial pressure of 45 mm Hg or less at a temperature of 20 °C (68 °F). (Rule 201.1 and Rule 210.1 BACT Requirements)
 - b. If used in non-aerospace applications, solvents shall contain 200 grams of VOC per liter of material or less. [Rules 410.4A (mobile) and 410.4 (non-mobile)]
16. VOC containing material used for stripping shall satisfy the following:
 - a. If used in aerospace applications, stripping material shall contain 300 grams of VOC per liter of material or less or VOC composite partial pressure of 9.5 mm Hg or less at a temperature of 20 °C (68 °F). (Rule 210.1 BACT Requirements)
 - b. If used in non-aerospace applications, stripping material shall contain 200 grams of VOC per liter of material. [Rules 410-4A (mobile) and 410-4 (non-mobile)]

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17. VOC containing material for equipment cleaning shall satisfy the following:
 - a. If used for cleaning of polyester resin application equipment, solvents shall satisfy:
 - b. A VOC content of 200 grams per liter of material or less **OR**;
 - c. A VOC content of 1100 grams per liter of material or less and a VOC composite partial pressure of 1.0 mm Hg or less at 20 °C (68 °F). (Rules 410.4, 410.4A, and Rule 210.1 BACT Requirements)
 - d. If used for cleaning of coating and adhesives application equipment, solvents shall contain 950 grams of VOC per liter of material or less and a VOC composite partial pressure of 35 mm Hg or less at 20°C (68 °F); **OR** a VOC composite partial pressure of 7 mm Hg or less at 20°C (68 °F). (Rules 410.4, 410.4A and Rule 210.1 BACT Requirements)
18. All solvents and solvent containing materials, or solvent-laden applicators shall be kept in closed containers when not in use. The design of the container shall prevent the escape of vapor to the atmosphere and the container is to be kept closed except when depositing or removing material from the container. (Rules 209, 210.1, 201.1 and 410.2)
19. Owner/operator shall conduct the handling and transfer of cleaning solvents, primers, topcoats and waste, except for hazardous waste that are determined to be hazardous under RCRA, which are exempt [40 CFR 63.741(e)], to or from enclosed systems, vats, waste containers, piping systems, and other equipment in such a manner that minimizes spills. (Rule 201.1)
20. Unless enclosed gun cleaning system utilizes solvent containing HAP and VOC below the de minimis levels specified in 40 CFR Section 63.741(f), on a monthly basis, the owner/operator shall inspect each enclosed system that uses HAP-containing solvents for leaks. If any leaks are found, repair within 15 days or remove solvent and shut down system until leak is repaired. (Rule 210.1 BACT Requirements, Rule 201.1 and Rule 410.4)
21. Cleaning or cleanup operations using VOC-containing material shall utilize at least one of the following:
 - a. Hand, rag (wipe cleaning), and brush cleaning using solvent container closed except during actual cleaning;
 - b. Spray bottles or containers with maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;
 - c. Cleaning equipment in solvent container closed during cleaning operations, except when depositing and removing objects to be cleaned, and closed during non-operation except during maintenance and repair of cleaning equipment itself;
 - d. Remote reservoir cold cleaner operated in conformance with Rule 410.3;
 - e. Enclosed system totally enclosing spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures;
 - f. Non-atomized solvent flow method collecting solvent in container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container; or
 - g. Solvent flushing methods discharging solvent into container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container. Discharged solvent from such equipment shall be collected into containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping. (Rule 210.1 BACT)
22. The owner/operator shall not repaint more than 6 completed aerospace vehicles in a calendar year on a facility-wide basis. (Rule 201.1)

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23. On each and every day the coating operation is used, the owner/operator shall maintain record of types and volume of all coatings and solvents used including solvents used for clean-up. Additionally, for each coating and solvent used/stored at this location, records shall be maintained on site and include the following: 1) the name, vapor pressure, weight fraction, and specific gravity of each organic HAP and VOC constituent; 2) VOC content, and organic HAP content as applied of all coatings and solvents; 3) the mass of organic HAP and VOC emitted per unit volume; 4) VOC composite vapor pressure of each coating and solvent; 5) flash point of all aqueous solvents used (solvents that contain at least 80% water); and 6) all data, calculations and/or test results that demonstrate the cleaning solvent and/or coating meet either composition or content requirements. Records shall be kept on each day operation is used as well as on a monthly and annual basis and maintained in such a manner that coating or solvent may be readily identified and VOC emissions determined upon District request.
(Rules 210.1 and 201.1)
24. Operator shall maintain records necessary to verify compliance with operational conditions.
(Rule 210.1)
25. Operator shall maintain record of all leaks from enclosed spray gun cleaning that uses HAP-containing solvents, including source identification; date leak was discovered; and date leak was repaired.
(Rule 201.1)
26. On a semiannual basis, the Owner/Operator shall report to the District and EPA the following information:
 - a. Any instance where the primer and topcoat application operation applied to aerospace parts exceeded the applicable limits specified here;
 - b. Any instance where a noncompliant cleaning solvent is used for hand-wipe cleaning related to aerospace operations, except those listed in 40 CFR 63.744 (e)- Exempt Cleaning Operations.
 - c. List of any new cleaning solvents used for hand-wipe cleaning in aerospace operations in the previous 6 months and information on the composite vapor pressure of the new solvent or notification they comply with the composition requirements specified in 40 CFR 63.744(b)(1); and
 - d. Instances when operation was not immediately shut down when the pressure drop across a dry particulate system was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures. (Rule 201.1)
27. If required by applicable law, regulations, or order, particulate filters shall be disposed of as hazardous waste. In any event, handling of filters shall be in manner, which prevents entrainment in atmosphere.
(Rules 419 and 210.1)
28. The above-permit conditions do not apply to hand-held spray can (including aerosol coating products) application methods for touch up and repair operations.
30. Average Daily emissions are calculated based on the total emissions (VOC or PM₁₀) emitted per calendar month divided by the number of days coating operations were conducted in that calendar month. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS FROM MAKEUP HEATERS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

<u>Particulate Matter (PM₁₀):</u>	0.08	lb/day
	0.01	ton/yr
<u>Sulfur Oxides:</u>	0.01	lb/day
	0.001	ton/yr
<u>Volatile Organic Compounds (VOC):</u>	0.11	lb/day
	0.001	ton/yr
<u>Nitrogen Oxides (as NO₂):</u>	1.84	lb/day
	0.015	ton/yr
<u>Carbon Monoxide:</u>	0.39	lb/day
	0.07	ton/yr

EMISSION LIMITS WITHIN SPRAY BOOTH:

Total maximum emission rate of each air contaminant (excluding combustion emissions) from this emission unit combined with emissions from 0127187A (Hanger Spray Insert Booth) and 0127189F (AGE Prep Booth) shall not exceed following limits:

<u>Particulate Matter (PM₁₀):</u>	0.0525	lb/day – Average Daily
	0.01	ton/yr
<u>Volatile Organic Compounds (VOC):</u>	26.32	lb/day – Average Daily
	1.65	ton/yr
<u>Copper:</u>	3.30 E -8	lb/hr (Rule 419)
	2.94 E -4	lb/yr (Rule 419)
<u>Hexavalent Chromium:</u>	1.20 E -5	lb/hr (Rule 419)
	0.11	lb/yr (Rule 419)
<u>Manganese:</u>	6.17 E -9	lb/hr (Rule 419)
	5.41 E -5	lb/yr (Rule 419)
<u>Nickel:</u>	7.28 E -9	lb/hr (Rule 419)
	6.38 E -5	lb/yr (Rule 419)
<u>Toluene:</u>	5.29 E -2	lb/hr (Rule 419)
	463.00	lb/yr (Rule 419)

Emission Unit 0127189 Permit Conditions

<u>Zinc:</u>	9.02 E -6	lb/hr (Rule 419)
	7.90 E -3	lb/yr (Rule 419)
<u>Methylene Chloride:</u>	6.64 E -3	lb/hr (Rule 419)
	58.20	lb/yr (Rule 419)

EMISSIONS LIMITS FROM UNCONTROLLED TOUCH-UP WITHIN SPRAY BOOTH

<u>Particulate Matter (PM₁₀):</u>	3.50	lb/day –Average Daily
	0.13	ton/yr
<u>Volatile Organic Compounds (VOC):</u>	10.00	lb/day –Average Daily
	0.36	ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with daily emission rate limits shall be verified by source operator through daily records (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 210.1)

Compliance with hazardous air pollutant emission rate limitations shall be verified by operator pursuant to Rule 108.1 should non-compliance be suspected. (Rule 108.1)

SPECIAL CONDITION:

Toxic air contaminants listed in Subsection (b) of Section 112 of the most recent update of Federal Act (42 U.S. Code Section 7412 (b)) or referenced in most recent update of Section 93000, California Administrative Code shall not be emitted with exception of toxics listed in Analysis Validation section above and in quantities stated in this section. (Rule 210.1)

Emission Unit 0132107 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132107	Surface Coating Operation with Paint Spray Booth

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Surface Coating Operation with Paint Spray Booth, including following equipment:

- A. Cross flow paint spray booth; 32-ft. wide x 16-ft high x 44-ft. deep equipped with approximately 180 20-in. x 20-in. NESHAP 319 3-stage dry overspray filters, and operational pressure differential gauge;
- B. Two 7.5-hp electric motor with 42-inch dia. tube-axial exhaust fan (providing exhaust flow rate of 51,200-cfm @ 0.25-in. water column {w.c.});
- C. Surface coating spray gun(s) of the following type: High volume low pressure (HVLP), airless and air assist;
- D. Enclosed gun cleaner; and
- E. 4.5 MMBtu Make-up Air Heater.

OPERATIONAL CONDITIONS:

1. Paint spray booth shall be equipped with operational pressure gauge indicating pressure drop across filter area. (Rule 210.1 BACT Requirement)
2. Dry exhaust filters shall be NESHAP 319 3-stage dry overspray filters. (Rule 210.1 BACT Requirement)
3. Spray booth equipped with air solenoid device that will not permit operation of spray gun without exhaust fan operating. (Rule 210.1)
4. All spraying of coatings shall be done within spray booth with all exhaust air passing through filters described in equipment description above. (Rule 210.1)
5. Exhaust fan flow rate shall be 51,200 actual cubic feet per minute (acfm) \pm 1000-acfm. (Rule 210.1)
6. Volume of surface coatings applied at this permit unit shall not exceed 2,250-gallons/year without prior District approval. (Rule 210.1)
7. Surface coating as applied VOC content shall not exceed of 3.5 lb/gal (420-g/l – less water and exempt compounds) unless a military or specialty coating is utilized. (Rule 210.1 BACT Requirement)
8. Surface coating operation shall comply with requirements of CFR 40 Part 63, Subpart GG (National Emissions Standards for Aerospace Manufacturing and Rework Facilities). (Rule 423, Subpart GG)
9. Specialty coatings which comply with "as applied" VOC limits in attached Table may be used. (Rule 210.1 BACT Requirement)
10. All coating shall be applied using HVLP, airless, air-assist spray gun, roller, brush, or dipping. (Rule 210.1 BACT Requirement)
11. Total photochemically reactive solvent disposal into atmosphere shall not exceed 1.5 gallons per day. (Rule 410.2)
12. HVLP surface coating system shall operate between 0.1 and 10 psig and less than 50 psig liquid supply pressure. (Rule 210.1)

Emission Unit 0132107 Permit Conditions

13. No emission shall cause nuisance or injury to any persons. (Rule 419)
14. There shall be no odors detectable at or beyond property boundary. (Rule 419)
15. VOC-containing material used for surface cleaning or clean-up, excluding coating stripping and equipment cleaning, shall satisfy the following: (Rule 210.1 BACT Requirement)
 - a. Shall contain 200 grams or less of VOC per liter of material; or
 - b. Composite vapor pressure of VOC shall be 45 mm Hg or less at temperature of 20°C (68°F).
16. VOC containing material used for stripping of aerospace components shall satisfy following: (Rule 210.1 BACT Requirement)
 - a. Stripper shall contain less than 300 grams of VOC per liter of material; or
 - b. Composite vapor pressure of VOC shall be 9.5 mm Hg (0.18 psia) or less at temperature of 20°C (68°F).
17. VOC-containing material for cleaning of coatings and adhesives application equipment shall satisfy following: (Rule 210.1 BACT Requirement)
 - a. Solvent shall have VOC content of 950 grams or less of VOC per liter of material; and
 - b. Solvent shall have VOC composite partial pressure of 35 mm Hg or less at 20°C (68°F).
18. Cleaning operations using VOC-containing material shall utilize one of following: (Rule 210.1 BACT Requirement)
 - a. Wipe cleaning;
 - b. Spray bottles or containers with maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;
 - c. Cleaning equipment in solvent container closed during cleaning operations, except when depositing and removing objects to be cleaned, and closed during non-operation except during maintenance and repair of cleaning equipment itself;
 - d. Remote reservoir cold cleaner operated in conformance with Rule 410.3;
 - e. Enclosed system totally enclosing spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures;
 - f. Non-atomized solvent flow method collecting cleaning solvent in container or collection system closed except for solvent collections openings and, if necessary, openings to avoid excessive pressure build-up inside container; or
 - g. Solvent flushing method discharging cleaning solvent into container closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container. Discharged solvent from such equipment shall be collected into containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping.
19. Cleaning operations using VOC-containing material shall not atomize any solvent into open air. (Rule 210.1 BACT Requirement)
20. VOC content of material used for surface cleaning or cleanup (excluding stripping and equipment cleaning), shall not exceed 200 grams/liter, meet the aqueous solvent composition requirements listed in Table 1 of 40 CFR Section 63.744 (b)(1) for specialty coatings, or VOC composite partial pressure not to exceed 45 mm Hg a temperature of 20 °C (68 °F). (Rules 201.1 and 210.1 BACT Requirements).
21. Operator shall maintain record of all leaks from enclosed spray gun cleaner including: source identification; date leak was discovered; and date leak was repaired.
22. All solvents, solvent containing materials, and solvent-laden applicators shall be kept in closed containers when not in use. Container shall prevent the escape of vapor to the atmosphere. Container is to be kept closed except when depositing or removing material from the container. (Rules 209, 210.1, 201.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

<u>Particulate Matter (PM₁₀):</u>	0.06	lb/day
	0.01	ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	46.73	lb/day
	5.14	ton/yr

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with daily emission limits shall be verified by recordkeeping (e.g. painting logs and invoices). Compliance with annual emission limits shall be demonstrated by records which sum facility emissions on quarterly basis. All records shall be kept on site and made readily available to District personnel upon request. (Rule 210.1)

SPECIAL CONDITIONS:

- aa. Edwards Air Force Base or facility operator shall maintain daily record of coatings used, volume of solvent and other materials added to each coating, VOC content of coating as applied, and volume and VOC content of clean-up solvent used. (Rule 210.1 BACT Requirement)
- bb. Provided the equipment described above is operated in compliance with all of the federally enforceable conditions listed below, a permit shield is granted from applicability and enforcement action for the following applicable requirements: 40 CFR Part 63 Subpart GG. (Rule 201.1)
- cc. Each dry filter system shall be equipped with differential pressure gauge which shall be monitored to determine need for filter change out. Read and record the pressure drop across the filter once per shift. If the pressure drop across the dry particulate filter system falls outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, shut down the operation immediately and take corrective action.
- dd. Owner/operator shall utilize only topcoats, primers, and self-priming topcoats and other coatings and adhesives from District BACT Policy 95-01 or Aerospace NESHAP, whichever is more stringent, unless a military or specialty coating is utilized. (Rules 210.1 BACT and 201.1)
- ee. Hazardous Air Pollutant (HAP) content level of primers shall be limited to no more than 350 g/l (2.9 lb/gal) of primer as applied. (Rule 201.1)
- ff. HAP content level of topcoats and self-priming topcoats shall be limited to no more than 420 g/l (3.5 lb/gal) of topcoats and self-priming topcoats as applied. (Rule 201.1)

Emission Unit 0132107 Permit Conditions

- gg. HAP content of primers and topcoats, do not apply to the use of low-volume coatings which the volume of each formulation used does not exceed 50 gal/year, and the combined volume of all coatings does not exceed 200 gal/year (given the daily and annual emissions limits specified in this permit are not exceeded). (Rule 201.1)
- hh. Enclosed gun cleaning system shall be used initially for all spray equipment. If further cleaning is necessary, hand cleaning (wipe cleaning) shall be permitted provided no solvent is atomized. On a monthly basis, inspect each enclosed system that uses HAP-containing solvents for leaks. If any leaks are found, repair within 15 days or remove solvent and shut down system until leak is repaired.
- ii. Owner/operator shall conduct the handling and transfer of cleaning solvents, primers, topcoats and waste, except for hazardous waste that are determined to be hazardous under RCRA, which are exempt [40 CFR 63.741(e)], to or from enclosed systems, vats, waste containers, piping systems, and other equipment in such a manner that minimizes spills. (Rule 201.1)
- jj. The owner/operator shall not depaint more than 6 completed aerospace vehicles in a calendar year on a facility-wide basis. (Rule 201.1)
- kk. On a semiannual basis, the Owner/Operator shall report to the District and EPA the following information:
 - i. Any instance where the primer and topcoat application operation applied to aerospace parts exceeded the applicable limits specified here;
 - ii. Any instance where a noncompliant cleaning solvent is used for hand-wipe cleaning related to aerospace operations, except those listed in 40 CFR 63.744 (e)- Exempt Cleaning Operations;
 - iii. A list of any new cleaning solvents used for hand-wipe cleaning in aerospace operations in the previous 6 months and information on the composite vapor pressure of the new solvent or notification they comply with the composition requirements specified in 40 CFR 63.744(b)(1); and
 - iv. Instances when operation was not immediately shut down when the pressure drop across a dry particulate system was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures. (Rule 201.1)
- ll. Except as provided in 40 CFR 63.745(g)(4), exhaust air shall pass through particulate filters prior to being exhausted to air. The use of an HVLP gun requires that the exhaust fan and control system are operating.
- mm. The following activities may be conducted in this operation without the exhaust fan and control system operating:
 - i. Touch-up of scratched surfaces or damaged paint;
 - ii. Hole daubing for fasteners;
 - iii. Touch-up of trimmed edges;
 - iv. Coating prior to joining dissimilar metal components;
 - v. Stencil operations performed by brush or air brush;
 - vi. Section joining;
 - vii. Touch-up of bushings and other similar parts;
 - viii. Sealant detackifying; and
 - ix. Use of hand-held spray can application methods. (Rule 210.1)

Table 1

VOC LIMITS for Specialty Coatings
Grams of VOC Per Liter of Coating
Less Water and Less Exempt Compounds

VOC Containing Material	Limit, g/l
Adhesion Promoter	850
Adhesives	
Non-Structural	250
Structural	
Autoclavable	50
Non-Autoclavable	850
Adhesive Bonding Primers	
Above 250	<input type="checkbox"/> F O 1030
250	<input type="checkbox"/> F d 850
Antichafe Coatings	600
Barrier Topcoat	790
Clear Topcoat	750
Conformal Coating	750
Dry Lubricative Materials	
Fastener Manufacturing	250
Nonfastener Manufacturing	880
Electric/Radiation Effect Coatings	800
Fastener Sealants	675
Fire Resistant Coatings	
Civilian	650
Military	970
Flight Test Coatings Used on	
Missiles or Single-Use Target	
Craft	420
All Others	840
Fuel Tank Coatings	720
Fuel Tank Adhesives	620
High Temperature Coating	850
Impact Resistant Coating	420
Maskants - Chemical Milling	250
Optical Anti-Reflective Coating	700
Pretreatment Coatings	780
Primers Not Resistant to Phosphate	
Esters	350
Phosphate Ester Resistant Primers	350
Rain Erosion Resistant Coating	800
Scale Inhibitor	880
Sealant	600
Solid Film Lubricants	
Fastener Manufacturing	880

Table 1 continued

Fastener Installation	880
Nonfastener Manufacturing	880
Space Vehicle Coating	
Electrostatic Discharge	
Protection	800
Other Space Vehicle Coatings	1000
Adhesives	800
Temporary Protective Coatings	250
Topcoats	420
Unicoats (Self Priming Topcoats)	420
Wing Coating	750
Wire Coating	
Electronic	725
Anti-Wicking	825
Pro-Bonding Etching	900
Phosphate Ester Resistant Ink	925

Surface Coating – Non-Booth

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Emission Unit 0127027 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127027	Outside Aircraft Painting Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Outside Aircraft Painting Operation, including following equipment:

One outside aircraft painting operation.

OPERATIONAL CONDITIONS:

1. Provided the equipment described above is operated in compliance with all of the federally enforceable conditions listed below, a permit shield is granted from applicability and enforcement action for the following applicable requirements: 40 CFR Part 63 Subpart GG. (Rule 201.1)
2. Operation may be used for touch-up to repair minor imperfections after main coating process. (Rule 210.1)
3. Aircraft coating operations, excluding touch-up, shall be conducted within permitted spray booth providing control of volatiles and particulates unless aircraft is too large to be painted within these booths. (Rule 210.3 Emission Reduction Credit)
4. Metal parts and products, motor vehicles, and mobile equipment shall be painted within permitted spray booths. (Rule 209)
5. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP (hazardous air pollutant) content and VOC (volatile organic compounds) content level of primers shall be limited to no more than 350 g/l (2.9 lb/gal) of primer as applied. (Rule 201.1)
6. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content and VOC content level of topcoats and self-priming topcoats shall be limited to no more than 420 g/l (3.5 lb/gal) of topcoats and self-priming topcoats as applied. (Rule 201.1)
7. VOC limits for specialty coatings (primers and topcoats), do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at the facility does not exceed 50 gal, and the combined annual total of all such coatings used at the facility does not exceed 200 gal, as long as the daily and annual emissions limits specified in this permit are not exceeded. (Rule 201.1)
8. VOC containing material used for surface cleaning or cleanup, excluding stripping and equipment cleaning, shall contain 200 grams or less of VOC per liter of material, and meet the aqueous solvent composition requirements listed in Table 1 of 40 CFR Section 63.744 (b) (1) or meet a VOC composite partial pressure of 45 mm Hg or less at a temperature of 20 °C (68 °F). (Rule 201.1 and Rule 210.1 BACT Requirements).
9. All solvents and solvent containing materials, or solvent-laden applicators shall be kept in closed containers when not in use. The design of the container shall prevent the escape of vapor to the atmosphere and the container is to be kept closed except when depositing or removing material from the container. (Rules 209, 210.1, 201.1 and 410.2)

Emission Unit 0127027 Permit Conditions

10. Owner/operator shall conduct the handling and transfer of cleaning solvents, primers, topcoats and waste, except for hazardous waste that are determined to be hazardous under RCRA, which are exempt [40 CFR 63.741(e)], to or from enclosed systems, vats, waste containers, piping systems, and other equipment in such a manner that minimizes spills. (Rule 201.1)
11. The owner/operator shall not spray inorganic HAP-containing primers, topcoats, and self-priming topcoats in this operation, except as provided in 40 CFR 63.745(g)(4)(i) through (g)(4)(x). (Rule 201.1)
12. The owner/operator shall not de-paint more than 6 completed aerospace vehicles in a calendar year on a facility-wide basis. (Rule 201.1)
13. Each day coating operation is used owner/operator shall maintain record of types and volume of all coatings and solvents used, including solvents used for clean-up. (Rule 210.1)
14. For each coating and solvent used/stored at this location the following records shall be maintained:
 - 1) Name, vapor pressure, weight fraction, and specific gravity of each organic HAP and VOC constituent;
 - 2) VOC content and organic HAP content as applied of all coatings and solvents;
 - 3) Mass of organic HAP and VOC emitted per unit volume;
 - 4) VOC composite vapor pressure of each coating and solvent;
 - 5) Flash point of all aqueous solvents used (solvents that contain at least 80% water); and
 - 6) All data, calculations and/or test results that demonstrate the cleaning solvent and/or coating meet either composition or content requirements.Records shall be maintained onsite for each day operation is used; additionally, monthly and annual records shall be maintained. All records shall be maintained in a manner that coating or solvent may be readily identified and VOC emissions determined upon District request. (Rules 210.1 and 201.1)
15. On a semiannual basis, the Owner/Operator shall report to the District and EPA the following information:
 - a. Any instance where the primer and topcoat application operation applied to aerospace parts exceeded the applicable limits specified here;
 - b. Any instance where a noncompliant cleaning solvent is used for hand-wipe cleaning related to aerospace operations, except those listed in 40 63.744 (e) - Exempt Cleaning Operations; and
 - c. A list of any new cleaning solvents used for hand-wipe cleaning in aerospace operations in the previous 6 months and information on the composite vapor pressure of the new solvent or notification they comply with the composition requirements specified in 63.744(b) (1). (40 CFR Part 63 Subpart GG)
16. The above-permit conditions do not apply to hand-held spray can (including aerosol coating products) application methods for touch up and repair operations. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with diesel fueled piston engine emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 45 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

<u>Volatile Organic Compounds (VOC):</u>	17.16	lb/day
<u>(as defined in Rule 210.1)</u>	3.13	ton/yr

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years.

Emission Unit 0127289 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127289	Electric Oven for Curing Painted Parts

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Electric Oven for Curing Painted Parts, including following equipment:

Gruenberg Industrial Oven, Model C45V960, electric oven, 4' by 4' by 6' (interior dimensions), rated at 30 kilowatt power input and maximum temperature of 450^o F.

OPERATIONAL CONDITIONS:

1. A list of the types of materials cured in the oven including VOC content as applied shall be available upon District request. Additionally, operator shall record type and amount of material cured in a readily available format that verifies compliance with emission limitations. (Rule 210.1)
2. Operator shall maintain records necessary to verify compliance with operational conditions. (Rule 209)
3. Equipment shall be maintained according to manufacturer's specifications. (Rules 209 and 210.1)
4. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Volatile Organic Compounds (VOC): 0.03 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Emission Unit 0127289 Permit Conditions

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

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Emission Unit 0127299 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127299	Outside Aircraft Painting Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Outside Aircraft Painting Operation, including following equipment:

One outside aircraft painting operation.

OPERATIONAL CONDITIONS:

1. Provided the equipment described above is operated in compliance with all of the federally enforceable conditions listed below, a permit shield is granted from applicability and enforcement action for the following applicable requirements: 40 CFR Part 63 Subpart GG. (Rule 201.1)
2. Operation may be used for touch-up to repair minor imperfections after main coating process. (Rule 209)
3. Aircraft coating operations, excluding touch-up, shall be conducted within permitted spray booth providing control of volatiles and particulates unless aircraft is too large to be painted within these booths.
4. Metal parts and products, motor vehicles, and mobile equipment shall be painted within permitted spray booths. (Rule 209)
5. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content and VOC HAP level of primers shall be limited to no more than 350 g/l (2.9 lb/gal) of primer as applied. (Rule 201.1)
6. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content and VOC content level of topcoats and self-priming topcoats shall be limited to no more than 420 g/l (3.5 lb/gal) of topcoats and self-priming topcoats as applied. (Rule 201.1)
7. Condition #s 5 and 6, above, do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at the facility does not exceed 50 gal, and the combined annual total of all such coatings used at the facility does not exceed 200 gal, as long as the daily and annual emissions limits specified in this permit are not exceeded. (Rule 201.1)
8. VOC containing material used for surface cleaning or cleanup, excluding stripping and equipment cleaning, shall contain 200 grams or less of VOC per liter of material, and meet the aqueous solvent composition requirements listed in Table 1 of 40 CFR Section 63.744 (b)(1) OR VOC composite partial pressure of 45 mm Hg or less at a temperature of 20 °C (68 °F). (Rule 201.1 and Rule 210.1 BACT Requirements).
9. All solvents and solvent containing materials, or solvent-laden applicators shall be kept in closed containers when not in use. The design of the container shall prevent the escape of vapor to the atmosphere and the container is to be kept closed except when depositing or removing material from the container. (Rules 209, 210.1, 201.1 and 410.2)

Emission Unit 0127299 Permit Conditions

10. Owner/operator shall conduct the handling and transfer of cleaning solvents, primers, topcoats and waste, except for hazardous waste that are determined to be hazardous under RCRA, which are exempt [40 CFR 63.741(e)], to or from enclosed systems, vats, waste containers, piping systems, and other equipment in such a manner that minimizes spills. (Rule 201.1)
11. The owner/operator shall not spray inorganic HAP-containing primers, topcoats, and self-priming topcoats in this operations, except as provided in 40 CFR 63.745(g)(4)(i) through (g)(4)(x). (Rule 201.1)
12. The owner/operator shall not depaint more than 6 completed aerospace vehicles in a calendar year on a facility-wide basis. (Rule 201.1)
13. On each and every day the coating operation is used, the owner/operator shall maintain record of types and volume of all coatings and solvents used including solvents used for clean-up. Additionally, for each coating and solvent used/stored at this location, records shall be maintained on site and include the following: 1) the name, vapor pressure, weight fraction, and specific gravity of each organic HAP and VOC constituent; 2) VOC content, and organic HAP content as applied of all coatings and solvents; 3) the mass of organic HAP and VOC emitted per unit volume; 4) VOC composite vapor pressure of each coating and solvent; 5) flash point of all aqueous solvents used (solvents that contain at least 80% water); and 6) all data, calculations and/or test results that demonstrate the cleaning solvent and/or coating meet either composition or content requirements. Records shall be kept on each day operation is used as well as on a monthly and annual basis and maintained in such a manner that coating or solvent may be readily identified and VOC emissions determined upon District request. (Rules 210.1 and 201.1)
14. On a semiannual basis, the Owner/Operator shall report to the District and EPA the following information:
 - a. Any instance where the primer and topcoat application operation applied to aerospace parts exceeded the applicable limits specified here;
 - b. Any instance where a noncompliant cleaning solvent is used for hand-wipe cleaning related to aerospace operations, except those listed in 40 CFR 63.744 (e) - Exempt Cleaning Operations; and
 - c. A list of any new cleaning solvents used for hand-wipe cleaning in aerospace operations in the previous 6 months and information on the composite vapor pressure of the new solvent or notification they comply with the composition requirements specified in 40 CFR 63.744(b)(1).
15. The above-permit conditions do not apply to hand-held spray can (including aerosol coating products) application methods for touch up and repair operations.

EMISSION LIMITS:

Maximum combined uncontrolled emission rate from painting operations located in Buildings 1864, 1870, 1874, 1875, 1881, Ramp 11 and Ramp 12 shall not exceed following limits:

Volatile Organic Compounds (VOC):

10.00 lb/day

0.36 tpy

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

SPECIAL CONDITION:

Compliance with maximum combined uncontrolled daily and quarterly emission rate shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept in Building 1874 in readily available format. (Rules 209 and 210.1)

Emission Unit 0132013 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132013	Aircraft Paint Spray Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Aircraft Paint Spray Operation, including following equipment:

- A. HVLP spray equipment;
- B. Equipment necessary for brush, roll, dip, or flow coating; and
- C. Other equipment approved by APCO and achieving at least 65% transfer efficiency.

OPERATIONAL CONDITIONS:

- 1. Use of coatings containing chromates shall not exceed equivalent of 2 gallons per month of any component containing 35% by weight chromium compounds considering combined use in Building 160. (CH&SC, Sec 41700 and per applicant submitted risk assessment)
- 2. All solvents and materials containing solvents shall be stored in enclosed, non-absorbent containers when not in use. (Rule 209)
- 3. Operator shall apply coatings such that minimum transfer efficiency of 65% is achieved. (Rule 210.1 BACT Requirement)
- 4. Aerosols shall be used only for touch-up defined as coating used to repair minor surface damage and imperfections after main coating process and not exceeding 9 sq. ft. per unit. (Rule 210.1 BACT)
- 5. VOC containing material used for surface cleaning or clean-up, excluding stripping and equipment cleaning, shall satisfy following:
 - a. Shall contain 200 grams or less of VOC per liter of material; or
 - b. Composite vapor pressure of VOC shall be 45 mm Hg or less at temperature of 20° C (68° F). (Rule 210.1 BACT)
- 6. VOC containing material used for stripping of aerospace components shall satisfy following:
 - a. Shall contain less than 300 grams or less of VOC per liter of material; or
 - b. Composite vapor pressure of VOC shall be 9.5 mm Hg or less at temperature of 20° C (68° F). (Rule 210.1 BACT)
- 7. VOC containing material for equipment cleaning shall satisfy following:
 - a. Solvent shall have VOC content of 950 grams or less of VOC per liter of material; and
 - b. Solvent shall have VOC composite partial pressure of 35 mm HG or less at 20° C (68° F). (Rule 210.1 BACT)
- 8. Cleaning operation using VOC-containing material shall utilize one of following:
 - a. Wipe cleaning;
 - b. Spray bottles or containers with maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;
 - c. Cleaning equipment in solvent container closed during cleaning operations, except when depositing and removing objects to be cleaned, and closed during non-operation except during maintenance and repair of cleaning equipment itself;

Emission Unit 0132013 Permit Conditions

- d. Remote reservoir cold cleaner operated in conformance with Rule 410.3;
 - e. Enclosed system totally enclosing sprayguns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures;
 - f. Non-atomized solvent flow method collecting solvent in container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container; or
 - g. Solvent flushing methods discharging solvent into container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container. Discharged solvent from such equipment shall be collected into containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping. (Rule 210.1 BACT)
9. The operator shall maintain daily record of types and volume of all coatings and solvents used including solvents used for clean-up. Additionally, records shall be maintained on site of VOC content as applied of all coatings and VOC content and vapor pressure of all solvents used/stored at this location. Records shall be maintained in manner such that coating may be readily identified and VOC emissions determined upon District request. (Rule 210.1)
 10. The operator shall maintain records necessary to verify compliance with operational conditions. (Rule 209)
 11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
 12. Spray booth shall be used solely for coating of aircraft. (Rule 209)
 13. Aircraft parts shall be coated within a controlled spray booth. (Rule 209)
 14. Coating of metal parts and products covered by District Rule 410.4 shall not be done in Building 151 or 160. (Rule 410.4 Exemption)

COMPLIANCE TESTING REQUIREMENTS:

Compliance shall be demonstrated through record keeping and purchase records. (Rule 209)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

11.45 lbm/day

Volatile Organic Compounds (VOC):

33.18 lbm/day

4.31 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0132014 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132014	Aircraft Paint Spray Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Aircraft Paint Spray Operation including following equipment:

- A. Equipment necessary for brush, roll, dip, or flow coating; and
- B. Other equipment approved by APCO and achieving at least 65% transfer efficiency.

OPERATIONAL CONDITIONS:

1. Provided the equipment described above is operated in compliance with all of the federally enforceable conditions listed below, a permit shield is granted from applicability and enforcement action for the following applicable requirements. 40CFR Part 63 Subpart GG (Rule 201.1)
2. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content level and VOC content level of primers, applied to aerospace components, shall be limited to no more than 350-g/l (2.9-lb/gal) of primer as applied. (Rule 201.1)
3. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content level and VOC content level of topcoats and self-priming topcoats, applied to aerospace components, shall be limited to no more than 420-g/l (3.5-lb/gal) of topcoats and self-priming topcoats as applied. (Rule 201.1)
4. Condition Nos. 3 and 4, above, do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at the facility does not exceed 50-gallons, and the combined annual total of all such coatings used at the facility does not exceed 200-gal, given the daily and annual emissions limits specified in this permit are not exceeded. (Rule 201.1)
6. VOC containing material used for surface cleaning or cleanup, excluding stripping and equipment cleaning, shall contain 200 grams or less of VOC per liter of material, and meet the aqueous solvent composition requirements listed in Table 1 of 40 CFR Section 63.744(b)(1) or meet a VOC composite partial pressure of 45-mm Hg or less at a temperature of 20°C (68°F). (Rule 201.1 and 210.1 BACT)
7. All solvents and solvent containing materials, or solvent laden applicators shall be kept in closed containers when not in use. The design of the container shall prevent the escape of the vapor to the atmosphere and the container is to be kept closed except when depositing or removing material from the container. (Rules 209, 210.1, 201.1 and 410.2)
8. Owner/Operator shall handle and transfer cleaning solvents, primers, topcoats, and wastes (excluding hazardous wastes determined to be hazardous under the Resource Conservation and Recovery Act {RCRA} – [exempt in accordance with 40 CFR Part 63.741(e)]) to and from enclosed systems, vats, waste containers, piping systems, and other equipment in a manner that minimizes spills. (Rules 201.1 and 210.1)

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9. Owner/operators shall not de-paint more than 6 completed aerospace vehicles in one calendar year, on a facility-wide basis. (Rules 201.1 and Rule 210.1)
10. VOC containing material used for stripping of aerospace components shall satisfy following:
 - a. Shall contain less than 300-grams or less of VOC per liter of material; or
 - b. Composite vapor pressure of VOC shall be 9.5-mm Hg or less at temperature of 20°C (68°F). (Rule 210.1 BACT)
11. Above permit conditions shall not apply to hand-held spray can (including aerosol coating product) application methods for touch up and repair operations. (Rule 210.1)
12. Aerosols shall be used only for touch-up defined as coating used to repair minor surface damage and imperfections after main coating process and not exceeding 9-sq. ft. per unit. (Rule 210.1 BACT)
13. Each day coating operation is utilized owner/operator shall maintain records of types and volume of all coatings and solvents, including cleanup, used. Additionally, for each coating and solvent used or stored at this location, records shall be maintained on site and include the following:
 - a. The name, vapor pressure, weight fraction, and specific gravity of each organic HAP and VOC equivalent;
 - b. VOC content and organic HAP content as applied of all coatings and solvents;
 - c. The mass of HAP and VOC emitted per unit volume;
 - d. VOC composite vapor pressure of each coating and solvent;
 - e. Flash point of all aqueous solvents used (solvents that contain at least 80% water); and
 - f. All data, calculations and/or test results that demonstrate the cleaning solvent and/or coating meet either composition or content requirements. Records shall be kept on each day operation is used as well as on a monthly and annual basis and maintained in such a manner that coating solvent may be really identified and VOC emissions determined upon District request. (Rule 210.1 and 201.1)
14. On a semiannual basis, Owner/Operator shall report to the District and EPA the following information:
 - a. Any instance where the primer and topcoat application operation applied to aerospace parts exceeded the applicable limits specified in this document;
 - b. Any instance where a non-compliant cleaning solvent is used for hand-wipe cleaning related to aerospace operations, excluding items listed in CFR 40 Part 60.744(e) – Exempt Cleaning Operations; and
 - c. A list of any new cleaning solvents used for hand-wipe cleaning in aerospace operations in the previous 6 months and information.
15. VOC containing material for equipment cleaning shall satisfy following:
 - a. Solvent shall have VOC content of 950-grams or less of VOC per liter of material; and
 - b. Solvent shall have VOC composite partial pressure of 35 mm HG or less at 20°C (68°F). (Rule 210.1 BACT)
16. Cleaning operation using VOC-containing material shall utilize one of following:
 - a. Wipe cleaning;
 - b. Spray bottles or containers with maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;
 - c. Cleaning equipment in solvent container closed during cleaning operations, except when depositing and removing objects to be cleaned, and closed during non-operation except during maintenance and repair of cleaning equipment itself;
 - d. Remote reservoir cold cleaner operated in conformance with Rule 410.3;
 - e. Enclosed system totally enclosing spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures;

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- f. Non-atomized solvent flow method collecting solvent in container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container; or
- g. Solvent flushing methods discharging solvent into container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container. Discharged solvent from such equipment shall be collected into containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping. (Rule 210.1 BACT)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

<u>Particulate Matter (PM₁₀):</u>	2.86	lb/day
	0.37	ton/yr
<u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1)	8.30	lb/day
	1.08	ton/yr

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 210.1)

Emission Unit 0138057 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0138057	Unconfined Surface Coating Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Unconfined Surface Coating Operation, including following equipment:

- A. Unconfined surface coating operation, and
- B. Brush, roll, Q-Tip style swab, and dip application of surface coatings.

OPERATIONAL CONDITIONS:

1. No emission shall cause injury, detriment, nuisance, or annoyance or endanger the comfort, repose, health or safety of any persons or have natural tendency to cause injury or damage to business or property. (Rule 419)
2. Unless specifically denoted within this permit, all surface coating shall be completed by brush, dip, or roll coating. (Rule 210.1 BACT Requirement)
3. Aerosol application of surface coatings shall only be utilized for surface coatings containing no hexavalent chromium compounds. (Rule 210.1 BACT Requirement)
4. Total paints, lacquers, thinners, additives and other materials containing solvents used in surface coating operation shall not exceed 1474 gallons/year. (Rule 210.1)
5. Coatings as applied VOC content shall not exceed 4.5-lb/gal (540-g/l, less water and exempt compounds) or less, except for the following: Specialty Coating VOC Content Limits (40 CFR Part 63, Subpart GG)

SPECIALTY COATINGS VOC LIMITS Grams of VOC Per Liter of Coating Less Water and Less Exempt Compounds

VOC Containing Material	Limit, g/l
Adhesion Promoter	850
Adhesives	
Non-Structural	250
Structural	
Autoclavable	50
Non-Autoclavable	850
Adhesive Bonding Primers	
Above 250EF Curing Temp	1030
250EF or Less Curing Temp	850
Antichafe Coatings	600

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Barrier Topcoat	790
Clear Topcoat	750
Conformal Coating	750
Dry Lubricative Materials	
Fastener Manufacturing	250
Nonfastener Manufacturing	880
Electric/Radiation Effect Coatings	800
Fastener Sealants	675
Fire Resistant Coatings	
Civilian	650
Military	970
Flight Test Coatings Used on	
Missiles or Single-Use Target Craft	420
All Others	840
Fuel Tank Coatings	720
Fuel Tank Adhesives	620
High Temperature Coating	850
Impact Resistant Coating	420
Maskants - Chemical Milling	250
Optical Anti-Reflective Coating	700
Pretreatment Coatings	780
Primers Not Resistant to Phosphate Esters	350
Phosphate Ester Resistant Primers	350
Rain Erosion Resistant Coating	800
Scale Inhibitor	880
Sealant	600
Solid Film Lubricants	
Fastener Manufacturing	880
Fastener Installation	880
Nonfastener Manufacturing	880
Space Vehicle Coating	
Electrostatic Discharge Protection	800
Other Space Vehicle Coatings	1000
Adhesives	800
Temporary Protective Coatings	250
Topcoats	420
Unicoats (Self Priming Topcoats)	420
Wing Coating	750
Wire Coating	
Electronic	725
Anti-Wicking	825
Pro-Bonding Etching	900
Phosphate Ester Resistant Ink	925

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6. All solvents and any materials containing solvents shall be stored in enclosed containers when not in use. (Rule 210.1)
7. There shall be no odors detectable at or beyond the property boundary. (Rule 419)
8. Regardless of VOC content, all VOC-containing materials used in solvent cleaning operations, such as solvents, and cloth and paper moistened with solvents, shall be stored in non-absorbent, non-leaking containers kept closed at all times except when filling or emptying. (Rule 410.4A)
9. Waste solvents and waste solvent residues shall be managed in compliance with California and Federal requirements applicable to solid wastes, hazardous wastes, or recyclable materials. (Rule 210.1)
10. Owner/operator shall conduct the handling and transfer of cleaning solvents, primers, topcoats and waste, except for hazardous waste that are determined to be hazardous under RCRA, which are exempt [40 CFR 63.741(e)], to or from enclosed systems, vats, waste containers, piping systems, and other equipment in such a manner that minimizes spills. (Rule 201.1)
11. VOC containing materials used for **surface cleaning or clean-up**, excluding stripping and equipment cleaning shall satisfy the following:
 - a. If used in aerospace applications, the solvents shall contain 200 grams or less of VOC per liter of material, and meet the aqueous solvent composition requirements listed in Table 1 of 40 CFR Section 63.744 (b)(1) **OR** meet a VOC composite partial pressure of 45 mm Hg or less at a temperature of 20 °C (68 °F). (Rule 201.1 and Rule 210.1 BACT Requirements)
 - b. If used in non-aerospace operations, solvents shall contain 200 grams of VOC per liter of material or less. [Rules 410.4A (mobile) and 410.4 (non-mobile)]
12. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, organic HAP content level and VOC content level of primers, applied to aerospace components, shall be limited to no more than 350 g/l (2.9 lb/gal) of primer as applied. (Rule 201.1)
13. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, organic HAP content level and VOC content level of topcoats and self-priming topcoats, applied to aerospace components, shall be limited to no more than 420 g/l (3.5 lb/gal) of topcoats and self-priming topcoats as applied. (Rule 201.1)
14. Coatings applied to non-aerospace components shall meet the requirements of Rules 410 or 410-A, as applicable. (Rule 201.1)
15. All solvents, solvent-containing materials, or solvent-laden applicators shall be kept in closed containers when not in use. The design of the container shall prevent the escape of vapor to the atmosphere and the container is to be kept closed except when depositing or removing material from the container. (Rules 209, 210.1, 201.1 and 410.2)
16. Cleaning or cleanup operations using VOC-containing material shall utilize at least one of the following:
 - a. Hand, rag (wipe cleaning) and brush cleaning using solvent container that is kept closed except during actual cleaning;
 - b. Spray bottles or containers with maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;
 - c. Cleaning equipment in a solvent container that is kept closed during cleaning operations, except when depositing and removing objects to be cleaned, and closed during non-operation except during maintenance and repair of cleaning equipment itself;
 - d. Remote reservoir cold cleaner operated in conformance with Rule 410.3;
 - e. Enclosed system totally enclosing spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures;

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- f. Non-atomized solvent flow method collecting solvent in container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container; or
 - g. Solvent flushing methods discharging solvent into container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container. Discharged solvent from such equipment shall be collected into containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping. (Rule 210.1 BACT Requirements)
- 17. The owner/operator shall not de-paint more than 6 completed aerospace vehicles in a calendar year on a facility-wide basis. (Rule 201.1)
 - 18. On each and every day the coating operation is used, the owner/operator shall maintain record of types and volume of all coatings and solvents used including solvents used for clean-up. Additionally, for each coating and solvent used/stored at this location, records shall be maintained on site and include the following: 1) the name, vapor pressure, weight fraction, and specific gravity of each organic HAP and VOC constituent; 2) VOC content, and organic HAP content as applied of all coatings and solvents; 3) the mass of organic HAP and VOC emitted per unit volume; 4) VOC composite vapor pressure of each coating and solvent; 5) flash point of all aqueous solvents used (solvents that contain at least 80% water); and 6) all data, calculations and/or test results that demonstrate the cleaning solvent and/or coating meet either composition or content requirements. Records shall be kept on each day operation is used as well as on a monthly and annual basis and maintained in such a manner that coating or solvent may be readily identified and VOC emissions determined upon District request. (Rules 210.1 and 201.1)
 - 19. Owner/operator shall maintain records necessary to verify compliance with operational conditions. (Rule 209)
 - 20. On a semiannual basis, the owner/operator shall report to the District and EPA the following information:
 - a. Any instance where the primer and topcoat application operation applied to aerospace parts exceeded the applicable limits specified here;
 - b. Any instance where a noncompliant cleaning solvent is used for hand-wipe cleaning related to aerospace operations, except those listed in 40 CFR 63.744 (e)- Exempt Cleaning Operations;
 - c. A list of any new cleaning solvents used for hand-wipe cleaning in aerospace operations in the previous 6 months and information on the composite vapor pressure of the new solvent or notification they comply with the composition requirements specified in 63.744(b)(1);
 - 21. The owner/operator shall not spray inorganic HAP-containing primers, topcoats, and self-priming topcoats in this operation, except as provided in 40 CFR 63.745(g)(4)(i) through (g)(4)(ix). (Rule 201.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed following limits:

<u>Volatile Organic Compounds (VOC):</u>	18.50	lb/day
<u>(as defined in Rule 210.1)</u>	1.85	ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0138063 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0138063	Unconfined Surface Coating Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Unconfined Surface Coating Operation, including following equipment:

- A. Unconfined surface coating operation; and
- B. Brush, roll, Q-Tip style swab, and dip application of surface coatings.

OPERATIONAL CONDITIONS:

- 1. Provided the equipment described above is operated in compliance with all of the federally enforceable conditions listed below, a permit shield is granted from applicability and enforcement action for the following applicable requirements: 40 CFR Part 63 Subpart GG. (Rule 201.1)
- 2. Surface coating application methods shall be completed by brush, dip, or roll coating or shall achieve a minimum transfer efficiency of 65%. (Rule 210.1 BACT Requirement)
- 3. Total paints, lacquers, thinners, additives and other materials containing solvents, including cleanup, used in surface coating operation shall not exceed 1916 gallons/year. (Rule 210.1)
- 4. There shall be no odors detectable at or beyond the property boundary. (Rule 419)
- 5. Owner/operator shall conduct the handling and transfer of cleaning solvents, primers, topcoats and waste, except for hazardous waste that are determined to be hazardous under RCRA, which are exempt [40 CFR 63.741(e)], to or from enclosed systems, vats, waste containers, piping systems, and other equipment in such a manner that minimizes spills. (Rule 201.1)
- 6. VOC containing materials used for surface cleaning or clean-up, excluding stripping and equipment cleaning shall satisfy the following:
 - a. If used in aerospace applications, the solvents shall contain 200 grams or less of VOC per liter of material, and meet the aqueous solvent composition requirements listed in Table 1 of 40 CFR Section 63.744 (b)(1) OR meet a VOC composite partial pressure of 45 mm Hg or less at a temperature of 20 °C (68 °F). (Rule 201.1 and Rule 210.1 BACT Requirements)
 - b. If used in non-aerospace operations, solvents shall contain 200 grams of VOC per liter of material or less. [Rules 410.4A (mobile) and 410.4 (non-mobile)]
- 7. VOC containing material used for stripping shall satisfy the following:
 - a. If used in aerospace applications, stripping material shall contain 300 grams of VOC per liter of material or less OR VOC composite partial pressure of 9.5 mm Hg or less at a temperature of 20°C (68 °F). (Rule 210.1 BACT Requirements).
 - b. If used in non-aerospace applications, stripping material shall contain 200 grams of VOC per liter of material. (Rules 410.4A (mobile) and 410.4 (non-mobile))

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8. VOC containing material for equipment cleaning shall satisfy the following:
 - a. If used for cleaning of polyester resin application equipment, solvents shall satisfy:
 - 1.) VOC content of 200 grams per liter of material or less; OR
 - 2.) VOC content of 1100 grams per liter of material or less and a VOC composite partial pressure of 1.0 mm Hg or less at 20°C (68 °F). (Rules 410.4, 410.4A, and Rule 210.1 BACT Requirements)
 - b. If used for cleaning of coating and adhesives application equipment, solvents shall contain 950 grams of VOC per liter of material or less and a VOC composite partial pressure of 35 mm Hg or less at 20°C (68 °F); OR a VOC composite partial pressure of 7 mm Hg or less at 20°C (68 °F). (Rules 410.4, 410.4A and Rule 210.1 BACT Requirements)
9. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content level and VOC content level of primers, applied to aerospace components, shall be limited to no more than 350 g/l (2.9 lb/gal) of primer as applied. (Rule 201.1)
10. Except for specialty coatings which meet the definition(s) in Appendix A of 40 CFR Part 63 Subpart GG, or federally enforceable SIP-approved limits, whichever is more stringent, organic HAP content level and VOC content level of topcoats and self-priming topcoats, applied to aerospace components, shall be limited to no more than 420 g/l (3.5 lb/gal) of topcoats and self-priming topcoats as applied. (Rule 201.1)
11. Condition #s 9 and 10, above, do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at the facility does not exceed 50 gal, and the combined annual total of all such coatings used at the facility does not exceed 200 gal, as long as the daily and annual emissions limits specified in this permit are not exceeded. (Rule 201.1)
12. Coatings applied to non-aerospace components shall meet the requirements of Rules 410 or 410-4A, as applicable. (Rule 201.1)
13. All solvents, solvent-containing materials, or solvent-laden applicators shall be kept in closed containers when not in use. The design of the container shall prevent the escape of vapor to the atmosphere and the container is to be kept closed except when depositing or removing material from the container. (Rules 209, 210.1, 201.1 and 410.2)
14. Cleaning or cleanup operations using VOC-containing material shall utilize at least one of the following:
 - a. Hand, rag (wipe cleaning) and brush cleaning using solvent container that is kept closed except during actual cleaning;
 - b. Spray bottles or containers with maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;
 - c. Cleaning equipment in a solvent container that is kept closed during cleaning operations, except when depositing and removing objects to be cleaned, and closed during non-operation except during maintenance and repair of cleaning equipment itself;
 - d. Remote reservoir cold cleaner operated in conformance with Rule 410.3;
 - e. Enclosed system totally enclosing spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures;
 - f. Non-atomized solvent flow method collecting solvent in container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container; or

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- g. Solvent flushing methods discharging solvent into container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container. Discharged solvent from such equipment shall be collected into containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping. (Rule 210.1 BACT Requirements)
- 15. The owner/operator shall not de paint more than 6 completed aerospace vehicles in a calendar year on a facility wide basis. (Rule 201.1)
- 16. On each and every day the coating operation is used, the owner/operator shall maintain record of types and volume of all coatings and solvents used including solvents used for clean-up. Additionally, for each coating and solvent used/stored at this location, records shall be maintained on site and include the following:
 - a. the name, vapor pressure, weight fraction, and specific gravity of each organic HAP and VOC constituent;
 - b. VOC content, and organic HAP content as applied of all coatings and solvents;
 - c. the mass of organic HAP and VOC emitted per unit volume;
 - d. VOC composite vapor pressure of each coating and solvent;
 - e. flash point of all aqueous solvents used (solvents that contain at least 80% water); and
 - f. all data, calculations and/or test results that demonstrate the cleaning solvent and/or coating meet either composition or content requirements.Records shall be kept on each day operation is used as well as on a monthly and annual basis and maintained in such a manner that coating or solvent may be readily identified and VOC emissions determined upon District request. (Rules 210.1 and 201.1)
- 17. Owner/operator shall maintain records necessary to verify compliance with operational conditions. (Rule 209)
- 18. On a semiannual basis, the owner/operator shall report to the District and EPA the following information:
 - a. Any instance where the primer and topcoat application operation applied to aerospace parts exceeded the applicable limits specified here;
 - b. Any instance where a noncompliant cleaning solvent is used for hand-wipe cleaning related to aerospace operations, except those listed in 40 CFR 63.744 (e)- Exempt Cleaning Operations;
 - c. A list of any new cleaning solvents used for hand-wipe cleaning in aerospace operations in the previous 6 months and information on the composite vapor pressure of the new solvent or notification they comply with the composition requirements specified in 40 CFR 63.744(b)(1).
- 19. The owner/operator shall not spray inorganic HAP-containing primers, topcoats, and self-priming topcoats in this operation, except as provided in 40 CFR 63.745(g)(4)(i) through (g)(4)(x). (Rule 201.1)
- 20. The above-permit conditions do not apply to hand-held spray can (including aerosol coating products) application methods for touch up and repair operations.

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to EKAPCD within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed following limits:

<u>Volatile Organic Compounds (VOC):</u>	24.05	lb/day
<u>(as defined in Rule 210.1)</u>	2.40	ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Woodworking Operation

DRAFT

Emission Unit 0127302 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129106	Downdraft Dust Collector Table

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Portable Downdraft Table, including following equipment:

- A. One portable downdraft table with 1.5 hp filter collection system containing filters rated at 98% efficiency or greater for particulate matter with an aerodynamic diameter of 1 micron; and
- B. Associated sanding equipment.

OPERATIONAL CONDITIONS:

- 1. Dust collection system shall be in operation when associated equipment is operated. (Rule 210.1)
- 2. Ducting shall be maintained leak-free. (Rules 209 and 210.1)
- 3. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
- 4. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
- 5. Visible emissions shall be limited to 20% opacity except for three minutes in any one-hour. (Rule 401)
- 6. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rule 210.1)
- 7. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rules 209 and 210.1)
- 8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to EKAPCD within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.01 grains/dscf (of PM) (BACT)

0.30 lbm/day (of PM₁₀)

0.05 ton/yr (of PM₁₀)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129106 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129106	Downdraft Dust Collector Table

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Downdraft Dust Collector Table, including following equipment:

- A. Sanding operation; and
- B. 8000 cfm Downdraft Table with 7.5 hp motor

OPERATIONAL CONDITIONS:

- 1. Dust collector shall be equipped with operational pressure differential indicator. (Rule 209)
- 2. Dust collection system shall be in operation when associated equipment is operated. (Rule 210.1)
- 3. Ducting shall be maintained leak-free. (Rules 209 and 210.1)
- 4. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
- 5. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
- 6. Visible emissions shall be limited to 20% opacity except for three minutes in any one-hour. (Rule 401)
- 7. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rule 210.1)
- 8. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rules 209 and 210.1)
- 9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.05 lbm/day

0.01 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0129111 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129111	Woodworking Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Woodworking Operation, including following equipment:

A. Woodworking tools connected to Cyclone Dust Collector No. 1:

	Equipment	Horsepower
1.	Shaper	2.00
2.	Jointer	0.50
3.	Jointer	5.00
4.	Table saw	3.00
5.	Table saw	3.00
6.	Radial arm saw	2.00
7.	Wood planer	10.00
8.	Band saw	1.00

B. Equipment connected to Cyclone Dust Collector #2:

	Equipment	Horsepower
1.	Miter saw	1.50
2.	Miter saw	2.00
3.	Miter saw	2.30
4.	Disc and belt sander	1.50
5.	Wheel Sander	2.00

- C. Ventilation system serving all equipment listed above (exhausted to cyclone collector listed below), and
- D. Cyclone Collector No. 1, Model 3630-54, with 30 horsepower motor driving exhaust fan, and 7,880 cubic feet per minute (cfm) exhaust flow rate.
- E. Cyclone Collector No. 2, Model CYH 3015BD with 15-hp electric motor driving exhaust fan, and 4,400-cfm exhaust flow rate
- F. Shop vacuum (for housekeeping and backup dust control for Cyclones No. 1 and No. 2)
- G. Woodworking tools not connected to Cyclone Dust Collectors No. 1 or No. 2 (operation limited to no more than ten hours per month per equipment unit);

	Equipment	Horsepower
1.	Drum sander	1.50
2.	Spindle sander	0.25
3.	Miter saw	1.50

Emission Unit 0129111 Permit Conditions

	Equipment	Horsepower
4.	Panel saw	2.50
5.	Lathe	0.75
6.	Drill press	0.75
7.	Drill press	0.75
8.	Band saw	1.50
9.	Scroll saw	0.25
10.	Router	3.25
11.	Double miter saw	1.00

OPERATIONAL CONDITIONS:

1. Woodworking operations connected to cyclone dust collector(s) shall not exceed 4380-hours/year without prior District approval. (Rule 210.1)
2. Operation of woodworking equipment not connected to cyclone dust collectors shall not exceed 10-hours/month per unit without prior District approval. (Rule 210.1)
3. Total particulate matter emission concentration from cyclone collector shall not exceed 0.1-grains per standard cubic foot (gr/scf). (Rule 404.1)
4. Visible emissions from cyclone collector shall not exceed 10% opacity. (Rule 210.1)
5. Cyclone No. 1 dust collector volumetric exhaust flow rate shall not exceed 7,880-cfm. (Rule 210.1)
6. Cyclone No. 2 dust collector volumetric exhaust flow rate shall not exceed 4,400-cfm. (Rule 210.1)
7. Cyclone dust collector(s) shall be in operation when associated equipment is operated. (Rule 210.1)
8. All piping, ducting, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
9. Residual saw dust and other particulate matter shall be vacuumed each day of use. (Rule 210.1)
10. Vacuum shall be maintained, leak-free and kept in good working order. (Rules 209 and 210.1)
11. Material collected in cyclone dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
12. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
13. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Emission rate of each air contaminant from this emissions unit shall not exceed the following emissions limitations:

Particulate Matter (PM₁₀):

Cyclone Dust Collector No. 1	0.012	gr/scf
	0.82	lb/hr
	9.84	lb/day
	1.80	ton/yr
Cyclone Dust Collector No. 2	0.011	gr/scf
	0.42	lb/hr
	5.08	lb/day
	0.93	ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and recordkeeping to document maximum daily emission rate) each day source is operated. Documentation of compliance shall be retained and made readily available to District for a period of three years. (Rules 209 and 210.1)

Emission Unit 0131013 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0131013	Woodworking Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Woodworking Operation, including following equipment:

- A. One 5 hp radial arm saw;
- B. One 5 hp spindle/disc sander;
- C. One 1.85 hp miter saw;
- D. One 1.5 hp router table;
- E. One 3 hp circular table saw;
- F. One 2 hp panel saw;
- G. One 4 hp jointer/shaper;
- H. One 5 hp radial arm saw;
- I. One 25 hp planer/surfacer;
- J. One 3 hp wood shaper;
- K. One 5 hp band saw;
- L. One ¾ hp milling machine;
- M. One 0.5 hp drill press;
- N. One 0.75 horsepower belt/disk sander;
- O. One spindle sander (460V, 3 phase, 60 hz)
- P. Three floor dust collection points;
- Q. Two Dustvents/worktable
- R. Ventilation system serving items A through Q above; and
- S. Torit & Day Model HPW 96, Serial Number IG379679A fabric dust collector with design air flow rating of 14,000 cubic feet per minute at 14 inches of water column using 50 horsepower blower and 954 square feet of filter area with an air to cloth ratio of 13.6:1 using ninety-six 8 foot long bags made of polyester felt glazed

OPERATIONAL CONDITIONS:

- 1. Ventilation system design shall conform to Industrial Ventilation Guide. (Rule 209)
- 2. Exhaust filter bank shall be equipped with operational differential pressure indicator showing filter pressure drop. (Rule 209)
- 3. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
- 4. Visible emissions from equipment shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 5. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)

Emission Unit 0131013 Permit Conditions

6. Fabric dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
7. Total operating hours for facility shall not exceed 4,380 hours per year without prior District approval. (Rule 210.1)
8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.02 grains/dscf
28.80 lbm/day
2.63 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0133006 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0133006	Woodworking Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Woodworking Operation, including following equipment:

A. Woodworking tools including the following:

Equipment		
1.	Delta 14-inch table saw	7.5-hp
2.	Delta Radial Arm Saw (18 in.)	7.5-hp
3.	Delta Radial Arm Saw (18 in.)	7.5-hp
4.	Belt/Disc Sander	2-hp
5.	Delta Planer	10-hp
6.	Band Saw	5-hp
7.	DeWalt Compound Miter Saw (12 in.)	15-Amperes
8.	Safety Speed Cut Panel Saw	2.5-hp
9.	Delta Drill Press	0.5-hp
10.	Two 10-inch sweeper feet (dust collection points)	
11.	Delta Tablesaper @ 5 hp	5 hp

- B. Ventilation system serving all equipment except for DeWalt compound miter saw (item 8), Safety Speed Cut panel saw (item 9), and Delta drill press (item 10) listed above; and
- C. Dust collector including a 7.5 hp centrifugal fan.

OPERATIONAL CONDITIONS:

1. Dust collector shall be in operation with associated equipment is operated. (Rule 210.1)
2. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
3. Visible emissions from dust collector shall not exceed 10% opacity. (Rule 210.1 BACT Requirement)
4. All piping, ducting, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
5. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
6. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
7. DeWalt miter saw operation shall not exceed 6 hours per month. (Rule 210.1)
8. Safety Speed Cut panel saw operation shall not exceed 2 hours per month. (Rule 210.1)
9. Delta drill press operation shall not exceed 2 hours per month. (Rule 210.1)

Emission Unit 0133006 Permit Conditions

10. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
11. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.16 lb/hr (of PM₁₀)
1.25 lb/day (of PM₁₀)
0.03 tons/year (of PM₁₀)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0141006 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0141006	Woodworking Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Woodworking Operation, including following equipment:

- A. Up to 20 fixed and handheld electrically powered woodworking tools up to 5 horsepower each, which include saws, presses, jointer, sanders and routers;
- B. Dust Collector with 1.5-hp motor;
- C. Dust Collector with 1.5-hp motor; and
- D. Air Purifier with 0.75-hp motor.

OPERATIONAL CONDITIONS:

1. Except for handheld equipment during operation each unit of woodworking equipment shall be connected to dust collector. (Rule 210.1)
2. Particulate matter emissions from dust collector shall not exceed 0.02-gr/scf. (Rule 210.1)
3. Visible emissions from dust collector shall not exceed 5% opacity. (Rule 210.1)
4. Dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
5. All piping, ducting, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
6. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
7. Equipment shall be maintained according to manufacturer's specifications. (Rule 210.1)
8. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

<u>Particulate Matter (PM₁₀):</u>	0.02	gr/dscf
	0.34	lb/hr
	5.49	Lb/day
	0.99	ton/yr

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 210.1)

Emission Unit 0127287 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127287	Wood & Plastics Working Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Wood & Plastics Working Operation, including following equipment:

Revised Wood/Plastic working tools Equipment Description:

	Equipment	Up To Horsepower
1.	Panel saw	3
2.	Buffing machine	2
3.	Bandsaw	1
4.	Crosscut saw	10
5.	State spindle sander	3
6.	Jointer	7.5
7.	Jointer	3.5
8.	Table saw	2
9.	Miter saw	2
10.	Table router	3
11.	Belt/disc sander	1.5
12.	Over-arm router	3
13.	Bandsaw	4
14.	Planer	10
15.	Dual disc sander	5
16.	Belt Sander	7.5
17.	Bandsaw	3
18.	Drill Press	3

Ventilation system serving all equipment listed above (exhausted to fabric collector listed below); and Torit and Day Model 96HPW, 13,000 cubic feet per minute (cfm) fabric collector with 96-8 ft. long polyester felt filter bags and 41.33 hp electric motor driving blower and pulse jet cleaning system.

OPERATIONAL CONDITIONS:

1. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Fabric collector shall all be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Particulate matter emissions from fabric collector shall not exceed 0.002 gr/scf.
(Rule 210.1 BACT Requirement)
4. There shall be no visible emissions from fabric collector. (Rule 210.1 BACT Requirement)

Emission Unit 0127287 Permit Conditions

5. Fabric dust collector volumetric exhaust flow rate shall not exceed 13,000 standard cubic feet per minute (scfm). (Rule 209)
6. Fabric dust collector shall be in operation when associated equipment is operated. (Rule 209)
7. All piping, ducting, and connections shall be leak-tight and shall have no visible emissions. (Rule 209)
8. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
9. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
10. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
11. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

Fabric Collector	0.002	grains/dscf (of PM ₁₀)
(@ 13,000 acfm)	0.19	lb/hr (of PM ₁₀)
	1.50	lb/day (of PM ₁₀)
	0.27	tons/year (of PM ₁₀)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0127290 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0127290	Downdraft Dust Collector Table

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Downdraft Dust Collector Table, including following equipment:

One downdraft dust collector table, 3 ft. x 4 ft. x 5 ft., rated at 10 hp/4,800 CFM, containing 51 cotton sateen filters rated at 98% efficiency for 1 micron particles.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No.1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 grains/ft³ of gas at standard conditions. (Rule 404.1)
3. Equipment shall be maintained according to manufacturer's specifications. (Rules 209 and 210.1)
4. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter:

0.10 grains/scf (of PM) (Rule 404.1)
0.02 lbm/day (of PM₁₀)

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

Emission Unit 0132016 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132016	Grinding/Milling Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Grinding/Milling Operation, including following equipment:

- A. Torit-Donaldson open-front environmental control booth with five Model ECB-1 modules; and
- B. Five dust collection modules each equipped with six filter cartridges, automatic cleaning system, and 2.6 cu. ft. dust drawer and blower with 5 hp electric motor.

OPERATIONAL CONDITIONS:

1. Unit shall be equipped with operational differential pressure indicator. (Rule 209)
2. All dust collection module blowers shall be operated whenever grinding is conducted. (Rule 209)
3. Filters shall be installed, operated, and replaced as specified by manufacturer. (Rule 209)
4. Cartridge pressure drops shall be monitored and cartridges replaced per manufacturer's recommendation. (Rule 209)
5. Reverse pulse jet cleaning system shall be adjusted to maintain maximum filtering efficiency. (Rule 209)
6. Dust collected in filter collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
7. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
8. There shall be no odors detectable at or beyond property boundary. (Rule 419)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.65 lbm/hr
15.60 lbm/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rules 209 and 210.1)

SPECIAL CONDITIONS:

- aa. Source operator shall maintain records of operation and cartridge replacement and shall make records readily available for District inspection upon request for period of two years. (Rule 210.1)
- bb. This Permit to Operate does not authorize use of paints, solvents, or any other material containing organic solvents in this booth. (Rule 209)

DRAFT

Emission Unit 0129118 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0129118	Woodworking Operation

Emission Unit Equipment Description/Permit Conditions**Federally Enforceable Conditions**

EQUIPMENT DESCRIPTION: Woodworking Operation, including following equipment:

A Woodworking Tools Connected to Cyclone:

	Equipment	Horsepower
1.	36" Band Saw	7.5
2.	Planer/Surfacer	15.0
3.	Wood Shaper	1.5
4.	Jointer	7.5
5.	16" Table Saw	5.0
6.	16" Radial Arm Saw	5.0
7.	10" Table Saw	5.0
8.	Sander	12.0
9.	14" Delta radial arm saw	5.0

B Ventilation system serving all equipment listed above (exhausted to cyclone collector listed below),

C. Blow Pipe Manufacturing Model HPW96 cyclone collector rated at 4,500 cubic feet per minute (cfm) with 15-hp electric motor driving collector fan.

D. Woodworking Tools Not Connected to Cyclone (limited operation as stated below):

	Equipment	Horsepower	Max. Operation Hours/Month
1.	12" DeWalt compound miter saw	2.20	2
2.	12" Makita sliding mitersaw	2.00	2
3.	8" Delta frame and trim saw	1.50	2
4.	12" Delta disk sander	0.75	2
5.	14" Delta band saw	1.50	2
6.	16" Delta scroll saw	0.50	2
7.	8" Milwaukee panel saw	3.25	2
8.	DeWalt Drill Press	0.50	2
9.	Boice Crane wood lathe	2.00	4
10.	8" Delta tool grinder	0.75	2
11.	V-Line grinder	0.25	2

Emission Unit 0129118 Permit Conditions

OPERATIONAL CONDITIONS:

1. Total particulate matter emission concentration from cyclone collector shall not exceed 0.1-gr/scf. (Rule 404.1)
2. Visible emissions from cyclone collector shall not exceed 10% opacity. (Rule 210.1)
3. Cyclone dust collector volumetric exhaust flow rate shall not exceed 4,500-cfm. (Rule 210.1)
4. Cyclone dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
5. All piping, ducting, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
6. Material collected in cyclone dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
7. Operation of woodworking equipment connected to cyclone shall not exceed 4380 hours/year. (Rule 210.1)
8. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
9. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
10. Emissions from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with cyclone collector emission limitations shall be verified within 60 days of District request. (Rule 108.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

<u>Particulate Matter (PM₁₀):</u>	1.39	lb/hr
	16.63	lb/day
	3.03	ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of

Emission Unit 0132110 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132110	Wood Working Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Wood Working Operation, including following equipment:

- A. 40 horsepower pulse jet dust collector with 26 bags totaling 251 square feet of filter area;
- B. Wood working tools including but not limited to shapers, jointers, table saws, wood planers, band saws, double miter saws and routers not to exceed a total of 60 horsepower.

OPERATIONAL CONDITIONS:

- 1. All woodworking equipment must be operated with dust collector operating. (Rule 210.1 BACT requirement)
- 2. Woodworking operation connected to the dust collector shall not exceed 2,080 hours per year prior District approval. (Rule 210.1)
- 3. Material collected in the dust collector shall be disposed of in a manner preventing entrainment in atmosphere. (Rule 210.1)
- 4. Particulate matter emissions from dust collector shall not exceed 0.01-gr/scf. (Rule 210.1)
- 5. Visible emissions from dust collector shall not exceed 5% opacity. (Rule 210.1)
- 6. Dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
- 7. All piping, ducting, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
- 8. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 9. Equipment shall be maintained according to manufacturer's specifications. (Rule 210.1)
- 10. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 11. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.86 lb/day

0.11 ton/year

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 210.1)

Emission Unit 0132111 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132111	Abrasive Blasting Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Abrasive Blasting Operation, including following equipment:

- A. Abrasive blasting unit, with CFM-C style dust collector;
- B. ARB certified blast media; and
- C. Industrial media vacuum cleaner, (Shared with ATC# 0132112 and 0132113).

OPERATIONAL CONDITIONS:

- 1. There shall be no visible emission from dust collectors. (Rule 210.1 BACT Requirement)
- 2. Particulate matter emissions from dust collector exhaust shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
- 3. Equipment shall be maintained according to manufacturer's specifications, including periodic replacement and/or cleaning of filters, to ensure compliance with emission limitations. (Rule 210.1)
- 4. All piping, duct work, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
- 5. Material collected from abrasive blasting operation shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 6. Dust collectors shall be in operation whenever blasting cabinet is in operation. (Rule 210.1)
- 7. No emissions shall cause injury, detriment, nuisance, annoyance or endanger comfort, repose, health, or safety of public or have natural tendency to cause injury or damage to business or property. (CH&SC, Sec 41700)
- 8. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be on site and readily available. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.01 gr/scf

0.72 lb/day

0.13 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to the District for period of three years. (Rules 209 and 210.1)

Emission Unit 0132112 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132112	Sanding Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Sanding Operation, including following equipment:

- A. Downdraft sanding table with attached HEPA filter bank; and
- B. Industrial media vacuum cleaner (Shared with ATC# 0132111 and 0132113).

OPERATIONAL CONDITIONS:

- 1. There shall be no visible emission from dust collectors. (Rule 210.1 BACT Requirement)
- 2. Particulate matter emissions from dust collector exhaust shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
- 3. Equipment shall be maintained according to manufacturer's specifications, including periodic replacement and/or cleaning of filters, to ensure compliance with emission limitations. (Rule 210.1)
- 4. All piping, duct work, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
- 5. Material collected from sanding operation shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 6. Dust collectors shall be in operation whenever downdraft table is in operation. (Rule 210.1)
- 7. No emissions shall cause injury, detriment, nuisance, annoyance or endanger comfort, repose, health, or safety of public or have natural tendency to cause injury or damage to business or property. (CH&SC, Sec 41700)
- 8. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be on site and readily available. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.01 gr/scf
9.84 lb/day
1.80 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to the District for period of three years. (Rules 209 and 210.1)

Emission Unit 0132113 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
9002	0132113	Sanding Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Sanding Operation, including following equipment:

- A. Downdraft sanding table with attached HEPA filter bank; and
- B. Industrial media vacuum cleaner (Shared with ATC# 0132111 and 0132113).

OPERATIONAL CONDITIONS:

- 1. There shall be no visible emission from dust collectors. (Rule 210.1 BACT Requirement)
- 2. Particulate matter emissions from dust collector exhaust shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
- 3. Equipment shall be maintained according to manufacturer's specifications, including periodic replacement and/or cleaning of filters, to ensure compliance with emission limitations. (Rule 210.1)
- 4. All piping, duct work, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
- 5. Material collected from sanding operation shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 6. Dust collectors shall be in operation whenever downdraft table is in operation. (Rule 210.1)
- 7. No emissions shall cause injury, detriment, nuisance, annoyance or endanger comfort, repose, health, or safety of public or have natural tendency to cause injury or damage to business or property. (CH&SC, Sec 41700)
- 8. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be on site and readily available. (Rule 210.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Particulate Matter (PM₁₀):

0.01 gr/scf
9.84 lb/day
1.80 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to the District for period of three years. (Rules 209 and 210.1)

FEDERAL REGULATIONS
40 CFR 60 SUBPART A
General Provisions

Applicable provisions of 40 CFR 60 Subpart A shall apply.

[40 FR 53346, Nov. 17, 1975, as amended at 55 FR 51382, Dec. 13, 1990; 59 FR 12427, Mar. 16, 1994; 62 FR 52641, Oct. 8, 1997]

Applicability

§60.1(a)	Except as provided in subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
§60.1(b)	Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
§60.1(c)	In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.
§60.1(a)(2)	Except for compliance with 40 CFR 60.49b(u), the site shall have the option of either complying directly with the requirements of this part, or reducing the site-wide emissions caps in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the site-wide emissions caps in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable requirements of this part.
§60.1(a)(3)	Notwithstanding the provisions of paragraph (d)(2) of this section, for any provisions of this part except for Subpart Kb, the owner/operator of the site shall comply with the applicable provisions of this part if the Administrator determines that compliance with the provisions of this part is necessary for achieving the objectives of the regulation and the Administrator notifies the site in accordance with the provisions of the permit issued pursuant to 40 CFR 52.2454.

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FEDERAL REGULATIONS
40 CFR 60 SUBPART WWW
Standards of Performance for Municipal Solid Waste Landfills

Applicable provisions of 40 CFR 60 Subpart WWW shall apply.

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32750, June 16, 1998]

Applicability, Designation of Affected Facility, and Delegation of Authority

§60.750	<p>(a) The provisions of this subpart apply to each municipal solid waste landfill that commenced construction, reconstruction or modification on or after May 30, 1991. Physical or operational changes made to an existing MSW landfill solely to comply with subpart Cc of this part are not considered construction, reconstruction, or modification for the purposes of this section.</p> <p>(b) The following authorities shall be retained by the Administrator and not transferred to the State: §60.754(a)(5).</p> <p>(c) Activities required by or conducted pursuant to a CERCLA, RCRA, or State remedial action are not considered construction, reconstruction, or modification for purposes of this subpart.</p>
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Standards: Air Emissions from Municipal Solid Waste Landfills

§60.752	<p>(a) Each owner or operator of an MSW landfill having a design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume shall submit an initial design capacity report to the Administrator as provided in §60.757(a). The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions shall be documented and submitted with the report. Submittal of the initial design capacity report shall fulfill the requirements of this subpart except as provided for in paragraphs (a)(1) and (a)(2) of this section.</p> <p>(1) The owner or operator shall submit to the Administrator an amended design capacity report, as provided for in §60.757(a)(3).</p> <p>(2) When an increase in the maximum design capacity of a landfill exempted from the provisions of §60.752(b) through §60.759 of this subpart on the basis of the design capacity exemption in paragraph (a) of this section results in a revised maximum design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the owner or operator shall comply with the provision of paragraph (b) of this section.</p> <p>(b) Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, shall either comply with paragraph (b)(2) of this section or calculate an NMOC emission rate for the landfill using the procedures specified in §60.754. The NMOC emission rate shall be recalculated annually, except as provided in §60.757(b)(1)(ii) of this subpart. The owner or operator of an MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters is subject to part 70 or 71 permitting requirements.</p> <p>(1) If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:</p>
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<p>§60.752</p>	<p>(i) Submit an annual emission report to the Administrator, except as provided for in §60.757(b)(1)(ii); and</p> <p>(ii) Recalculate the NMOC emission rate annually using the procedures specified in §60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.</p> <p>(A) If the NMOC emission rate, upon recalculation required in paragraph (b)(1)(ii) of this section, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system in compliance with paragraph (b)(2) of this section.</p> <p>(B) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided for in §60.757(d).</p> <p>(2) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall:</p> <p>(i) Submit a collection and control system design plan prepared by a professional engineer to the Administrator within 1 year:</p> <p>(A) The collection and control system as described in the plan shall meet the design requirements of paragraph (b)(2)(ii) of this section.</p> <p>(B) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of §§60.753 through 60.758 proposed by the owner or operator.</p> <p>(C) The collection and control system design plan shall either conform with specifications for active collection systems in §60.759 or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to §60.759.</p> <p>(D) The Administrator shall review the information submitted under paragraphs (b)(2)(i) (A), (B) and (C) of this section and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.</p> <p>(ii) Install a collection and control system that captures the gas generated within the landfill as required by paragraphs (b)(2)(i)(A) or (B) and (b)(2)(iii) of this section within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 50 megagrams per year, as specified in §60.757(c)(1) or (2).</p> <p>(A) An active collection system shall:</p> <p>(1) Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;</p> <p>(2) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:</p> <p>(i) 5 years or more if active; or</p>
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(ii) 2 years or more if closed or at final grade.

(3) Collect gas at a sufficient extraction rate;

(4) Be designed to minimize off-site migration of subsurface gas.

(B) A passive collection system shall:

(1) Comply with the provisions specified in paragraphs (b)(2)(ii)(A)(1), (2), and (2)(ii)(A)(4) of this section.

(2) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under §258.40.

(iii) Route all the collected gas to a control system that complies with the requirements in either paragraph (b)(2)(iii) (A), (B) or (C) of this section.

(A) An open flare designed and operated in accordance with §60.18 except as noted in §60.754(e);

(B) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in §60.754(d).

(1) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.

(2) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in §60.756;

(C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of paragraph (b)(2)(iii) (A) or (B) of this section.

(iv) Operate the collection and control device installed to comply with this subpart in accordance with the provisions of §§60.753, 60.755 and 60.756.

(v) The collection and control system may be capped or removed provided that all the conditions of paragraphs (b)(2)(v) (A), (B), and (C) of this section are met:

(A) The landfill shall be a closed landfill as defined in §60.751 of this subpart. A closure report shall be submitted to the Administrator as provided in §60.757(d);

(B) The collection and control system shall have been in operation a minimum of 15 years; and

(C) Following the procedures specified in §60.754(b) of this subpart, the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

<p>§60.752</p>	<p>(c) For purposes of obtaining an operating permit under title V of the Act, the owner or operator of a MSW landfill subject to this subpart with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters is not subject to the requirement to obtain an operating permit for the landfill under part 70 or 71 of this chapter, unless the landfill is otherwise subject to either part 70 or 71. For purposes of submitting a timely application for an operating permit under part 70 or 71, the owner or operator of a MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters, and not otherwise subject to either part 70 or 71, becomes subject to the requirements of §§70.5(a)(1)(i) or 71.5(a)(1)(i) of this chapter, regardless of when the design capacity report is actually submitted, no later than:</p> <p>(1) June 10, 1996 for MSW landfills that commenced construction, modification, or reconstruction on or after May 30, 1991 but before March 12, 1996;</p> <p>(2) Ninety days after the date of commenced construction, modification, or reconstruction for MSW landfills that commence construction, modification, or reconstruction on or after March 12, 1996.</p> <p>(d) When a MSW landfill subject to this subpart is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under part 70 or 71 of this chapter for the landfill if the landfill is not otherwise subject to the requirements of either part 70 or 71 and if either of the following conditions are met:</p> <p>(1) The landfill was never subject to the requirement for a control system under paragraph (b)(2) of this section; or</p> <p>(2) The owner or operator meets the conditions for control system removal specified in paragraph (b)(2)(v) of this section.</p>
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Operational Standards: Collection and Control Systems

<p>§60.753</p>	<p>Each owner or operator of an MSW landfill with a gas collection and control system used to comply with the provisions of §60.752(b)(2)(ii) of this subpart shall:</p> <p>(a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:</p> <p>(1) 5 years or more if active; or</p> <p>(2) 2 years or more if closed or at final grade;</p> <p>(b) Operate the collection system with negative pressure at each wellhead except under the following conditions:</p> <p>(1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in §60.757(f)(1);</p> <p>(2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;</p> <p>(3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator;</p>
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(c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

(1) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by §60.752(b)(2)(i) of this subpart.

(2) Unless an alternative test method is established as allowed by §60.752(b)(2)(i) of this subpart, the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:

(i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;

(ii) A data recorder is not required;

(iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;

(iv) A calibration error check is not required;

(v) The allowable sample bias, zero drift, and calibration drift are ± 10 percent.

(d) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

(e) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with §60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; and

(f) Operate the control or treatment system at all times when the collected gas is routed to the system.

(g) If monitoring demonstrates that the operational requirements in paragraphs (b), (c), or (d) of this section are not met, corrective action shall be taken as specified in §60.755(a)(3) through (5) or §60.755(c) of this subpart. If corrective actions are taken as specified in §60.755, the monitored exceedance is not a violation of the operational requirements in this section.

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Test Methods and Procedures**§60.754**

(a)(1) The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in paragraph (a)(1)(i) of this section or the equation provided in paragraph (a)(1)(ii) of this section. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in paragraph (a)(1)(i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in paragraph (a)(1)(ii), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for k , 170 cubic meters per megagram for L_o , and 4,000 parts per million by volume as hexane for the C_{NMOC} . For landfills located in geographical areas with a thirty year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year.

(i) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^n 2 k L_o M_i (e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9})$$

where,

M_{NMOC} = Total NMOC emission rate from the landfill, megagrams per year

k = methane generation rate constant, year⁻¹

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the i^{th} section, megagrams

t_i = age of the i^{th} section, years

C_{NMOC} = concentration of NMOC, parts per million by volume as hexane

3.6×10^{-9} = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if documentation of the nature and amount of such wastes is maintained

(ii) The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown.

$$M_{NMOC} = 2L_o R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$$

Where:

M_{NMOC} = mass emission rate of NMOC, megagrams per year

L_o = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, year⁻¹

t = age of landfill, years

C_{NMOC} = concentration of NMOC, parts per million by volume as hexane

c = time since closure, years; for active landfill $c=0$ and $e^{-kc}=1$

3.6×10^{-9} = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value of R , if documentation of the nature and amount of such wastes is maintained.

(2) *Tier 1.* The owner or operator shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.

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(ii) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the landfill owner shall either comply with §60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in paragraph (a)(3) of this section.

(3) *Tier 2.* The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure. The landfill owner or operator shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25 or 25C of appendix A of this part. Method 18 of appendix A of this part may be used to analyze the samples collected by the Method 25 or 25C sampling procedure. Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes. Terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes. If using Method 18, the owner or operator must identify all compounds in the sample and, as a minimum, test for those compounds published in the most recent Compilation of Air Pollutant Emission Factors (AP-42), minus carbon monoxide, hydrogen sulfide, and mercury. As a minimum, the instrument must be calibrated for each of the compounds on the list. Convert the concentration of each Method 18 compound to C_{NMOC} as hexane by multiplying by the ratio of its carbon atoms divided by six. If more than the required number of samples are taken, all samples must be used in the analysis. The landfill owner or operator must divide the NMOC concentration from Method 25 or 25C of appendix A of this part by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two sampling probe per hectare requirement. For active collection systems, samples may be collected from the common header pipe before the gas moving or condensate removal equipment. For these systems, a minimum of three samples must be collected from the header pipe.

(i) The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in paragraph (a)(1)(i) or (a)(1)(ii) of this section and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in paragraph (a)(1) of this section.

(ii) If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the landfill owner or operator shall either comply with §60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in paragraph (a)(4) of this section.

(iii) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in §60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in this section.

(4) *Tier 3.* The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of appendix A of this part. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in paragraph (a)(1)(i) or (a)(1)(ii) of this section and using a site-specific methane generation rate constant k , and the site-specific NMOC concentration as determined in paragraph (a)(3) of this section instead of the default values provided in paragraph (a)(1) of this section. The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

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(i) If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the owner or operator shall comply with §60.752(b)(2).

(ii) If the NMOC mass emission rate is less than 50 megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in §60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in §60.757(b)(1) using the equations in paragraph (a)(1) of this section and using the site-specific methane generation rate constant and NMOC concentration obtained in paragraph (a)(3) of this section. The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.

(5) The owner or operator may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in paragraphs (a)(3) and (a)(4) of this section if the method has been approved by the Administrator.

(b) After the installation of a collection and control system in compliance with §60.755, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in §60.752(b)(2)(v), using the following equation:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}}$$

where,

M_{NMOC} = mass emission rate of NMOC, megagrams per year

Q_{LFG} = flow rate of landfill gas, cubic meters per minute

C_{NMOC} = NMOC concentration, parts per million by volume as hexane

(1) The flow rate of landfill gas, Q_{LFG} , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of this part.

(2) The average NMOC concentration, C_{NMOC} , shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of appendix A of this part. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of this part by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

(3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator.

(c) When calculating emissions for PSD purposes, the owner or operator of each MSW landfill subject to the provisions of this subpart shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in §§51.166 or 52.21 of this chapter using AP-42 or other approved measurement procedures.

(d) For the performance test required in §60.752(b)(2)(iii)(B), Method 25, 25C, or Method 18 of appendix A of this part must be used to determine compliance with the 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by §60.752(b)(2)(i)(B).

§60.754	<p>Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:</p> $\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})$ <p>where, NMOC_{in} = mass of NMOC entering control device NMOC_{out} = mass of NMOC exiting control device</p> <p>(e) For the performance test required in §60.752(b)(2)(iii)(A), the net heating value of the combusted landfill gas as determined in §60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under §60.18(f)(4).</p>
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Compliance Provisions

§60.755	<p>(a) Except as provided in §60.752(b)(2)(i)(B), the specified methods in paragraphs (a)(1) through (a)(6) of this section shall be used to determine whether the gas collection system is in compliance with §60.752(b)(2)(ii).</p> <p>(1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with §60.752(b)(2)(ii)(A)(I), one of the following equations shall be used. The k and L_o kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in §60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.</p> <p>(i) For sites with unknown year-to-year solid waste acceptance rate:</p> $Q_m = 2L_o R (e^{-kc} - e^{-kt})$ <p>where, Q_m = maximum expected gas generation flow rate, cubic meters per year L_o = methane generation potential, cubic meters per megagram solid waste R = average annual acceptance rate, megagrams per year k = methane generation rate constant, year⁻¹ t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years c = time since closure, years (for an active landfill $c = 0$ and $e^{-kc} = 1$)</p>
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(ii) For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{i=1}^n 2 k L_o M_i (e^{-k t_i})$$

where,

Q_M = maximum expected gas generation flow rate, cubic meters per year

k = methane generation rate constant, year⁻¹

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the i^{th} section, megagrams

t_i = age of the i^{th} section, years

(iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in paragraphs (a)(1) (i) and (ii) of this section. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in paragraphs (a)(1) (i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

(2) For the purposes of determining sufficient density of gas collectors for compliance with §60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

(3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with §60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under §60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

(4) Owners or operators are not required to expand the system as required in paragraph (a)(3) of this section during the first 180 days after gas collection system startup.

(5) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in §60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

(6) An owner or operator seeking to demonstrate compliance with §60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in §60.759 shall provide information satisfactory to the Administrator as specified in §60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.

<p>§60.755</p>	<p>(b) For purposes of compliance with §60.753(a), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in §60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:</p> <ul style="list-style-type: none"> (1) 5 years or more if active; or (2) 2 years or more if closed or at final grade. <p>(c) The following procedures shall be used for compliance with the surface methane operational standard as provided in §60.753(d).</p> <ul style="list-style-type: none"> (1) After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph (d) of this section. (2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. (3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of this part, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. (4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in paragraphs (c)(4) (i) through (v) of this section shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of §60.753(d). <ul style="list-style-type: none"> (i) The location of each monitored exceedance shall be marked and the location recorded. (ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance. (iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in paragraph (c)(4)(v) of this section shall be taken, and no further monitoring of that location is required until the action specified in paragraph (c)(4)(v) has been taken. (iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph (c)(4) (ii) or (iii) of this section shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in paragraph (c)(4) (iii) or (v) shall be taken.
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§60.755	<p>(v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.</p> <p>(5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.</p> <p>(d) Each owner or operator seeking to comply with the provisions in paragraph (c) of this section shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:</p> <p>(1) The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of this part, except that “methane” shall replace all references to VOC.</p> <p>(2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.</p> <p>(3) To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of this part, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of this part shall be used.</p> <p>(4) The calibration procedures provided in section 4.2 of Method 21 of appendix A of this part shall be followed immediately before commencing a surface monitoring survey.</p> <p>(e) The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.</p>
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Monitoring of Operations

§60.756	<p>Except as provided in §60.752(b)(2)(i)(B),</p> <p>(a) Each owner or operator seeking to comply with §60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:</p> <p>(1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in §60.755(a)(3); and</p> <p>(2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in §60.755(a)(5); and</p> <p>(3) Monitor temperature of the landfill gas on a monthly basis as provided in §60.755(a)(5).</p> <p>(b) Each owner or operator seeking to comply with §60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.</p>
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<p>§60.756</p>	<p>(1) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius or ± 0.5 degrees Celsius, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts.</p> <p>(2) A device that records flow to or bypass of the control device. The owner or operator shall either:</p> <p>(i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or</p> <p>(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.</p> <p>(c) Each owner or operator seeking to comply with §60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:</p> <p>(1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.</p> <p>(2) A device that records flow to or bypass of the flare. The owner or operator shall either:</p> <p>(i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or</p> <p>(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.</p> <p>(d) Each owner or operator seeking to demonstrate compliance with §60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Administrator as provided in §60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator shall review the information and either approve it, or request that additional information be submitted. The Administrator may specify additional appropriate monitoring procedures.</p> <p>(e) Each owner or operator seeking to install a collection system that does not meet the specifications in §60.759 or seeking to monitor alternative parameters to those required by §60.753 through §60.756 shall provide information satisfactory to the Administrator as provided in §60.752(b)(2)(i) (B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator may specify additional appropriate monitoring procedures.</p> <p>(f) Each owner or operator seeking to demonstrate compliance with §60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in §60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.</p>
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Reporting Requirements

§60.757	<p>Except as provided in §60.752(b)(2)(i)(B),</p> <p>(a) Each owner or operator subject to the requirements of this subpart shall submit an initial design capacity report to the Administrator.</p> <p>(1) The initial design capacity report shall fulfill the requirements of the notification of the date construction is commenced as required by §60.7(a)(1) and shall be submitted no later than:</p> <p>(i) June 10, 1996, for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991 but before March 12, 1996 or</p> <p>(ii) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996.</p> <p>(2) The initial design capacity report shall contain the following information:</p> <p>(i) A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where solid waste may be landfilled according to the permit issued by the State, local, or tribal agency responsible for regulating the landfill.</p> <p>(ii) The maximum design capacity of the landfill. Where the maximum design capacity is specified in the permit issued by the State, local, or tribal agency responsible for regulating the landfill, a copy of the permit specifying the maximum design capacity may be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity shall be calculated using good engineering practices. The calculations shall be provided, along with the relevant parameters as part of the report. The State, Tribal, local agency or Administrator may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.</p> <p>(3) An amended design capacity report shall be submitted to the Administrator providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in §60.758(f).</p> <p>(b) Each owner or operator subject to the requirements of this subpart shall submit an NMOC emission rate report to the Administrator initially and annually thereafter, except as provided for in paragraphs (b)(1)(ii) or (b)(3) of this section. The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.</p> <p>(1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in §60.754(a) or (b), as applicable.</p> <p>(i) The initial NMOC emission rate report may be combined with the initial design capacity report required in paragraph (a) of this section and shall be submitted no later than indicated in paragraphs (b)(1)(i)(A) and (B) of this section. Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in paragraphs (b)(1)(ii) and (b)(3) of this section.</p> <p>(A) June 10, 1996, for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991, but before March 12, 1996, or</p>
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(B) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996.

(ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 50 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Administrator. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Administrator. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

(2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.

(3) Each owner or operator subject to the requirements of this subpart is exempted from the requirements of paragraphs (b)(1) and (2) of this section, after the installation of a collection and control system in compliance with §60.752(b)(2), during such time as the collection and control system is in operation and in compliance with §§60.753 and 60.755.

(c) Each owner or operator subject to the provisions of §60.752(b)(2)(i) shall submit a collection and control system design plan to the Administrator within 1 year of the first report required under paragraph (b) of this section in which the emission rate equals or exceeds 50 megagrams per year, except as follows:

(1) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in §60.754(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 megagrams per year.

(2) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in §60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of §60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Administrator within 1 year of the first calculated emission rate exceeding 50 megagrams per year.

(d) Each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under §60.7(a)(4).

(e) Each owner or operator of a controlled landfill shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.

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(1) The equipment removal report shall contain all of the following items:

(i) A copy of the closure report submitted in accordance with paragraph (d) of this section;

(ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

(iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

(2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in §60.752(b)(2)(v) have been met.

(f) Each owner or operator of a landfill seeking to comply with §60.752(b)(2) using an active collection system designed in accordance with §60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in (f)(1) through (f)(6) of this paragraph. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under §60.8. For enclosed combustion devices and flares, reportable exceedances are defined under §60.758(c).

(1) Value and length of time for exceedance of applicable parameters monitored under §60.756(a), (b), (c), and (d).

(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under §60.756.

(3) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.

(4) All periods when the collection system was not operating in excess of 5 days.

(5) The location of each exceedance of the 500 parts per million methane concentration as provided in §60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.

(6) The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), and (c)(4) of §60.755.

(g) Each owner or operator seeking to comply with §60.752(b)(2)(iii) shall include the following information with the initial performance test report required under §60.8:

(1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

(2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;

(3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;

§60.757	<p>(4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and</p> <p>(5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and</p> <p>(6) The provisions for the control of off-site migration.</p>
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Recordkeeping Requirements

§60.758	<p>(a) Except as provided in §60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of §60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered §60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.</p> <p>(b) Except as provided in §60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs (b)(1) through (b)(4) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.</p> <p>(1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(ii):</p> <p>(i) The maximum expected gas generation flow rate as calculated in §60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.</p> <p>(ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in §60.759(a)(1).</p> <p>(2) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts:</p> <p>(i) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.</p> <p>(ii) The percent reduction of NMOC determined as specified in §60.752(b)(2)(iii)(B) achieved by the control device.</p> <p>(3) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(iii)(B)(I) through use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.</p>
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§60.758

(4) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

(c) Except as provided in §60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in §60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

(1) The following constitute exceedances that shall be recorded and reported under §60.757(f):

(i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28 oC below the average combustion temperature during the most recent performance test at which compliance with §60.752(b)(2)(iii) was determined.

(ii) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under paragraph (b)(3) of this section.

(2) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under §60.756.

(3) Each owner or operator subject to the provisions of this subpart who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with §60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, Tribal, or Federal regulatory requirements.)

(4) Each owner or operator seeking to comply with the provisions of this subpart by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under §60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

(d) Except as provided in §60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

(1) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under §60.755(b).

(2) Each owner or operator subject to the provisions of this subpart shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in §60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in §60.759(a)(3)(ii).

§60.758	<p>(e) Except as provided in §60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in §60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.</p> <p>(f) Landfill owners or operators who convert design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, as provided in the definition of “design capacity”, shall keep readily accessible, on-site records of the annual recalculation of site-specific density, design capacity, and the supporting documentation. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.</p>
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Specifications: Active Collection Systems

§60.759	<p>(a) Each owner or operator seeking to comply with §60.752(b)(2)(i) shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Administrator as provided in §60.752(b)(2)(i)(C) and (D):</p> <p>(1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.</p> <p>(2) The sufficient density of gas collection devices determined in paragraph (a)(1) of this section shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.</p> <p>(3) The placement of gas collection devices determined in paragraph (a)(1) of this section shall control all gas producing areas, except as provided by paragraphs (a)(3)(i) and (a)(3)(ii) of this section.</p> <p>(i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under §60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Administrator upon request.</p> <p>(ii) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:</p>
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§60.759

$$Q_i = 2 k L_o M_i (e^{-kt} i) (C_{NMOC}) (3.6 \times 10^{-9})$$

where,

Q_i = NMOC emission rate from the i^{th} section, megagrams per year

k = methane generation rate constant, year⁻¹

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of the degradable solid waste in the i^{th} section, megagram

t_i = age of the solid waste in the i^{th} section, years

C_{NMOC} = concentration of nonmethane organic compounds, parts per million by volume

3.6×10^{-9} = conversion factor

(iii) The values for k and C_{NMOC} determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for k , L_o and C_{NMOC} provided in §60.754(a)(1) or the alternative values from §60.754(a)(5) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in paragraph (a)(3)(i) of this section.

(b) Each owner or operator seeking to comply with §60.752(b)(2)(i)(A) shall construct the gas collection devices using the following equipment or procedures:

(1) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

(2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

(3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

(c) Each owner or operator seeking to comply with §60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with §60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

(1) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph (c)(2) of this section shall be used.

(2) For new collection systems, the maximum flow rate shall be in accordance with §60.755(a)(1).

FEDERAL REGULATIONS
40 CFR 61 SUBPART C
National Emission Standard for Beryllium

Applicable provisions of 40 CFR 61 Subpart C shall apply.

[38 FR 8826, Apr. 6, 1973, as amended at 65 FR 62151, Oct. 17, 2000]

Applicability

§61.30	<p>The provisions of this subpart are applicable to the following stationary sources:</p> <p>(a) Extraction plants, ceramic plants, foundries, incinerators, and propellant plants which process beryllium ore, beryllium, beryllium oxide, beryllium alloys, or beryllium-containing waste.</p> <p>(b) Machine shops which process beryllium, beryllium oxides, or any alloy when such alloy contains more than 5 percent beryllium by weight.</p>
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Emission Standard

§61.32	<p>(a) Emissions to the atmosphere from stationary sources subject to the provisions of this subpart shall not exceed 10 grams (0.022 lb) of beryllium over a 24-hour period, except as provided in paragraph (b) of this section.</p> <p>(b) Rather than meet the requirement of paragraph (a) of this section, an owner or operator may request approval from the Administrator to meet an ambient concentration limit on beryllium in the vicinity of the stationary source of $0.01 \mu\text{g}/\text{m}^3$ ($4.37 \times 10^{-6} \text{ gr}/\text{ft}^3$), averaged over a 30-day period.</p> <p>(1) Approval of such requests may be granted by the Administrator provided that:</p> <p>(i) At least 3 years of data is available which in the judgment of the Administrator demonstrates that the future ambient concentrations of beryllium in the vicinity of the stationary source will not exceed $0.01 \mu\text{g}/\text{m}^3$ ($4.37 \times 10^{-6} \text{ gr}/\text{ft}^3$), averaged over a 30-day period. Such 3-year period shall be the 3 years ending 30 days before the effective date of this standard.</p> <p>(ii) The owner or operator requests such approval in writing within 30 days after the effective date of this standard.</p> <p>(iii) The owner or operator submits a report to the Administrator within 45 days after the effective date of this standard which report includes the following information:</p> <p>(a) Description of sampling method including the method and frequency of calibration.</p> <p>(b) Method of sample analysis.</p> <p>(c) Averaging technique for determining 30-day average concentrations.</p>
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<p>§61.32</p>	<p>(d) Number, identity, and location (address, coordinates, or distance and heading from plant) of sampling sites.</p> <p>(e) Ground elevations and height above ground of sampling inlets.</p> <p>(f) Plant and sampling area plots showing emission points and sampling sites. Topographic features significantly affecting dispersion including plant building heights and locations shall be included.</p> <p>(g) Information necessary for estimating dispersion including stack height, inside diameter, exit gas temperature, exit velocity or flow rate, and beryllium concentration.</p> <p>(h) A description of data and procedures (methods or models) used to design the air sampling network (i.e., number and location of sampling sites).</p> <p>(i) Air sampling data indicating beryllium concentrations in the vicinity of the stationary source for the 3-year period specified in paragraph (b)(1) of this section. This data shall be presented chronologically and include the beryllium concentration and location of each individual sample taken by the network and the corresponding 30-day average beryllium concentrations.</p> <p>(2) Within 60 days after receiving such report, the Administrator will notify the owner or operator in writing whether approval is granted or denied. Prior to denying approval to comply with the provisions of paragraph (b) of this section, the Administrator will consult with representatives of the statutory source for which the demonstration report was submitted.</p> <p>(c) The burning of beryllium and/or beryllium-containing waste, except propellants, is prohibited except in incinerators, emissions from which must comply with the standard.</p>
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Stack Sampling

<p>§61.33</p>	<p>(a) Unless a waiver of emission testing is obtained under §61.13, each owner or operator required to comply with §61.32(a) shall test emissions from the source according to Method 104 of appendix B to this part or according to Method 29 of appendix A to part 60. Method 103 of appendix B to this part is approved by the Administrator as an alternative method for sources subject to §61.32(a). The emission test shall be performed:</p> <p>(1) By May 28, 2014 in the case of an existing source or a new source which has an initial startup date preceding February 27, 2014; or</p> <p>(2) Within 90 days of startup in the case of a new source which did not have an initial startup date preceding February 27, 2014.</p> <p>(b) The Administrator shall be notified at least 30 days prior to an emission test so that he may at his option observe the test.</p> <p>(c) Samples shall be taken over such a period or periods as are necessary to accurately determine the maximum emissions which will occur in any 24-hour period. Where emissions depend upon the relative frequency of operation of different types of processes, operating hours, operating capacities, or other factors, the calculation of maximum 24-hour-period emissions will be based on that combination of factors which is likely to occur during the subject period and which result in the maximum emissions.</p>
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§61.33	<p>No changes in the operation shall be made, which would potentially increase emissions above that determined by the most recent source test, until a new emission level has been estimated by calculation and the results reported to the Administrator.</p> <p>(d) All samples shall be analyzed and beryllium emissions shall be determined within 30 days after the source test. All determinations shall be reported to the Administrator by a registered letter dispatched before the close of the next business day following such determination.</p> <p>(e) Records of emission test results and other data needed to determine total emissions shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.</p>
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Air Sampling

§61.34	<p>(a) Stationary sources subject to §61.32(b) shall locate air sampling sites in accordance with a plan approved by the Administrator. Such sites shall be located in such a manner as is calculated to detect maximum concentrations of beryllium in the ambient air.</p> <p>(b) All monitoring sites shall be operated continuously except for a reasonable time allowance for instrument maintenance and calibration, for changing filters, or for replacement of equipment needing major repair.</p> <p>(c) Filters shall be analyzed and concentrations calculated within 30 days after filters are collected. Records of concentrations at all sampling sites and other data needed to determine such concentrations shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.</p> <p>(d) Concentrations measured at all sampling sites shall be reported to the Administrator every 30 days by a registered letter.</p> <p>(e) The Administrator may at any time require changes in, or expansion of, the sampling network.</p>
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FEDERAL REGULATIONS
40 CFR 61 SUBPART D
National Emission Standard for Beryllium Rocket Motor Firing

Applicable provisions of 40 CFR 61 Subpart D shall apply.

[38 FR 8826, Apr. 6, 1973, as amended at 65 FR 62151, Oct. 17, 2000; 79 FR 11275, Feb. 27, 2014]

Applicability

§61.40	The provisions of this subpart are applicable to rocket motor test sites.
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Emission Standard

§61.42	<p>(a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter ($\mu\text{g-min}/\text{m}^3$)($4.68 \times 10^{-9}$ pound minutes per cubic foot ($\text{lb-min}/\text{ft}^3$)) of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an adverse effect to public health could occur.</p> <p>(b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such tank shall not exceed 2.0 g/hr (0.0044 lb/hr) and a maximum of 10 g/day (0.022 lb/day).</p>
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Emission Testing: Rocket Firing or Propellant Disposal

§61.43	<p>(a) Ambient air concentrations shall be measured during and after firing of a rocket motor or propellant disposal and in such a manner that the effect of these emissions can be compared with the standard. Such sampling techniques shall be approved by the Administrator.</p> <p>(b) All samples shall be analyzed and results shall be calculated within 30 days after samples are taken and before any subsequent rocket motor firing or propellant disposal at the given site. All results shall be reported to the Administrator by a registered letter dispatched before the close of the next business day following determination of such results.</p> <p>(c) Records of air sampling test results and other data needed to determine integrated intermittent concentrations shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.</p> <p>(d) The Administrator shall be notified at least 30 days prior to an air sampling test, so that he may at his option observe the test.</p>
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Emission Standard

§61.44	<p>(a) Sources subject to §61.42(b) shall be continuously sampled, during release of combustion products from the tank, according to Method 104 of appendix B to this part. Method 103 of appendix B to this part is approved by the Administrator as an alternative method for sources subject to §61.42(b).</p> <p>(b) All samples shall be analyzed, and beryllium emissions shall be determined within 30 days after samples are taken and before any subsequent rocket motor firing or propellant disposal at the given site. All determinations shall be reported to the Administrator by a registered letter dispatched before the close of the next business day following such determinations.</p> <p>(c) Records of emission test results and other data needed to determine total emissions shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.</p> <p>(d) The Administrator shall be notified at least 30 days prior to an emission test, so that he may at his option observe the test.</p>
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FEDERAL REGULATIONS
40 CFR 61 SUBPART M
National Emission Standard for Asbestos

Applicable provisions of 40 CFR 61 Subpart M shall apply.

[55 FR 48414, Nov. 20, 1990]

Applicability

§61.140	The provisions of this subpart are applicable to those sources specified in §§61.142 through 61.151, 61.154, and 61.155.
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Standard for Roadways

§61.143	<p>No person may construct or maintain a roadway with asbestos tailings or asbestos-containing waste material on that roadway, unless, for asbestos tailings.</p> <p>(a) It is a temporary roadway on an area of asbestos ore deposits (asbestos mine): or</p> <p>(b) It is a temporary roadway at an active asbestos mill site and is encapsulated with a resinous or bituminous binder. The encapsulated road surface must be maintained at a minimum frequency of once per year to prevent dust emissions; or</p> <p>(c) It is encapsulated in asphalt concrete meeting the specifications contained in section 401 of Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-85, 1985, or their equivalent.</p>
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Standard for Demolition and Renovation

§61.145(a)	<p>(a) To determine which requirements of paragraphs (a), (b), and (c) of this section apply to the owner or operator of a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM. The requirements of paragraphs (b) and (c) of this section apply to each owner or operator of a demolition or renovation activity, including the removal of RACM as follows:</p>
§61.145(a)(1)	<p>(1) In a facility being demolished, all the requirements of paragraphs (b) and (c) of this section apply, except as provided in paragraph (a)(3) of this section, if the combined amount of RACM is</p> <p>(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or</p> <p>(ii) At least 1 cubic meter (35 cubic feet) of facility components where the length or area could not be measured previously.</p>

<p>§61.145(a)(2)</p>	<p>(2) In a facility being demolished, only the notification requirements of paragraphs (b)(1), (2), (3)(i) and (iv), and (4)(i) through (vii) and (4)(ix) and (xvi) of this section apply, if the combined amount of RACM is</p> <p>(i) Less than 80 linear meters (260 linear feet) on pipes and less than 15 square meters (160 square feet) on other facility components, and</p> <p>(ii) Less than one cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously or there is no asbestos.</p> <p>(3) If the facility is being demolished under an order of a State or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, only the requirements of paragraphs (b)(1), (b)(2), (b)(3)(iii), (b)(4) (except (b)(4)(viii)), (b)(5), and (c)(4) through (c)(9) of this section apply.</p> <p>(4) In a facility being renovated, including any individual nonscheduled renovation operation, all the requirements of paragraphs (b) and (c) of this section apply if the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is</p> <p>(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or</p> <p>(ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.</p> <p>(iii) To determine whether paragraph (a)(4) of this section applies to planned renovation operations involving individual nonscheduled operations, predict the combined additive amount of RACM to be removed or stripped during a calendar year of January 1 through December 31.</p> <p>(iv) To determine whether paragraph (a)(4) of this section applies to emergency renovation operations, estimate the combined amount of RACM to be removed or stripped as a result of the sudden, unexpected event that necessitated the renovation.</p> <p>(5) Owners or operators of demolition and renovation operations are exempt from the requirements of §§61.05(a), 61.07, and 61.09.</p>
<p>§61.145(b)</p>	<p>Notification Requirements</p> <p>(b)Each owner or operator of a demolition or renovation activity to which this section applies shall:</p> <p>(1) Provide the Administrator with written notice of intention to demolish or renovate. Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.</p> <p>(2) Update notice, as necessary, including when the amount of asbestos affected changes by at least 20 percent.</p> <p>(3) Postmark or deliver the notice as follows:</p> <p>(i) At least 10 working days before asbestos stripping or removal work or any other activity begins (such as site preparation that would break up, dislodge or similarly disturb asbestos material), if the operation is described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section. If the operation is as described in paragraph (a)(2) of this section, notification is required 10 working days before demolition begins.</p>

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(ii) At least 10 working days before the end of the calendar year preceding the year for which notice is being given for renovations described in paragraph (a)(4)(iii) of this section.

(iii) As early as possible before, but not later than, the following working day if the operation is a demolition ordered according to paragraph (a)(3) of this section or, if the operation is a renovation described in paragraph (a)(4)(iv) of this section.

(iv) For asbestos stripping or removal work in a demolition or renovation operation, described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section, and for a demolition described in paragraph (a)(2) of this section, that will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator as follows:

(A) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin after the date contained in the notice,

(1) Notify the Administrator of the new start date by telephone as soon as possible before the original start date, and

(2) Provide the Administrator with a written notice of the new start date as soon as possible before, and no later than, the original start date. Delivery of the updated notice by the U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(B) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin on a date earlier than the original start date,

(1) Provide the Administrator with a written notice of the new start date at least 10 working days before asbestos stripping or removal work begins.

(2) For demolitions covered by paragraph (a)(2) of this section, provide the Administrator written notice of a new start date at least 10 working days before commencement of demolition. Delivery of updated notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(C) In no event shall an operation covered by this paragraph begin on a date other than the date contained in the written notice of the new start date.

(4) Include the following in the notice:

(i) An indication of whether the notice is the original or a revised notification.

(ii) Name, address, and telephone number of both the facility owner and operator and the asbestos removal contractor owner or operator.

(iii) Type of operation: demolition or renovation.

(iv) Description of the facility or affected part of the facility including the size (square meters [square feet] and number of floors), age, and present and prior use of the facility.

(v) Procedure, including analytical methods, employed to detect the presence of RACM and Category I and Category II nonfriable ACM.

§61.145(b)

(vi) Estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear meters (linear feet), surface area in square meters (square feet) on other facility components, or volume in cubic meters (cubic feet) if off the facility components. Also, estimate the approximate amount of Category I and Category II nonfriable ACM in the affected part of the facility that will not be removed before demolition.

(vii) Location and street address (including building number or name and floor or room number, if appropriate), city, county, and state, of the facility being demolished or renovated.

(viii) Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition or renovation; planned renovation operations involving individual nonscheduled operations shall only include the beginning and ending dates of the report period as described in paragraph (a)(4)(iii) of this section.

(ix) Scheduled starting and completion dates of demolition or renovation.

(x) Description of planned demolition or renovation work to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility components.

(xi) Description of work practices and engineering controls to be used to comply with the requirements of this subpart, including asbestos removal and waste-handling emission control procedures.

(xii) Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.

(xiii) A certification that at least one person trained as required by paragraph (c)(8) of this section will supervise the stripping and removal described by this notification. This requirement shall become effective 1 year after promulgation of this regulation.

(xiv) For facilities described in paragraph (a)(3) of this section, the name, title, and authority of the State or local government representative who has ordered the demolition, the date that the order was issued, and the date on which the demolition was ordered to begin. A copy of the order shall be attached to the notification.

(xv) For emergency renovations described in paragraph (a)(4)(iv) of this section, the date and hour that the emergency occurred, a description of the sudden, unexpected event, and an explanation of how the event caused an unsafe condition, or would cause equipment damage or an unreasonable financial burden.

(xvi) Description of procedures to be followed in the event that unexpected RACM is found or Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder.

(xvii) Name, address, and telephone number of the waste transporter.

(5) The information required in paragraph (b)(4) of this section must be reported using a form similar to that shown in Figure 3.

§61.145(c)	<p>Procedures for Asbestos Emission Control.</p> <p>(c)Each owner or operator of a demolition or renovation activity to whom this paragraph applies, according to paragraph (a) of this section, shall comply with the following procedures:</p> <p>(1) Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:</p> <ul style="list-style-type: none">(i) It is Category I nonfriable ACM that is not in poor condition and is not friable.(ii) It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or(iii) It was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and adequately wet at all times until disposed of.(iv) They are Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition. <p>(2) When a facility component that contains, is covered with, or is coated with RACM is being taken out of the facility as a unit or in sections:</p> <ul style="list-style-type: none">(i) Adequately wet all RACM exposed during cutting or disjoining operations; and(ii) Carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding, or otherwise damaging or disturbing the RACM. <p>(3) When RACM is stripped from a facility component while it remains in place in the facility, adequately wet the RACM during the stripping operation.</p> <ul style="list-style-type: none">(i) In renovation operations, wetting is not required if:<ul style="list-style-type: none">(A) The owner or operator has obtained prior written approval from the Administrator based on a written application that wetting to comply with this paragraph would unavoidably damage equipment or present a safety hazard; and(B) The owner or operator uses of the following emission control methods:<ul style="list-style-type: none">(1) A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.(2) A glove-bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.(3) Leak-tight wrapping to contain all RACM prior to dismantlement.
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<p>§61.145(c)</p>	<p>(ii) In renovation operations where wetting would result in equipment damage or a safety hazard, and the methods allowed in paragraph (c)(3)(i) of this section cannot be used, another method may be used after obtaining written approval from the Administrator based upon a determination that it is equivalent to wetting in controlling emissions or to the methods allowed in paragraph (c)(3)(i) of this section.</p> <p>(iii) A copy of the Administrator's written approval shall be kept at the worksite and made available for inspection.</p> <p>(4) After a facility component covered with, coated with, or containing RACM has been taken out of the facility as a unit or in sections pursuant to paragraph (c)(2) of this section, it shall be stripped or contained in leak-tight wrapping, except as described in paragraph (c)(5) of this section. If stripped, either:</p> <p>(i) Adequately wet the RACM during stripping; or</p> <p>(ii) Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.</p> <p>(5) For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which must be handled in accordance with paragraphs (c)(2), (3), and (4) of this section), the RACM is not required to be stripped if the following requirements are met:</p> <p>(i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.</p> <p>(ii) The component is encased in a leak-tight wrapping.</p> <p>(iii) The leak-tight wrapping is labeled according to §61.149(d)(1)(i), (ii), and (iii) during all loading and unloading operations and during storage.</p> <p>(6) For all RACM, including material that has been removed or stripped:</p> <p>(i) Adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal in accordance with §61.150; and</p> <p>(ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.</p> <p>(iii) Transport the material to the ground via leak-tight chutes or containers if it has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections.</p> <p>(iv) RACM contained in leak-tight wrapping that has been removed in accordance with paragraphs (c)(4) and (c)(3)(i)(B)(3) of this section need not be wetted.</p> <p>(7) When the temperature at the point of wetting is below 0 °C (32 °F):</p> <p>(i) The owner or operator need not comply with paragraph (c)(2)(i) and the wetting provisions of paragraph (c)(3) of this section.</p> <p>(ii) The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.</p>
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<p>§61.145(c)</p>	<p>(iii) During periods when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Administrator during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least 2 years.</p> <p>(8) Effective 1 year after promulgation of this regulation, no RACM shall be stripped, removed, or otherwise handled or disturbed at a facility regulated by this section unless at least one on-site representative, such as a foreman or management-level person or other authorized representative, trained in the provisions of this regulation and the means of complying with them, is present. Every 2 years, the trained on-site individual shall receive refresher training in the provisions of this regulation. The required training shall include as a minimum: applicability; notifications; material identification; control procedures for removals including, at least, wetting, local exhaust ventilation, negative pressure enclosures, glove-bag procedures, and High Efficiency Particulate Air (HEPA) filters; waste disposal work practices; reporting and recordkeeping; and asbestos hazards and worker protection. Evidence that the required training has been completed shall be posted and made available for inspection by the Administrator at the demolition or renovation site.</p> <p>(9) For facilities described in paragraph (a)(3) of this section, adequately wet the portion of the facility that contains RACM during the wrecking operation.</p> <p>(10) If a facility is demolished by intentional burning, all RACM including Category I and Category II nonfriable ACM must be removed in accordance with the NESHAP before burning.</p>
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Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations

<p>§61.150</p>	<p>Each owner or operator of any source covered under the provisions of §§61.144, 61.145, 61.146, and 61.147 shall comply with the following provisions:</p> <p>(a) Discharge no visible emissions to the outside air during the collection, processing (including incineration), packaging, or transporting of any asbestos-containing waste material generated by the source, or use one of the emission control and waste treatment methods specified in paragraphs (a) (1) through (4) of this section.</p> <p>(1) Adequately wet asbestos-containing waste material as follows:</p> <p>(i) Mix control device asbestos waste to form a slurry; adequately wet other asbestos-containing waste material; and</p> <p>(ii) Discharge no visible emissions to the outside air from collection, mixing, wetting, and handling operations, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air; and</p> <p>(iii) After wetting, seal all asbestos-containing waste material in leak-tight containers while wet; or, for materials that will not fit into containers without additional breaking, put materials into leak-tight wrapping; and</p>
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- (iv) Label the containers or wrapped materials specified in paragraph (a)(1)(iii) of this section using warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1001(j)(4) or 1926.1101(k)(8). The labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible.
- (v) For asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated.
- (2) Process asbestos-containing waste material into nonfriable forms as follows:
- (i) Form all asbestos-containing waste material into nonfriable pellets or other shapes;
- (ii) Discharge no visible emissions to the outside air from collection and processing operations, including incineration, or use the method specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.
- (3) For facilities demolished where the RACM is not removed prior to demolition according to §§61.145(c)(1) (i), (ii), (iii), and (iv) or for facilities demolished according to §61.145(c)(9), adequately wet asbestos-containing waste material at all times after demolition and keep wet during handling and loading for transport to a disposal site. Asbestos-containing waste materials covered by this paragraph do not have to be sealed in leak-tight containers or wrapping but may be transported and disposed of in bulk.
- (4) Use an alternative emission control and waste treatment method that has received prior approval by the Administrator according to the procedure described in §61.149(c)(2).
- (5) As applied to demolition and renovation, the requirements of paragraph (a) of this section do not apply to Category I nonfriable ACM waste and Category II nonfriable ACM waste that did not become crumbled, pulverized, or reduced to powder.
- (b) All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at:
- (1) A waste disposal site operated in accordance with the provisions of §61.154, or
- (2) An EPA-approved site that converts RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of §61.155.
- (3) The requirements of paragraph (b) of this section do not apply to Category I nonfriable ACM that is not RACM.
- (c) Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that the signs are visible. The markings must conform to the requirements of §§61.149(d)(1) (i), (ii), and (iii).
- (d) For all asbestos-containing waste material transported off the facility site:
- (1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:
- (i) The name, address, and telephone number of the waste generator.

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(ii) The name and address of the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program.

(iii) The approximate quantity in cubic meters (cubic yards).

(iv) The name and telephone number of the disposal site operator.

(v) The name and physical site location of the disposal site.

(vi) The date transported.

(vii) The name, address, and telephone number of the transporter(s).

(viii) A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

(2) Provide a copy of the waste shipment record, described in paragraph (d)(1) of this section, to the disposal site owners or operators at the same time as the asbestos-containing waste material is delivered to the disposal site.

(3) For waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment.

(4) Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:

(i) A copy of the waste shipment record for which a confirmation of delivery was not received, and

(ii) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.

(5) Retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least 2 years.

(e) Furnish upon request, and make available for inspection by the Administrator, all records required under this section.

Air Cleaning

<p>§61.152</p>	<p>(a) The owner or operator who uses air cleaning, as specified in §§61.142(a), 61.144(b)(2), 61.145(c)(3)(i)(B)(I), 61.145(c)(4)(ii), 61.145(c)(11)(i), 61.146(b)(2), 61.147(b)(2), 61.149(b), 61.149(c)(1)(ii), 61.150(a)(1)(ii), 61.150(a)(2)(ii), and 61.155(e) shall:</p> <p>(1) Use fabric filter collection devices, except as noted in paragraph (b) of this section, doing all of the following:</p> <p>(i) Ensuring that the airflow permeability, as determined by ASTM Method D737-75, does not exceed 9 m³/min/m² (30 ft³/min/ft²) for woven fabrics or 11³/min/m² (35 ft³/min/ft²) for felted fabrics, except that 12 m³/min/m² (40 ft³/min/ft²) for woven and 14 m³/min/m² (45 ft³/min/ft²) for felted fabrics is allowed for filtering air from asbestos ore dryers; and</p> <p>(ii) Ensuring that felted fabric weighs at least 475 grams per square meter (14 ounces per square yard) and is at least 1.6 millimeters (one-sixteenth inch) thick throughout; and</p> <p>(iii) Avoiding the use of synthetic fabrics that contain fill yarn other than that which is spun.</p> <p>(2) Properly install, use, operate, and maintain all air-cleaning equipment authorized by this section. Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos material.</p> <p>(3) For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.</p> <p>(b) There are the following exceptions to paragraph (a)(1):</p> <p>(1) After January 10, 1989, if the use of fabric creates a fire or explosion hazard, or the Administrator determines that a fabric filter is not feasible, the Administrator may authorize as a substitute the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals (40 inches water gage pressure).</p> <p>(2) Use a HEPA filter that is certified to be at least 99.97 percent efficient for 0.3 micron particles.</p> <p>(3) The Administrator may authorize the use of filtering equipment other than described in paragraphs (a)(1) and (b)(1) and (2) of this section if the owner or operator demonstrates to the Administrator's satisfaction that it is equivalent to the described equipment in filtering particulate asbestos material.</p>
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Reporting

<p>§61.153</p>	<p>(a) Any new source to which this subpart applies (with the exception of sources subject to §§61.143, 61.145, 61.146, and 61.148), which has an initial startup date preceding the effective date of this revision, shall provide the following information to the Administrator postmarked or delivered within 90 days of the effective date. In the case of a new source that does not have an initial startup date preceding the effective date, the information shall be provided, postmarked or delivered, within 90 days of the initial startup date. Any owner or operator of an existing source shall provide the following information to the Administrator within 90 days of the effective date of this subpart unless the owner or operator of the existing source has previously provided this information to the Administrator. Any changes in the information provided by any existing source shall be provided to the Administrator, postmarked or delivered, within 30 days after the change.</p>
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- (1) A description of the emission control equipment used for each process; and
 - (i) If the fabric device uses a woven fabric, the airflow permeability in $\text{m}^3/\text{min}/\text{m}^2$ and; if the fabric is synthetic, whether the fill yarn is spun or not spun; and
 - (ii) If the fabric filter device uses a felted fabric, the density in g/m^2 , the minimum thickness in inches, and the airflow permeability in $\text{m}^3/\text{min}/\text{m}^2$.
- (2) If a fabric filter device is used to control emissions,
 - (i) The airflow permeability in $\text{m}^3/\text{min}/\text{m}^2$ ($\text{ft}^3/\text{min}/\text{ft}^2$) if the fabric filter device uses a woven fabric, and, if the fabric is synthetic, whether the fill yarn is spun or not spun; and
 - (ii) If the fabric filter device uses a felted fabric, the density in g/m^2 (oz/yd^2), the minimum thickness in millimeters (inches), and the airflow permeability in $\text{m}^3/\text{min}/\text{m}^2$ ($\text{ft}^3/\text{min}/\text{ft}^2$).
- (3) If a HEPA filter is used to control emissions, the certified efficiency.
- (4) For sources subject to §§61.149 and 61.150:
 - (i) A brief description of each process that generates asbestos-containing waste material; and
 - (ii) The average volume of asbestos-containing waste material disposed of, measured in m^3/day (yd^3/day); and
 - (iii) The emission control methods used in all stages of waste disposal; and
 - (iv) The type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.
- (5) For sources subject to §§61.151 and 61.154:
 - (i) A brief description of the site; and
 - (ii) The method or methods used to comply with the standard, or alternative procedures to be used.
- (b) The information required by paragraph (a) of this section must accompany the information required by §61.10. Active waste disposal sites subject to §61.154 shall also comply with this provision. Roadways, demolition and renovation, spraying, and insulating materials are exempted from the requirements of §61.10(a). The information described in this section must be reported using the format of appendix A of this part as a guide.

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FEDERAL REGULATIONS
40 CFR 63 SUBPART A
General Provisions

Applicable provisions of 40 CFR 63 Subpart A shall apply.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16595, Apr. 5, 2002]

Applicability

§63.1(a)	<p><i>General.</i> (1) Terms used throughout this part are defined in §63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in §63.2.</p> <p>(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.</p> <p>(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.</p> <p>(4)(i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.</p> <p>(ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61 or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60, part 61, or other part 63 subpart A (General) provision.</p> <p>(iii) The General Provisions in this subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.</p> <p>(5) [Reserved]</p> <p>(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD-13), Research Triangle Park, North Carolina 27711.</p> <p>(7)-(9) [Reserved]</p>
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<p>§63.1(a)</p>	<p>(10) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word “calendar” is absent, unless otherwise specified in an applicable requirement.</p> <p>(11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.</p> <p>(12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in §63.9(i).</p>
<p>§63.1(b)</p>	<p>(b) <i>Initial applicability determination for this part.</i> (1) The provisions of this part apply to the owner or operator of any stationary source that—</p> <p>(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and</p> <p>(ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.</p> <p>(2) [Reserved]</p> <p>(3) An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under this part must keep a record as specified in §63.10(b)(3).</p>
<p>§63.1(c)</p>	<p>(c) <i>Applicability of this part after a relevant standard has been set under this part.</i> (1) If a relevant standard has been established under this part, the owner or operator of an affected source must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4) of this section.</p> <p>(2) Except as provided in §63.10(b)(3), if a relevant standard has been established under this part, the owner or operator of an affected source may be required to obtain a title V permit from a permitting authority in the State in which the source is located. Emission standards promulgated in this part for area sources pursuant to section 112(c)(3) of the Act will specify whether—</p> <p>(i) States will have the option to exclude area sources affected by that standard from the requirement to obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the permitting requirement);</p> <p>(ii) States will have the option to defer permitting of area sources in that category until the Administrator takes rulemaking action to determine applicability of the permitting requirements; or</p>

§63.1(c)	<p>(iii) If a standard fails to specify what the permitting requirements will be for area sources affected by such a standard, then area sources that are subject to the standard will be subject to the requirement to obtain a title V permit without any deferral.</p> <p>(3)-(4) [Reserved]</p> <p>(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart.</p>
§§63.1(e)	<p>(e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section 112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program.</p>

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**FEDERAL REGULATIONS
40 CFR 63 SUBPART GG**

National Emission Standards for Aerospace Manufacturing and Rework Facilities

Applicable provisions of 40 CFR 63 Subpart GG shall apply.

[60 FR 45956, Sept. 1, 1996, as amended at 63 FR 15016, Mar. 27, 1998; 63 FR 46532, Sept. 1, 1998]

Applicability and Designation of Affected Sources

§63.741	<p>(a) This subpart applies to facilities that are engaged, either in part or in whole, in the manufacture or rework of commercial, civil, or military aerospace vehicles or components and that are major sources as defined in §63.2.</p> <p>(b) The owner or operator of an affected source shall comply with the requirements of this subpart and of subpart A of this part, except as specified in §63.743(a) and Table 1 of this subpart.</p> <p>(c) <i>Affected sources.</i> The affected sources to which the provisions of this subpart apply are specified in paragraphs (c)(1) through (7) of this section. The activities subject to this subpart are limited to the manufacture or rework of aerospace vehicles or components as defined in this subpart. Where a dispute arises relating to the applicability of this subpart to a specific activity, the owner or operator shall demonstrate whether or not the activity is regulated under this subpart.</p> <p>(1) Each cleaning operation as follows:</p> <p>(i) All hand-wipe cleaning operations constitute an affected source.</p> <p>(ii) Each spray gun cleaning operation constitutes an affected source.</p> <p>(iii) All flush cleaning operations constitute an affected source.</p> <p>(2) For organic HAP or VOC emissions, each primer application operation, which is the total of all primer applications at the facility.</p> <p>(3) For organic HAP or VOC emissions, each topcoat application operation, which is the total of all topcoat applications at the facility.</p> <p>(4) For organic HAP or VOC emissions, each depainting operation, which is the total of all depainting at the facility.</p> <p>(5) Each chemical milling maskant application operation, which is the total of all chemical milling maskant applications at the facility.</p> <p>(6) Each waste storage and handling operation, which is the total of all waste handling and storage at the facility.</p> <p>(7) For inorganic HAP emissions, each spray booth or hangar that contains a primer or topcoat application operation subject to §63.745(g) or a depainting operation subject to §63.746(b)(4).</p>
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§63.741

(d) An owner or operator of an affected source subject to this subpart shall obtain an operating permit from the permitting authority in the State in which the source is located. The owner or operator shall apply for and obtain such permit in accordance with the regulations contained in part 70 of this chapter and in applicable State regulations.

(e) All wastes that are determined to be hazardous wastes under the Resource Conservation and Recovery Act of 1976 (PL 94-580) (RCRA) as implemented by 40 CFR parts 260 and 261, and that are subject to RCRA requirements as implemented in 40 CFR parts 262 through 268, are exempt from the requirements of this subpart.

(f) This subpart does not contain control requirements for use of specialty coatings, adhesives, adhesive bonding primers, or sealants at aerospace facilities. It also does not regulate research and development, quality control, and laboratory testing activities, chemical milling, metal finishing, electrodeposition (except for electrodeposition of paints), composites processing (except for cleaning and coating of composite parts or components that become part of an aerospace vehicle or component as well as composite tooling that comes in contact with such composite parts or components prior to cure), electronic parts and assemblies (except for cleaning and topcoating of completed assemblies), manufacture of aircraft transparencies, and wastewater operations at aerospace facilities. These requirements do not apply to the rework of aircraft or aircraft components if the holder of the Federal Aviation Administration (FAA) design approval, or the holder's licensee, is not actively manufacturing the aircraft or aircraft components. These requirements also do not apply to parts and assemblies not critical to the vehicle's structural integrity or flight performance. The requirements of this subpart also do not apply to primers, topcoats, chemical milling maskants, strippers, and cleaning solvents containing HAP and VOC at concentrations less than 0.1 percent for carcinogens or 1.0 percent for noncarcinogens, as determined from manufacturer's representations. Additional specific exemptions from regulatory coverage are set forth in paragraphs (e), (g), (h), (i) and (j) of this section and §§63.742, 63.744(a)(1), (b), (e), 63.745(a), (f)(3), (g)(4), 63.746(a), (b)(5), 63.747(c)(3), and 63.749(d).

(g) The requirements for primers, topcoats, and chemical milling maskants in §63.745 and §63.747 do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 189 l (50 gal), and the combined annual total of all such primers, topcoats, and chemical milling maskants used at a facility does not exceed 757 l (200 gal). Primers and topcoats exempted under paragraph (f) of this section and under §63.745(f)(3) and (g)(4) are not included in the 50 and 200 gal limits. Chemical milling maskants exempted under §63.747(c)(3) are also not included in these limits.

(h) Regulated activities associated with space vehicles designed to travel beyond the limit of the earth's atmosphere, including but not limited to satellites, space stations, and the Space Shuttle System (including orbiter, external tanks, and solid rocket boosters), are exempt from the requirements of this subpart, except for depainting operations found in §63.746.

(i) Any waterborne coating for which the manufacturer's supplied data demonstrate that organic HAP and VOC contents are less than or equal to the organic HAP and VOC content limits for its coating type, as specified in §§63.745(c) and 63.747(c), is exempt from the following requirements of this subpart: §§63.745 (d) and (e), 63.747(d) and (e), 63.749 (d) and (h), 63.750 (c) through (h) and (k) through (n), 63.752 (c) and (f), and 63.753 (c) and (e). A facility shall maintain the manufacturer's supplied data and annual purchase records for each exempt waterborne coating readily available for inspection and review and shall retain these data for 5 years.

(j) Regulated activities associated with the rework of antique aerospace vehicles or components are exempt from the requirements of this subpart.

Standards: General

§63.743	<p>(a) Except as provided in paragraphs (a)(4) through (a)(10) of this section and in Table 1 of this subpart, each owner or operator of an affected source subject to this subpart is also subject to the following sections of subpart A of this part:</p> <p>(1) §63.4, Prohibited activities and circumvention;</p> <p>(2) §63.5, Construction and reconstruction; and</p> <p>(3) §63.6, Compliance with standards and maintenance requirements.</p> <p>(4) For the purposes of this subpart, all affected sources shall submit any request for an extension of compliance not later than 120 days before the affected source's compliance date. The extension request should be requested for the shortest time necessary to attain compliance, but in no case shall exceed 1 year.</p> <p>(5)(i) For the purposes of this subpart, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of his/her intention to deny approval of a request for an extension of compliance submitted under either §63.6(i)(4) or §63.6(i)(5) within 60 calendar days after receipt of sufficient information to evaluate the request.</p> <p>(ii) In addition, for purposes of this subpart, if the Administrator does not notify the owner or operator in writing of his/her intention to deny approval within 60 calendar days after receipt of sufficient information to evaluate a request for an extension of compliance, then the request shall be considered approved.</p> <p>(6)(i) For the purposes of this subpart, the Administrator (or the State) will notify the owner or operator in writing of the status of his/her application submitted under §63.6(i)(4)(ii) (that is, whether the application contains sufficient information to make a determination) within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted, rather than 15 calendar days as provided for in §63.6(i)(13)(i).</p> <p>(ii) In addition, for the purposes of this subpart, if the Administrator does not notify the owner or operator in writing of the status of his/her application within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted, then the information in the application or the supplementary information is to be considered sufficient upon which to make a determination.</p> <p>(7) For the purposes of this subpart, each owner or operator who has submitted an extension request application under §63.6(i)(5) is to be provided 30 calendar days to present additional information or arguments to the Administrator after he/she is notified that the application is not complete, rather than 15 calendar days as provided for in §63.6(i)(13)(ii).</p> <p>(8) For the purposes of this subpart, each owner or operator is to be provided 30 calendar days to present additional information to the Administrator after he/she is notified of the intended denial of a compliance extension request submitted under either §63.6(i)(4) or §63.6(i)(5), rather than 15 calendar days as provided for in §63.6(1)(12)(iii)(B) and §63.6(i)(13)(iii)(B).</p> <p>(9) For the purposes of this subpart, a final determination to deny any request for an extension submitted under either §63.6(i)(4) or §63.6(i)(5) will be made within 60 calendar days after presentation of additional information or argument (if the application is complete), or within 60 calendar days after the final date specified for the presentation if no presentation is made, rather than 30 calendar days as provided for in §63.6(i)(12)(iv) and §63.6(i)(13)(iv).</p>
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(10) For the purposes of compliance with the requirements of §63.5(b)(4) of the General Provisions and this subpart, owners or operators of existing primer or topcoat application operations and depainting operations who construct or reconstruct a spray booth or hangar that does not have the potential to emit 10 tons/yr or more of an individual inorganic HAP or 25 tons/yr or more of all inorganic HAP combined shall only be required to notify the Administrator of such construction or reconstruction on an annual basis. Notification shall be submitted on or before March 1 of each year and shall include the information required in §63.5(b)(4) for each such spray booth or hangar constructed or reconstructed during the prior calendar year, except that such information shall be limited to inorganic HAP's. No advance notification or written approval from the Administrator pursuant to §63.5(b)(3) shall be required for the construction or reconstruction of such a spray booth or hangar unless the booth or hangar has the potential to emit 10 tons/yr or more of an individual inorganic HAP or 25 tons/yr or more of all inorganic HAP combined.

(b) *Startup, shutdown, and malfunction plan.* Each owner or operator that uses an air pollution control device or equipment to control HAP emissions shall prepare a startup, shutdown, and malfunction plan in accordance with §63.6. Dry particulate filter systems operated per the manufacturer's instructions are exempt from a startup, shutdown, and malfunction plan. A startup, shutdown, and malfunction plan shall be prepared for facilities using locally prepared operating procedures. In addition to the information required in §63.6, this plan shall also include the following provisions:

(1) The plan shall specify the operation and maintenance criteria for each air pollution control device or equipment and shall include a standardized checklist to document the operation and maintenance of the equipment;

(2) The plan shall include a systematic procedure for identifying malfunctions and for reporting them immediately to supervisory personnel; and

(3) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur.

(c) An owner or operator who uses an air pollution control device or equipment not listed in this subpart shall submit a description of the device or equipment, test data verifying the performance of the device or equipment in controlling organic HAP and/or VOC emissions, as appropriate, and specific operating parameters that will be monitored to establish compliance with the standards to the Administrator for approval not later than 120 days prior to the compliance date.

(d) Instead of complying with the individual coating limits in §§63.745 and 63.747, a facility may choose to comply with the averaging provisions specified in paragraphs (d)(1) through (d)(6) of this section.

(1) Each owner or operator of a new or existing source shall use any combination of primers, topcoats (including self-priming topcoats), Type I chemical milling maskants, or Type II chemical milling maskants such that the monthly volume-weighted average organic HAP and VOC contents of the combination of primers, topcoats, Type I chemical milling maskants, or Type II chemical milling maskants, as determined in accordance with the applicable procedures set forth in §63.750, complies with the specified content limits in §§63.745(c) and 63.747(c), unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program.

(2) Averaging is allowed only for uncontrolled primers, topcoats (including self-priming topcoats), Type I chemical milling maskants, or Type II chemical milling maskants.

(3) Averaging is not allowed between primers and topcoats (including self-priming topcoats).

(4) Averaging is not allowed between Type I and Type II chemical milling maskants.

(5) Averaging is not allowed between primers and chemical milling maskants, or between topcoats and chemical milling maskants.

(6) Each averaging scheme shall be approved in advance by the permitting agency and adopted as part of the facility's title V permit.

Standards: Cleaning Operations

<p>§63.744</p>	<p>(a) <i>Housekeeping measures.</i> Each owner or operator of a new or existing cleaning operation subject to this subpart shall comply with the requirements in these paragraphs unless the cleaning solvent used is identified in Table 1 of this section or contains HAP and VOC below the de minimis levels specified in §63.741(f).</p> <p>(1) Unless the owner or operator satisfies the requirements in paragraph (a)(4) of this section, place used solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.</p> <p>(2) Unless the owner or operator satisfies the requirements in paragraph (a)(4) of this section, store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.</p> <p>(4) Demonstrate to the Administrator (or delegated State, local, or Tribal authority) that equivalent or better alternative measures are in place compared to the use of closed containers for the solvent-laden materials described in paragraph (a)(1) of this section, or the storage of solvents described in paragraph (a)(2) of this section.</p> <p>(3) Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.</p> <p>(b) <i>Hand-wipe cleaning.</i> Each owner or operator of a new or existing hand-wipe cleaning operation (excluding cleaning of spray gun equipment performed in accordance with paragraph (c) of this section) subject to this subpart shall use cleaning solvents that meet one of the requirements specified in paragraphs (b)(1), (b)(2), and (b)(3) of this section. Cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in §63.741(f) are exempt from the requirements in paragraphs (b)(1), (b)(2), and (b)(3) of this section.</p> <p>(1) Meet one of the composition requirements in Table 1 of this section;</p> <p>(2) Have a composite vapor pressure of 45 mm Hg (24.1 in. H₂O) or less at 20 °C (68 °F); or</p> <p>(3) Demonstrate that the volume of hand-wipe solvents used in cleaning operations has been reduced by at least 60% from a baseline adjusted for production. The baseline shall be established as part of an approved alternative plan administered by the State. Demonstrate that the volume of hand-wipe cleaning solvents used in cleaning operations has been reduced by at least 60 percent from a baseline adjusted for production. The baseline shall be calculated using data from 1996 and 1997, or as otherwise agreed upon by the Administrator or delegated State Authority. The baseline shall be approved by the Administrator or delegated State Authority and shall be included as part of the facility's title V or part 70 permit.</p> <p>(c) <i>Spray gun cleaning.</i> Each owner or operator of a new or existing spray gun cleaning operation subject to this subpart in which spray guns are used for the application of coatings or any other materials that require the spray guns to be cleaned shall use one or more of the techniques, or their equivalent, specified in paragraphs (c)(1) through (c)(4) of this section. Spray gun cleaning operations using cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in §63.741(f) are exempt from the requirements in paragraphs (c)(1) through (c)(4) of this section.</p>
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(1)(i) Enclosed system. Clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing solvent through the gun.

(ii) If leaks are found during the monthly inspection required in §63.751(a), repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed, and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.

(2) *Nonatomized cleaning.* Clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. Direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use.

(3) Disassembled spray gun cleaning. Disassemble the spray gun and clean the components by hand in a vat, which shall remain closed at all times except when in use. Alternatively, soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components.

(4) *Atomizing cleaning.* Clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions.

(5) Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from the requirements of paragraph (c) of this section.

(d) *Flush cleaning.* Each owner or operator of a flush cleaning operation subject to this subpart (excluding those in which Table 1 or semi-aqueous cleaning solvents are used) shall empty the used cleaning solvent each time aerospace parts or assemblies, or components of a coating unit (with the exception of spray guns) are flush cleaned into an enclosed container or collection system that is kept closed when not in use or into a system with equivalent emission control.

(e) *Exempt cleaning operations.* The following cleaning operations are exempt from the requirements of paragraph (b) of this section:

(1) Cleaning during the manufacture, assembly, installation, maintenance, or testing of components of breathing oxygen systems that are exposed to the breathing oxygen;

(2) Cleaning during the manufacture, assembly, installation, maintenance, or testing of parts, subassemblies, or assemblies that are exposed to strong oxidizers or reducers (e.g., nitrogen tetroxide, liquid oxygen, or hydrazine);

(3) Cleaning and surface activation prior to adhesive bonding;

(4) Cleaning of electronic parts and assemblies containing electronic parts;

(5) Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to-air heat exchangers and hydraulic fluid systems;

(6) Cleaning of fuel cells, fuel tanks, and confined spaces;

(7) Surface cleaning of solar cells, coated optics, and thermal control surfaces;

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(8) Cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used in the interior of the aircraft;

(9) Cleaning of metallic and nonmetallic materials used in honeycomb cores during the manufacture or maintenance of these cores, and cleaning of the completed cores used in the manufacture of aerospace vehicles or components;

(10) Cleaning of aircraft transparencies, polycarbonate, or glass substrates;

(11) Cleaning and cleaning solvent usage associated with research and development, quality control, and laboratory testing;

(12) Cleaning operations, using nonflammable liquids, conducted within five feet of energized electrical systems. Energized electrical systems means any AC or DC electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells and tail sections; and

(13) Cleaning operations identified as essential uses under the Montreal Protocol for which the Administrator has allocated essential use allowances or exemptions in 40 CFR 82.4.

TABLE 1—COMPOSITION REQUIREMENTS FOR APPROVED CLEANING SOLVENTS

Cleaning solvent type	Composition requirements
Aqueous	Cleaning solvents in which water is the primary ingredient (≥ 80 percent of cleaning solvent solution as applied must be water). Detergents, surfactants, and bioenzyme mixtures and nutrients may be combined with the water along with a variety of additives, such as organic solvents (e.g., high boiling point alcohols), builders, saponifiers, inhibitors, emulsifiers, pH buffers, and antifoaming agents. Aqueous solutions must have a flash point greater than 93°C (200°F) (as reported by the manufacturer), and the solution must be miscible with water.
Hydrocarbon-based	Cleaners that are composed of photochemically reactive hydrocarbons and/or oxygenated hydrocarbons and have a maximum vapor pressure of 7 mm Hg at 20°C (3.75 in. H_2O and 68°F). These cleaners also contain no HAP.

Standards: Primer and Topcoat Application Operations

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(a) Each owner or operator of a new or existing primer or topcoat application operation subject to this subpart shall comply with the requirements specified in paragraph (c) of this section for those coatings that are uncontrolled (no control device is used to reduce organic HAP emissions from the operation), and in paragraph (d) of this section for those coatings that are controlled (organic HAP emissions from the operation are reduced by the use of a control device). Aerospace equipment that is no longer operational, intended for public display, and not easily capable of being moved is exempt from the requirements of this section.

(b) Each owner or operator shall conduct the handling and transfer of primers and topcoats to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.

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(c) *Uncontrolled coatings—organic HAP and VOC content levels.* Each owner or operator shall comply with the organic HAP and VOC content limits specified in paragraphs (c)(1) through (c)(4) of this section for those coatings that are uncontrolled.

(1) Organic HAP emissions from primers shall be limited to an organic HAP content level of no more than: 540 g/L (4.5 lb/gal) of primer (less water), as applied, for general aviation rework facilities; or 650 g/L (5.4 lb/gal) of exterior primer (less water), as applied, to large commercial aircraft components (parts or assemblies) or fully assembled, large commercial aircraft at existing affected sources that produce fully assembled, large commercial aircraft; or 350 g/L (2.9 lb/gal) of primer (less water), as applied.

(2) VOC emissions from primers shall be limited to a VOC content level of no more than: 540 g/L (4.5 lb/gal) of primer (less water and exempt solvents), as applied, for general aviation rework facilities; or 650 g/L (5.4 lb/gal) of exterior primer (less water and exempt solvents), as applied, to large commercial aircraft components (parts or assemblies) or fully assembled, large commercial aircraft at existing affected sources that produce fully assembled, large commercial aircraft; or 350 g/L (2.9 lb/gal) of primer (less water and exempt solvents), as applied.

(3) Organic HAP emissions from topcoats shall be limited to an organic HAP content level of no more than: 420 g/L (3.5 lb/gal) of coating (less water) as applied or 540 g/L (4.5 lb/gal) of coating (less water) as applied for general aviation rework facilities. Organic HAP emissions from self-priming topcoats shall be limited to an organic HAP content level of no more than: 420 g/L (3.5 lb/gal) of self-priming topcoat (less water) as applied or 540 g/L (4.5 lb/gal) of self-priming topcoat (less water) as applied for general aviation rework facilities.

(4) VOC emissions from topcoats shall be limited to a VOC content level of no more than: 420 g/L (3.5 lb/gal) of coating (less water and exempt solvents) as applied or 540 g/L (4.5 lb/gal) of coating (less water and exempt solvents) as applied for general aviation rework facilities. VOC emissions from self-priming topcoats shall be limited to a VOC content level of no more than: 420 g/L (3.5 lb/gal) of self-priming topcoat (less water and exempt solvents) as applied or 540 g/L (4.5 lb/gal) of self-priming topcoat (less water) as applied for general aviation rework facilities.

(d) *Controlled coatings—control system requirements.* Each control system shall reduce the operation's organic HAP and VOC emissions to the atmosphere by 81% or greater, taking into account capture and destruction or removal efficiencies, as determined using the procedures in §63.750(g) when a carbon adsorber is used and in §63.750(h) when a control device other than a carbon adsorber is used.

(e) *Compliance methods.* Compliance with the organic HAP and VOC content limits specified in paragraphs (c)(1) through (c)(4) of this section shall be accomplished by using the methods specified in paragraphs (e)(1) and (e)(2) of this section either by themselves or in conjunction with one another.

(1) Use primers and topcoats (including self-priming topcoats) with HAP and VOC content levels equal to or less than the limits specified in paragraphs (c)(1) through (c)(4) of this section; or

(2) Use the averaging provisions described in §63.743(d).

(f) *Application equipment.* Except as provided in paragraph (f)(3) of this section, each owner or operator of a new or existing primer or topcoat (including self-priming topcoat) application operation subject to this subpart in which any of the coatings contain organic HAP or VOC shall comply with the requirements specified in paragraphs (f)(1) and (f)(2) of this section.

(1) All primers and topcoats (including self-priming topcoats) shall be applied using one or more of the application techniques specified in paragraphs (f)(1)(i) through (f)(1)(ix) of this section.

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- (i) Flow/curtain coat application;
- (ii) Dip coat application;
- (iii) Roll coating;
- (iv) Brush coating;
- (v) Cotton-tipped swab application;
- (vi) Electrodeposition (dip) coating;
- (vii) High volume low pressure (HVLP) spraying;
- (viii) Electrostatic spray application; or

(ix) Other coating application methods that achieve emission reductions equivalent to HVLP or electrostatic spray application methods, as determined according to the requirements in §63.750(i).

(2) All application devices used to apply primers or topcoats (including self-priming topcoats) shall be operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times. Equipment modified by the facility shall maintain a transfer efficiency equivalent to HVLP and electrostatic spray application techniques.

(3) The following situations are exempt from the requirements of paragraph (f)(1) of this section:

(i) Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces;

(ii) The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that the permitting agency has determined cannot be applied by any of the application methods specified in paragraph (f)(1) of this section;

(iii) The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.) and that the permitting agency has determined cannot be applied by any of the application methods specified in paragraph (f)(1) of this section;

(iv) The use of airbrush application methods for stenciling, lettering, and other identification markings;

(v) The use of hand-held spray can application methods; and

(vi) Touch-up and repair operations.

(g) *Inorganic HAP emissions.* Except as provided in paragraph (g)(4) of this section, each owner or operator of a new or existing primer or topcoat application operation subject to this subpart in which any of the coatings that are spray applied contain inorganic HAP, shall comply with the applicable requirements in paragraphs (g)(1) through (g)(3) of this section.

(1) Apply these coatings in a booth or hangar in which air flow is directed downward onto or across the part or assembly being coated and exhausted through one or more outlets.

(2) Control the air stream from this operation as follows:

(i) For existing sources, the owner or operator must choose one of the following:

(A) Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in §63.750(o) to meet or exceed the efficiency data points in Tables 1 and 2 of this section; or

§63.745**TABLE 1—TWO-STAGE ARRESTOR; LIQUID PHASE CHALLENGE FOR EXISTING SOURCES**

Filtration efficiency requirement, %	Aerodynamic particle size range, μm
>90	>5.7
>50	>4.1
>10	>2.2

TABLE 2—TWO-STAGE ARRESTOR; SOLID PHASE CHALLENGE FOR EXISTING SOURCES

Filtration efficiency requirement, %	Aerodynamic particle size range, μm
>90	>8.1
>50	>5.0
>10	>2.6

(B) Before exhausting it to the atmosphere, pass the air stream through a waterwash system that shall remain in operation during all coating application operations; or

(C) Before exhausting it to the atmosphere, pass the air stream through an air pollution control system that meets or exceeds the efficiency data points in Tables 1 and 2 of this section and is approved by the permitting authority.

(ii) For new sources, either:

(A) Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in §63.750(o) to meet or exceed the efficiency data points in Tables 3 and 4 of this section; or

TABLE 3—THREE-STAGE ARRESTOR; LIQUID PHASE CHALLENGE FOR NEW SOURCES

Filtration efficiency requirement, %	Aerodynamic particle size range, μm
>95	>2.0
>80	>1.0
>65	>0.42

TABLE 4—THREE-STAGE ARRESTOR; SOLID PHASE CHALLENGE FOR NEW SOURCES

Filtration efficiency requirement, %	Aerodynamic particle size range, μm
>95	>2.5
>85	>1.1
>75	>0.70

(B) Before exhausting it to the atmosphere, pass the air stream through an air pollution control system that meets or exceeds the efficiency data points in Tables 3 and 4 of this section and is approved by the permitting authority.

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(iii) Owners or operators of new sources that have commenced construction or reconstruction after June 6, 1994 but prior to October 29, 1996 may comply with the following requirements in lieu of the requirements in paragraph (g)(2)(ii) of this section:

(A) Pass the air stream through either a two-stage dry particulate filter system or a waterwash system before exhausting it to the atmosphere.

(B) If the primer or topcoat contains chromium or cadmium, control shall consist of a HEPA filter system, three-stage filter system, or other control system equivalent to the three stage filter system as approved by the permitting agency.

(iv) If a dry particulate filter system is used, the following requirements shall be met:

(A) Maintain the system in good working order;

(B) Install a differential pressure gauge across the filter banks;

(C) Continuously monitor the pressure drop across the filter and read and record the pressure drop once per shift; and

(D) Take corrective action when the pressure drop exceeds or falls below the filter manufacturer's recommended limit(s).

(v) If a conventional waterwash system is used, continuously monitor the water flow rate and read and record the water flow rate once per shift. If a pumpless system is used, continuously monitor the booth parameter(s) that indicate performance of the booth per the manufacturer's recommendations to maintain the booth within the acceptable operating efficiency range and read and record the parameters once per shift.

(3) If the pressure drop across the dry particulate filter system, as recorded pursuant to §63.752(d)(1), is outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, shut down the operation immediately and take corrective action. If the water path in the waterwash system fails the visual continuity/flow characteristics check, or the water flow rate recorded pursuant to §63.752(d)(2) exceeds the limit(s) specified by the booth manufacturer or in locally prepared operating procedures, or the booth manufacturer's or locally prepared maintenance procedures for the filter or waterwash system have not been performed as scheduled, shut down the operation immediately and take corrective action. The operation shall not be resumed until the pressure drop or water flow rate is returned within the specified limit(s).

(4) The requirements of paragraphs (g)(1) through (g)(3) of this section do not apply to the following:

(i) Touch-up of scratched surfaces or damaged paint;

(ii) Hole daubing for fasteners;

(iii) Touch-up of trimmed edges;

(iv) Coating prior to joining dissimilar metal components;

(v) Stencil operations performed by brush or air brush;

(vi) Section joining;

(vii) Touch-up of bushings and other similar parts;

(viii) Sealant detackifying;

(ix) Painting parts in an area identified in a title V permit, where the permitting authority has determined that it is not technically feasible to paint the parts in a booth; and

(x) The use of hand-held spray can application methods.

Standards: Depainting Operations

<p>§63.746</p>	<p>(a) <i>Applicability.</i> Each owner or operator of a new or existing depainting operation subject to this subpart shall comply with the requirements in paragraphs (a)(1) through (a)(3) of this section, and with the requirements specified in paragraph (b) where there are no controls for organic HAP, or paragraph (c) where organic HAP are controlled using a control system. This section does not apply to an aerospace manufacturing or rework facility that repaints six or less completed aerospace vehicles in a calendar year.</p> <p>(1) The provisions of this section apply to the depainting of the outer surface areas of completed aerospace vehicles, including the fuselage, wings, and vertical and horizontal stabilizers of the aircraft, and the outer casing and stabilizers of missiles and rockets. These provisions do not apply to the depainting of parts or units normally removed from the aerospace vehicle for depainting. However, depainting of wings and stabilizers is always subject to the requirements of this section regardless of whether their removal is considered by the owner or operator to be normal practice for depainting.</p> <p>(2) Aerospace vehicles or components that are intended for public display, no longer operational, and not easily capable of being moved are exempt from the requirements of this section.</p> <p>(3) The following depainting operations are exempt from the requirements of this section:</p> <p>(i) Depainting of radomes; and</p> <p>(ii) Depainting of parts, subassemblies, and assemblies normally removed from the primary aircraft structure before depainting.</p> <p>(b)(1) <i>HAP emissions—non-HAP chemical strippers and technologies.</i> Except as provided in paragraphs (b)(2) and (b)(3) of this section, each owner or operator of a new or existing aerospace depainting operation subject to this subpart shall emit no organic HAP from chemical stripping formulations and agents or chemical paint softeners.</p> <p>(2) Where non-chemical based equipment is used to comply with paragraph (b)(1) of this section, either in total or in part, each owner or operator shall operate and maintain the equipment according to the manufacturer's specifications or locally prepared operating procedures. During periods of malfunctions of such equipment, each owner or operator may use substitute materials during the repair period provided the substitute materials used are those available that minimize organic HAP emissions. In no event shall substitute materials be used for more than 15 days annually, unless such materials are organic HAP-free.</p> <p>(3) Each owner or operator of a new or existing depainting operation shall not, on an annual average basis, use more than 26 gallons of organic HAP-containing chemical strippers or alternatively 190 pounds of organic HAP per commercial aircraft repainted; or more than 50 gallons of organic HAP-containing chemical strippers or alternatively 365 pounds of organic HAP per military aircraft repainted for spot stripping and decal removal.</p> <p>(4) Each owner or operator of a new or existing depainting operation complying with paragraph (b)(2), that generates airborne inorganic HAP emissions from dry media blasting equipment, shall also comply with the requirements specified in paragraphs (b)(4)(i) through (b)(4)(v) of this section.</p> <p>(i) Perform the depainting operation in an enclosed area, unless a closed-cycle depainting system is used.</p>
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(ii)(A) For existing sources pass any air stream removed from the enclosed area or closed-cycle depainting system through a dry particulate filter system, certified using the method described in §63.750(o) to meet or exceed the efficiency data points in Tables 1 and 2 of §63.745, through a baghouse, or through a waterwash system before exhausting it to the atmosphere.

(B) For new sources pass any air stream removed from the enclosed area or closed-cycle depainting system through a dry particulate filter system certified using the method described in §63.750(o) to meet or exceed the efficiency data points in Tables 3 and 4 of §63.745 or through a baghouse before exhausting it to the atmosphere.

(c) Owners or operators of new sources that have commenced construction or reconstruction after June 6, 1994 but prior to October 29, 1996 may comply with the following requirements in lieu of the requirements in paragraph (b)(4)(ii)(B) of this section:

(1) Pass the air stream through either a two-stage dry particulate filter system or a waterwash system before exhausting it to the atmosphere.

(2) If the coating being removed contains chromium or cadmium, control shall consist of a HEPA filter system, three-stage filter system, or other control system equivalent to the three-stage filter system as approved by the permitting agency.

(iii) If a dry particulate filter system is used, the following requirements shall be met:

(A) Maintain the system in good working order;

(B) Install a differential pressure gauge across the filter banks;

(C) Continuously monitor the pressure drop across the filter, and read and record the pressure drop once per shift; and

(D) Take corrective action when the pressure drop exceeds or falls below the filter manufacturer's recommended limits.

(iv) If a waterwash system is used, continuously monitor the water flow rate, and read and record the water flow rate once per shift.

(v) If the pressure drop, as recorded pursuant to §63.752(e)(7), is outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, whichever is more stringent, shut down the operation immediately and take corrective action. If the water path in the waterwash system fails the visual continuity/flow characteristics check, as recorded pursuant to §63.752(e)(7), or the water flow rate, as recorded pursuant to §63.752(d)(2), exceeds the limit(s) specified by the booth manufacturer or in locally prepared operating procedures, or the booth manufacturer's or locally prepared maintenance procedures for the filter or waterwash system have not been performed as scheduled, shut down the operation immediately and take corrective action. The operation shall not be resumed until the pressure drop or water flow rate is returned within the specified limit(s).

(5) Mechanical and hand sanding operations are exempt from the requirements in paragraph (b)(4) of this section.

(c) *Organic HAP emissions—organic HAP-containing chemical strippers.* Each owner or operator of a new or existing organic HAP-containing chemical stripper depainting operation subject to this subpart shall comply with the requirements specified in this paragraph.

§63.746	<p>(1) All organic HAP emissions from the operation shall be reduced by the use of a control system. Each control system that was installed before the effective date shall reduce the operations' organic HAP emissions to the atmosphere by 81 percent or greater, taking into account capture and destruction or removal efficiencies.</p> <p>(2) Each control system installed on or after the effective date shall reduce organic HAP emissions to the atmosphere by 95 percent or greater. Reduction shall take into account capture and destruction or removal efficiencies, and may take into account the volume of chemical stripper used relative to baseline levels (e.g., the 95 percent efficiency may be achieved by controlling emissions at 81 percent efficiency with a control system and using 74 percent less stripper than in baseline applications). The baseline shall be calculated using data from 1996 and 1997, which shall be on a usage per aircraft or usage per square foot of surface basis.</p> <p>(3) The capture and destruction or removal efficiencies are to be determined using the procedures in §63.750(g) when a carbon adsorber is used and those in §63.750(h) when a control device other than a carbon adsorber is used.</p>
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Standards: Chemical Milling Maskant Application Operations

§63.747	<p>(a) Each owner or operator of a new or existing chemical milling maskant operation subject to this subpart shall comply with the requirements specified in paragraph (c) of this section for those chemical milling maskants that are uncontrolled (no control device is used to reduce organic HAP emissions from the operation) and in paragraph (d) of this section for those chemical milling maskants that are controlled (organic HAP emissions from the operation are reduced by the use of a control device).</p> <p>(b) Each owner or operator shall conduct the handling and transfer of chemical milling maskants to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.</p> <p>(c) <i>Uncontrolled maskants—organic HAP and VOC content levels.</i> Each owner or operator shall comply with the organic HAP and VOC content limits specified in paragraphs (c)(1) and (c)(2) of this section for each chemical milling maskant that is uncontrolled.</p> <p>(1) Organic HAP emissions from chemical milling maskants shall be limited to organic HAP content levels of no more than 622 grams of organic HAP per liter (5.2 lb/gal) of Type I chemical milling maskant (less water) as applied, and no more than 160 grams of organic HAP per liter (1.3 lb/gal) of Type II chemical milling maskant (less water) as applied.</p> <p>(2) VOC emissions from chemical milling maskants shall be limited to VOC content levels of no more than 622 grams of VOC per liter (5.2 lb/gal) of Type I chemical milling maskant (less water and exempt solvents) as applied, and no more than 160 grams of VOC per liter (1.3 lb/gal) of Type II chemical milling maskant (less water and exempt solvents) as applied.</p> <p>(3) The requirements of paragraphs (c)(1) and (c)(2) of this section do not apply to the following:</p> <p>(i) Touch-up of scratched surfaces or damaged maskant; and</p> <p>(ii) Touch-up of trimmed edges.</p>
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§63.747	<p>(d) <i>Controlled maskants—control system requirements.</i> Each control system shall reduce the operation's organic HAP and VOC emissions to the atmosphere by 81% or greater, taking into account capture and destruction or removal efficiencies, as determined using the procedures in §63.750(g) when a carbon adsorber is used and in §63.750(h) when a control device other than a carbon adsorber is used.</p> <p>(e) <i>Compliance methods.</i> Compliance with the organic HAP and VOC content limits specified in paragraphs (c)(1) and (c)(2) of this section may be accomplished by using the methods specified in paragraphs (e)(1) and (e)(2) of this section either by themselves or in conjunction with one another.</p> <p>(1) Use chemical milling maskants with HAP and VOC content levels equal to or less than the limits specified in paragraphs (c)(1) and (c)(2) of this section.</p> <p>(2) Use the averaging provisions described in §63.743(d).</p>
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Standards: Handling and Storage of Waste

§63.748	<p>Except as provided in §63.741(e), the owner or operator of each facility subject to this subpart that produces a waste that contains HAP shall conduct the handling and transfer of the waste to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.</p>
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Test methods and Procedures

§63.750	<p>(a) <i>Composition determination.</i> Compliance with the hand-wipe cleaning solvent approved composition list specified in §63.744(b)(1) for hand-wipe cleaning solvents shall be demonstrated using data supplied by the manufacturer of the cleaning solvent. The data shall identify all components of the cleaning solvent and shall demonstrate that one of the approved composition definitions is met.</p> <p>(b) <i>Vapor pressure determination.</i> The composite vapor pressure of hand-wipe cleaning solvents used in a cleaning operation subject to this subpart shall be determined as follows:</p> <p>(1) For single-component hand-wipe cleaning solvents, the vapor pressure shall be determined using MSDS or other manufacturer's data, standard engineering reference texts, or other equivalent methods.</p> <p>(2) The composite vapor pressure of a blended hand-wipe solvent shall be determined by quantifying the amount of each organic compound in the blend using manufacturer's supplied data or a gas chromatographic analysis in accordance with ASTM E 260-91 or 96 (incorporated by reference—see §63.14 of subpart A of this part) and by calculating the composite vapor pressure of the solvent by summing the partial pressures of each component. The vapor pressure of each component shall be determined using manufacturer's data, standard engineering reference texts, or other equivalent methods. The following equation shall be used to determine the composite vapor pressure:</p> $PP_c = \sum_{i=1}^n \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \sum_{e=1}^n \frac{W_e}{MW_e} + \sum_{i=1}^n \frac{W_i}{MW_i}}$
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where:

W_i = Weight of the “i” th VOC compound, grams.

W_w = Weight of water, grams.

W_e = Weight of non-HAP, nonVOC compound, grams.

MW_i = Molecular weight of the “i”th VOC compound, g/g-mole.

MW_w = Molecular weight of water, g/g-mole.

MW_e = Molecular weight of exempt compound, g/g-mole.

PP_c = VOC composite partial pressure at 20 °C, mm Hg.

VP_i = Vapor pressure of the “i”th VOC compound at 20 °C, mm Hg.

(c) *Organic HAP content level determination—compliant primers and topcoats.* For those uncontrolled primers and topcoats complying with the primer and topcoat organic HAP content limits specified in §63.745(c) without being averaged, the following procedures shall be used to determine the mass of organic HAP emitted per volume of coating (less water) as applied.

(1) For coatings that contain no exempt solvents, determine the total organic HAP content using manufacturer's supplied data or Method 24 of 40 CFR part 60, appendix A, to determine the VOC content. The VOC content shall be used as a surrogate for total HAP content for coatings that contain no exempt solvent. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24 analysis, compliance shall be based on the results from the Method 24 analysis.

When Method 24 is used to determine the VOC content of water-reducible coatings, the precision adjustment factors in Reference Method 24 shall be used. If the adjusted analytical VOC content is less than the formulation solvent content, then the analytical VOC content should be set equal to the formulation solvent content.

(2) For each coating formulation as applied, determine the organic HAP weight fraction, water weight fraction (if applicable), and density from manufacturer's data. If these values cannot be determined using the manufacturer's data, the owner or operator shall submit an alternative procedure for determining their values for approval by the Administrator. Recalculation is required only when a change occurs in the coating formulation.

(3) For each coating as applied, calculate the mass of organic HAP emitted per volume of coating (lb/gal) less water as applied using equations 1, 2, and 3:

$$V_{wi} = \frac{D_a W_{wi}}{D_w} \quad \text{Eq. 1}$$

where:

V_{wi} = volume (gal) of water in one gal of coating i.

D_a = density (lb of coating per gal of coating) of coating i.

W_{wi} = weight fraction (expressed as a decimal) of water in coating i.

D_w = density of water, 8.33 lb/gal.

$$M_H = D_a W_H \quad \text{Eq. 2}$$

where:

M_{Hi} = mass (lb) of organic HAP in one gal of coating i.

D_a = density (lb of coating per gal of coating) of coating i.

W_{Hi} = weight fraction (expressed as a decimal) of organic HAP in coating i.

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$$H_i = \frac{M_H}{(1 - V_{wi})} \quad \text{Eq. 3}$$

where:

H_i = mass of organic HAP emitted per volume of coating i (lb/gal) less water as applied.

M_H = mass (lb) of organic HAP in one gal of coating i .

V_{wi} = volume (gal) of water in one gal of coating i .

(d) *Organic HAP content level determination—averaged primers and topcoats.* For those uncontrolled primers and topcoats that are averaged together in order to comply with the primer and topcoat organic HAP content limits specified in §63.745(c), the following procedure shall be used to determine the monthly volume-weighted average mass of organic HAP emitted per volume of coating (less water) as applied, unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program.

(1)(i) Determine the total organic HAP weight fraction as applied of each coating. If any ingredients, including diluent solvent, are added to a coating prior to its application, the organic HAP weight fraction of the coating shall be determined at a time and location in the process after all ingredients have been added.

(ii) Determine the total organic HAP weight fraction of each coating as applied each month.

(A) If no changes have been made to a coating, either as supplied or as applied, or if a change has been made that has a minimal effect on the organic HAP content of the coating, the value previously determined may continue to be used until a change in formulation has been made by either the manufacturer or the user.

(B) If a change in formulation or a change in the ingredients added to the coating takes place, including the ratio of coating to diluent solvent, prior to its application, either of which results in a more than minimal effect on the organic HAP content of the coating, the total organic HAP weight fraction of the coating shall be redetermined.

(iii) Manufacturer's formulation data may be used to determine the total organic HAP content of each coating and any ingredients added to the coating prior to its application. If the total organic HAP content cannot be determined using the manufacturer's data, the owner or operator shall submit an alternative procedure for determining the total organic HAP weight fraction for approval by the Administrator.

(2)(i) Determine the volume both in total gallons as applied and in total gallons (less water) as applied of each coating. If any ingredients, including diluent solvents, are added prior to its application, the volume of each coating shall be determined at a time and location in the process after all ingredients (including any diluent solvent) have been added.

(ii) Determine the volume of each coating (less water) as applied each month, unless the permitting agency specifies a shorter period as part of an ambient ozone control program.

(iii) The volume applied may be determined from company records.

(3)(i) Determine the density of each coating as applied. If any ingredients, including diluent solvent, are added to a coating prior to its application, the density of the coating shall be determined at a time and location in the process after all ingredients have been added.

(ii) Determine the density of each coating as applied each month, unless the permitting agency specifies a shorter period as part of an ambient ozone control program.

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(A) If no changes have been made to a coating, either as supplied or as applied, or if a change has been made that has a minimal effect on the density of the coating, then the value previously determined may continue to be used until a change in formulation has been made by either the manufacturer or the user.

(B) If a change in formulation or a change in the ingredients added to the coating takes place, including the ratio of coating to diluent solvent, prior to its application, either of which results in a more than minimal effect on the density of the coating, then the density of the coating shall be redetermined.

(iii) The density may be determined from company records, including manufacturer's data sheets. If the density of the coating cannot be determined using the company's records, including the manufacturer's data, then the owner or operator shall submit an alternative procedure for determining the density for approval by the Administrator.

(4) Calculate the total volume in gallons as applied (less water) by summing the individual volumes of each coating (less water) as applied, which were determined under paragraph (d)(2) of this section.

(5) Calculate the volume-weighted average mass of organic HAP in coatings emitted per unit volume (lb/gal) of coating (less water) as applied during each 30-day period using equation 4:

$$H_a = \frac{\sum_{i=1}^n W_{Hi} D_i V_i}{C_{tw}} \quad Eq. 4$$

where:

H_a = volume-weighted average mass of organic HAP emitted per unit volume of coating (lb/gal) (less water) as applied during each 30-day period for those coatings being averaged.

n = number of coatings being averaged.

W_{Hi} = weight fraction (expressed as a decimal) of organic HAP in coating i as applied that is being averaged during each 30-day period.

D_i = density (lb of coating per gal of coating) of coating i as applied that is being averaged during each 30-day period.

V_i = volume (gal) of coating i as applied that is being averaged during the 30-day period.

C_{tw} = total volume (gal) of all coatings (less water) as applied that are being averaged during each 30-day period.

(e) *VOC content level determination—compliant primers and topcoats.* For those uncontrolled primers and topcoats complying with the primer and topcoat VOC content levels specified in §63.745(c) without being averaged, the following procedure shall be used to determine the mass of VOC emitted per volume of coating (less water and exempt solvents) as applied.

(1) Determine the VOC content of each formulation (less water and exempt solvents) as applied using manufacturer's supplied data or Method 24 of 40 CFR part 60, appendix A, to determine the VOC content. The VOC content shall be used as a surrogate for total HAP content for coatings that contain no exempt solvent. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24 analysis, compliance shall be based on the results from the Method 24 analysis.

When Method 24 is used to determine the VOC content of water-reducible coatings, the precision adjustment factors in Reference Method 24 shall be used. If the adjusted analytical VOC content is less than the formulation solvent content, then the analytical VOC content should be set equal to the formulation solvent content.

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(2) For each coating applied, calculate the mass of VOC emitted per volume of coating (lb/gal) (less water and exempt solvents) as applied using equations 5, 6, and 7:

$$V_{wi} = \frac{D_a W_{wi}}{D_w} \quad \text{Eq. 5}$$

where:

V_{wi} = volume (gal) of water in one gal of coating i.

D_a = density (lb of coating per gal of coating) of coating i.

W_{wi} = weight fraction (expressed as a decimal) of water in coating i.

D_w = density of water, 8.33 lb/gal.

$$M_{vi} = D_a W_{vi} \quad \text{Eq. 6}$$

where:

M_{vi} = mass (lb) of VOC in one gal of coating i.

D_a = density (lb of coating per gal of coating) of coating i.

W_{vi} = weight fraction (expressed as a decimal) of VOC in coating i.

$$G_i = \frac{M_{vi}}{(1 - V_{wi}) - V_{xi}} \quad \text{Eq. 7}$$

where:

G_i = mass of VOC emitted per volume of coating i (lb/gal) (less water and exempt solvents) as applied.

M_{vi} = mass (lb) of VOC in one gal of coating i.

V_{wi} = volume (gal) of water in one gal of coating i.

V_{xi} = volume (gal) of exempt solvents in one gal of coating i.

(3)(i) If the VOC content is found to be different when EPA Method 24 is used during an enforcement inspection from that used by the owner or operator in calculating G_s , compliance shall be based, except as provided in paragraph (e)(3)(ii) of this section, upon the VOC content obtained using EPA Method 24.

(ii) If the VOC content of a coating obtained using Method 24 would indicate noncompliance as determined under either §63.749 (d)(3)(i) or (d)(4)(i), an owner or operator may elect to average the coating with other uncontrolled coatings and (re)calculate G_i (using the procedure specified in paragraph (f) of this section), provided appropriate and sufficient records were maintained for all coatings included in the average (re)calculation. The (re)calculated value of G_i (G_s in paragraph (f)) for the averaged coatings shall then be used to determine compliance.

(f) *VOC content level determination—averaged primers and topcoats.* For those uncontrolled primers and topcoats that are averaged within their respective coating category in order to comply with the primer and topcoat VOC content limits specified in §63.745 (c)(2) and (c)(4), the following procedure shall be used to determine the monthly volume-weighted average mass of VOC emitted per volume of coating (less water and exempt solvents) as applied, unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program.

(1)(i) Determine the VOC content (lb/gal) as applied of each coating. If any ingredients, including diluent solvent, are added to a coating prior to its application, the VOC content of the coating shall be determined at a time and location in the process after all ingredients have been added.

(ii) Determine the VOC content of each coating as applied each month, unless the permitting agency specifies a shorter period as part of an ambient ozone control program.

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(A) If no changes have been made to a coating, either as supplied or as applied, or if a change has been made that has a minimal effect on the VOC content of the coating, the value previously determined may continue to be used until a change in formulation has been made by either the manufacturer or the user.

(B) If a change in formulation or a change in the ingredients added to the coating takes place, including the ratio of coating to diluent solvent, prior to its application, either of which results in a more than minimal effect on the VOC content of the coating, the VOC content of the coating shall be redetermined.

(iii) Determine the VOC content of each primer and topcoat formulation (less water and exempt solvents) as applied using EPA Method 24 or from manufacturer's data.

(2)(i) Determine the volume both in total gallons as applied and in total gallons (less water and exempt solvents) as applied of each coating. If any ingredients, including diluent solvents, are added prior to its application, the volume of each coating shall be determined at a time and location in the process after all ingredients (including any diluent solvent) have been added.

(ii) Determine the volume of each coating (less water and exempt solvents) as applied each day.

(iii) The volume applied may be determined from company records.

(3) Calculate the total volume in gallons (less water and exempt solvents) as applied by summing the individual volumes of each coating (less water and exempt solvents) as applied, which were determined under paragraph (f)(2) of this section.

(4) Calculate the volume-weighted average mass of VOC emitted per unit volume (lb/gal) of coating (less water and exempt solvents) as applied for each coating category during each 30-day period using equation 8:

$$G_a = \frac{\sum_{i=1}^n (VOC)_i V_i}{C_{lwes}} \quad Eq. 8$$

where:

G_a = volume weighted average mass of VOC per unit volume of coating (lb/gal) (less water and exempt solvents) as applied during each 30-day period for those coatings being averaged.

n = number of coatings being averaged.

$(VOC)_i$ = VOC content (lb/gal) of coating i (less water and exempt solvents) as applied (as determined using the procedures specified in paragraph (f)(1) of this section) that is being averaged during the 30-day period.

V_i = volume (gal) of coating i (less water and exempt solvents) as applied that is being averaged during the 30-day period.

C_{lwes} = total volume (gal) of all coatings (less water and exempt solvents) as applied during each 30-day period for those coatings being averaged.

(5)(i) If the VOC content is found to be different when EPA Method 24 is used during an enforcement inspection from that used by the owner or operator in calculating G_a , recalculation of G_a is required using the new value. If more than one coating is involved, the recalculation shall be made once using all of the new values.

(ii) If recalculation is required, an owner or operator may elect to include in the recalculation of G_a uncontrolled coatings that were not previously included provided appropriate and sufficient records were maintained for these other coatings to allow daily recalculations.

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(iii) The recalculated value of G_s under either paragraph (f)(5)(i) or (f)(5)(ii) of this section shall be used to determine compliance.

(g) *Overall VOC and/or organic HAP control efficiency—carbon adsorber.* Each owner or operator subject to the requirements of §63.745(d), §63.746(c), or §63.747(d) shall demonstrate initial compliance with the requirements of this subpart by following the procedures of paragraph (g)(1), (2), (3), (4), or (5) as applicable and paragraphs (6), (7), and (8) of this section. When an initial compliance demonstration is required by this subpart, the procedures in paragraphs (g)(9) through (g)(14) of this section shall be used in determining initial compliance with the provisions of this subpart.

(1) To demonstrate initial and continuous compliance with §63.745(d), §63.746(c), or §63.747(d) when emissions are controlled by a dedicated solvent recovery device, each owner or operator of the affected operation may perform a liquid-liquid HAP or VOC material balance over rolling 7- to 30-day periods in lieu of demonstrating compliance through the methods in paragraph (g)(2), (g)(3), or (g)(4) of this section. Results of the material balance calculations performed to demonstrate initial compliance shall be submitted to the Administrator with the notification of compliance status required by §63.9(h) and by §63.753 (c)(1)(iv), (d)(3)(i), and (e)(3). When demonstrating compliance by this procedure, §63.7(e)(3) of subpart A does not apply. The amount of liquid HAP or VOC applied and recovered shall be determined as discussed in paragraph (g)(1)(iii) of this section. The overall HAP or VOC emission reduction (R) is calculated using equation 9:

$$R = \frac{M_r}{\sum_{i=1}^n [W_{oi} M_{ci} - RS_i]} \times 100 \quad \text{Eq. 9}$$

(i) The value of RS_i is zero unless the owner or operator submits the following information to the Administrator for approval of a measured RS_i value that is greater than zero:

(A) Measurement techniques; and

(B) Documentation that the measured value of RS_i exceeds zero.

(ii) The measurement techniques of paragraph (g)(1)(i)(A) of this section shall be submitted to the Administrator for approval with the notification of performance test required under §63.7(b).

(iii) Each owner or operator demonstrating compliance by the test method described in paragraph (g)(1) of this section shall:

(A) Measure the amount of coating or stripper as applied;

(B) Determine the VOC or HAP content of all coating and stripper applied using the test method specified in §63.750(c) (1) through (3) or (e) (1) and (2) of this section;

(C) Install, calibrate, maintain, and operate, according to the manufacturer's specifications, a device that indicates the amount of HAP or VOC recovered by the solvent recovery device over rolling 7- to 30-day periods; the device shall be certified by the manufacturer to be accurate to within ± 2.0 percent, and this certification shall be kept on record;

(D) Measure the amount of HAP or VOC recovered; and

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(E) Calculate the overall HAP or VOC emission reduction (R) for rolling 7- to 30-day periods using equation 9.

(F) Compliance is demonstrated if the value of R is equal to or greater than the overall HAP control efficiencies required by §63.745(d), §63.746(c), or §63.747(d).

(2) To demonstrate initial compliance with §63.745(d), §63.746(c), or §63.747(d) when affected HAP emission points are controlled by an emission control device other than a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel, each owner or operator of an affected source shall perform a gaseous emission test using the following procedures.

(i) Construct the overall HAP emission reduction system so that all volumetric flow rates and total HAP or VOC emissions can be accurately determined by the applicable test methods and procedures specified in §63.750(g) (9) through (14).

(ii) Determine capture efficiency from the HAP emission points by capturing, venting, and measuring all HAP emissions from the HAP emission points. During a performance test, the owner or operator of affected HAP emission points located in an area with other gaseous emission sources not affected by this subpart shall isolate the affected HAP emission points from all other gaseous emission points by one of the following methods:

(A) Build a temporary total enclosure around the affected HAP emission point(s); or

(B) Shut down all gaseous emission points not affected by this subpart and continue to exhaust fugitive emissions from the affected HAP emission points through any building ventilation system and other room exhausts such as drying ovens. All ventilation air must be vented through stacks suitable for testing.

(iii) Operate the emission control device with all affected HAP emission points connected and operating.

(iv) Determine the efficiency (E) of the control device using equation 10:

(v) Determine the efficiency (F) of the capture system using equation 11:

$$E = \frac{\sum_{i=1}^n Q_{di} C_{di} - \sum_{j=1}^P Q_{fj} C_{fj}}{\sum_{i=1}^n Q_{di} C_{di}} \quad Eq. 10$$

$$F = \frac{\sum_{i=1}^n Q_{di} C_{di}}{\sum_{i=1}^n Q_{di} C_{di} + \sum_{k=1}^P Q_{fk} C_{fk}} \quad Eq. 11$$

(vi) For each HAP emission point subject to §63.745(d), §63.746(c), or §63.747(d), compliance is demonstrated if the product of (E) × (F) is equal to or greater than the overall HAP control efficiencies required under §63.745(d), §63.746(c), or §63.747(d).

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(3) To demonstrate compliance with §63.745(d), §63.746(c), or §63.747(d) when affected HAP emission points are controlled by a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel, each owner or operator of an affected source shall perform a gaseous emission test using the following procedures:

(i) Construct the overall HAP emission reduction system so that each volumetric flow rate and the total HAP emissions can be accurately determined by the applicable test methods and procedures specified in §63.750(g) (9) through (14);

(ii) Assure that all HAP emissions from the affected HAP emission point(s) are segregated from gaseous emission points not affected by this subpart and that the emissions can be captured for measurement, as described in paragraphs (g)(2)(ii) (A) and (B) of this section;

(iii) Operate the emission control device with all affected HAP emission points connected and operating;

(iv) Determine the efficiency (H_v) of each individual carbon adsorber vessel (v) using equation 12:

$$H_v = \frac{Q_{gv} C_{gv} - Q_{kv} C_{kv}}{Q_{gv} C_{gv}} \quad \text{Eq. 12}$$

(v) Determine the efficiency of the carbon adsorption system (H_{sys}) by computing the average efficiency of the individual carbon adsorber vessels as weighted by the volumetric flow rate (Q_{kv}) of each individual carbon adsorber vessel (v) using equation 13:

$$H_{sys} = \frac{\sum_{v=1}^q H_v Q_{kv}}{\sum_{v=1}^q Q_{kv}} \quad \text{Eq. 13}$$

(vi) Determine the efficiency (F) of the capture system using equation 11.

(vii) For each HAP emission point subject to §63.745(d), §63.746(c), or §63.747(d), compliance is demonstrated if the product of (H_{sys}) \times (F) is equal to or greater than the overall HAP control efficiency required by §63.745(d), §63.746(c), or §63.747(d).

(4) An alternative method of demonstrating compliance with §63.745(d), §63.746(c), or §63.747(d) is the installation of a total enclosure around the affected HAP emission point(s) and the ventilation of all HAP emissions from the total enclosure to a control device with the efficiency specified in paragraph (g)(4)(iii) of this section. If this method is selected, the compliance test methods described in paragraphs (g)(1), (g)(2), and (g)(3) of this section are not required. Instead, each owner or operator of an affected source shall:

(i) Demonstrate that a total enclosure is installed. An enclosure that meets the requirements in paragraphs (g)(4)(i) (A) through (D) of this section shall be considered a total enclosure. The owner or operator of an enclosure that does not meet these requirements may apply to the Administrator for approval of the enclosure as a total enclosure on a case-by-case basis. The enclosure shall be considered a total enclosure if it is demonstrated to the satisfaction of the Administrator that all HAP emissions from the affected HAP emission point(s) are contained and vented to the control device. The requirements for automatic approval are as follows:

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(A) The total area of all natural draft openings shall not exceed 5% of the total surface area of the total enclosure's walls, floor, and ceiling;

(B) All sources of emissions within the enclosure shall be a minimum of four equivalent diameters away from each natural draft opening;

(C) The average inward face velocity (FV) across all natural draft openings shall be a minimum of 3,600 meters per hour as determined by the following procedures:

(1) All forced makeup air ducts and all exhaust ducts are constructed so that the volumetric flow rate in each can be accurately determined by the test methods and procedures specified in §63.750(g) (10) and (11); volumetric flow rates shall be calculated without the adjustment normally made for moisture content; and

(2) Determine FV by equation 14:

$$FV = \frac{\sum_{j=1}^n Q_{out\ j} - \sum_{i=1}^p Q_{in\ i}}{\sum_{k=1}^q A_k} \quad Eq. 14$$

(D) The air passing through all natural draft openings shall flow into the enclosure continuously. If FV is less than or equal to 9,000 meters per hour, the continuous inward flow of air shall be verified by continuous observation using smoke tubes, streamers, tracer gases, or other means approved by the Administrator over the period that the volumetric flow rate tests required to determine FV are carried out. If FV is greater than 9,000 meters per hour, the direction of airflow through the natural draft openings shall be presumed to be inward at all times without verification.

(ii) Determine the control device efficiency using equation 10 or equations 12 and 13, as applicable, and the test methods and procedures specified in §63.750(g) (9) through (14).

(iii) Compliance shall be achieved if the installation of a total enclosure is demonstrated and the value of E determined from equation 10 (or the value of H_{ys} determined from equations 12 and 13, as applicable) is equal to or greater than the overall HAP control efficiencies required under §63.745(d), §63.746(c), or §63.747(d).

(5) When nonregenerative carbon absorbers are used to comply with §63.745(d), §63.746(c), or §63.747(d), the owner or operator may conduct a design evaluation to demonstrate initial compliance in lieu of following the compliance test procedures of paragraphs (g)(1), (2), (3), and (4) of this section. The design evaluation shall consider the vent stream composition, component concentrations, flow rate, relative humidity, and temperature, and shall establish the design exhaust vent stream organic compound concentration level, capacity of the carbon bed, type and working capacity of activated carbon used for the carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and the emission point operating schedule.

(6)(i) To demonstrate initial compliance with §63.745(d), §63.746(c), or §63.747(d) when hard piping or ductwork is used to direct VOC and HAP emissions from a VOC and HAP source to the control device, each owner or operator shall demonstrate upon inspection that the criteria of paragraph (g)(6)(i)(A) and paragraph (g)(6)(i) (B) or (C) of this section VR/FD are met.

(A) The equipment shall be vented to a control device.

<p>§63.750</p>	<p>(B) The control device efficiency (E or H_{sys}, as applicable) determined using equation 10 or equations 12 and 13, respectively, and the test methods and procedures specified in §63.750(g) (9) through (14), shall be equal to or greater than the overall HAP control efficiency required by §63.745(d), §63.746(c), or §63.747(d).</p> <p>(C) When a nonregenerative carbon adsorber is used, the ductwork from the affected emission point(s) shall be vented to the control device and the carbon adsorber shall be demonstrated, through the procedures of §63.750(g) (1), (2), (3), (4), or (5), to meet the requirements of §63.745(d), §63.746(c), or §63.747(d).</p> <p>(7) Startups and shutdowns are normal operation for this source category. Emissions from these activities are to be included when determining if the standards specified in §63.745(d), §63.746(c), or §63.747(d) are being attained.</p> <p>(8) An owner or operator who uses compliance techniques other than those specified in this subpart shall submit a description of those compliance procedures, subject to the Administrator's approval, in accordance with §63.7(f) of subpart A.</p> <p>(9) Either EPA Method 18 or EPA Method 25A of appendix A of part 60, as appropriate to the conditions at the site, shall be used to determine VOC and HAP concentration of air exhaust streams as required by §63.750(g) (1) through (6). The owner or operator shall submit notice of the intended test method to the Administrator for approval along with the notification of the performance test required under §63.7(b). Method selection shall be based on consideration of the diversity of organic species present and their total concentration and on consideration of the potential presence of interfering gases. Except as indicated in paragraphs (g)(9) (i) and (ii) of this section, the test shall consist of three separate runs, each lasting a minimum of 30 minutes.</p> <p>(i) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with a common exhaust stack for all the individual carbon adsorber vessels pursuant to paragraph (g) (2) or (4) of this section, the test shall consist of three separate runs, each coinciding with one or more complete sequences through the adsorption cycles of all of the individual carbon adsorber vessels.</p> <p>(ii) When either EPA Method 18 or EPA Method 25A is to be used in the determination of the efficiency of a fixed-bed carbon adsorption system with individual exhaust stacks for each carbon adsorber vessel pursuant to §63.750(g) (3) or (4), each carbon adsorber vessel shall be tested individually. The test for each carbon adsorber vessel shall consist of three separate runs. Each run shall coincide with one or more complete adsorption cycles.</p> <p>(10) EPA Method 1 or 1A of appendix A of part 60 is used for sample and velocity traverses.</p> <p>(11) EPA Method 2, 2A, 2C, or 2D of appendix A of part 60 is used for velocity and volumetric flow rates.</p> <p>(12) EPA Method 3 of appendix A of part 60 is used for gas analysis.</p> <p>(13) EPA Method 4 of appendix A of part 60 is used for stack gas moisture.</p> <p>(14) EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.</p>
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(h) *Overall VOC and/or organic HAP control efficiency—control devices other than carbon absorbers.*
Calculate the overall control efficiency of a control system with a control device other than a carbon adsorber using the following procedure.

(1) Calculate the overall control efficiency using equation 15:

$$E_k = R_k F_k \quad \text{Eq. 15}$$

where:

E_k = overall VOC and/or organic HAP control efficiency (expressed as a decimal) of control system k.

R_k = destruction or removal efficiency (expressed as a decimal) of total organic compounds or total organic HAP for control device k as determined under paragraph (h)(2) of this section.

F_k = capture efficiency (expressed as a decimal) of capture system k as determined under paragraph (h)(3) of this section.

(2) The organic HAP destruction or removal efficiency R_k of a control device other than a carbon adsorber shall be determined using the procedures described below. The destruction efficiency may be measured as either total organic HAP or as TOC minus methane and ethane according to these procedures.

(i) Use Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, to select the sampling sites.

(ii) Determine the gas volumetric flow rate using Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate.

(iii) Use Method 18 of 40 CFR part 60, appendix A, to measure either TOC minus methane and ethane or total organic HAP. Alternatively, any other method or data that have been validated according to the applicable procedures in Method 301 of this part may be used.

(iv) Use the following procedure to calculate the destruction or removal efficiency:

(A) The destruction or removal efficiency test shall consist of three runs. The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, the samples shall be taken at approximately equal intervals in time such as 15-minute intervals during the run.

(B) Calculate the mass rate of either TOC (minus methane and ethane) or total organic HAP (E_i , E_o) using equations 16 and 17:

$$E_i = K_2 \left(\sum_{j=1}^n C_{ij} M_{ij} \right) Q_i \quad \text{Eq. 16}$$

$$E_o = K_2 \left(\sum_{j=1}^n C_{oj} M_{oj} \right) Q_o \quad \text{Eq. 17}$$

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where:

E_i , E_o = mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet and outlet of the control device, respectively, dry basis, kg/hr.

K_z = constant, 2.494×10^{-6} (parts per million)⁻¹ (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature for (gram-mole per standard cubic meter) is 20 °C.

n = number of sample components in the gas stream.

C_{ij} , C_{oj} = concentration of sample component j of the gas stream at the inlet and outlet of the control device, respectively, dry basis, parts per million by volume.

M_{ij} , M_{oj} = molecular weight of sample component j of the gas stream at the inlet and outlet of the control device, respectively, gram/gram-mole.

Q_i , Q_o = flow rate of gas stream at the inlet and outlet of the control device, respectively, dry standard cubic meter per minute.

(1) Where the mass rate of TOC is being calculated, all organic compounds (minus methane and ethane) measured by EPA Method 18 shall be summed using equation 16 in paragraph (h)(2)(iv)(B) of this section.

(2) Where the mass rate of total organic HAP is being calculated, only the organic HAP species shall be summed using equation 17 in paragraph (h)(2)(iv)(B) of this section. The list of organic HAP is provided in §63.104 of subpart F of this part.

(C) Calculate the destruction or removal efficiency for TOC (minus methane and ethane) or total organic HAP using equation 18:

$$R = \frac{E_i - E_o}{E_i} \times 100 \quad Eq. 18$$

where:

R = destruction or removal efficiency of control device, percent.

E_i = mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet to the control device as calculated under paragraph (h)(2)(iv)(B) of this section, kg TOC per hour or kg organic HAP per hour.

E_o = mass rate of TOC (minus methane and ethane) or total organic HAP at the outlet of the control device, as calculated under paragraph (h)(2)(iv)(B) of this section, kg TOC per hour or kg organic HAP per hour.

(3) Determine the capture efficiency F_k of each capture system to which organic HAP and VOC emissions from coating operations are vented. The capture efficiency value shall be determined using Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure as found in appendix B to §52.741 of part 52 of this chapter for total enclosures, and the capture efficiency protocol specified in §52.741(a)(4)(iii) of part 52 of this chapter for all other enclosures.

(i)(1) *Alternative application method—primers and topcoats.* Each owner or operator seeking to use an alternative application method (as allowed in §63.745(f)(1)(ix)) in complying with the standards for primers and topcoats shall use the procedures specified in paragraphs (i)(2)(i) and (i)(2)(ii) or (i)(2)(iii) of this section to determine the organic HAP and VOC emission levels of the alternative application technique as compared to either HVLP or electrostatic spray application methods.

(2)(i) For the process or processes for which the alternative application method is to be used, the total organic HAP and VOC emissions shall be determined for an initial 30-day period, the period of time required to apply coating to five completely assembled aircraft, or a time period approved by the permitting agency. During this initial period, only HVLP or electrostatic spray application methods shall be used. The emissions shall be determined based on the volumes, organic HAP contents (less water), and VOC contents (less water and exempt solvents) of the coatings as applied.

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(ii) Upon implementation of the alternative application method, use the alternative application method in production on actual production parts or assemblies for a period of time sufficient to coat an equivalent amount of parts and assemblies with coatings identical to those used in the initial 30-day period. The actual organic HAP and VOC emissions shall be calculated for this post-implementation period.

(iii) Test the proposed application method against either HVLP or electrostatic spray application methods in a laboratory or pilot production area, using parts and coatings representative of the process(es) where the alternative method is to be used. The laboratory test will use the same part configuration(s) and the same number of parts for both the proposed method and the HVLP or electrostatic spray application methods.

(iv) Whenever the approach in either paragraph (i)(2)(ii) or (i)(2)(iii) of this section is used, the owner or operator shall calculate both the organic HAP and VOC emission reduction using equation:

$$P = \frac{E_b - E_a}{E_b} \times 100 \quad Eq. 19$$

where:

P=organic HAP or VOC emission reduction, percent.

E_b = organic HAP or VOC emissions, in pounds, before the alternative application technique was implemented, as determined under paragraph (i)(2)(i) of this section.

E_a = organic HAP or VOC emissions, in pounds, after the alternative application technique was implemented, as determined under paragraph (i)(2)(ii) of this section.

(3) Each owner or operator seeking to demonstrate that an alternative application method achieves emission reductions equivalent to HVLP or electrostatic spray application methods shall comply with the following:

(i) Each coating shall be applied such that the dried film thickness is within the range specified by the applicable specification(s) for the aerospace vehicle or component being coated.

(ii) If no such dried film thickness specification(s) exists, the owner or operator shall ensure that the dried film thickness applied during the initial 30-day period is equivalent to the dried film thickness applied during the alternative application method test period for similar aerospace vehicles or components.

(iii) Failure to comply with these dried film thickness requirements shall invalidate the test results obtained under paragraph (i)(2)(i) of this section.

(j) *Spot stripping and decal removal.* Each owner or operator seeking to comply with §63.746(b)(3) shall determine the volume of organic HAP-containing chemical strippers or alternatively the weight of organic HAP used per aircraft using the procedure specified in paragraphs (j)(1) through (j)(3) of this section.

(1) For each chemical stripper used for spot stripping and decal removal, determine for each annual period the total volume as applied or the total weight of organic HAP using the procedure specified in paragraph (d)(2) of this section.

(2) Determine the total number of aircraft for which depainting operations began during the annual period as determined from company records.

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(3) Calculate the annual average volume of organic HAP-containing chemical stripper or weight of organic HAP used for spot stripping and decal removal per aircraft using equation 20 (volume) or equation 21 (weight):

$$C = \frac{\sum_{i=1}^n V_{si}}{A} \quad \text{Eq. 20}$$

where:

C=annual average volume (gal per aircraft) of organic HAP-containing chemical stripper used for spot stripping and decal removal.

n=number of organic HAP-containing chemical strippers used in the annual period.

V_{si} = volume (gal) of organic HAP-containing chemical stripper (i) used during the annual period.

A=number of aircraft for which depainting operations began during the annual period.

$$C = \frac{\sum_{i=1}^n \left(V_{si} D_{ki} \left(\sum_{k=1}^m W_{ki} \right) \right)}{A} \quad \text{Eq. 21}$$

where:

C = annual average weight (lb per aircraft) of organic HAP (chemical stripper) used for spot stripping and decal removal.

m = number of organic HAP contained in each chemical stripper, as applied.

n = number of organic HAP-containing chemical strippers used in the annual period.

W_{hi} = weight fraction (expressed as a decimal) of each organic HAP (i) contained in the chemical stripper, as applied, for each aircraft depainted.

D_{hi} = density (lb/gal) of each organic HAP-containing chemical stripper (i), used in the annual period.

V_{si} = volume (gal) of organic HAP-containing chemical stripper (i) used during the annual period.

A = number of aircraft for which depainting operations began during the annual period.

(k) *Organic HAP content level determination—compliant chemical milling maskants.* For those uncontrolled chemical milling maskants complying with the chemical milling maskant organic HAP content limit specified in §63.747(c)(1) without being averaged, the following procedures shall be used to determine the mass of organic HAP emitted per unit volume of coating (chemical milling maskant) i as applied (less water), H_i (lb/gal).

(1) For coatings that contain no exempt solvents, determine the total organic HAP content using manufacturer's supplied data or Method 24 of 40 CFR part 60, appendix A to determine the VOC content. The VOC content shall be used as a surrogate for total HAP content for coatings that contain no exempt solvent. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24 analysis, compliance shall be based on the results from the Method 24 analysis.

When Method 24 is used to determine the VOC content of water-reducible coatings, the precision adjustment factors in Reference Method 24 shall be used. If the adjusted analytical VOC content is less than the formulation solvent content, then the analytical VOC content should be set equal to the formulation solvent content.

(2) [Reserved]

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(l) *Organic HAP content level determination—averaged chemical milling maskants.* For those uncontrolled chemical milling maskants that are averaged together in order to comply with the chemical milling maskant organic HAP content level specified in §63.747(c)(1), the procedure specified in paragraphs (l)(1) through (l)(4) of this section shall be used to determine the monthly volume-weighted average mass of organic HAP emitted per volume of chemical milling maskant (less water) as applied, unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program.

(1) Determine the total organic HAP weight fraction as applied of each chemical milling maskant used during each 30-day period using the procedure specified in paragraph (d)(1) of this section.

(2) Determine for each 30-day period:

(i) The individual volume of each chemical milling maskant applied in terms of total gallons (less water) (using the procedure specified in paragraph (d)(2) of this section), and

(ii) The total volume in gallons of all chemical milling maskants (less water) as applied by summing the individual volumes of each chemical milling maskant as applied (less water).

(3) Determine the density of each chemical milling maskant as applied used during each 30-day period using the procedure specified in paragraph (d)(3) of this section.

(4) Calculate the volume-weighted average mass of organic HAP emitted per unit volume (lb/gal) of chemical milling maskant (less water) as applied for all chemical milling maskants during each 30-day period using equation 22:

$$H_a = \frac{\sum_{i=1}^n W_{Hi} D_{mi} V_{mi}}{M_{lw}} \quad \text{Eq. 22}$$

where:

H_a = volume-weighted mass of organic HAP emitted per unit volume of chemical milling maskants (lb/gal) (less water) as applied during each 30-day period for those chemical milling maskants being averaged.

n = number of chemical milling maskants being averaged.

W_{Hi} = weight fraction (expressed as a decimal) of organic HAP in chemical milling maskant i (less water) as applied during each 30-day period that is averaged.

D_{mi} = density (lb chemical milling maskant per gal coating) of chemical milling maskant i as applied during each 30-day period that is averaged.

V_{mi} = volume (gal) of chemical milling maskant i (less water) as applied during the 30-day period that is averaged.

M_{lw} = total volume (gal) of all chemical milling maskants (less water) as applied during each 30-day period that is averaged.

(m) *VOC content level determination—compliant chemical milling maskants.* For those uncontrolled chemical milling maskants complying with the chemical milling maskant VOC content limit specified in §63.747(c)(2) without being averaged, the procedure specified in paragraphs (m)(1) and (m)(2) of this section shall be used to determine the mass of VOC emitted per volume of chemical milling maskant (less water and exempt solvents) as applied.

(1) Determine the mass of VOC emitted per unit volume of chemical milling maskant (lb/gal) (less water and exempt solvents) as applied, G_i , for each chemical milling maskant using the procedures specified in paragraphs (e)(1) and (e)(2) of this section.

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(2)(i) If the VOC content is found to be different when EPA Method 24 is used during an enforcement inspection from that used by the owner or operator in calculating G_a , compliance shall be based, except as provided in paragraph (m)(2)(ii) of this section, upon the VOC content obtained using EPA Method 24.

(ii) If the VOC content of a chemical milling maskant obtained using EPA Method 24 would indicate noncompliance as determined under §63.749(h)(3)(i), an owner or operator may elect to average the chemical milling maskant with other uncontrolled chemical milling maskants and (re)calculate G_a (using the procedure specified in paragraph (n) of this section), provided appropriate and sufficient records were maintained for all chemical milling maskants included in the average recalculation. The (re)calculated value of G_a for the averaged chemical milling maskants shall then be used to determine compliance.

(n) *VOC content level determination—averaged chemical milling maskants.* For those uncontrolled chemical milling maskants that are averaged together in order to comply with the chemical milling maskant VOC content limit specified in §63.747(c)(2), the procedure specified in paragraphs (n)(1) through (n)(4) of this section shall be used to determine the monthly volume-weighted average mass of VOC emitted per volume of chemical milling maskant (less water and exempt solvents) as applied, unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program.

(1) Determine the VOC content of each chemical milling maskant (less water and exempt solvents) as applied used during each 30-day period using the procedure specified in paragraph (f)(1) of this section.

(2)(i) Determine the individual volume of each chemical milling maskant applied in terms of total gallons (less water and exempt solvents) using the procedure specified in paragraph (f)(2) of this section, and

(ii) Calculate the total volume in gallons of all chemical milling maskants (less water and exempt solvents) as applied by summing the individual volumes of each chemical milling maskant (less water and exempt solvents) as applied.

(3) Calculate the volume-weighted average mass of VOC emitted per unit volume (lb/gal) of chemical milling maskant (less water and exempt solvents) as applied during each 30-day period using equation 23:

$$G_a = \frac{\sum_{i=1}^n (VOC)_{mi} V_{mi}}{M_{wes}} \quad \text{Eq. 23}$$

where:

G_a = volume-weighted average mass of VOC per unit volume of chemical milling maskant (lb/gal) (less water and exempt solvents) as applied during each 30-day period for those chemical milling maskants that are averaged.

n = number of chemical milling maskants being averaged.

$(VOC)_{mi}$ = VOC content (lb/gal) of chemical milling maskant i (less water and exempt solvents) as applied during the 30-day period that is averaged.

V_{mi} = volume (gal) of chemical milling maskant i (less water and exempt solvents) as applied during the 30-day period that is averaged.

M_{wes} = total volume (gal) of all chemical milling maskants (less water and exempt solvents) as applied during each 30-day period that is averaged.

(4)(i) If the VOC content is found to be different when EPA Method 24 is used during an enforcement inspection from that used by the owner or operator in calculating G_a , recalculation of G_a is required using the new value. If more than one chemical milling maskant is involved, the recalculation shall be made once using all of the new values.

§63.750	<p>(ii) If recalculation is required, an owner or operator may elect to include in the recalculation of G_a uncontrolled chemical milling maskants that were not previously included provided appropriate and sufficient records were maintained for these other chemical milling maskants to allow daily recalculations.</p> <p>(iii) The recalculated value of G_a under either paragraph (n)(4)(i) or (n)(4)(ii) of this section shall be used to determine compliance.</p> <p>(o) <i>Inorganic HAP emissions—dry particulate filter certification requirements.</i> Dry particulate filters used to comply with §63.745(g)(2) or §63.746(b)(4) must be certified by the filter manufacturer or distributor, paint/depainting booth supplier, and/or the facility owner or operator using method 319 in appendix A of this part, to meet or exceed the efficiency data points found in Tables 1 and 2, or 3 and 4 of §63.745 for existing or new sources respectively.</p>
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Monitoring Requirements

§63.751	<p>(a) <i>Enclosed spray gun cleaners.</i> Each owner or operator using an enclosed spray gun cleaner under §63.744(c)(1) shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation.</p> <p>(b) <i>Incinerators and carbon absorbers—initial compliance demonstrations.</i> Each owner or operator subject to the requirements in this subpart must demonstrate initial compliance with the requirements of §63.745(d), 63.746(c), and 63.747(d) of this subpart. Each owner or operator using a carbon adsorber to comply with the requirements in this subpart shall comply with the requirements specified in paragraphs (b)(1) through (7) of this section. Each owner or operator using an incinerator to comply with the requirements in this subpart shall comply with the requirements specified in paragraphs (b)(8) through (12) of this section.</p> <p>(1) Except as allowed by paragraph (b)(2) or (b)(5) of this section, for each control device used to control organic HAP or VOC emissions, the owner or operator shall fulfill the requirements of paragraph (b)(1) (i) or (ii) of this section.</p> <p>(i) The owner or operator shall establish as a site-specific operating parameter the outlet total HAP or VOC concentration that demonstrates compliance with §63.745(d), §63.746(c), or §63.747(d) as appropriate; or</p> <p>(ii) The owner or operator shall establish as the site-specific operating parameter the control device efficiency that demonstrates compliance with §63.745(d), §63.746(c), or §63.747(d).</p> <p>(iii) When a nonregenerative carbon adsorber is used to comply with §63.745(d), §63.746(c), or §63.747(d), the site-specific operating parameter value may be established as part of the design evaluation used to demonstrate initial compliance. Otherwise, the site-specific operating parameter value shall be established during the initial performance test conducted according to the procedures of §63.750(g).</p>
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(2) For each nonregenerative carbon adsorber, in lieu of meeting the requirements of §63.751(b)(1), the owner or operator may establish as the site-specific operating parameter the carbon replacement time interval, as determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system. The carbon replacement time interval shall be established either as part of the design evaluation to demonstrate initial compliance or during the initial performance test conducted according to the procedures in §63.750(g) (1), (2), (3), or (4).

(3) Each owner or operator venting solvent HAP emissions from a source through a room, enclosure, or hood, to a control device to comply with §63.745(d), §63.746(c), or §63.747(d) shall:

(i) Submit to the Administrator with the compliance status report required by §63.9(h) of the General Provisions a plan that:

(A) Identifies the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained;

(B) Discusses why this parameter is appropriate for demonstrating ongoing compliance; and

(C) Identifies the specific monitoring procedures;

(ii) Set the operating parameter value, or range of values, that demonstrate compliance with §63.745(d), §63.746(c), or §63.747(d), as appropriate; and

(iii) Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.

(4) Owners or operators subject to §63.751(b) (1), (2), or (3) shall calculate the site-specific operating parameter value, or range of values, as the arithmetic average of the maximum and/or minimum operating parameter values, as appropriate, that demonstrate compliance with §63.745(d), §63.746(c), or §63.747(d) during the multiple test runs required by §63.750 (g)(2) and (g)(1).

(5) For each solvent recovery device used to comply with §63.745(d), §63.746(c), or §63.747(d), in lieu of meeting the requirements of paragraph (b)(1) of this section, the results of the material balance calculation conducted in accordance with §63.750(g)(1) may serve as the site-specific operating parameter that demonstrates compliance with §63.745(d), §63.746(c), or §63.747(d).

(6) *Continuous compliance monitoring.* Following the date on which the initial compliance demonstration is completed, continuous compliance with §63.745(d), §63.746(c), or §63.747(d) of this subpart shall be demonstrated as outlined in this paragraph.

(i) Each owner or operator of an affected source subject to §63.745(d), §63.746(c), or §63.747(d) of this subpart shall monitor the applicable parameters specified in paragraph (b)(6)(ii), (b)(6)(iii), or (b)(6)(iv) of this section depending on the type of control technique used.

(ii) Compliance monitoring shall be subject to the following provisions:

(A) Except as allowed by paragraph (b)(6)(iii)(A)(2) of this section, all continuous emission monitors shall comply with performance specification (PS) 8 or 9 in 40 CFR part 60, appendix B, as appropriate depending on whether VOC or HAP concentration is being measured. The requirements in appendix F of 40 CFR part 60 shall also be followed. In conducting the quarterly audits required by appendix F, owners or operators shall challenge the monitors with compounds representative of the gaseous emission stream being controlled.

<p>§63.751</p>	<p>(B) If the effluent from multiple emission points are combined prior to being channeled to a common control device, the owner or operator is required only to monitor the common control device, not each emission point.</p> <p>(iii) Owners or operators complying with §63.745(d), §63.746(c), or §63.747(d) through the use of a control device and establishing a site-specific operating parameter in accordance with paragraph (b)(1) of this section shall fulfill the requirements of paragraph (b)(6)(iii)(A) of this section and paragraph (b)(6)(iii)(B) or (C) of this section, as appropriate.</p> <p>(A) The owner or operator shall install, calibrate, operate, and maintain a continuous emission monitor.</p> <p>(I) The continuous emission monitor shall be used to measure continuously the total HAP or VOC concentration at both the inlet and the outlet whenever HAP from coating and paint stripping operations are vented to the control device, or when continuous compliance is demonstrated through a percent efficiency calculation; or</p> <p>(2) For owners or operators using a nonregenerative carbon adsorber, in lieu of using continuous emission monitors as specified in paragraph (b)(6)(iii)(A)(I) of this section, the owner or operator may use a portable monitoring device to monitor total HAP or VOC concentration at the inlet and outlet or the outlet of the carbon adsorber as appropriate.</p> <p>(a) The monitoring device shall be calibrated, operated, and maintained in accordance with the manufacturer's specifications.</p> <p>(b) The monitoring device shall meet the requirements of part 60, appendix A, Method 21, sections 2, 3, 4.1, 4.2, and 4.4. The calibration gas shall either be representative of the compounds to be measured or shall be methane, and shall be at a concentration associated with 125% of the expected organic compound concentration level for the carbon adsorber outlet vent.</p> <p>(c) The probe inlet of the monitoring device shall be placed at approximately the center of the carbon adsorber outlet vent. The probe shall be held there for at least 5 minutes during which flow into the carbon adsorber is expected to occur. The maximum reading during that period shall be used as the measurement.</p> <p>(B) If complying with §63.745(d), §63.746(c), or §63.747(d) through the use of a carbon adsorption system with a common exhaust stack for all of the carbon vessels, the owner or operator shall not operate the control device at an average control efficiency less than that required by §63.745(d), §63.746(c), or §63.747(d) for three consecutive adsorption cycles.</p> <p>(C) If complying with §63.745(d), §63.746(c), or §63.747(d) through the use of a carbon adsorption system with individual exhaust stacks for each of the multiple carbon adsorber vessels, the owner or operator shall not operate any carbon adsorber vessel at an average control efficiency less than that required by §63.745(d), §63.746(c), or §63.747(d) as calculated daily using a 7 to 30-day rolling average.</p> <p>(D) If complying with §63.745(d), §63.746(c), or §63.747(d) through the use of a nonregenerative carbon adsorber, in lieu of the requirements of paragraph (b)(6)(iii) (B) or (C) of this section, the owner or operator may monitor the VOC or HAP concentration of the adsorber exhaust daily, at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater, or at a frequency as determined by the owner or operator and approved by the Administrator.</p>
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<p>§63.751</p>	<p>(iv) Owners or operators complying with §63.745(d), §63.746(c), or §63.747(d) through the use of a nonregenerative carbon adsorber and establishing a site-specific operating parameter for the carbon replacement time interval in accordance with paragraph (b)(2) shall replace the carbon in the carbon adsorber system with fresh carbon at the predetermined time interval as determined in the design evaluation.</p> <p>(v) Owners or operators complying with §63.745(d), §63.746(c), or §63.747(d) by capturing emissions through a room, enclosure, or hood shall install, calibrate, operate, and maintain the instrumentation necessary to measure continuously the site-specific operating parameter established in accordance with paragraph (b)(3) of this section whenever VOC and HAP from coating and stripper operations are vented through the capture device. The capture device shall not be operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with paragraph (b)(3) of this section for any 3-hour period.</p> <p>(7) Owners or operators complying with paragraph (b)(4) or (b)(5) of this section shall calculate the site-specific operating parameter value as the arithmetic average of the minimum operating parameter values that demonstrate compliance with §63.745(d) and §63.747(d) during the three test runs required by §63.750(h)(2)(iv).</p> <p>(8) All temperature monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications. Every 3 months, facilities shall replace the temperature sensors or have the temperature sensors recalibrated. As an alternative, a facility may use a continuous emission monitoring system (CEMS) to verify that there has been no change in the destruction efficiency and effluent composition of the incinerator.</p> <p>(9) Where an incinerator other than a catalytic incinerator is used, a thermocouple equipped with a continuous recorder shall be installed and continuously operated in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.</p> <p>(10) Where a catalytic incinerator is used, thermocouples, each equipped with a continuous recorder, shall be installed and continuously operated in the gas stream immediately before and after the catalyst bed.</p> <p>(11) For each incinerator other than a catalytic incinerator, each owner or operator shall establish during each performance test during which compliance is demonstrated, including the initial performance test, the minimum combustion temperature as a site-specific operating parameter. This minimum combustion temperature shall be the operating parameter value that demonstrates compliance with §63.745(d) and §63.747(d).</p> <p>(12) For each catalytic incinerator, each owner or operator shall establish during each performance test during which compliance is demonstrated, including the initial performance test, the minimum gas temperature upstream of the catalyst bed and the minimum gas temperature difference across the catalyst bed as site-specific operating parameters. These minimum temperatures shall be the operating parameter values that demonstrate compliance with §63.745(d) and §63.747(d).</p> <p>(c) <i>Dry particulate filter, HEPA filter, and waterwash systems—primer and topcoat application operations.</i> (1) Each owner or operator using a dry particulate filter system to meet the requirements of §63.745(g)(2) shall, while primer or topcoat application operations are occurring, continuously monitor the pressure drop across the system and read and record the pressure drop once per shift following the recordkeeping requirements of §63.752(d).</p>
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(2) Each owner or operator using a conventional waterwash system to meet the requirements of §63.745(g)(2) shall, while primer or topcoat application operations are occurring, continuously monitor the water flow rate through the system and read and record the water flow rate once per shift following the recordkeeping requirements of §63.752(d). Each owner or operator using a pumpless waterwash system to meet the requirements of §63.745(g)(2) shall, while primer and topcoat application operations are occurring, measure and record the parameter(s) recommended by the booth manufacturer that indicate booth performance once per shift, following the recordkeeping requirements of §63.752(d).

(d) *Particulate filters and waterwash booths—depainting operations.* Each owner or operator using a dry particulate filter or a conventional waterwash system in accordance with the requirements of §63.746(b)(4) shall, while depainting operations are occurring, continuously monitor the pressure drop across the particulate filters or the water flow rate through the conventional waterwash system and read and record the pressure drop or the water flow rate once per shift following the recordkeeping requirements of §63.752(e). Each owner or operator using a pumpless waterwash system to meet the requirements of §63.746(b)(4) shall, while depainting operations are occurring, measure and record the parameter(s) recommended by the booth manufacturer that indicate booth performance once per shift, following the recordkeeping requirements of §63.752(e).

(e) *Use of an alternative monitoring method—(1) General.* Until permission to use an alternative monitoring method has been granted by the Administrator under this paragraph, the owner or operator of an affected source shall remain subject to the requirements of this section.

(2) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this section including, but not limited to, the following:

(i) Alternative monitoring requirements when the affected source is infrequently operated; or

(ii) Alternative locations for installing continuous monitoring systems when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements; or

(iii) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified in this section.

(3) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section. If the results of the specified and the alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail.

(4)(i) *Request to use alternative monitoring method.* An owner or operator who wishes to use an alternative monitoring method shall submit an application to the Administrator as described in paragraph (e)(4)(ii) of this section. The application may be submitted at any time provided that the monitoring method is not used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring method is to be used to demonstrate compliance with a relevant standard, the application shall be submitted not later than with the site-specific test plan required in §63.7(c) (if requested) or with the site-specific performance evaluation plan (if requested), or at least 60 days before the performance evaluation is scheduled to begin.

(ii) The application shall contain a description of the proposed alternative monitoring system and information justifying the owner's or operator's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.

<p>§63.751</p>	<p>(iii) The owner or operator may submit the information required in this paragraph well in advance of the submittal dates specified in paragraph (e)(4)(i) of this section to ensure a timely review by the Administrator in order to meet the compliance demonstration date specified in this subpart.</p> <p>(5) <i>Approval of request to use alternative monitoring method.</i> (i) The Administrator will notify the owner or operator of his/her intention to deny approval of the request to use an alternative monitoring method within 60 calendar days after receipt of the original request and within 60 calendar days after receipt of any supplementary information that is submitted. If notification of intent to deny approval is not received within 60 calendar days, the alternative monitoring method is to be considered approved. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intent to disapprove the request together with:</p> <p>(A) Notice of the information and findings on which the intended disapproval is based; and</p> <p>(B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.</p> <p>(ii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (e)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until approval is received from the Administrator to use another monitoring method as allowed by paragraph (e) of this section.</p> <p>(f) <i>Reduction of monitoring data.</i> (1) The data may be recorded in reduced or nonreduced form (e.g., parts per million (ppm) pollutant and % O₂ or nanograms per Joule (ng/J) of pollutant).</p> <p>(2) All emission data shall be converted into units specified in this subpart for reporting purposes. After conversion into units specified in this subpart, the data may be rounded to the same number of significant digits as used in this subpart to specify the emission limit (e.g., rounded to the nearest 1% overall reduction efficiency).</p>
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Recordkeeping Requirements

<p>§63.752</p>	<p>(a) <i>General.</i> Each owner or operator of a source subject to this subpart shall fulfill all recordkeeping requirements specified in §63.10 (a), (b), (d), and (f).</p> <p>(b) <i>Cleaning operation.</i> Each owner or operator of a new or existing cleaning operation subject to this subpart shall record the information specified in paragraphs (b)(1) through (b)(5) of this section, as appropriate.</p> <p>(1) The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility.</p> <p>(2) For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in §63.744(b)(1) or for semi-aqueous cleaning solvents used for flush cleaning operations:</p> <p>(i) The name of each cleaning solvent used;</p>
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(ii) All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and

(iii) Annual records of the volume of each solvent used, as determined from facility purchase records or usage records.

(3) For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in §63.744(b)(1), but does comply with the vapor pressure requirement in §63.744(b)(2):

(i) The name of each cleaning solvent used;

(ii) The composite vapor pressure of each cleaning solvent used;

(iii) All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and

(iv) The amount (in gallons) of each cleaning solvent used each month at each operation.

(4) For each cleaning solvent used for the exempt hand-wipe cleaning operations specified in §63.744(e) that does not conform to the vapor pressure or composition requirements of §63.744(b):

(i) The identity and amount (in gallons) of each cleaning solvent used each month at each operation; and

(ii) A list of the processes set forth in §63.744(e) to which the cleaning operation applies.

(5) A record of all leaks from enclosed spray gun cleaners identified pursuant to §63.751(a) that includes for each leak found:

(i) Source identification;

(ii) Date leak was discovered; and

(iii) Date leak was repaired.

(c) *Primer and topcoat application operations—organic HAP and VOC.* Each owner or operator required to comply with the organic HAP and VOC content limits specified in §63.745(c) shall record the information specified in paragraphs (c)(1) through (c)(6) of this section, as appropriate.

(1) The name and VOC content as received and as applied of each primer and topcoat used at the facility.

(2) For uncontrolled primers and topcoats that meet the organic HAP and VOC content limits in §63.745(c)(1) through (c)(4) without averaging:

(i) The mass of organic HAP emitted per unit volume of coating as applied (less water) (H_i) and the mass of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (G_i) for each coating formulation within each coating category used each month (as calculated using the procedures specified in §63.750(c) and (e));

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(ii) All data, calculations, and test results (including EPA Method 24 results) used in determining the values of H_i and G_i ; and

(iii) The volume (gal) of each coating formulation within each coating category used each month.

(3) For “low HAP content” uncontrolled primers with organic HAP content less than or equal to 250 g/l (2.1 lb/gal) less water as applied and VOC content less than or equal to 250 g/l (2.1 lb/gal) less water and exempt solvents as applied:

(i) Annual purchase records of the total volume of each primer purchased; and

(ii) All data, calculations, and test results (including EPA Method 24 results) used in determining the organic HAP and VOC content as applied. These records shall consist of the manufacturer's certification when the primer is applied as received, or the data and calculations used to determine H_i if not applied as received.

(4) For primers and topcoats complying with the organic HAP or VOC content level by averaging:

(i) The monthly volume-weighted average masses of organic HAP emitted per unit volume of coating as applied (less water) (H_a) and of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (G_a) for all coatings (as determined by the procedures specified in §63.750(d) and (f)); and

(ii) All data, calculations, and test results (including EPA Method 24 results) used to determine the values of H_a and G_a .

(5) For primers and topcoats that are controlled by a control device other than a carbon adsorber:

(i) The overall control efficiency of the control system (as determined using the procedures specified in §63.750(h)) and all test results, data, and calculations used in determining the overall control efficiency;

(ii) If an incinerator other than a catalytic incinerator is used, continuous records of the firebox temperature recorded under §63.751(b)(9) and all calculated 3-hour averages of the firebox temperature; and

(iii) If a catalytic incinerator is used, continuous records of the temperature recorded under §63.751(b)(10) and all calculated 3-hour averages of the recorded temperatures.

(6) For primer and topcoats that are controlled by a carbon adsorber:

(i) The overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The length of the rolling material balance period and all data and calculations used for determining this rolling period. The record of the certification of the accuracy of the device that measures the amount of HAP or VOC recovered; or

(ii) For nonregenerative carbon absorbers, the overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The record of the carbon replacement time established as the site-specific operating parameter to demonstrate compliance.

<p>§63.752</p>	<p>(d) <i>Primer and topcoat application operations—inorganic HAP emissions.</i> (1) Each owner or operator complying with §63.745(g) for the control of inorganic HAP emissions from primer and topcoat application operations through the use of a dry particulate filter system or a HEPA filter system shall record the pressure drop across the operating system once each shift during which coating operations occur.</p> <p>(2) Each owner or operator complying with §63.745(g) through the use of a conventional waterwash system shall record the water flow rate through the operating system once each shift during which coating operations occur. Each owner or operator complying with §63.745(g) through the use of a pumpless waterwash system shall record the parameter(s) recommended by the booth manufacturer that indicate the performance of the booth once each shift during which coating operations occur.</p> <p>(3) This log shall include the acceptable limit(s) of pressure drop, water flow rate, or for the pumpless waterwash booth, the booth manufacturer recommended parameter(s) that indicate the booth performance, as applicable, as specified by the filter or booth manufacturer or in locally prepared operating procedures.</p> <p>(e) <i>Depainting operations.</i> Each owner or operator subject to the depainting standards specified in §63.746 shall record the information specified in paragraphs (e)(1) through (e)(7) of this section, as appropriate.</p> <p>(1) <i>General.</i> For all chemical strippers used in the depainting operation:</p> <p>(i) The name of each chemical stripper; and</p> <p>(ii) Monthly volumes of each organic HAP containing chemical stripper used or monthly weight of organic HAP-material used for spot stripping and decal removal.</p> <p>(2) For HAP-containing chemical strippers that are controlled by a carbon adsorber:</p> <p>(i) The overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The length of the rolling material balance period and all data and calculations used for determining this rolling period. The record of the certification of the accuracy of the device that measures the amount of HAP or VOC recovered; or</p> <p>(ii) For nonregenerative carbon absorbers, the overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The record of the carbon replacement time established as the site-specific operating parameter to demonstrate compliance.</p> <p>(3) For HAP-containing chemical strippers that are controlled by a control device other than a carbon adsorber:</p> <p>(i) The overall control efficiency of the control system (as determined using the procedures specified in §63.750(h)) and all test results, data, and calculations used in determining the overall control efficiency;</p> <p>(ii) [Reserved]</p>
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(4) For each type of aircraft depainted at the facility, a listing of the parts, subassemblies, and assemblies normally removed from the aircraft before depainting. Prototype, test model or aircraft that exist in low numbers (i.e., less than 25 aircraft of any one type) are exempt from this requirement.

(5) *Non-chemical based equipment.* If dry media blasting equipment is used to comply with the organic HAP emission limit specified in §63.746(b)(1):

- (i) The names and types of non-chemical based equipment; and
- (ii) For periods of malfunction,
 - (A) The non-chemical method or technique that malfunctioned;
 - (B) The date that the malfunction occurred;
 - (C) A description of the malfunction;
 - (D) The methods used to depaint aerospace vehicles during the malfunction period;
 - (E) The dates that these methods were begun and discontinued; and
 - (F) The date that the malfunction was corrected.

(6) *Spot stripping and decal removal.* For spot stripping and decal removal, the volume of organic HAP-containing chemical stripper or weight of organic HAP used, the annual average volume of organic HAP-containing chemical stripper or weight of organic HAP used per aircraft, the annual number of aircraft stripped, and all data and calculations used.

(7) *Inorganic HAP emissions.* Each owner or operator shall record the actual pressure drop across the particulate filters or the visual continuity of the water curtain and water flow rate for conventional waterwash systems once each shift in which the depainting process is in operation. For pumpless waterwash systems, the owner or operator shall record the parameter(s) recommended by the booth manufacturer that indicate the performance of the booth once per shift in which the depainting process is in operation. This log shall include the acceptable limit(s) of the pressure drop as specified by the filter manufacturer, the visual continuity of the water curtain and the water flow rate for conventional waterwash systems, or the recommended parameter(s) that indicate the booth performance for pumpless systems as specified by the booth manufacturer or in locally prepared operating procedures.

(f) *Chemical milling maskant application operations.* Each owner or operator seeking to comply with the organic HAP and VOC content limits for the chemical milling maskant application operation, as specified in §63.747(c), or the control system requirements specified in §63.747(d), shall record the information specified in paragraphs (f)(1) through (f)(4) of this section, as appropriate.

(1) For uncontrolled chemical milling maskants that meet the organic HAP or VOC content limit without averaging:

(i) The mass of organic HAP emitted per unit volume of chemical milling maskant as applied (less water) (H_i) and the mass of VOC emitted per unit volume of chemical milling maskant as applied (less water and exempt solvents) (G_i) for each chemical milling maskant formulation used each month (as determined by the procedures specified in §63.750 (k) and (m));

<p>§63.752</p>	<p>(ii) All data, calculations, and test results (including EPA Method 24 results) used in determining the values of H_i and G_i; and</p> <p>(iii) The volume (gal) of each chemical milling maskant formulation used each month.</p> <p>(2) For chemical milling maskants complying with the organic HAP or VOC content level by averaging:</p> <p>(i) The monthly volume-weighted average masses of organic HAP emitted per unit volume of chemical milling maskant as applied (less water) (H_a) and of VOC emitted per unit volume of chemical milling maskant as applied (less water and exempt solvents) (G_a) for all chemical milling maskants (as determined by the procedures specified in §63.750 (l) and (n)); and</p> <p>(ii) All data, calculations, and test results (including EPA Method 24 results) used to determine the values of H_a and G_a.</p> <p>(3) For chemical milling maskants that are controlled by a carbon adsorber:</p> <p>(i) The overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The length of the rolling material balance period and all data and calculations used for determining this rolling period. The record of the certification of the accuracy of the device that measures the amount of HAP or VOC recovered; or</p> <p>(ii) For nonregenerative carbon absorbers, the overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The record of the carbon replacement time established as the site-specific operating parameter to demonstrate compliance.</p> <p>(4) For chemical milling maskants that are controlled by a control device other than a carbon adsorber:</p> <p>(i) The overall control efficiency of the control system (as determined using the procedures specified in §63.750(h)) and all test results, data, and calculations used in determining the overall control efficiency;</p> <p>(ii) If an incinerator other than a catalytic incinerator is used, continuous records of the firebox temperature recorded under §63.751(b)(9) and all calculated 3-hour averages of the firebox temperature; and</p> <p>(iii) If a catalytic incinerator is used, continuous records of the temperature recorded under §63.751(b)(10) and all calculated 3-hour averages of the recorded temperatures.</p>
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Reporting Requirements

<p>§63.753</p>	<p>(a)(1) Except as provided in paragraphs (a)(2) and (a)(3) of this section, each owner or operator subject to this subpart shall fulfill the requirements contained in §63.9(a) through (e) and (h) through (j), Notification requirements, and §63.10(a), (b), (d), and (f), Recordkeeping and reporting requirements, of the General Provisions, 40 CFR part 63, subpart A, and that the initial notification for existing sources required in §63.9(b)(2) shall be submitted not later than September 1, 1997. In addition to the requirements of §63.9(h), the notification of compliance status shall include:</p> <p>(i) Information detailing whether the source has operated within the specified ranges of its designated operating parameters.</p> <p>(ii) For each coating line, where averaging will be used along with the types of quantities of coatings the facility expects to use in the first year of operation. Averaging scheme shall be approved by the Administrator or delegated State authority and shall be included as part of the facility's title V or part 70 permit.</p> <p>(2) The initial notification for existing sources, required in §63.9(b)(2) shall be submitted no later than September 1, 1997. For the purposes of this subpart, a title V or part 70 permit application may be used in lieu of the initial notification required under §63.9(b)(2), provided the same information is contained in the permit application as required by §63.9(b)(2), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notifications.</p> <p>(3) For the purposes of this subpart, the Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment to a particular time period or postmark deadline submitted under §63.9(i) within 30 calendar days of receiving sufficient information to evaluate the request, rather than 15 calendar days as provided for in §63.9(i)(3).</p> <p>(b) <i>Cleaning operation.</i> Each owner or operator of a cleaning operation subject to this subpart shall submit the following information:</p> <p>(1) Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify:</p> <p>(i) Any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation;</p> <p>(ii) A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in §63.744(b)(1);</p> <p>(iii) Any instance where a noncompliant spray gun cleaning method is used;</p> <p>(iv) Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days; and</p> <p>(v) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.</p>
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<p>§63.753</p>	<p>(c) <i>Primer and topcoat application operations.</i> Each owner or operator of a primer or topcoat application operation subject to this subpart shall submit the following information:</p> <p>(1) Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify:</p> <p>(i) For primers and topcoats where compliance is not being achieved through the use of averaging or a control device, each value of H_i and G_i, as recorded under §63.752(c)(2)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.745(c);</p> <p>(ii) For primers and topcoats where compliance is being achieved through the use of averaging, each value of H_a and G_a, as recorded under §63.752(c)(4)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.745(c);</p> <p>(iii) If incinerators are used to comply with the standards, all periods when the 3-hour average combustion temperature(s) is (are) less than the average combustion temperature(s) established under §63.751(b) (11) or (12) during the most recent performance test during which compliance was demonstrated;</p> <p>(iv) If a carbon adsorber is used;</p> <p>(A) each rolling period when the overall control efficiency of the control system is calculated to be less than 81%, the initial material balance calculation, and any exceedances as demonstrated through the calculation; or,</p> <p>(B) for nonregenerative carbon absorbers, submit the design evaluation, the continuous monitoring system performance report, and any excess emissions as demonstrated through deviations of monitored values.</p> <p>(v) For control devices other than an incinerator or carbon adsorber, each exceedance of the operating parameter(s) established for the control device under the initial performance test during which compliance was demonstrated;</p> <p>(vi) All times when a primer or topcoat application operation was not immediately shut down when the pressure drop across a dry particulate filter or HEPA filter system, the water flow rate through a conventional waterwash system, or the recommended parameter(s) that indicate the booth performance for pumpless systems, as appropriate, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures;</p> <p>(vii) If the operations have been in compliance for the semiannual period, a statement that the operations have been in compliance with the applicable standards; and,</p> <p>(2) Annual reports beginning 12 months after the date of the notification of compliance status listing the number of times the pressure drop or water flow rate for each dry filter or waterwash system, as applicable, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures.</p> <p>(d) <i>Depainting operation.</i> Each owner or operator of a depainting operation subject to this subpart shall submit the following information:</p>
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§63.753

(1) Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify:

(i) Any 24-hour period where organic HAP were emitted from the depainting of aerospace vehicles, other than from the exempt operations listed in §63.746 (a), (b)(3), and (b)(5).

(ii) Any new chemical strippers used at the facility during the reporting period;

(iii) The organic HAP content of these new chemical strippers;

(iv) For each chemical stripper that undergoes reformulation, its organic HAP content;

(v) Any new non-chemical depainting technique in use at the facility since the notification of compliance status or any subsequent semiannual report was filed;

(vi) For periods of malfunctions:

(A) The non-chemical method or technique that malfunctioned;

(B) The date that the malfunction occurred;

(C) A description of the malfunction;

(D) The methods used to depaint aerospace vehicles during the malfunction period;

(E) The dates that these methods were begun and discontinued; and

(F) The date that the malfunction was corrected;

(vii) All periods where a nonchemical depainting operation subject to §63.746(b)(2) and (b)(4) for the control of inorganic HAP emissions was not immediately shut down when the pressure drop, water flow rate, or recommended booth parameter(s) was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operational procedures;

(viii) A list of new and discontinued aircraft models depainted at the facility over the last 6 months and a list of the parts normally removed for depainting for each new aircraft model being depainted; and

(ix) If the depainting operation has been in compliance for the semiannual period, a statement signed by a responsible company official that the operation was in compliance with the applicable standards.

(2) Annual reports occurring every 12 months from the date of the notification of compliance status that identify:

(i) The average volume per aircraft of organic HAP-containing chemical strippers or weight of organic HAP used for spot stripping and decal removal operations if it exceeds the limits specified in §63.746(b)(3); and

(ii) The number of times the pressure drop limit(s) for each filter system or the number of times the water flow rate limit(s) for each waterwash system were outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures.

<p>§63.753</p>	<p>(3) Where a control device is used to control organic HAP emissions, semiannual reports that identify:</p> <p>(i) If a carbon adsorber is used,</p> <p>(A) each rolling period when the overall control efficiency of the control system is calculated to be less than 81% for existing systems or less than 95% for new systems, the initial material balance calculation, and any exceedances as demonstrated through the calculation; or,</p> <p>(B) for nonregenerative carbon absorbers, submit the design evaluation, the continuous monitoring system performance report, and any excess emissions as demonstrated through deviations of monitored values.</p> <p>(ii) For control devices other than a carbon adsorber, each exceedance of the operating parameter(s) established for the control device under the initial performance test during which compliance was demonstrated;</p> <p>(iii) Descriptions of any control devices currently in use that were not listed in the notification of compliance status or any subsequent report.</p> <p>(e) <i>Chemical milling maskant application operation.</i> Each owner or operator of a chemical milling maskant application operation subject to this subpart shall submit semiannual reports occurring every 6 months from the date of the notification of compliance status that identify:</p> <p>(1) For chemical milling maskants where compliance is not being achieved through the use of averaging or a control device, each value of H_i and G_i, as recorded under §63.752(f)(1)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.747(c);</p> <p>(2) For chemical milling maskants where compliance is being achieved through the use of averaging, each value of H_a and G_a, as recorded under §63.752(f)(2)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.747(c);</p> <p>(3) Where a control device is used,</p> <p>(i) If incinerators are used to comply with the standards, all periods when the 3-hour average combustion temperature(s) is (are) less than the average combustion temperature(s) established under §63.751(b) (11) or (12) during the most recent performance test during which compliance was demonstrated;</p> <p>(ii) If a carbon adsorber is used,</p> <p>(A) Each rolling period when the overall control efficiency of the control system is calculated to be less than 81%, the initial material balance calculation, and any exceedances as demonstrated through the calculation; or,</p> <p>(B) For nonregenerative carbon absorbers, submit the design evaluation, the continuous monitoring system performance report, and any excess emissions as demonstrated through deviations of monitored values.</p>
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§63.753	<p>(iii) For control devices other than an incinerator or carbon adsorber, each exceedance of the operating parameter(s) established for the control device under the initial performance test during which compliance was demonstrated;</p> <p>(4) All chemical milling maskants currently in use that were not listed in the notification of compliance status or any other subsequent semiannual report;</p> <p>(5) Descriptions of any control devices currently in use that were not listed in the notification of compliance status or any subsequent report; and</p> <p>(6) If the operations have been in compliance for the semiannual period, a statement that the chemical milling maskant application operation has been in compliance with the applicable standards.</p>
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FEDERAL REGULATIONS
40 CFR 63 SUBPART AAAA
National Emission Standards for Hazardous Air Pollutants:
Municipal Solid Waste Landfills

Applicable provisions of 40 CFR 63 Subpart AAAA shall apply.

[68 FR 2238, Jan. 16, 2003, unless otherwise noted]

Purpose

§63.1930	This subpart establishes national emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills. This subpart requires all landfills described in §63.1935 to meet the requirements of 40 CFR part 60, subpart Cc or WWW and requires timely control of bioreactors. This subpart also requires such landfills to meet the startup, shutdown, and malfunction (SSM) requirements of the general provisions of this part and provides that compliance with the operating conditions shall be demonstrated by parameter monitoring results that are within the specified ranges. It also includes additional reporting requirements.
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Applicability

§63.1935	<p>You are subject to this subpart if you meet the criteria in paragraph (a) or (b) of this section.</p> <p>(a) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:</p> <ul style="list-style-type: none">(1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.(2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.(3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to §60.754(a) of the MSW landfills new source performance standards in 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan that applies to your landfill. <p>(b) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition, that includes a bioreactor, as defined in §63.1990, and that meets any one of the criteria in paragraphs (b)(1) through (3) of this section:</p> <ul style="list-style-type: none">(1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.(2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.(3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³ and that is not permanently closed as of January 16, 2003.
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Affected Source

§63.1940	<p>a) An affected source of this subpart is a MSW landfill, as defined in §63.1990, that meets the criteria in §63.1935(a) or (b). The affected source includes the entire disposal facility in a contiguous geographic space where household waste is placed in or on land, including any portion of the MSW landfill operated as a bioreactor.</p> <p>(b) A new affected source of this subpart is an affected source that commenced construction or reconstruction after November 7, 2000. An affected source is reconstructed if it meets the definition of reconstruction in 40 CFR 63.2 of subpart A.</p> <p>(c) An affected source of this subpart is existing if it is not new.</p>
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Compliance Dates

§63.1945	<p>(a) If your landfill is a new affected source, you must comply with this subpart by January 16, 2003 or at the time you begin operating, whichever is last.</p> <p>(b) If your landfill is an existing affected source, you must comply with this subpart by January 16, 2004.</p> <p>(c) If your landfill is a new affected source and is a major source or is collocated with a major source, you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.</p> <p>(d) If your landfill is an existing affected source and is a major source or is collocated with a major source, you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 13, 2004, whichever occurs later.</p> <p>(e) If your landfill is a new affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements of §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.</p> <p>(f) If your landfill is an existing affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 16, 2004, whichever occurs later.</p>
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Exemption

§63.1950	<p>You are no longer required to comply with the requirements of this subpart when you are no longer required to apply controls as specified in 40 CFR 60.752(b)(2)(v) of subpart WWW, or the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill.</p>
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Requirements

§63.1955	<p>(a) You must fulfill one of the requirements in paragraph (a)(1) or (2) of this section, whichever is applicable:</p> <p>(1) Comply with the requirements of 40 CFR part 60, subpart WWW.</p> <p>(2) Comply with the requirements of the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc.</p> <p>(b) If you are required by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in §§63.1960 through 63.1985 and with the general provisions of this part specified in table 1 of this subpart.</p> <p>(c) For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with this subpart, except that all affected sources must comply with the SSM requirements in Subpart A of this part as specified in Table 1 of this subpart and all affected sources must submit compliance reports every 6 months as specified in §63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.</p> <p>(d) If you own or operate a bioreactor that is located at a MSW landfill that is not permanently closed and has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³, then you must meet the requirements of paragraph (a) and the additional requirements in paragraphs (d)(1) and (2) of this section.</p> <p>(1) You must comply with the general provisions specified in Table 1 of this subpart and §§63.1960 through 63.1985 starting on the date you are required to install the gas collection and control system.</p> <p>(2) You must extend the collection and control system into each new cell or area of the bioreactor prior to initiating liquids addition in that area, instead of the schedule in 40 CFR 60.752(b)(2)(ii)(A)(2).</p>
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Compliance Determination

§63.1960	<p>Compliance is determined in the same way it is determined for 40 CFR part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.</p> <p>[68 FR 2238, Jan. 16, 2003, as amended at 71 FR 20462, Apr. 20, 2006]</p>
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Deviation

§63.1965	<p>A deviation is defined in §63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in paragraphs (a) through (c) of this section.</p> <p>(a) A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW are exceeded.</p> <p>(b) A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.</p> <p>(c) A deviation occurs when a SSM plan is not developed or maintained on site.</p> <p>[68 FR 2238, Jan. 16, 2003, as amended at 71 FR 20462, Apr. 20, 2006]</p>
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3-Hour Block Average Calculation

§63.1975	<p>Averages are calculated in the same way as they are calculated in 40 CFR part 60, subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) of this section are not to be included in any average computed under this subpart:</p> <p>(a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.</p> <p>(b) Startups.</p> <p>(c) Shutdowns.</p> <p>(d) Malfunctions.</p>
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Records and Reports

§63.1980	<p>(a) Keep records and reports as specified in 40 CFR part 60, subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months.</p> <p>(b) You must also keep records and reports as specified in the general provisions of 40 CFR part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.</p> <p>(c) For bioreactors at new affected sources you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by §63.1947(a)(2) of this subpart.</p>
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§63.1980

(d) For bioreactors at existing affected sources, you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the compliance date specified in §63.1947(b) of this subpart, unless you have previously submitted a compliance report for the bioreactor required by 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State plan or tribal plan.

(e) For bioreactors that are located at existing affected sources, but do not initiate liquids addition until later than the compliance date in §63.1947(b) of this subpart, you must submit the initial semiannual compliance report and performance tests results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by §63.1947(c) of this subpart.

(f) If you must submit a semiannual compliance report for a bioreactor as well as a semiannual compliance report for a conventional portion of the same landfill, you may delay submittal of a subsequent semiannual compliance report for the bioreactor according to paragraphs (f)(1) through (3) of this section so that the reports may be submitted on the same schedule.

(1) After submittal of your initial semiannual compliance report and performance test results for the bioreactor, you may delay submittal of the subsequent semiannual compliance report for the bioreactor until the date the initial or subsequent semiannual compliance report is due for the conventional portion of your landfill.

(2) You may delay submittal of your subsequent semiannual compliance report by no more than 12 months after the due date for submitting the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) for the bioreactor. The report shall cover the time period since the previous semiannual report for the bioreactor, which would be a period of at least 6 months and no more than 12 months.

(3) After the delayed semiannual report, all subsequent semiannual reports for the bioreactor must be submitted every 6 months on the same date the semiannual report for the conventional portion of the landfill is due.

(g) If you add any liquids other than leachate in a controlled fashion to the waste mass and do not comply with the bioreactor requirements in §§63.1947, 63.1955(c) and 63.1980(c) through (f) of this subpart, you must keep a record of calculations showing that the percent moisture by weight expected in the waste mass to which liquid is added is less than 40 percent. The calculation must consider the waste mass, moisture content of the incoming waste, mass of water added to the waste including leachate recirculation and other liquids addition and precipitation, and the mass of water removed through leachate or other water losses. Moisture level sampling or mass balances calculations can be used. You must document the calculations and the basis of any assumptions. Keep the record of the calculations until you cease liquids addition.

(h) If you calculate moisture content to establish the date your bioreactor is required to begin operating the collection and control system under §63.1947(a)(2) or (c)(2), keep a record of the calculations including the information specified in paragraph (g) of this section for 5 years. Within 90 days after the bioreactor achieves 40 percent moisture content, report the results of the calculation, the date the bioreactor achieved 40 percent moisture content by weight, and the date you plan to begin collection and control system operation.

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FEDERAL REGULATIONS
40 CFR 63 SUBPART ZZZZ
National Emissions Standards for Hazardous Air Pollutants for Stationary
Reciprocating Internal Combustion Engines

Applicable provisions of 40 CFR 63 Subpart ZZZZ shall apply.

[73 FR 3603, Jan. 18, 2008]

Purpose

§63.6580	Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.
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Applicability

§63.6585	<p>You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.</p> <p>(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.</p> <p>(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.</p> <p>(c) An area source of HAP emissions is a source that is not a major source.</p> <p>(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.</p> <p>(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.</p> <p>(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes operating according to the provisions specified in §63.6640(f).</p>
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§63.6585	<p>(1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).</p> <p>(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).</p> <p>(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).</p>
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Affected Source

§63.6590	<p>This subpart applies to each affected source.</p> <p>(a) <i>Affected source.</i> An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.</p> <p>(1) <i>Existing stationary RICE.</i></p> <p>(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.</p> <p>(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.</p> <p>(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.</p> <p>(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.</p> <p>(2) <i>New stationary RICE.</i> (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.</p> <p>(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.</p> <p>(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.</p>
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§63.6590

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

<p>§63.6590</p>	<p>(c) <i>Stationary RICE subject to Regulations under 40 CFR Part 60.</i> An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.</p> <p>(1) A new or reconstructed stationary RICE located at an area source;</p> <p>(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;</p> <p>(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;</p> <p>(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;</p> <p>(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;</p> <p>(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;</p> <p>(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.</p>
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Compliance Dates

<p>§63.6595</p>	<p>(a) <i>Affected sources.</i> (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.</p> <p>(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.</p> <p>(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.</p>
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<p>§63.6595</p>	<p>(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.</p> <p>(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.</p> <p>(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.</p> <p>(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.</p> <p>(b) <i>Area sources that become major sources.</i> If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.</p> <p>(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.</p> <p>(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.</p> <p>(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.</p>
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Emission Limitations and Operating Limitations: Stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions

<p>§63.6600</p>	<p>Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.</p> <p>(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.</p> <p>(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.</p>
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§63.6600	<p>(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.</p> <p>(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.</p>
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Emission Limitations: New or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions

§63.6601	<p>Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.</p>
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Emission Limitations and Other Requirements: Existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions

§63.6602	<p>If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations and other requirements in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.</p>
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Emission Limitations, Operating Limitations, and Other Requirements: Existing stationary RICE located at an area source of HAP emissions

§ 63.6603	<p>Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.</p> <p>(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.</p>
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(b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

(1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

(2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

(i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

(1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement.

(2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in §63.6625(g).

<p>§ 63.6603</p>	<p>You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in §63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.</p> <p>(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.</p> <p>(f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in §63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in §63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.</p>
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Fuel Requirements for Stationary CI RICE

<p>§ 63.6604</p>	<p>(a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.</p> <p>(b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.</p> <p>(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.</p> <p>(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2), or are on offshore vessels that meet §63.6603(c) are exempt from the requirements of this section.</p>
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General Requirements

§ 63.6605	<p>(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.</p> <p>(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.</p>
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Initial Performance Tests: RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

§ 63.6610	<p>If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.</p> <p>(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).</p> <p>(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).</p> <p>(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).</p> <p>(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.</p> <p>(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.</p> <p>(2) The test must not be older than 2 years.</p> <p>(3) The test must be reviewed and accepted by the Administrator.</p> <p>(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.</p> <p>(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.</p>
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Initial Performance Tests: New or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions

§ 63.6611	If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.
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Initial Performance Tests: Existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions

§ 63.6612	<p>If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.</p> <p>(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).</p> <p>(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.</p> <p>(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.</p> <p>(2) The test must not be older than 2 years.</p> <p>(3) The test must be reviewed and accepted by the Administrator.</p> <p>(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.</p>
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Subsequent Performance Tests

§ 63.6615	If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.
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Performance Tests and Other Procedures**§ 63.6620**

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.

(1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.

(3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 1})$$

Where:

C_i = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

C_o = concentration of CO, THC, or formaldehyde at the control device outlet, and

R = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 2})$$

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Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, $dsf/10^6$ Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, $dsf/10^6$ Btu)

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2 , as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

Where:

X_{CO_2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O_2 —15 percent O_2 , the defined O_2 correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 4})$$

Where:

C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O_2 .

C_d = Measured concentration of CO, THC, or formaldehyde, uncorrected.

X_{CO_2} = CO_2 correction factor, percent.

$\%CO_2$ = Measured CO_2 concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

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(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.*, operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.*, wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

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Monitoring, Installation, Collection, Operation, and Maintenance Requirements

§ 63.6625	<p>(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O₂ or CO₂ according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.</p> <p>(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.</p> <p>(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.</p> <p>(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.</p> <p>(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO₂ concentration.</p> <p>(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.</p> <p>(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.</p> <p>(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;</p> <p>(ii) Sampling interface (<i>e.g.</i>, thermocouple) location such that the monitoring system will provide representative measurements;</p> <p>(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;</p> <p>(iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and</p> <p>(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).</p> <p>(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.</p>
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(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

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(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet §63.6603(c) do not have to meet the requirements of this paragraph (g).

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

<p>§ 63.6625</p>	<p>(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.</p>
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Initial Compliance Demonstration

<p>§ 63.6630</p>	<p>(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.</p> <p>(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.</p> <p>(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.</p> <p>(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.</p> <p>(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:</p> <ol style="list-style-type: none"> (1) The compliance demonstration must consist of at least three test runs. (2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.
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<p>§ 63.6630</p>	<p>(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.</p> <p>(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.</p> <p>(5) You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.</p> <p>(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.</p>
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Continuous Compliance Demonstration: Monitor and Data Collection

<p>§ 63.6635</p>	<p>(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.</p> <p>(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.</p> <p>(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.</p>
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Continuous Compliance Demonstration: Emission Limitations, Operating Limitations, and Other Requirements

<p>§ 63.6640</p>	<p>(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.</p> <p>(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.</p>
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(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

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If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

<p>§ 63.6640</p>	<p>(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.</p> <p>(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:</p> <p>(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.</p> <p>(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.</p> <p>(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.</p> <p>(D) The power is provided only to the facility itself or to support the local transmission and distribution system.</p> <p>(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.</p>
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Notifications, Reports, and Records

<p>§63.6645</p>	<p>(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;</p> <p>(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.</p> <p>(2) An existing stationary RICE located at an area source of HAP emissions.</p> <p>(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.</p> <p>(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.</p> <p>(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.</p>
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(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in §63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in §63.6603(d) and identifying the state or local regulation that the engine is subject to.

Reporting Requirements

<p>§ 63.6650</p>	<p>(a) You must submit each report in Table 7 of this subpart that applies to you.</p> <p>(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.</p> <p>(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.</p> <p>(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.</p> <p>(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.</p> <p>(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.</p> <p>(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.</p> <p>(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.</p> <p>(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.</p> <p>(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.</p> <p>(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.</p> <p>(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.</p> <p>(1) Company name and address.</p> <p>(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.</p>
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<p>§ 63.6650</p>	<p>(3) Date of report and beginning and ending dates of the reporting period.</p> <p>(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.</p> <p>(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.</p> <p>(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.</p> <p>(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.</p> <p>(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.</p> <p>(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.</p> <p>(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.</p> <p>(1) The date and time that each malfunction started and stopped.</p> <p>(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.</p> <p>(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).</p> <p>(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.</p> <p>(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.</p> <p>(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.</p> <p>(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.</p>
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(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

§ 63.6650	<p>(v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).</p> <p>(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).</p> <p>(vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.</p> <p>(viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.</p> <p>(ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.</p> <p>(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.</p> <p>(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.</p>
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Record Retention

§63.6655	<p>(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.</p> <p>(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).</p> <p>(2) Records of the occurrence and duration of each malfunction of operation (<i>i.e.</i>, process equipment) or the air pollution control and monitoring equipment.</p> <p>(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).</p> <p>(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.</p> <p>(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</p>
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<p>§63.6655</p>	<p>(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.</p> <p>(1) Records described in §63.10(b)(2)(vi) through (xi).</p> <p>(2) Previous (<i>i.e.</i>, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).</p> <p>(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.</p> <p>(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.</p> <p>(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.</p> <p>(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;</p> <p>(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.</p> <p>(2) An existing stationary emergency RICE.</p> <p>(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.</p> <p>(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.</p> <p>(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.</p> <p>(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.</p>
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FEDERAL REGULATIONS
40 CFR 63 SUBPART DDDDD
National Emission Standards for Hazardous Air Pollutants for Major Sources:
Industrial, Commercial, and Institutional Boilers and Process Heaters

Applicable provisions of 40 CFR 63 Subpart DDDDD shall apply.

[76 FR 15664, Mar. 21, 2011, unless otherwise noted]

Purpose

§63.7480	This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.
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Applicability

§63.7485	<p>You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP, except as specified in §63.7491. For purposes of this subpart, a major source of HAP is as defined in §63.2, except that for oil and natural gas production facilities, a major source of HAP is as defined in §63.7575.</p> <p>[78 FR 7162, Jan. 31, 2013]</p>
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Affected Source

§63.7490	<p>a) This subpart applies to new, reconstructed, and existing affected sources as described in paragraphs (a)(1) and (2) of this section.</p> <p>(1) The affected source of this subpart is the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in §63.7575.</p> <p>(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater, as defined in §63.7575, located at a major source.</p> <p>(b) A boiler or process heater is new if you commence construction of the boiler or process heater after June 4, 2010, and you meet the applicability criteria at the time you commence construction.</p>
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§63.7490	<p>(c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in §63.2, you commence reconstruction after June 4, 2010, and you meet the applicability criteria at the time you commence reconstruction.</p> <p>(d) A boiler or process heater is existing if it is not new or reconstructed.</p> <p>(e) An existing electric utility steam generating unit (EGU) that meets the applicability requirements of this subpart after the effective date of this final rule due to a change (e.g., fuel switch) is considered to be an existing source under this subpart.</p> <p>[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7162, Jan. 31, 2013]</p>
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Boilers and Process Heaters

§63.7491	<p>The types of boilers and process heaters listed in paragraphs (a) through (n) of this section are not subject to this subpart.</p> <p>(a) An electric utility steam generating unit (EGU) covered by subpart UUUUU of this part.</p> <p>(b) A recovery boiler or furnace covered by subpart MM of this part.</p> <p>(c) A boiler or process heater that is used specifically for research and development, including test steam boilers used to provide steam for testing the propulsion systems on military vessels. This does not include units that provide heat or steam to a process at a research and development facility.</p> <p>(d) A hot water heater as defined in this subpart.</p> <p>(e) A refining kettle covered by subpart X of this part.</p> <p>(f) An ethylene cracking furnace covered by subpart YY of this part.</p> <p>(g) Blast furnace stoves as described in EPA-453/R-01-005 (incorporated by reference, see §63.14).</p> <p>(h) Any boiler or process heater that is part of the affected source subject to another subpart of this part, such as boilers and process heaters used as control devices to comply with subparts JJJ, OOO, PPP, and U of this part.</p> <p>(i) Any boiler or process heater that is used as a control device to comply with another subpart of this part, or part 60, part 61, or part 65 of this chapter provided that at least 50 percent of the average annual heat input during any 3 consecutive calendar years to the boiler or process heater is provided by regulated gas streams that are subject to another standard.</p> <p>(j) Temporary boilers as defined in this subpart.</p> <p>(k) Blast furnace gas fuel-fired boilers and process heaters as defined in this subpart.</p>
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§63.7491	<p>(l) Any boiler specifically listed as an affected source in any standard(s) established under section 129 of the Clean Air Act.</p> <p>(m) A unit that burns hazardous waste covered by Subpart EEE of this part. A unit that is exempt from Subpart EEE as specified in §63.1200(b) is not covered by Subpart EEE.</p> <p>[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7162, Jan. 31, 2013]</p> <p>Editorial Note: At 78 FR 7162, Jan. 31, 2013, §63.7491 was amended by revising paragraph (n). However, there is no paragraph (n) to be revised.</p>
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Compliance Dates

§63.7495	<p>(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by January 31, 2013, or upon startup of your boiler or process heater, whichever is later.</p> <p>(b) If you have an existing boiler or process heater, you must comply with this subpart no later than January 31, 2016, except as provided in §63.6(i).</p> <p>(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.</p> <p>(1) Any new or reconstructed boiler or process heater at the existing source must be in compliance with this subpart upon startup.</p> <p>(2) Any existing boiler or process heater at the existing source must be in compliance with this subpart within 3 years after the source becomes a major source.</p> <p>(d) You must meet the notification requirements in §63.7545 according to the schedule in §63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.</p> <p>(e) If you own or operate an industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for the exemption in §63.7491(l) for commercial and industrial solid waste incineration units covered by part 60, subpart CCCC or subpart DDDD, and you cease combusting solid waste, you must be in compliance with this subpart on the effective date of the switch from waste to fuel.</p> <p>(f) If you own or operate an existing EGU that becomes subject to this subpart after January 31, 2013, you must be in compliance with the applicable existing source provisions of this subpart on the effective date such unit becomes subject to this subpart.</p> <p>(g) If you own or operate an existing industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for an exemption in §63.7491(i) that becomes subject to this subpart after January 31, 2013, you must be in compliance with the applicable existing source provisions of this subpart within 3 years after such unit becomes subject to this subpart.</p> <p>[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7162, Jan. 31, 2013]</p>
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Emission Limitations and Work Practice Standards

§63.7499

The subcategories of boilers and process heaters, as defined in §63.7575 are:

- (a) Pulverized coal/solid fossil fuel units.
- (b) Stokers designed to burn coal/solid fossil fuel.
- (c) Fluidized bed units designed to burn coal/solid fossil fuel.
- (d) Stokers/sloped grate/other units designed to burn kiln dried biomass/bio-based solid.
- (e) Fluidized bed units designed to burn biomass/bio-based solid.
- (f) Suspension burners designed to burn biomass/bio-based solid.
- (g) Fuel cells designed to burn biomass/bio-based solid.
- (h) Hybrid suspension/grate burners designed to burn wet biomass/bio-based solid.
- (i) Stokers/sloped grate/other units designed to burn wet biomass/bio-based solid.
- (j) Dutch ovens/pile burners designed to burn biomass/bio-based solid.
- (k) Units designed to burn liquid fuel that are non-continental units.
- (l) Units designed to burn gas 1 fuels.
- (m) Units designed to burn gas 2 (other) gases.
- (n) Metal process furnaces.
- (o) Limited-use boilers and process heaters.
- (p) Units designed to burn solid fuel.
- (q) Units designed to burn liquid fuel.
- (r) Units designed to burn coal/solid fossil fuel.
- (s) Fluidized bed units with an integrated fluidized bed heat exchanger designed to burn coal/solid fossil fuel.
- (t) Units designed to burn heavy liquid fuel.
- (u) Units designed to burn light liquid fuel.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7163, Jan. 31, 2013]

Emission Limitations, Work Practice Standards, and Operating Limits

§63.7500	<p>(a) You must meet the requirements in paragraphs (a)(1) through (3) of this section, except as provided in paragraphs (b), through (e) of this section. You must meet these requirements at all times the affected unit is operating, except as provided in paragraph (f) of this section.</p> <p>(1) You must meet each emission limit and work practice standard in Tables 1 through 3, and 11 through 13 to this subpart that applies to your boiler or process heater, for each boiler or process heater at your source, except as provided under §63.7522. The output-based emission limits, in units of pounds per million Btu of steam output, in Tables 1 or 2 to this subpart are an alternative applicable only to boilers and process heaters that generate steam. The output-based emission limits, in units of pounds per megawatt-hour, in Tables 1 or 2 to this subpart are an alternative applicable only to boilers that generate electricity. If you operate a new boiler or process heater, you can choose to comply with alternative limits as discussed in paragraphs (a)(1)(i) through (a)(1)(iii) of this section, but on or after January 31, 2016, you must comply with the emission limits in Table 1 to this subpart.</p> <p>(i) If your boiler or process heater commenced construction or reconstruction after June 4, 2010 and before May 20, 2011, you may comply with the emission limits in Table 1 or 11 to this subpart until January 31, 2016.</p> <p>(ii) If your boiler or process heater commenced construction or reconstruction after May 20, 2011 and before December 23, 2011, you may comply with the emission limits in Table 1 or 12 to this subpart until January 31, 2016.</p> <p>(iii) If your boiler or process heater commenced construction or reconstruction after December 23, 2011 and before January 31, 2013, you may comply with the emission limits in Table 1 or 13 to this subpart until January 31, 2016.</p> <p>(2) You must meet each operating limit in Table 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Table 4 to this subpart, or you wish to establish and monitor an alternative operating limit or an alternative monitoring parameter, you must apply to the EPA Administrator for approval of alternative monitoring under §63.8(f).</p> <p>(3) At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.</p> <p>(b) As provided in §63.6(g), EPA may approve use of an alternative to the work practice standards in this section.</p> <p>(c) Limited-use boilers and process heaters must complete a tune-up every 5 years as specified in §63.7540. They are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, the annual tune-up, or the energy assessment requirements in Table 3 to this subpart, or the operating limits in Table 4 to this subpart.</p> <p>(d) Boilers and process heaters with a heat input capacity of less than or equal to 5 million Btu per hour in the units designed to burn gas 2 (other) fuels subcategory or units designed to burn light liquid fuels subcategory must complete a tune-up every 5 years as specified in §63.7540.</p>
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§63.7500	<p>(e) Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, or the operating limits in Table 4 to this subpart.</p> <p>(f) These standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time you must comply only with Table 3 to this subpart.</p> <p>[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7163, Jan. 31, 2013]</p>
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General Compliance Requirements

§63.7505	<p>(a) You must be in compliance with the emission limits, work practice standards, and operating limits in this subpart. These limits apply to you at all times the affected unit is operating except for the periods noted in §63.7500(f).</p> <p>(b) [Reserved]</p> <p>(c) You must demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS), continuous opacity monitoring system (COMS), continuous parameter monitoring system (CPMS), or particulate matter continuous parameter monitoring system (PM CPMS), where applicable. You may demonstrate compliance with the applicable emission limit for hydrogen chloride (HCl), mercury, or total selected metals (TSM) using fuel analysis if the emission rate calculated according to §63.7530(c) is less than the applicable emission limit. (For gaseous fuels, you may not use fuel analyses to comply with the TSM alternative standard or the HCl standard.) Otherwise, you must demonstrate compliance for HCl, mercury, or TSM using performance testing, if subject to an applicable emission limit listed in Tables 1, 2, or 11 through 13 to this subpart.</p> <p>(d) If you demonstrate compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits (including the use of CPMS), or with a CEMS, or COMS, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of this section for the use of any CEMS, COMS, or CPMS. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).</p> <p>(1) For each CMS required in this section (including CEMS, COMS, or CPMS), you must develop, and submit to the Administrator for approval upon request, a site-specific monitoring plan that addresses design, data collection, and the quality assurance and quality control elements outlined in §63.8(d) and the elements described in paragraphs (d)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS. This requirement to develop and submit a site specific monitoring plan does not apply to affected sources with existing CEMS or COMS operated according to the performance specifications under appendix B to part 60 of this chapter and that meet the requirements of §63.7525. Using the process described in §63.8(f)(4), you may request approval of alternative monitoring system quality assurance and quality control procedures in place of those specified in this paragraph and, if approved, include the alternatives in your site-specific monitoring plan.</p>
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<p>§63.7505</p>	<p>(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);</p> <p>(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and</p> <p>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations, accuracy audits, analytical drift).</p> <p>(2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii) of this section.</p> <p>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);</p> <p>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and</p> <p>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c) (as applicable in Table 10 to this subpart), (e)(1), and (e)(2)(i).</p> <p>(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.</p> <p>(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.</p> <p>[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7164, Jan. 31, 2013]</p>
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Testing, Fuel Analyses, and Initial Compliance Requirements

<p>§63.7510</p>	<p>(a) For each boiler or process heater that is required or that you elect to demonstrate compliance with any of the applicable emission limits in Tables 1 or 2 or 11 through 13 of this subpart through performance testing, your initial compliance requirements include all the following:</p> <p>(1) Conduct performance tests according to §63.7520 and Table 5 to this subpart.</p> <p>(2) Conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart, except as specified in paragraphs (a)(2)(i) through (iii) of this section.</p> <p>(i) For each boiler or process heater that burns a single type of fuel, you are not required to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart. For purposes of this subpart, units that use a supplemental fuel only for startup, unit shutdown, and transient flame stability purposes still qualify as units that burn a single type of fuel, and the supplemental fuel is not subject to the fuel analysis requirements under §63.7521 and Table 6 to this subpart.</p>
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(ii) When natural gas, refinery gas, or other gas 1 fuels are co-fired with other fuels, you are not required to conduct a fuel analysis of those fuels according to §63.7521 and Table 6 to this subpart. If gaseous fuels other than natural gas, refinery gas, or other gas 1 fuels are co-fired with other fuels and those gaseous fuels are subject to another subpart of this part, part 60, part 61, or part 65, you are not required to conduct a fuel analysis of those fuels according to §63.7521 and Table 6 to this subpart.

(iii) You are not required to conduct a chlorine fuel analysis for any gaseous fuels. You must conduct a fuel analysis for mercury on gaseous fuels unless the fuel is exempted in paragraphs (a)(2)(i) and (ii) of this section.

(3) Establish operating limits according to §63.7530 and Table 7 to this subpart.

(4) Conduct CMS performance evaluations according to §63.7525.

(b) For each boiler or process heater that you elect to demonstrate compliance with the applicable emission limits in Tables 1 or 2 or 11 through 13 to this subpart for HCl, mercury, or TSM through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart and establish operating limits according to §63.7530 and Table 8 to this subpart. The fuels described in paragraph (a)(2)(i) and (ii) of this section are exempt from these fuel analysis and operating limit requirements. The fuels described in paragraph (a)(2)(ii) of this section are exempt from the chloride fuel analysis and operating limit requirements. Boilers and process heaters that use a CEMS for mercury or HCl are exempt from the performance testing and operating limit requirements specified in paragraph (a) of this section for the HAP for which CEMS are used.

(c) If your boiler or process heater is subject to a carbon monoxide (CO) limit, your initial compliance demonstration for CO is to conduct a performance test for CO according to Table 5 to this subpart or conduct a performance evaluation of your continuous CO monitor, if applicable, according to §63.7525(a). Boilers and process heaters that use a CO CEMS to comply with the applicable alternative CO CEMS emission standard listed in Tables 12, or 11 through 13 to this subpart, as specified in §63.7525(a), are exempt from the initial CO performance testing and oxygen concentration operating limit requirements specified in paragraph (a) of this section.

(d) If your boiler or process heater is subject to a PM limit, your initial compliance demonstration for PM is to conduct a performance test in accordance with §63.7520 and Table 5 to this subpart.

(e) For existing affected sources (as defined in §63.7490), you must complete the initial compliance demonstration, as specified in paragraphs (a) through (d) of this section, no later than 180 days after the compliance date that is specified for your source in §63.7495 and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart, except as specified in paragraph (j) of this section. You must complete an initial tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) no later than the compliance date specified in §63.7495, except as specified in paragraph (j) of this section. You must complete the one-time energy assessment specified in Table 3 to this subpart no later than the compliance date specified in §63.7495, except as specified in paragraph (j) of this section.

(f) For new or reconstructed affected sources (as defined in §63.7490), you must complete the initial compliance demonstration with the emission limits no later than July 30, 2013 or within 180 days after startup of the source, whichever is later. If you are demonstrating compliance with an emission limit in Tables 11 through 13 to this subpart that is less stringent (that is, higher) than the applicable emission limit in Table 1 to this subpart, you must demonstrate compliance with the applicable emission limit in Table 1 no later than July 29, 2016.

§63.7510	<p>(g) For new or reconstructed affected sources (as defined in §63.7490), you must demonstrate initial compliance with the applicable work practice standards in Table 3 to this subpart within the applicable annual, biennial, or 5-year schedule as specified in §63.7540(a) following the initial compliance date specified in §63.7495(a). Thereafter, you are required to complete the applicable annual, biennial, or 5-year tune-up as specified in §63.7540(a).</p> <p>(h) For affected sources (as defined in §63.7490) that ceased burning solid waste consistent with §63.7495(e) and for which the initial compliance date has passed, you must demonstrate compliance within 60 days of the effective date of the waste-to-fuel switch. If you have not conducted your compliance demonstration for this subpart within the previous 12 months, you must complete all compliance demonstrations for this subpart before you commence or recommence combustion of solid waste.</p> <p>(i) For an existing EGU that becomes subject after January 31, 2013, you must demonstrate compliance within 180 days after becoming an affected source.</p> <p>(j) For existing affected sources (as defined in §63.7490) that have not operated between the effective date of the rule and the compliance date that is specified for your source in §63.7495, you must complete the initial compliance demonstration, if subject to the emission limits in Table 2 to this subpart, as specified in paragraphs (a) through (d) of this section, no later than 180 days after the re-start of the affected source and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart. You must complete an initial tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) no later than 30 days after the re-start of the affected source and, if applicable, complete the one-time energy assessment specified in Table 3 to this subpart, no later than the compliance date specified in §63.7495.</p> <p>[78 FR 7164, Jan. 31, 2013]</p>
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Subsequent Performance Tests, Fuel Analyses, and Tune-ups

§63.7515	<p>(a) You must conduct all applicable performance tests according to §63.7520 on an annual basis, except as specified in paragraphs (b) through (e), (g), and (h) of this section. Annual performance tests must be completed no more than 13 months after the previous performance test, except as specified in paragraphs (b) through (e), (g), and (h) of this section.</p> <p>(b) If your performance tests for a given pollutant for at least 2 consecutive years show that your emissions are at or below 75 percent of the emission limit (or, in limited instances as specified in Tables 1 and 2 or 11 through 13 to this subpart, at or below the emission limit) for the pollutant, and if there are no changes in the operation of the individual boiler or process heater or air pollution control equipment that could increase emissions, you may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. If you elect to demonstrate compliance using emission averaging under §63.7522, you must continue to conduct performance tests annually. The requirement to test at maximum chloride input level is waived unless the stack test is conducted for HCl. The requirement to test at maximum mercury input level is waived unless the stack test is conducted for mercury. The requirement to test at maximum TSM input level is waived unless the stack test is conducted for TSM.</p>
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(c) If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit (as specified in Tables 1 and 2 or 11 through 13 to this subpart) for a pollutant, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level (at or below 75 percent of the emission limit, as specified in Tables 1 and 2 or 11 through 13 to this subpart).

(d) If you are required to meet an applicable tune-up work practice standard, you must conduct an annual, biennial, or 5-year performance tune-up according to §63.7540(a)(10), (11), or (12), respectively. Each annual tune-up specified in §63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each biennial tune-up specified in §63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in §63.7490), the first annual, biennial, or 5-year tune-up must be no later than 13 months, 25 months, or 61 months, respectively, after the initial startup of the new or reconstructed affected source.

(e) If you demonstrate compliance with the mercury, HCl, or TSM based on fuel analysis, you must conduct a monthly fuel analysis according to §63.7521 for each type of fuel burned that is subject to an emission limit in Tables 1, 2, or 11 through 13 to this subpart. You may comply with this monthly requirement by completing the fuel analysis any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in §63.7540. If each of 12 consecutive monthly fuel analyses demonstrates 75 percent or less of the compliance level, you may decrease the fuel analysis frequency to quarterly for that fuel. If any quarterly sample exceeds 75 percent of the compliance level or you begin burning a new type of fuel, you must return to monthly monitoring for that fuel, until 12 months of fuel analyses are again less than 75 percent of the compliance level.

(f) You must report the results of performance tests and the associated fuel analyses within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established according to §63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests must include all applicable information required in §63.7550.

(g) For affected sources (as defined in §63.7490) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, you must complete the subsequent compliance demonstration, if subject to the emission limits in Tables 1, 2, or 11 through 13 to this subpart, no later than 180 days after the re-start of the affected source and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart. You must complete a subsequent tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) and the schedule described in §63.7540(a)(13) for units that are not operating at the time of their scheduled tune-up.

(h) If your affected boiler or process heater is in the unit designed to burn light liquid subcategory and you combust ultra low sulfur liquid fuel, you do not need to conduct further performance tests if the pollutants measured during the initial compliance performance tests meet the emission limits in Tables 1 or 2 of this subpart providing you demonstrate ongoing compliance with the emissions limits by monitoring and recording the type of fuel combusted on a monthly basis. If you intend to use a fuel other than ultra low sulfur liquid fuel, natural gas, refinery gas, or other gas 1 fuel, you must conduct new performance tests within 60 days of burning the new fuel type.

(i) If you operate a CO CEMS that meets the Performance Specifications outlined in §63.7525(a)(3) of this subpart to demonstrate compliance with the applicable alternative CO CEMS emission standard listed in Tables 1, 2, or 11 through 13 to this subpart, you are not required to conduct CO performance tests and are not subject to the oxygen concentration operating limit requirement specified in §63.7510(a).

Stack Tests and Procedure Requirement

§63.7520	<p>(a) You must conduct all performance tests according to §63.7(c), (d), (f), and (h). You must also develop a site-specific stack test plan according to the requirements in §63.7(c). You shall conduct all performance tests under such conditions as the Administrator specifies to you based on the representative performance of each boiler or process heater for the period being tested. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests.</p> <p>(b) You must conduct each performance test according to the requirements in Table 5 to this subpart.</p> <p>(c) You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to this subpart. You must conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and TSM if you are opting to comply with the TSM alternative standard and you must demonstrate initial compliance and establish your operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, you must comply with the operating limit for operating load conditions specified in Table 4 to this subpart.</p> <p>(d) You must conduct a minimum of three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must comply with the minimum applicable sampling times or volumes specified in Tables 1 and 2 or 11 through 13 to this subpart.</p> <p>(e) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 at 40 CFR part 60, appendix A-7 of this chapter to convert the measured particulate matter (PM) concentrations, the measured HCl concentrations, the measured mercury concentrations, and the measured TSM concentrations that result from the performance test to pounds per million Btu heat input emission rates.</p> <p>(f) Except for a 30-day rolling average based on CEMS (or sorbent trap monitoring system) data, if measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), you must use the method detection level as the measured emissions level for that pollutant in calculating compliance. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 29 fractions both for individual HAP metals and for total HAP metals) may include a combination of method detection level data and analytical data reported above the method detection level.</p> <p>[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7166, Jan. 31, 2013]</p>
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Fuel Analyses, Specification, and Procedures

§63.7521	<p>(a) For solid and liquid fuels, you must conduct fuel analyses for chloride and mercury according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable. For solid fuels and liquid fuels, you must also conduct fuel analyses for TSM if you are opting to comply with the TSM alternative standard. For gas 2 (other) fuels, you must conduct fuel analyses for mercury according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable. (For gaseous fuels, you may not use fuel analyses to comply with the TSM alternative standard or the HCl standard.) For purposes of complying with this section, a fuel gas system that consists of multiple gaseous fuels collected and mixed with each other is considered a single fuel type and sampling and analysis is only required on the combined fuel gas system that will feed the boiler or process heater. Sampling and analysis of the individual gaseous streams prior to combining is not required. You are not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability purposes. You are required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury, HCl, or TSM in Tables 1 and 2 or 11 through 13 to this subpart. Gaseous and liquid fuels are exempt from the sampling requirements in paragraphs (c) and (d) of this section and Table 6 to this subpart.</p> <p>(b) You must develop a site-specific fuel monitoring plan according to the following procedures and requirements in paragraphs (b)(1) and (2) of this section, if you are required to conduct fuel analyses as specified in §63.7510.</p> <p>(1) If you intend to use an alternative analytical method other than those required by Table 6 to this subpart, you must submit the fuel analysis plan to the Administrator for review and approval no later than 60 days before the date that you intend to conduct the initial compliance demonstration described in §63.7510.</p> <p>(2) You must include the information contained in paragraphs (b)(2)(i) through (vi) of this section in your fuel analysis plan.</p> <p>(i) The identification of all fuel types anticipated to be burned in each boiler or process heater.</p> <p>(ii) For each anticipated fuel type, the notification of whether you or a fuel supplier will be conducting the fuel analysis.</p> <p>(iii) For each anticipated fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if your procedures are different from paragraph (c) or (d) of this section. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.</p> <p>(iv) For each anticipated fuel type, the analytical methods from Table 6, with the expected minimum detection levels, to be used for the measurement of chlorine or mercury.</p> <p>(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that you are proposing to use. Methods in Table 6 shall be used until the requested alternative is approved.</p> <p>(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.</p> <p>(c) At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of this section, or the methods listed in Table 6 to this subpart, or use an automated sampling mechanism that provides representative composite fuel samples for each fuel type that includes both coarse and fine material.</p>
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(1) If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii) of this section.

(i) Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. You must collect all the material (fines and coarse) in the full cross-section. You must transfer the sample to a clean plastic bag.

(ii) Each composite sample will consist of a minimum of three samples collected at approximately equal one-hour intervals during the testing period for sampling during performance stack testing. For monthly sampling, each composite sample shall be collected at approximately equal 10-day intervals during the month.

(2) If sampling from a fuel pile or truck, you must collect fuel samples according to paragraphs (c)(2)(i) through (iii) of this section.

(i) For each composite sample, you must select a minimum of five sampling locations uniformly spaced over the surface of the pile.

(ii) At each sampling site, you must dig into the pile to a uniform depth of approximately 18 inches. You must insert a clean shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling; use the same shovel to collect all samples.

(iii) You must transfer all samples to a clean plastic bag for further processing.

(d) You must prepare each composite sample according to the procedures in paragraphs (d)(1) through (7) of this section.

(1) You must thoroughly mix and pour the entire composite sample over a clean plastic sheet.

(2) You must break large sample pieces (e.g., larger than 3 inches) into smaller sizes.

(3) You must make a pie shape with the entire composite sample and subdivide it into four equal parts.

(4) You must separate one of the quarter samples as the first subset.

(5) If this subset is too large for grinding, you must repeat the procedure in paragraph (d)(3) of this section with the quarter sample and obtain a one-quarter subset from this sample.

(6) You must grind the sample in a mill.

(7) You must use the procedure in paragraph (d)(3) of this section to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

(e) You must determine the concentration of pollutants in the fuel (mercury and/or chlorine and/or TSM) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to this subpart, for use in Equations 7, 8, and 9 of this subpart.

(f) To demonstrate that a gaseous fuel other than natural gas or refinery gas qualifies as another gas 1 fuel, as defined in §63.7575, you must conduct a fuel specification analyses for mercury according to the procedures in paragraphs (g) through (i) of this section and Table 6 to this subpart, as applicable, except as specified in paragraph (f)(1) through (4) of this section.

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(1) You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section for natural gas or refinery gas.

(2) You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section for gaseous fuels that are subject to another subpart of this part, part 60, part 61, or part 65.

(3) You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section on gaseous fuels for units that are complying with the limits for units designed to burn gas 2 (other) fuels.

(4) You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section for gas streams directly derived from natural gas at natural gas production sites or natural gas plants.

(g) You must develop and submit a site-specific fuel analysis plan for other gas 1 fuels to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (g)(1) and (2) of this section.

(1) If you intend to use an alternative analytical method other than those required by Table 6 to this subpart, you must submit the fuel analysis plan to the Administrator for review and approval no later than 60 days before the date that you intend to conduct the initial compliance demonstration described in §63.7510.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all gaseous fuel types other than those exempted from fuel specification analysis under (f)(1) through (3) of this section anticipated to be burned in each boiler or process heater.

(ii) For each anticipated fuel type, the notification of whether you or a fuel supplier will be conducting the fuel specification analysis.

(iii) For each anticipated fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the samples if your procedures are different from the sampling methods contained in Table 6 to this subpart. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types. If multiple boilers or process heaters are fueled by a common fuel stream it is permissible to conduct a single gas specification at the common point of gas distribution.

(iv) For each anticipated fuel type, the analytical methods from Table 6 to this subpart, with the expected minimum detection levels, to be used for the measurement of mercury.

(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that you are proposing to use. Methods in Table 6 to this subpart shall be used until the requested alternative is approved.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

(h) You must obtain a single fuel sample for each fuel type according to the sampling procedures listed in Table 6 for fuel specification of gaseous fuels.

(i) You must determine the concentration in the fuel of mercury, in units of microgram per cubic meter, dry basis, of each sample for each other gas 1 fuel type according to the procedures in Table 6 to this subpart.

Emissions Averaging

<p>§63.7522</p>	<p>(a) As an alternative to meeting the requirements of §63.7500 for PM (or TSM), HCl, or mercury on a boiler or process heater-specific basis, if you have more than one existing boiler or process heater in any subcategories located at your facility, you may demonstrate compliance by emissions averaging, if your averaged emissions are not more than 90 percent of the applicable emission limit, according to the procedures in this section. You may not include new boilers or process heaters in an emissions average.</p> <p>(b) For a group of two or more existing boilers or process heaters in the same subcategory that each vent to a separate stack, you may average PM (or TSM), HCl, or mercury emissions among existing units to demonstrate compliance with the limits in Table 2 to this subpart as specified in paragraph (b)(1) through (3) of this section, if you satisfy the requirements in paragraphs (c) through (g) of this section.</p> <p>(1) You may average units using a CEMS or PM CPMS for demonstrating compliance.</p> <p>(2) For mercury and HCl, averaging is allowed as follows:</p> <p>(i) You may average among units in any of the solid fuel subcategories.</p> <p>(ii) You may average among units in any of the liquid fuel subcategories.</p> <p>(iii) You may average among units in a subcategory of units designed to burn gas 2 (other) fuels.</p> <p>(iv) You may not average across the units designed to burn liquid, units designed to burn solid fuel, and units designed to burn gas 2 (other) subcategories.</p> <p>(3) For PM (or TSM), averaging is only allowed between units within each of the following subcategories and you may not average across subcategories:</p> <p>(i) Units designed to burn coal/solid fossil fuel.</p> <p>(ii) Stokers/sloped grate/other units designed to burn kiln dried biomass/bio-based solids.</p> <p>(iii) Stokers/sloped grate/other units designed to burn wet biomass/bio-based solids.</p> <p>(iv) Fluidized bed units designed to burn biomass/bio-based solid.</p> <p>(v) Suspension burners designed to burn biomass/bio-based solid.</p> <p>(vi) Dutch ovens/pile burners designed to burn biomass/bio-based solid.</p> <p>(vii) Fuel Cells designed to burn biomass/bio-based solid.</p> <p>(viii) Hybrid suspension/grate burners designed to burn wet biomass/bio-based solid.</p> <p>(ix) Units designed to burn heavy liquid fuel.</p> <p>(x) Units designed to burn light liquid fuel.</p> <p>(xi) Units designed to burn liquid fuel that are non-continental units.</p> <p>(xii) Units designed to burn gas 2 (other) gases.</p> <p>(c) For each existing boiler or process heater in the averaging group, the emission rate achieved during the initial compliance test for the HAP being averaged must not exceed the emission level that was being achieved on January 31, 2013 or the control technology employed during the initial compliance test must not be less effective for the HAP being averaged than the control technology employed on January 31, 2013.</p>
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(d) The averaged emissions rate from the existing boilers and process heaters participating in the emissions averaging option must not exceed 90 percent of the limits in Table 2 to this subpart at all times the affected units are operating following the compliance date specified in §63.7495.

(e) You must demonstrate initial compliance according to paragraph (e)(1) or (2) of this section using the maximum rated heat input capacity or maximum steam generation capacity of each unit and the results of the initial performance tests or fuel analysis.

(1) You must use Equation 1a or 1b or 1c of this section to demonstrate that the PM (or TSM), HCl, or mercury emissions from all existing units participating in the emissions averaging option for that pollutant do not exceed the emission limits in Table 2 to this subpart. Use Equation 1a if you are complying with the emission limits on a heat input basis, use Equation 1b if you are complying with the emission limits on a steam generation (output) basis, and use Equation 1c if you are complying with the emission limits on an electric generation (output) basis.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^n (Er \times Hm) \div \sum_{i=1}^n Hm \quad (\text{Eq. 1a})$$

Where:

AveWeightedEmissions = Average weighted emissions for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as determined during the initial compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c).

Hm = Maximum rated heat input capacity of unit, i, in units of million Btu per hour.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^n (Er \times So) \div \sum_{i=1}^n So \quad (\text{Eq. 1b})$$

Where:

AveWeightedEmissions = Average weighted emissions for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of steam output.

Er = Emission rate (as determined during the initial compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of steam output. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c). If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, Eadj, determined according to §63.7533 for that unit.

So = Maximum steam output capacity of unit, i, in units of million Btu per hour, as defined in §63.7575.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

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$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^n (Er \times Eo) \div \sum_{i=1}^n Eo \quad (\text{Eq. 1c})$$

Where:

AveWeightedEmissions = Average weighted emissions for PM (or TSM), HCl, or mercury, in units of pounds per megawatt hour.

Er = Emission rate (as determined during the initial compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per megawatt hour. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c). If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, Eadj, determined according to §63.7533 for that unit.

Eo = Maximum electric generating output capacity of unit, i, in units of megawatt hour, as defined in §63.7575.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

(2) If you are not capable of determining the maximum rated heat input capacity of one or more boilers that generate steam, you may use Equation 2 of this section as an alternative to using Equation 1a of this section to demonstrate that the PM (or TSM), HCl, or mercury emissions from all existing units participating in the emissions averaging option do not exceed the emission limits for that pollutant in Table 2 to this subpart that are in pounds per million Btu of heat input.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^n (Er \times Sm \times Cfi) \div \sum_{i=1}^n (Sm \times Cfi) \quad (\text{Eq. 2})$$

Where:

AveWeightedEmissions = Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c).

Sm = Maximum steam generation capacity by unit, i, in units of pounds per hour.

Cfi = Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated for unit, i.

1.1 = Required discount factor.

(f) After the initial compliance demonstration described in paragraph (e) of this section, you must demonstrate compliance on a monthly basis determined at the end of every month (12 times per year) according to paragraphs (f)(1) through (3) of this section. The first monthly period begins on the compliance date specified in §63.7495. If the affected source elects to collect monthly data for up the 11 months preceding the first monthly period, these additional data points can be used to compute the 12-month rolling average in paragraph (f)(3) of this section.

(1) For each calendar month, you must use Equation 3a or 3b or 3c of this section to calculate the average weighted emission rate for that month. Use Equation 3a and the actual heat input for the month for each existing unit participating in the emissions averaging option if you are complying with emission limits on a heat input basis. Use Equation 3b and the actual steam generation for the month if you are complying with the emission limits on a steam generation (output) basis. Use Equation 3c and the actual steam generation for the month if you are complying with the emission limits on an electrical generation (output) basis.

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$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^n (Er \times Hb) \div \sum_{i=1}^n Hb \quad (\text{Eq. 3a})$$

Where:

AveWeightedEmissions = Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input, for that calendar month.

Er = Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart.

Hb = The heat input for that calendar month to unit, i, in units of million Btu.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^n (Er \times So) \div \sum_{i=1}^n So \quad (\text{Eq. 3b})$$

Where:

AveWeightedEmissions = Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of steam output, for that calendar month.

Er = Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of steam output. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart. If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, E_{adj}, determined according to §63.7533 for that unit.

So = The steam output for that calendar month from unit, i, in units of million Btu, as defined in §63.7575.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^n (Er \times Eo) \div \sum_{i=1}^n Eo \quad (\text{Eq. 3c})$$

Where:

AveWeightedEmissions = Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per megawatt hour, for that calendar month.

Er = Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per megawatt hour. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart. If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, E_{adj}, determined according to §63.7533 for that unit.

Eo = The electric generating output for that calendar month from unit, i, in units of megawatt hour, as defined in §63.7575.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

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(2) If you are not capable of monitoring heat input, you may use Equation 4 of this section as an alternative to using Equation 3a of this section to calculate the average weighted emission rate using the actual steam generation from the boilers participating in the emissions averaging option.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^n (Er \times Sa \times Cfi) \div \sum_{i=1}^n (Sa \times Cfi) \quad (\text{Eq. 4})$$

Where:

AveWeightedEmissions = average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input for that calendar month.

Er = Emission rate (as determined during the most recent compliance demonstration of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart.

Sa = Actual steam generation for that calendar month by boiler, i, in units of pounds.

Cfi = Conversion factor, as calculated during the most recent compliance test, in units of million Btu of heat input per pounds of steam generated for boiler, i.

1.1 = Required discount factor.

(3) Until 12 monthly weighted average emission rates have been accumulated, calculate and report only the average weighted emission rate determined under paragraph (f)(1) or (2) of this section for each calendar month. After 12 monthly weighted average emission rates have been accumulated, for each subsequent calendar month, use Equation 5 of this section to calculate the 12-month rolling average of the monthly weighted average emission rates for the current calendar month and the previous 11 calendar months.

$$Eavg = \sum_{i=1}^{12} ERi \div 12 \quad (\text{Eq. 5})$$

Where:

Eavg = 12-month rolling average emission rate, (pounds per million Btu heat input)

ERi = Monthly weighted average, for calendar month "i" (pounds per million Btu heat input), as calculated by paragraph (f)(1) or (2) of this section.

(g) You must develop, and submit upon request to the applicable Administrator for review and approval, an implementation plan for emission averaging according to the following procedures and requirements in paragraphs (g)(1) through (4) of this section.

(1) You must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average:

(i) The identification of all existing boilers and process heaters in the averaging group, including for each either the applicable HAP emission level or the control technology installed as of January 31, 2013 and the date on which you are requesting emission averaging to commence;

(ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group;

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(iii) The specific control technology or pollution prevention measure to be used for each emission boiler or process heater in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple boilers or process heaters, the owner or operator must identify each boiler or process heater;

(iv) The test plan for the measurement of PM (or TSM), HCl, or mercury emissions in accordance with the requirements in §63.7520;

(v) The operating parameters to be monitored for each control system or device consistent with §63.7500 and Table 4, and a description of how the operating limits will be determined;

(vi) If you request to monitor an alternative operating parameter pursuant to §63.7525, you must also include:

(A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and

(B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the Administrator, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

(vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating load conditions. Following each compliance demonstration and until the next compliance demonstration, you must comply with the operating limit for operating load conditions specified in Table 4 to this subpart.

(3) The Administrator shall review and approve or disapprove the plan according to the following criteria:

(i) Whether the content of the plan includes all of the information specified in paragraph (g)(2) of this section; and

(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(4) The applicable Administrator shall not approve an emission averaging implementation plan containing any of the following provisions:

(i) Any averaging between emissions of differing pollutants or between differing sources; or

(ii) The inclusion of any emission source other than an existing unit in the same subcategories.

(h) For a group of two or more existing affected units, each of which vents through a single common stack, you may average PM (or TSM), HCl, or mercury emissions to demonstrate compliance with the limits for that pollutant in Table 2 to this subpart if you satisfy the requirements in paragraph (i) or (j) of this section.

(i) For a group of two or more existing units in the same subcategories, each of which vents through a common emissions control system to a common stack, that does not receive emissions from units in other subcategories or categories, you may treat such averaging group as a single existing unit for purposes of this subpart and comply with the requirements of this subpart as if the group were a single unit.

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(j) For all other groups of units subject to the common stack requirements of paragraph (h) of this section, including situations where the exhaust of affected units are each individually controlled and then sent to a common stack, the owner or operator may elect to:

(1) Conduct performance tests according to procedures specified in §63.7520 in the common stack if affected units from other subcategories vent to the common stack. The emission limits that the group must comply with are determined by the use of Equation 6 of this section.

$$En = \sum_{i=1}^n (ELi \times Hi) \div \sum_{i=1}^n Hi \quad (\text{Eq. 6})$$

Where:

En = HAP emission limit, pounds per million British thermal units (lb/MMBtu), parts per million (ppm), or nanograms per dry standard cubic meter (ng/dscm).

ELi = Appropriate emission limit from Table 2 to this subpart for unit i, in units of lb/MMBtu, ppm or ng/dscm.

Hi = Heat input from unit i, MMBtu.

(2) Conduct performance tests according to procedures specified in §63.7520 in the common stack. If affected units and non-affected units vent to the common stack, the non-affected units must be shut down or vented to a different stack during the performance test unless the facility determines to demonstrate compliance with the non-affected units venting to the stack; and

(3) Meet the applicable operating limit specified in §63.7540 and Table 8 to this subpart for each emissions control system (except that, if each unit venting to the common stack has an applicable opacity operating limit, then a single continuous opacity monitoring system may be located in the common stack instead of in each duct to the common stack).

(k) The common stack of a group of two or more existing boilers or process heaters in the same subcategories subject to paragraph (h) of this section may be treated as a separate stack for purposes of paragraph (b) of this section and included in an emissions averaging group subject to paragraph (b) of this section.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7168, Jan. 31, 2013]

Monitoring, Installation, Operation, and Maintenance Requirements

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(a) If your boiler or process heater is subject to a CO emission limit in Tables 1, 2, or 11 through 13 to this subpart, you must install, operate, and maintain an oxygen analyzer system, as defined in §63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen according to the procedures in paragraphs (a)(1) through (7) of this section.

(1) Install the CO CEMS and oxygen analyzer by the compliance date specified in §63.7495. The CO and oxygen levels shall be monitored at the same location at the outlet of the boiler or process heater.

(2) To demonstrate compliance with the applicable alternative CO CEMS emission standard listed in Tables 1, 2, or 11 through 13 to this subpart, you must install, certify, operate, and maintain a CO CEMS and an oxygen analyzer according to the applicable procedures under Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B, the site-specific monitoring plan developed according to §63.7505(d), and the requirements in §63.7540(a)(8) and paragraph (a) of this section.

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Any boiler or process heater that has a CO CEMS that is compliant with Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B, a site-specific monitoring plan developed according to §63.7505(d), and the requirements in §63.7540(a)(8) and paragraph (a) of this section must use the CO CEMS to comply with the applicable alternative CO CEMS emission standard listed in Tables 1, 2, or 11 through 13 to this subpart.

(i) You must conduct a performance evaluation of each CO CEMS according to the requirements in §63.8(e) and according to Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B.

(ii) During each relative accuracy test run of the CO CEMS, you must collect emission data for CO concurrently (or within a 30- to 60-minute period) by both the CO CEMS and by Method 10, 10A, or 10B at 40 CFR part 60, appendix A-4. The relative accuracy testing must be at representative operating conditions.

(iii) You must follow the quality assurance procedures (e.g., quarterly accuracy determinations and daily calibration drift tests) of Procedure 1 of appendix F to part 60. The measurement span value of the CO CEMS must be two times the applicable CO emission limit, expressed as a concentration.

(iv) Any CO CEMS that does not comply with §63.7525(a) cannot be used to meet any requirement in this subpart to demonstrate compliance with a CO emission limit listed in Tables 1, 2, or 11 through 13 to this subpart.

(v) For a new unit, complete the initial performance evaluation no later than July 30, 2013, or 180 days after the date of initial startup, whichever is later. For an existing unit, complete the initial performance evaluation no later than July 29, 2016.

(3) Complete a minimum of one cycle of CO and oxygen CEMS operation (sampling, analyzing, and data recording) for each successive 15-minute period. Collect CO and oxygen data concurrently. Collect at least four CO and oxygen CEMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CEMS calibration, quality assurance, or maintenance activities are being performed.

(4) Reduce the CO CEMS data as specified in §63.8(g)(2).

(5) Calculate one-hour arithmetic averages, corrected to 3 percent oxygen from each hour of CO CEMS data in parts per million CO concentration. The one-hour arithmetic averages required shall be used to calculate the 30-day or 10-day rolling average emissions. Use Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR part 60, appendix A-7 for calculating the average CO concentration from the hourly values.

(6) For purposes of collecting CO data, operate the CO CEMS as specified in §63.7535(b). You must use all the data collected during all periods in calculating data averages and assessing compliance, except that you must exclude certain data as specified in §63.7535(c). Periods when CO data are unavailable may constitute monitoring deviations as specified in §63.7535(d).

(7) Operate an oxygen trim system with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen according to Table 7 to this subpart.

(b) If your boiler or process heater is in the unit designed to burn coal/solid fossil fuel subcategory or the unit designed to burn heavy liquid subcategory and has an average annual heat input rate greater than 250 MMBtu per hour from solid fossil fuel and/or heavy liquid, and you demonstrate compliance with the PM limit instead of the alternative TSM limit, you must install, certify, maintain, and operate a PM CPMS monitoring emissions discharged to the atmosphere and record the output of the system as specified in paragraphs (b)(1) through (4) of this section. As an alternative to use of a PM CPMS to demonstrate compliance with the PM limit, you may choose to use a PM CEMS.

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If you choose to use a PM CEMS to demonstrate compliance with the PM limit instead of the alternative TSM limit, you must install, certify, maintain, and operate a PM CEMS monitoring emissions discharged to the atmosphere and record the output of the system as specified in paragraph (b)(5) through (8) of this section. For other boilers or process heaters, you may elect to use a PM CPMS or PM CEMS operated in accordance with this section in lieu of using other CMS for monitoring PM compliance (e.g., bag leak detectors, ESP secondary power, PM scrubber pressure). Owners of boilers and process heaters who elect to comply with the alternative TSM limit are not required to install a PM CPMS.

(1) Install, certify, operate, and maintain your PM CPMS according to the procedures in your approved site-specific monitoring plan developed in accordance with §63.7505(d), the requirements in §63.7540(a)(9), and paragraphs (b)(1)(i) through (iii) of this section.

(i) The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation detection of PM in the exhaust gas or representative exhaust gas sample. The reportable measurement output from the PM CPMS must be expressed as milliamps.

(ii) The PM CPMS must have a cycle time (i.e., period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes.

(iii) The PM CPMS must be capable of detecting and responding to PM concentrations of no greater than 0.5 milligram per actual cubic meter.

(2) For a new unit, complete the initial performance evaluation no later than July 30, 2013, or 180 days after the date of initial startup, whichever is later. For an existing unit, complete the initial performance evaluation no later than July 29, 2016.

(3) Collect PM CPMS hourly average output data for all boiler or process heater operating hours except as indicated in §63.7535(a) through (d). Express the PM CPMS output as milliamps.

(4) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output data collected during all boiler or process heater operating hours (milliamps).

(5) Install, certify, operate, and maintain your PM CEMS according to the procedures in your approved site-specific monitoring plan developed in accordance with §63.7505(d), the requirements in §63.7540(a)(9), and paragraphs (b)(5)(i) through (iv) of this section.

(i) You shall conduct a performance evaluation of the PM CEMS according to the applicable requirements of §60.8(e), and Performance Specification 11 at 40 CFR part 60, appendix B of this chapter.

(ii) During each PM correlation testing run of the CEMS required by Performance Specification 11 at 40 CFR part 60, appendix B of this chapter, you shall collect PM and oxygen (or carbon dioxide) data concurrently (or within a 30-to 60-minute period) by both the CEMS and conducting performance tests using Method 5 at 40 CFR part 60, appendix A-3 or Method 17 at 40 CFR part 60, appendix A-6 of this chapter.

(iii) You shall perform quarterly accuracy determinations and daily calibration drift tests in accordance with Procedure 2 at 40 CFR part 60, appendix F of this chapter. You must perform Relative Response Audits annually and perform Response Correlation Audits every 3 years.

(iv) Within 60 days after the date of completing each CEMS relative accuracy test audit or performance test conducted to demonstrate compliance with this subpart, you must submit the relative accuracy test audit data and performance test data to the EPA by successfully submitting the data electronically into the EPA's Central Data Exchange by using the Electronic Reporting Tool (see <http://www.epa.gov/ttn/chief/ert/erttool.html>).

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(6) For a new unit, complete the initial performance evaluation no later than July 30, 2013, or 180 days after the date of initial startup, whichever is later. For an existing unit, complete the initial performance evaluation no later than July 29, 2016.

(7) Collect PM CEMS hourly average output data for all boiler or process heater operating hours except as indicated in §63.7535(a) through (d).

(8) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CEMS output data collected during all boiler or process heater operating hours.

(c) If you have an applicable opacity operating limit in this rule, and are not otherwise required or elect to install and operate a PM CPMS, PM CEMS, or a bag leak detection system, you must install, operate, certify and maintain each COMS according to the procedures in paragraphs (c)(1) through (7) of this section by the compliance date specified in §63.7495.

(1) Each COMS must be installed, operated, and maintained according to Performance Specification 1 at appendix B to part 60 of this chapter.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8(e) and according to Performance Specification 1 at appendix B to part 60 of this chapter.

(3) As specified in §63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in §63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of §63.8(e). You must identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit. Any 6-minute period for which the monitoring system is out of control and data are not available for a required calculation constitutes a deviation from the monitoring requirements.

(7) You must determine and record all the 6-minute averages (and daily block averages as applicable) collected for periods during which the COMS is not out of control.

(d) If you have an operating limit that requires the use of a CMS other than a PM CPMS or COMS, you must install, operate, and maintain each CMS according to the procedures in paragraphs (d)(1) through (5) of this section by the compliance date specified in §63.7495.

(1) The CPMS must complete a minimum of one cycle of operation every 15-minutes. You must have a minimum of four successive cycles of operation, one representing each of the four 15-minute periods in an hour, to have a valid hour of data.

(2) You must operate the monitoring system as specified in §63.7535(b), and comply with the data calculation requirements specified in §63.7535(c).

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(3) Any 15-minute period for which the monitoring system is out-of-control and data are not available for a required calculation constitutes a deviation from the monitoring requirements. Other situations that constitute a monitoring deviation are specified in §63.7535(d).

(4) You must determine the 30-day rolling average of all recorded readings, except as provided in §63.7535(c).

(5) You must record the results of each inspection, calibration, and validation check.

(e) If you have an operating limit that requires the use of a flow monitoring system, you must meet the requirements in paragraphs (d) and (e)(1) through (4) of this section.

(1) You must install the flow sensor and other necessary equipment in a position that provides a representative flow.

(2) You must use a flow sensor with a measurement sensitivity of no greater than 2 percent of the design flow rate.

(3) You must minimize, consistent with good engineering practices, the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) You must conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(f) If you have an operating limit that requires the use of a pressure monitoring system, you must meet the requirements in paragraphs (d) and (f)(1) through (6) of this section.

(1) Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (*e.g.*, PM scrubber pressure drop).

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion consistent with good engineering practices.

(3) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1 percent of the pressure monitoring system operating range, whichever is less.

(4) Perform checks at least once each process operating day to ensure pressure measurements are not obstructed (*e.g.*, check for pressure tap pluggage daily).

(5) Conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(6) If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in your monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.

(g) If you have an operating limit that requires a pH monitoring system, you must meet the requirements in paragraphs (d) and (g)(1) through (4) of this section.

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- (1) Install the pH sensor in a position that provides a representative measurement of scrubber effluent pH.
- (2) Ensure the sample is properly mixed and representative of the fluid to be measured.
- (3) Conduct a performance evaluation of the pH monitoring system in accordance with your monitoring plan at least once each process operating day.
- (4) Conduct a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit) of the pH monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than quarterly.
- (h) If you have an operating limit that requires a secondary electric power monitoring system for an electrostatic precipitator (ESP) operated with a wet scrubber, you must meet the requirements in paragraphs (h)(1) and (2) of this section.
 - (1) Install sensors to measure (secondary) voltage and current to the precipitator collection plates.
 - (2) Conduct a performance evaluation of the electric power monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
- (i) If you have an operating limit that requires the use of a monitoring system to measure sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (d) and (i)(1) through (2) of this section.
 - (1) Install the system in a position(s) that provides a representative measurement of the total sorbent injection rate.
 - (2) Conduct a performance evaluation of the sorbent injection rate monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.
- (j) If you are not required to use a PM CPMS and elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate the bag leak detection system as specified in paragraphs (j)(1) through (6) of this section.
 - (1) You must install a bag leak detection sensor(s) in a position(s) that will be representative of the relative or absolute PM loadings for each exhaust stack, roof vent, or compartment (e.g., for a positive pressure fabric filter) of the fabric filter.
 - (2) Conduct a performance evaluation of the bag leak detection system in accordance with your monitoring plan and consistent with the guidance provided in EPA-454/R-98-015 (incorporated by reference, see §63.14).
 - (3) Use a bag leak detection system certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter or less.
 - (4) Use a bag leak detection system equipped with a device to record continuously the output signal from the sensor.
 - (5) Use a bag leak detection system equipped with a system that will alert plant operating personnel when an increase in relative PM emissions over a preset level is detected. The alert must easily recognizable (e.g., heard or seen) by plant operating personnel.

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(6) Where multiple bag leak detectors are required, the system's instrumentation and alert may be shared among detectors.

(k) For each unit that meets the definition of limited-use boiler or process heater, you must keep fuel use records for the days the boiler or process heater was operating.

(l) For each unit for which you decide to demonstrate compliance with the mercury or HCl emissions limits in Tables 1 or 2 or 11 through 13 of this subpart by use of a CEMS for mercury or HCl, you must install, certify, maintain, and operate a CEMS measuring emissions discharged to the atmosphere and record the output of the system as specified in paragraphs (l)(1) through (8) of this section. For HCl, this option for an affected unit takes effect on the date a final performance specification for a HCl CEMS is published in the Federal Register or the date of approval of a site-specific monitoring plan.

(1) Notify the Administrator one month before starting use of the CEMS, and notify the Administrator one month before stopping use of the CEMS.

(2) Each CEMS shall be installed, certified, operated, and maintained according to the requirements in §63.7540(a)(14) for a mercury CEMS and §63.7540(a)(15) for a HCl CEMS.

(3) For a new unit, you must complete the initial performance evaluation of the CEMS by the latest of the dates specified in paragraph (l)(3)(i) through (iii) of this section.

(i) No later than July 30, 2013.

(ii) No later 180 days after the date of initial startup.

(iii) No later 180 days after notifying the Administrator before starting to use the CEMS in place of performance testing or fuel analysis to demonstrate compliance.

(4) For an existing unit, you must complete the initial performance evaluation by the latter of the two dates specified in paragraph (l)(4)(i) and (ii) of this section.

(i) No later than July 29, 2016.

(ii) No later 180 days after notifying the Administrator before starting to use the CEMS in place of performance testing or fuel analysis to demonstrate compliance.

(5) Compliance with the applicable emissions limit shall be determined based on the 30-day rolling average of the hourly arithmetic average emissions rates using the continuous monitoring system outlet data. The 30-day rolling arithmetic average emission rate (lb/MMBtu) shall be calculated using the equations in EPA Reference Method 19 at 40 CFR part 60, appendix A-7, but substituting the mercury or HCl concentration for the pollutant concentrations normally used in Method 19.

(6) Collect CEMS hourly averages for all operating hours on a 30-day rolling average basis. Collect at least four CMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed.

(7) The one-hour arithmetic averages required shall be expressed in lb/MMBtu and shall be used to calculate the boiler 30-day and 10-day rolling average emissions.

§63.7525	<p>(8) You are allowed to substitute the use of the PM, mercury or HCl CEMS for the applicable fuel analysis, annual performance test, and operating limits specified in Table 4 to this subpart to demonstrate compliance with the PM, mercury or HCl emissions limit, and if you are using an acid gas wet scrubber or dry sorbent injection control technology to comply with the HCl emission limit, you are allowed to substitute the use of a sulfur dioxide (SO₂) CEMS for the applicable fuel analysis, annual performance test, and operating limits specified in Table 4 to this subpart to demonstrate compliance with HCl emissions limit.</p> <p>(m) If your unit is subject to a HCl emission limit in Tables 1, 2, or 11 through 13 of this subpart and you have an acid gas wet scrubber or dry sorbent injection control technology and you use an SO₂ CEMS, you must install the monitor at the outlet of the boiler or process heater, downstream of all emission control devices, and you must install, certify, operate, and maintain the CEMS according to part 75 of this chapter.</p> <p>(1) The SO₂ CEMS must be installed by the compliance date specified in §63.7495.</p> <p>(2) For on-going quality assurance (QA), the SO₂ CEMS must meet the applicable daily, quarterly, and semiannual or annual requirements in sections 2.1 through 2.3 of appendix B to part 75 of this chapter, with the following addition: You must perform the linearity checks required in section 2.2 of appendix B to part 75 of this chapter if the SO₂ CEMS has a span value of 30 ppm or less.</p> <p>(3) For a new unit, the initial performance evaluation shall be completed no later than July 30, 2013, or 180 days after the date of initial startup, whichever is later. For an existing unit, the initial performance evaluation shall be completed no later than July 29, 2016.</p> <p>(4) For purposes of collecting SO₂ data, you must operate the SO₂ CEMS as specified in §63.7535(b). You must use all the data collected during all periods in calculating data averages and assessing compliance, except that you must exclude certain data as specified in §63.7535(c). Periods when SO₂ data are unavailable may constitute monitoring deviations as specified in §63.7535(d).</p> <p>(5) Collect CEMS hourly averages for all operating hours on a 30-day rolling average basis.</p> <p>(6) Use only unadjusted, quality-assured SO₂ concentration values in the emissions calculations; do not apply bias adjustment factors to the part 75 SO₂ data and do not use part 75 substitute data values.</p> <p>[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7171, Jan. 31, 2013]</p>
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Initial Compliance Demonstration: Emission Limitations, Fuel Specifications, and Work Practice Standards

§63.7530	<p>(a) You must demonstrate initial compliance with each emission limit that applies to you by conducting initial performance tests and fuel analyses and establishing operating limits, as applicable, according to §63.7520, paragraphs (b) and (c) of this section, and Tables 5 and 7 to this subpart. The requirement to conduct a fuel analysis is not applicable for units that burn a single type of fuel, as specified by §63.7510(a)(2)(i). If applicable, you must also install, operate, and maintain all applicable CMS (including CEMS, COMS, and CPMS) according to §63.7525.</p> <p>(b) If you demonstrate compliance through performance testing, you must establish each site-specific operating limit in Table 4 to this subpart that applies to you according to the requirements in §63.7520, Table 7 to this subpart, and paragraph (b)(4) of this section, as applicable.</p>
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You must also conduct fuel analyses according to §63.7521 and establish maximum fuel pollutant input levels according to paragraphs (b)(1) through (3) of this section, as applicable, and as specified in §63.7510(a)(2). Note that §63.7510(a)(2) exempts certain fuels from the fuel analysis requirements.) However, if you switch fuel(s) and cannot show that the new fuel(s) does (do) not increase the chlorine, mercury, or TSM input into the unit through the results of fuel analysis, then you must repeat the performance test to demonstrate compliance while burning the new fuel(s).

(1) You must establish the maximum chlorine fuel input (Clinput) during the initial fuel analysis according to the procedures in paragraphs (b)(1)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

(ii) During the fuel analysis for hydrogen chloride, you must determine the fraction of the total heat input for each fuel type burned (Q_i) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned (C_i).

(iii) You must establish a maximum chlorine input level using Equation 7 of this section.

$$Clinput = \sum_{i=1}^n (C_i \times Q_i) \quad (\text{Eq. 7})$$

Where:

Clinput = Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.

C_i = Arithmetic average concentration of chlorine in fuel type, i , analyzed according to §63.7521, in units of pounds per million Btu.

Q_i = Fraction of total heat input from fuel type, i , based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

(2) You must establish the maximum mercury fuel input level (Mercuryinput) during the initial fuel analysis using the procedures in paragraphs (b)(2)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.

(ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned (Q_i) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HG_i).

(iii) You must establish a maximum mercury input level using Equation 8 of this section.

$$Mercuryinput = \sum_{i=1}^n (HG_i \times Q_i) \quad (\text{Eq. 8})$$

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Where:

Mercuryinput = Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu.

HGi = Arithmetic average concentration of mercury in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

(3) If you opt to comply with the alternative TSM limit, you must establish the maximum TSM fuel input (TSMinput) for solid or liquid fuels during the initial fuel analysis according to the procedures in paragraphs (b)(3)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of TSM.

(ii) During the fuel analysis for TSM, you must determine the fraction of the total heat input for each fuel type burned (Qi) based on the fuel mixture that has the highest content of TSM, and the average TSM concentration of each fuel type burned (TSMi).

(iii) You must establish a maximum TSM input level using Equation 9 of this section.

$$TSMinput = \sum_{i=1}^n (TSMi \times Qi) \quad (\text{Eq. 9})$$

Where:

TSMinput = Maximum amount of TSM entering the boiler or process heater through fuels burned in units of pounds per million Btu.

TSMi = Arithmetic average concentration of TSM in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of TSM. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.

(4) You must establish parameter operating limits according to paragraphs (b)(4)(i) through (ix) of this section. As indicated in Table 4 to this subpart, you are not required to establish and comply with the operating parameter limits when you are using a CEMS to monitor and demonstrate compliance with the applicable emission limit for that control device parameter.

(i) For a wet acid gas scrubber, you must establish the minimum scrubber effluent pH and liquid flow rate as defined in §63.7575, as your operating limits during the performance test during which you demonstrate compliance with your applicable limit. If you use a wet scrubber and you conduct separate performance tests for HCl and mercury emissions, you must establish one set of minimum scrubber effluent pH, liquid flow rate, and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flow rate operating limit at the higher of the minimum values established during the performance tests.

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(ii) For any particulate control device (e.g., ESP, particulate wet scrubber, fabric filter) for which you use a PM CPMS, you must establish your PM CPMS operating limit and determine compliance with it according to paragraphs (b)(4)(ii)(A) through (F) of this section.

(A) Determine your operating limit as the average PM CPMS output value recorded during the most recent performance test run demonstrating compliance with the filterable PM emission limit or at the PM CPMS output value corresponding to 75 percent of the emission limit if your PM performance test demonstrates compliance below 75 percent of the emission limit. You must verify an existing or establish a new operating limit after each repeated performance test. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.

(1) Your PM CPMS must provide a 4-20 milliamp output and the establishment of its relationship to manual reference method measurements must be determined in units of milliamps.

(2) Your PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to at least two times your allowable emission limit. If your PM CPMS is an auto-ranging instrument capable of multiple scales, the primary range of the instrument must be capable of reading PM concentration from zero to a level equivalent to two times your allowable emission limit.

(3) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record and average all milliamp output values from the PM CPMS for the periods corresponding to the compliance test runs (e.g., average all your PM CPMS output values for three corresponding 2-hour Method 5I test runs).

(B) If the average of your three PM performance test runs are below 75 percent of your PM emission limit, you must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or performance test with the procedures in paragraphs (b)(4)(ii)(B)(1) through (4) of this section.

(1) Determine your instrument zero output with one of the following procedures:

(i) Zero point data for *in-situ* instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench.

(ii) Zero point data for *extractive* instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air.

(iii) The zero point may also be established by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (e.g., when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept.

(iv) If none of the steps in paragraphs (b)(4)(ii)(B)(1)(i) through (iii) of this section are possible, you must use a zero output value provided by the manufacturer.

(2) Determine your PM CPMS instrument average in milliamps, and the average of your corresponding three PM compliance test runs, using equation 10.

$$\bar{X} = \frac{1}{n} \sum_{i=1}^n X_i, \bar{Y} = \frac{1}{n} \sum_{i=1}^n Y_i \quad (\text{Eq. 10})$$

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Where:

X_1 = the PM CPMS data points for the three runs constituting the performance test,

Y_1 = the PM concentration value for the three runs constituting the performance test, and

n = the number of data points.

(3) With your instrument zero expressed in milliamps, your three run average PM CPMS milliamp value, and your three run average PM concentration from your three compliance tests, determine a relationship of lb/MMBtu per milliamp with equation 11.

$$R = \frac{Y_1}{(X_1 - z)} \quad (\text{Eq. 11})$$

Where:

R = the relative lb/MMBtu per milliamp for your PM CPMS,

Y_1 = the three run average lb/MMBtu PM concentration,

X_1 = the three run average milliamp output from you PM CPMS, and

z = the milliamp equivalent of your instrument zero determined from (B)(i).

(4) Determine your source specific 30-day rolling average operating limit using the lb/MMBtu per milliamp value from Equation 11 in equation 12, below. This sets your operating limit at the PM CPMS output value corresponding to 75 percent of your emission limit.

$$O_1 = z + \frac{0.75L}{R} \quad (\text{Eq. 12})$$

Where:

O_1 = the operating limit for your PM CPMS on a 30-day rolling average, in milliamps.

L = your source emission limit expressed in lb/MMBtu,

z = your instrument zero in milliamps, determined from (B)(i), and

R = the relative lb/MMBtu per milliamp for your PM CPMS, from Equation 11.

(C) If the average of your three PM compliance test runs is at or above 75 percent of your PM emission limit you must determine your 30-day rolling average operating limit by averaging the PM CPMS milliamp output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using equation 13 and you must submit all compliance test and PM CPMS data according to the reporting requirements in paragraph (b)(4)(ii)(F) of this section.

$$O_n = \frac{1}{n} \sum_{i=1}^n X_i \quad (\text{Eq. 13})$$

Where:

X_i = the PM CPMS data points for all runs i ,

n = the number of data points, and

O_n = your site specific operating limit, in milliamps.

(D) To determine continuous compliance, you must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30-day rolling average basis, updated at the end of each new operating hour. Use Equation 14 to determine the 30-day rolling average.

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$$30\text{-day} = \frac{\sum_{i=1}^n H_{pvi}}{n} \quad (\text{Eq. 14})$$

Where:

30-day = 30-day average.

H_{pvi} = is the hourly parameter value for hour i

n = is the number of valid hourly parameter values collected over the previous 720 operating hours.

(E) Use EPA Method 5 of appendix A to part 60 of this chapter to determine PM emissions. For each performance test, conduct three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur. Conduct each test run to collect a minimum sample volume specified in Tables 1, 2, or 11 through 13 to this subpart, as applicable, for determining compliance with a new source limit or an existing source limit. Calculate the average of the results from three runs to determine compliance. You need not determine the PM collected in the impingers (“back half”) of the Method 5 particulate sampling train to demonstrate compliance with the PM standards of this subpart. This shall not preclude the permitting authority from requiring a determination of the “back half” for other purposes.

(F) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g. beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run. (iii) For a particulate wet scrubber, you must establish the minimum pressure drop and liquid flow rate as defined in §63.7575, as your operating limits during the three-run performance test during which you demonstrate compliance with your applicable limit. If you use a wet scrubber and you conduct separate performance tests for PM and TSM emissions, you must establish one set of minimum scrubber liquid flow rate and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flow rate and pressure drop operating limits at the higher of the minimum values established during the performance tests.

(iii) For an electrostatic precipitator (ESP) operated with a wet scrubber, you must establish the minimum total secondary electric power input, as defined in §63.7575, as your operating limit during the three-run performance test during which you demonstrate compliance with your applicable limit. (These operating limits do not apply to ESP that are operated as dry controls without a wet scrubber.)

(iv) For a dry scrubber, you must establish the minimum sorbent injection rate for each sorbent, as defined in §63.7575, as your operating limit during the three-run performance test during which you demonstrate compliance with your applicable limit.

(v) For activated carbon injection, you must establish the minimum activated carbon injection rate, as defined in §63.7575, as your operating limit during the three-run performance test during which you demonstrate compliance with your applicable limit.

(vi) The operating limit for boilers or process heaters with fabric filters that demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in §63.7525, and that each fabric filter must be operated such that the bag leak detection system alert is not activated more than 5 percent of the operating time during a 6-month period.

(vii) For a minimum oxygen level, if you conduct multiple performance tests, you must set the minimum oxygen level at the lower of the minimum values established during the performance tests.

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(viii) The operating limit for boilers or process heaters that demonstrate continuous compliance with the HCl emission limit using a SO₂ CEMS is to install and operate the SO₂ according to the requirements in §63.7525(m) establish a maximum SO₂ emission rate equal to the highest hourly average SO₂ measurement during the most recent three-run performance test for HCl.

(c) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to §63.7521 and follow the procedures in paragraphs (c)(1) through (5) of this section.

(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.

(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided t-statistic test described in Equation 15 of this section.

$$P90 = \text{mean} + (SD \times t) \quad (\text{Eq. 15})$$

Where:

P90 = 90th percentile confidence level pollutant concentration, in pounds per million Btu.

Mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

SD = Standard deviation of the mean of pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu. SD is calculated as the sample standard deviation divided by the square root of the number of samples.

t = t distribution critical value for 90th percentile ($t_{0.1}$) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a t-Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable emission limit for HCl, the HCl emission rate that you calculate for your boiler or process heater using Equation 16 of this section must not exceed the applicable emission limit for HCl.

$$HCl = \sum_{i=1}^n (Ci90 \times Qi \times 1.028) \quad (\text{Eq. 16})$$

Where:

HCl = HCl emission rate from the boiler or process heater in units of pounds per million Btu.

Ci90 = 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to Equation 11 of this section.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

1.028 = Molecular weight ratio of HCl to chlorine.

(4) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 17 of this section must not exceed the applicable emission limit for mercury.

$$\text{Mercury} = \sum_{i=1}^n (Hgi90 \times Qi) \quad (\text{Eq. 17})$$

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Where:

Mercury = Mercury emission rate from the boiler or process heater in units of pounds per million Btu.

Hgi90 = 90th percentile confidence level concentration of mercury in fuel, i, in units of pounds per million Btu as calculated according to Equation 11 of this section.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest mercury content.

(5) To demonstrate compliance with the applicable emission limit for TSM for solid or liquid fuels, the TSM emission rate that you calculate for your boiler or process heater from solid fuels using Equation 18 of this section must not exceed the applicable emission limit for TSM.

$$Metals = \sum_{i=1}^n (TSM90i \times Qi) \quad (\text{Eq. 18})$$

Where:

Metals = TSM emission rate from the boiler or process heater in units of pounds per million Btu.

TSMi90 = 90th percentile confidence level concentration of TSM in fuel, i, in units of pounds per million Btu as calculated according to Equation 11 of this section.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest TSM content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest TSM content.

(d) If you own or operate an existing unit with a heat input capacity of less than 10 million Btu per hour or a unit in the unit designed to burn gas 1 subcategory, you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the unit.

(e) You must include with the Notification of Compliance Status a signed certification that the energy assessment was completed according to Table 3 to this subpart and is an accurate depiction of your facility at the time of the assessment.

(f) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7545(e).

(g) If you elect to demonstrate that a gaseous fuel meets the specifications of another gas 1 fuel as defined in §63.7575, you must conduct an initial fuel specification analyses according to §63.7521(f) through (i) and according to the frequency listed in §63.7540(c) and maintain records of the results of the testing as outlined in §63.7555(g). For samples where the initial mercury specification has not been exceeded, you will include a signed certification with the Notification of Compliance Status that the initial fuel specification test meets the gas specification outlined in the definition of other gas 1 fuels.

(h) If you own or operate a unit subject to emission limits in Tables 1 or 2 or 11 through 13 to this subpart, you must meet the work practice standard according to Table 3 of this subpart. During startup and shutdown, you must only follow the work practice standards according to item 5 of Table 3 of this subpart.

(i) If you opt to comply with the alternative SO₂ CEMS operating limit in Tables 4 and 8 to this subpart, you may do so only if your affected boiler or process heater:

§63.7530	<p>(1) Has a system using wet scrubber or dry sorbent injection and SO₂ CEMS installed on the unit; and</p> <p>(2) At all times, you operate the wet scrubber or dry sorbent injection for acid gas control on the unit consistent with §63.7500(a)(3); and</p> <p>(3) You establish a unit-specific maximum SO₂ operating limit by collecting the minimum hourly SO₂ emission rate on the SO₂ CEMS during the paired 3-run test for HCl. The maximum SO₂ operating limit is equal to the highest hourly average SO₂ concentration measured during the most recent HCl performance test.</p> <p>[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7174, Jan. 31, 2013]</p>
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Efficiency Credits Earned from Implementation of Energy Conservation Measures

§63.7533	<p>(a) If you elect to comply with the alternative equivalent output-based emission limits, instead of the heat input-based limits listed in Table 2 to this subpart, and you want to take credit for implementing energy conservation measures identified in an energy assessment, you may demonstrate compliance using efficiency credits according to the procedures in this section. You may use this compliance approach for an existing affected boiler for demonstrating initial compliance according to §63.7522(e) and for demonstrating monthly compliance according to §63.7522(f). Owners or operators using this compliance approach must establish an emissions benchmark, calculate and document the efficiency credits, develop an Implementation Plan, comply with the general reporting requirements, and apply the efficiency credit according to the procedures in paragraphs (b) through (f) of this section. You cannot use this compliance approach for a new or reconstructed affected boiler. Additional guidance from the Department of Energy on efficiency credits is available at: http://www.epa.gov/ttn/atw/boiler/boilerpg.html.</p> <p>(b) For each existing affected boiler for which you intend to apply emissions credits, establish a benchmark from which emission reduction credits may be generated by determining the actual annual fuel heat input to the affected boiler before initiation of an energy conservation activity to reduce energy demand (<i>i.e.</i>, fuel usage) according to paragraphs (b)(1) through (4) of this section. The benchmark shall be expressed in trillion Btu per year heat input.</p> <p>(1) The benchmark from which efficiency credits may be generated shall be determined by using the most representative, accurate, and reliable process available for the source. The benchmark shall be established for a one-year period before the date that an energy demand reduction occurs, unless it can be demonstrated that a different time period is more representative of historical operations.</p> <p>(2) Determine the starting point from which to measure progress. Inventory all fuel purchased and generated on-site (off-gases, residues) in physical units (MMBtu, million cubic feet, etc.).</p> <p>(3) Document all uses of energy from the affected boiler. Use the most recent data available.</p> <p>(4) Collect non-energy related facility and operational data to normalize, if necessary, the benchmark to current operations, such as building size, operating hours, etc. If possible, use actual data that are current and timely rather than estimated data.</p>
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(c) Efficiency credits can be generated if the energy conservation measures were implemented after January 1, 2008 and if sufficient information is available to determine the appropriate value of credits.

(1) The following emission points cannot be used to generate efficiency credits:

(i) Energy conservation measures implemented on or before January 1, 2008, unless the level of energy demand reduction is increased after January 1, 2008, in which case credit will be allowed only for change in demand reduction achieved after January 1, 2008.

(ii) Efficiency credits on shut-down boilers. Boilers that are shut down cannot be used to generate credits unless the facility provides documentation linking the permanent shutdown to energy conservation measures identified in the energy assessment. In this case, the bench established for the affected boiler to which the credits from the shutdown will be applied must be revised to include the benchmark established for the shutdown boiler.

(2) For all points included in calculating emissions credits, the owner or operator shall:

(i) Calculate annual credits for all energy demand points. Use Equation 19 to calculate credits. Energy conservation measures that meet the criteria of paragraph (c)(1) of this section shall not be included, except as specified in paragraph (c)(1)(i) of this section.

(3) Credits are generated by the difference between the benchmark that is established for each affected boiler, and the actual energy demand reductions from energy conservation measures implemented after January 1, 2008. Credits shall be calculated using Equation 19 of this section as follows:

(i) The overall equation for calculating credits is:

$$ECredits = \left(\sum_{i=1}^n EIS_{iactual} \right) + EI_{baseline} \quad (\text{Eq. 19})$$

Where:

ECredits = Energy Input Savings for all energy conservation measures implemented for an affected boiler, expressed as a decimal fraction of the baseline energy input.

EIS_{iactual} = Energy Input Savings for each energy conservation measure, i, implemented for an affected boiler, million Btu per year.

EI_{baseline} = Energy Input baseline for the affected boiler, million Btu per year.

n = Number of energy conservation measures included in the efficiency credit for the affected boiler.

(ii) [Reserved]

(d) The owner or operator shall develop, and submit for approval upon request by the Administrator, an Implementation Plan containing all of the information required in this paragraph for all boilers to be included in an efficiency credit approach. The Implementation Plan shall identify all existing affected boilers to be included in applying the efficiency credits. The Implementation Plan shall include a description of the energy conservation measures implemented and the energy savings generated from each measure and an explanation of the criteria used for determining that savings. If requested, you must submit the implementation plan for efficiency credits to the Administrator for review and approval no later than 180 days before the date on which the facility intends to demonstrate compliance using the efficiency credit approach.

§63.7533	<p>(e) The emissions rate as calculated using Equation 20 of this section from each existing boiler participating in the efficiency credit option must be in compliance with the limits in Table 2 to this subpart at all times the affected unit is operating, following the compliance date specified in §63.7495.</p> <p>(f) You must use Equation 20 of this section to demonstrate initial compliance by demonstrating that the emissions from the affected boiler participating in the efficiency credit compliance approach do not exceed the emission limits in Table 2 to this subpart.</p> $E_{adj} = E_m \times (1 - ECredits) \quad (Eq. 20)$ <p>Where:</p> <p>E_{adj} = Emission level adjusted by applying the efficiency credits earned, lb per million Btu steam output (or lb per MWh) for the affected boiler.</p> <p>E_m = Emissions measured during the performance test, lb per million Btu steam output (or lb per MWh) for the affected boiler.</p> <p>ECredits = Efficiency credits from Equation 19 for the affected boiler.</p> <p>(g) As part of each compliance report submitted as required under §63.7550, you must include documentation that the energy conservation measures implemented continue to generate the credit for use in demonstrating compliance with the emission limits.</p> <p>[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7178, Jan. 31, 2013]</p>
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Continuous Compliance Requirements

§63.7535	<p>(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by §63.7505(d).</p> <p>(b) You must operate the monitoring system and collect data at all required intervals at all times that each boiler or process heater is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods (see §63.8(c)(7) of this part), and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in your site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.</p> <p>(c) You may not use data recorded during monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. You must record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with your site-specific monitoring plan. You must use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system.</p>
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§63.7535	<p>(d) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring results, do not use any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities. You must calculate monitoring results using all other monitoring data collected while the process is operating. You must report all periods when the monitoring system is out of control in your annual report.</p> <p>[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7179, Jan. 31, 2013]</p>
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Continuous Compliance Demonstration: Emission Limitations, Fuel Specifications and Work Practice Standards

§63.7540	<p>(a) You must demonstrate continuous compliance with each emission limit in Tables 1 and 2 or 11 through 13 to this subpart, the work practice standards in Table 3 to this subpart, and the operating limits in Table 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (19) of this section.</p> <p>(1) Following the date on which the initial compliance demonstration is completed or is required to be completed under §§63.7 and 63.7510, whichever date comes first, operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 of this subpart except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests.</p> <p>(2) As specified in §63.7550(c), you must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in either of the following:</p> <p>(i) Lower emissions of HCl, mercury, and TSM than the applicable emission limit for each pollutant, if you demonstrate compliance through fuel analysis.</p> <p>(ii) Lower fuel input of chlorine, mercury, and TSM than the maximum values calculated during the last performance test, if you demonstrate compliance through performance testing.</p> <p>(3) If you demonstrate compliance with an applicable HCl emission limit through fuel analysis for a solid or liquid fuel and you plan to burn a new type of solid or liquid fuel, you must recalculate the HCl emission rate using Equation 12 of §63.7530 according to paragraphs (a)(3)(i) through (iii) of this section. You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the HCl emission rate.</p> <p>(i) You must determine the chlorine concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).</p>
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<p>§63.7540</p>	<p>(ii) You must determine the new mixture of fuels that will have the highest content of chlorine.</p> <p>(iii) Recalculate the HCl emission rate from your boiler or process heater under these new conditions using Equation 12 of §63.7530. The recalculated HCl emission rate must be less than the applicable emission limit.</p> <p>(4) If you demonstrate compliance with an applicable HCl emission limit through performance testing and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 7 of §63.7530. If the results of recalculating the maximum chlorine input using Equation 7 of §63.7530 are greater than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the HCl emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b). In recalculating the maximum chlorine input and establishing the new operating limits, you are not required to conduct fuel analyses for and include the fuels described in §63.7510(a)(2)(i) through (iii).</p> <p>(5) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 13 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section. You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the mercury emission rate.</p> <p>(i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).</p> <p>(ii) You must determine the new mixture of fuels that will have the highest content of mercury.</p> <p>(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 13 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.</p> <p>(6) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 8 of §63.7530. If the results of recalculating the maximum mercury input using Equation 8 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b). You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the mercury emission rate.</p> <p>(7) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alert and complete corrective actions as soon as practical, and operate and maintain the fabric filter system such that the periods which would cause an alert are no more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alert, the time corrective action was initiated and completed, and a brief description of the cause of the alert and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the conditions exist for an alert. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alert time is counted. If corrective action is required, each alert shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alert time shall be counted as the actual amount of time taken to initiate corrective action.</p>
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(8) To demonstrate compliance with the applicable alternative CO CEMS emission limit listed in Tables 1, 2, or 11 through 13 to this subpart, you must meet the requirements in paragraphs (a)(8)(i) through (iv) of this section.

(i) Continuously monitor CO according to §§63.7525(a) and 63.7535.

(ii) Maintain a CO emission level below or at your applicable alternative CO CEMS-based standard in Tables 1 or 2 or 11 through 13 to this subpart at all times the affected unit is operating.

(iii) Keep records of CO levels according to §63.7555(b).

(iv) You must record and make available upon request results of CO CEMS performance audits, dates and duration of periods when the CO CEMS is out of control to completion of the corrective actions necessary to return the CO CEMS to operation consistent with your site-specific monitoring plan.

(9) The owner or operator of a boiler or process heater using a PM CPMS or a PM CEMS to meet requirements of this subpart shall install, certify, operate, and maintain the PM CPMS or PM CEMS in accordance with your site-specific monitoring plan as required in §63.7505(d).

(10) If your boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, you must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of this section. This frequency does not apply to limited-use boilers and process heaters, as defined in §63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;

(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

(vi) Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (a)(10)(vi)(A) through (C) of this section,

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(A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

(B) A description of any corrective actions taken as a part of the tune-up; and

(C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

(11) If your boiler or process heater has a heat input capacity of less than 10 million Btu per hour (except as specified in paragraph (a)(12) of this section), you must conduct a biennial tune-up of the boiler or process heater as specified in paragraphs (a)(10)(i) through (vi) of this section to demonstrate continuous compliance.

(12) If your boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour and the unit is in the units designed to burn gas 1; units designed to burn gas 2 (other); or units designed to burn light liquid subcategories, or meets the definition of limited-use boiler or process heater in §63.7575, you must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (a)(10)(i) through (vi) of this section to demonstrate continuous compliance. You may delay the burner inspection specified in paragraph (a)(10)(i) of this section until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

(13) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

(14) If you are using a CEMS measuring mercury emissions to meet requirements of this subpart you must install, certify, operate, and maintain the mercury CEMS as specified in paragraphs (a)(14)(i) and (ii) of this section.

(i) Operate the mercury CEMS in accordance with performance specification 12A of 40 CFR part 60, appendix B or operate a sorbent trap based integrated monitor in accordance with performance specification 12B of 40 CFR part 60, appendix B. The duration of the performance test must be the maximum of 30 unit operating days or 720 hours. For each day in which the unit operates, you must obtain hourly mercury concentration data, and stack gas volumetric flow rate data.

(ii) If you are using a mercury CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the mercury mass emissions rate to the atmosphere according to the requirements of performance specifications 6 and 12A of 40 CFR part 60, appendix B, and quality assurance procedure 6 of 40 CFR part 60, appendix F.

(15) If you are using a CEMS to measure HCl emissions to meet requirements of this subpart, you must install, certify, operate, and maintain the HCl CEMS as specified in paragraphs (a)(15)(i) and (ii) of this section. This option for an affected unit takes effect on the date a final performance specification for an HCl CEMS is published in the Federal Register or the date of approval of a site-specific monitoring plan.

(i) Operate the continuous emissions monitoring system in accordance with the applicable performance specification in 40 CFR part 60, appendix B. The duration of the performance test must be the maximum of 30 unit operating days or 720 hours. For each day in which the unit operates, you must obtain hourly HCl concentration data, and stack gas volumetric flow rate data.

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(ii) If you are using a HCl CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the HCl mass emissions rate to the atmosphere according to the requirements of the applicable performance specification of 40 CFR part 60, appendix B, and the quality assurance procedures of 40 CFR part 60, appendix F.

(16) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 9 of §63.7530. If the results of recalculating the maximum TSM input using Equation 9 of §63.7530 are higher than the maximum total selected input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b). You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the TSM emission rate.

(17) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis for solid or liquid fuels, and you plan to burn a new type of fuel, you must recalculate the TSM emission rate using Equation 14 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section. You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the TSM emission rate.

(i) You must determine the TSM concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of TSM.

(iii) Recalculate the TSM emission rate from your boiler or process heater under these new conditions using Equation 14 of §63.7530. The recalculated TSM emission rate must be less than the applicable emission limit.

(18) If you demonstrate continuous PM emissions compliance with a PM CPMS you will use a PM CPMS to establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit. You will conduct your performance test using the test method criteria in Table 5 of this subpart. You will use the PM CPMS to demonstrate continuous compliance with this operating limit. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.

(i) To determine continuous compliance, you must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30-day rolling average basis, updated at the end of each new boiler or process heater operating hour.

(ii) For any deviation of the 30-day rolling PM CPMS average value from the established operating parameter limit, you must:

(A) Within 48 hours of the deviation, visually inspect the air pollution control device (APCD).

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(B) If inspection of the APCD identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and

(C) Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under this paragraph.

(iii) PM CPMS deviations from the operating limit leading to more than four required performance tests in a 12-month operating period constitute a separate violation of this subpart.

(19) If you choose to comply with the PM filterable emissions limit by using PM CEMS you must install, certify, operate, and maintain a PM CEMS and record the output of the PM CEMS as specified in paragraphs (a)(19)(i) through (vii) of this section. The compliance limit will be expressed as a 30-day rolling average of the numerical emissions limit value applicable for your unit in Tables 1 or 2 or 11 through 13 of this subpart.

(i) Install and certify your PM CEMS according to the procedures and requirements in Performance Specification 11—Specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources in Appendix B to part 60 of this chapter, using test criteria outlined in Table V of this rule. The reportable measurement output from the PM CEMS must be expressed in units of the applicable emissions limit (e.g., lb/MMBtu, lb/MWh).

(ii) Operate and maintain your PM CEMS according to the procedures and requirements in Procedure 2—Quality Assurance Requirements for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources in Appendix F to part 60 of this chapter.

(A) You must conduct the relative response audit (RRA) for your PM CEMS at least once annually.

(B) You must conduct the relative correlation audit (RCA) for your PM CEMS at least once every 3 years.

(iii) Collect PM CEMS hourly average output data for all boiler operating hours except as indicated in paragraph (i) of this section.

(iv) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CEMS output data collected during all nonexempt boiler or process heater operating hours.

(v) You must collect data using the PM CEMS at all times the unit is operating and at the intervals specified this paragraph (a), except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities.

(vi) You must use all the data collected during all boiler or process heater operating hours in assessing the compliance with your operating limit except:

(A) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities conducted during monitoring system malfunctions in calculations and report any such periods in your annual deviation report;

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(B) Any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or control activities conducted during out of control periods in calculations used to report emissions or operating levels and report any such periods in your annual deviation report;

(C) Any data recorded during periods of startup or shutdown.

(vii) You must record and make available upon request results of PM CEMS system performance audits, dates and duration of periods when the PM CEMS is out of control to completion of the corrective actions necessary to return the PM CEMS to operation consistent with your site-specific monitoring plan.

(b) You must report each instance in which you did not meet each emission limit and operating limit in Tables 1 through 4 or 11 through 13 to this subpart that apply to you. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in §63.7550.

(c) If you elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory, you must follow the sampling frequency specified in paragraphs (c)(1) through (4) of this section and conduct this sampling according to the procedures in §63.7521(f) through (i).

(1) If the initial mercury constituents in the gaseous fuels are measured to be equal to or less than half of the mercury specification as defined in §63.7575, you do not need to conduct further sampling.

(2) If the initial mercury constituents are greater than half but equal to or less than 75 percent of the mercury specification as defined in §63.7575, you will conduct semi-annual sampling. If 6 consecutive semi-annual fuel analyses demonstrate 50 percent or less of the mercury specification, you do not need to conduct further sampling. If any semi-annual sample exceeds 75 percent of the mercury specification, you must return to monthly sampling for that fuel, until 12 months of fuel analyses again are less than 75 percent of the compliance level.

(3) If the initial mercury constituents are greater than 75 percent of the mercury specification as defined in §63.7575, you will conduct monthly sampling. If 12 consecutive monthly fuel analyses demonstrate 75 percent or less of the mercury specification, you may decrease the fuel analysis frequency to semi-annual for that fuel.

(4) If the initial sample exceeds the mercury specification as defined in §63.7575, each affected boiler or process heater combusting this fuel is not part of the unit designed to burn gas 1 subcategory and must be in compliance with the emission and operating limits for the appropriate subcategory. You may elect to conduct additional monthly sampling while complying with these emissions and operating limits to demonstrate that the fuel qualifies as another gas 1 fuel. If 12 consecutive monthly fuel analyses samples are at or below the mercury specification as defined in §63.7575, each affected boiler or process heater combusting the fuel can elect to switch back into the unit designed to burn gas 1 subcategory until the mercury specification is exceeded.

(d) For startup and shutdown, you must meet the work practice standards according to item 5 of Table 3 of this subpart.

[78 FR 7179, Jan. 31, 2013]

Continuous Compliance Demonstration: Emissions Averaging Provision

§63.7541	<p>(a) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of paragraphs (a)(1) through (5) of this section.</p> <p>(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing units participating in the emissions averaging option as determined in §63.7522(f) and (g).</p> <p>(2) You must maintain the applicable opacity limit according to paragraphs (a)(2)(i) and (ii) of this section.</p> <p>(i) For each existing unit participating in the emissions averaging option that is equipped with a dry control system and not vented to a common stack, maintain opacity at or below the applicable limit.</p> <p>(ii) For each group of units participating in the emissions averaging option where each unit in the group is equipped with a dry control system and vented to a common stack that does not receive emissions from non-affected units, maintain opacity at or below the applicable limit at the common stack.</p> <p>(3) For each existing unit participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 30-day rolling average parameter values at or above the operating limits established during the most recent performance test.</p> <p>(4) For each existing unit participating in the emissions averaging option that has an approved alternative operating parameter, maintain the 30-day rolling average parameter values consistent with the approved monitoring plan.</p> <p>(5) For each existing unit participating in the emissions averaging option venting to a common stack configuration containing affected units from other subcategories, maintain the appropriate operating limit for each unit as specified in Table 4 to this subpart that applies.</p> <p>(b) Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (a)(1) through (5) of this section is a deviation.</p> <p>[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7182, Jan. 31, 2013]</p>
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Notification, Reports, and Records

§63.7545	<p>(a) You must submit to the Administrator all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.</p> <p>(b) As specified in §63.9(b)(2), if you startup your affected source before January 31, 2013, you must submit an Initial Notification not later than 120 days after January 31, 2013.</p> <p>(c) As specified in §63.9(b)(4) and (5), if you startup your new or reconstructed affected source on or after January 31, 2013, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.</p> <p>(d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.</p>
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<p>§63.7545</p>	<p>(e) If you are required to conduct an initial compliance demonstration as specified in §63.7530, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8), as applicable. If you are not required to conduct an initial compliance demonstration as specified in §63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8).</p> <p>(1) A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the EPA through a petition process to be a non-waste under §241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of §241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.</p> <p>(2) Summary of the results of all performance tests and fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits, and including:</p> <p>(i) Identification of whether you are complying with the PM emission limit or the alternative TSM emission limit.</p> <p>(ii) Identification of whether you are complying with the output-based emission limits or the heat input-based (i.e., lb/MMBtu or ppm) emission limits,</p> <p>(3) A summary of the maximum CO emission levels recorded during the performance test to show that you have met any applicable emission standard in Tables 1, 2, or 11 through 13 to this subpart, if you are not using a CO CEMS to demonstrate compliance.</p> <p>(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing, a CEMS, or fuel analysis.</p> <p>(5) Identification of whether you plan to demonstrate compliance by emissions averaging and identification of whether you plan to demonstrate compliance by using efficiency credits through energy conservation:</p> <p>(i) If you plan to demonstrate compliance by emission averaging, report the emission level that was being achieved or the control technology employed on January 31, 2013.</p> <p>(ii) [Reserved]</p> <p>(6) A signed certification that you have met all applicable emission limits and work practice standards.</p> <p>(7) If you had a deviation from any emission limit, work practice standard, or operating limit, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.</p>
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<p>§63.7545</p>	<p>(8) In addition to the information required in §63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:</p> <p>(i) “This facility complies with the required initial tune-up according to the procedures in §63.7540(a)(10)(i) through (vi).”</p> <p>(ii) “This facility has had an energy assessment performed according to §63.7530(e).”</p> <p>(iii) Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: “No secondary materials that are solid waste were combusted in any affected unit.”</p> <p>(f) If you operate a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to this subpart, and you intend to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of this part, part 60, 61, or 65, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in §63.7575, you must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in §63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of this section.</p> <p>(1) Company name and address.</p> <p>(2) Identification of the affected unit.</p> <p>(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.</p> <p>(4) Type of alternative fuel that you intend to use.</p> <p>(5) Dates when the alternative fuel use is expected to begin and end.</p> <p>(g) If you intend to commence or recommence combustion of solid waste, you must provide 30 days prior notice of the date upon which you will commence or recommence combustion of solid waste. The notification must identify:</p> <p>(1) The name of the owner or operator of the affected source, as defined in §63.7490, the location of the source, the boiler(s) or process heater(s) that will commence burning solid waste, and the date of the notice.</p> <p>(2) The currently applicable subcategories under this subpart.</p> <p>(3) The date on which you became subject to the currently applicable emission limits.</p> <p>(4) The date upon which you will commence combusting solid waste.</p> <p>(h) If you have switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, you must provide notice of the date upon which you switched fuels or made the physical change within 30 days of the switch/change. The notification must identify:</p>
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§63.7545	<p>(1) The name of the owner or operator of the affected source, as defined in §63.7490, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice.</p> <p>(2) The currently applicable subcategory under this subpart.</p> <p>(3) The date upon which the fuel switch or physical change occurred.</p> <p>[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7183, Jan. 31, 2013]</p>
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Reporting Requirements

§63.7550	<p>(a) You must submit each report in Table 9 to this subpart that applies to you.</p> <p>(b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report, according to paragraph (h) of this section, by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (4) of this section. For units that are subject only to a requirement to conduct an annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or operating limits, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of this section, instead of a semi-annual compliance report.</p> <p>(1) The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in §63.7495 and ending on July 31 or January 31, whichever date is the first date that occurs at least 180 days (or 1, 2, or 5 years, as applicable, if submitting an annual, biennial, or 5-year compliance report) after the compliance date that is specified for your source in §63.7495.</p> <p>(2) The first compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in §63.7495. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than January 31.</p> <p>(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31.</p> <p>(4) Each subsequent compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than January 31.</p> <p>(c) A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.</p> <p>(1) If the facility is subject to a the requirements of a tune up they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iv) and (xiv) of this section.</p>
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(2) If a facility is complying with the fuel analysis they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iv), (vi), (x), (xi), (xiii), (xv) and paragraph (d) of this section.

(3) If a facility is complying with the applicable emissions limit with performance testing they must submit a compliance report with the information in (c)(5)(i) through (iv), (vi), (vii), (ix), (xi), (xiii), (xv) and paragraph (d) of this section.

(4) If a facility is complying with an emissions limit using a CMS the compliance report must contain the information required in paragraphs (c)(5)(i) through (vi), (xi), (xiii), (xv) through (xvii), and paragraph (e) of this section.

(5)(i) Company and Facility name and address.

(ii) Process unit information, emissions limitations, and operating parameter limitations.

(iii) Date of report and beginning and ending dates of the reporting period.

(iv) The total operating time during the reporting period.

(v) If you use a CMS, including CEMS, COMS, or CPMS, you must include the monitoring equipment manufacturer(s) and model numbers and the date of the last CMS certification or audit.

(vi) The total fuel use by each individual boiler or process heater subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.

(vii) If you are conducting performance tests once every 3 years consistent with §63.7515(b) or (c), the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions.

(viii) A statement indicating that you burned no new types of fuel in an individual boiler or process heater subject to an emission limit. Or, if you did burn a new type of fuel and are subject to a HCl emission limit, you must submit the calculation of chlorine input, using Equation 7 of §63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HCl emission rate using Equation 12 of §63.7530 that demonstrates that your source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel and are subject to a mercury emission limit, you must submit the calculation of mercury input, using Equation 8 of §63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 13 of §63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel and are subject to a TSM emission limit, you must submit the calculation of TSM input, using Equation 9 of §63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate, using Equation 14 of §63.7530, that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

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(ix) If you wish to burn a new type of fuel in an individual boiler or process heater subject to an emission limit and you cannot demonstrate compliance with the maximum chlorine input operating limit using Equation 7 of §63.7530 or the maximum mercury input operating limit using Equation 8 of §63.7530, or the maximum TSM input operating limit using Equation 9 of §63.7530 you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(x) A summary of any monthly fuel analyses conducted to demonstrate compliance according to §§63.7521 and 63.7530 for individual boilers or process heaters subject to emission limits, and any fuel specification analyses conducted according to §§63.7521(f) and 63.7530(g).

(xi) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, a statement that there were no deviations from the emission limits or operating limits during the reporting period.

(xii) If there were no deviations from the monitoring requirements including no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in §63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period.

(xiii) If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by you during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with §63.7500(a)(3), including actions taken to correct the malfunction.

(xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

(xv) If you plan to demonstrate compliance by emission averaging, certify the emission level achieved or the control technology employed is no less stringent than the level or control technology contained in the notification of compliance status in §63.7545(e)(5)(i).

(xvi) For each reporting period, the compliance reports must include all of the calculated 30 day rolling average values based on the daily CEMS (CO and mercury) and CPMS (PM CPMS output, scrubber pH, scrubber liquid flow rate, scrubber pressure drop) data.

(xvii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(d) For each deviation from an emission limit or operating limit in this subpart that occurs at an individual boiler or process heater where you are not using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (d)(1) through (3) of this section.

(1) A description of the deviation and which emission limit or operating limit from which you deviated.

(2) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

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(3) If the deviation occurred during an annual performance test, provide the date the annual performance test was completed.

(e) For each deviation from an emission limit, operating limit, and monitoring requirement in this subpart occurring at an individual boiler or process heater where you are using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (e)(1) through (9) of this section. This includes any deviations from your site-specific monitoring plan as required in §63.7505(d).

(1) The date and time that each deviation started and stopped and description of the nature of the deviation (i.e., what you deviated from).

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A characterization of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS's downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) A brief description of the source for which there was a deviation.

(9) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

(f)-(g) [Reserved]

(h) You must submit the reports according to the procedures specified in paragraphs (h)(1) through (3) of this section.

(1) Within 60 days after the date of completing each performance test (defined in §63.2) as required by this subpart you must submit the results of the performance tests, including any associated fuel analyses, required by this subpart and the compliance reports required in §63.7550(b) to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see <http://www.epa.gov/ttn/chief/ert/index.html>). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703.

<p>§63.7550</p>	<p>The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the Administrator, you must also submit these reports, including the confidential business information, to the Administrator in the format specified by the Administrator. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test in paper submissions to the Administrator.</p> <p>(2) Within 60 days after the date of completing each CEMS performance evaluation test (defined in 63.2) you must submit the relative accuracy test audit (RATA) data to the EPA's Central Data Exchange by using CEDRI as mentioned in paragraph (h)(1) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator shall submit the results of the performance evaluation in paper submissions to the Administrator.</p> <p>(3) You must submit all reports required by Table 9 of this subpart electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due the report you must submit the report to the Administrator at the appropriate address listed in §63.13. At the discretion of the Administrator, you must also submit these reports, to the Administrator in the format specified by the Administrator.</p> <p>[78 FR 7183, Jan. 31, 2013]</p>
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Record Keeping Requirements

<p>§63.7555</p>	<p>(a) You must keep records according to paragraphs (a)(1) and (2) of this section.</p> <p>(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in §63.10(b)(2)(xiv).</p> <p>(2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in §63.10(b)(2)(viii).</p> <p>(b) For each CEMS, COMS, and continuous monitoring system you must keep records according to paragraphs (b)(1) through (5) of this section.</p> <p>(1) Records described in §63.10(b)(2)(vii) through (xi).</p> <p>(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in §63.6(h)(7)(i) and (ii).</p> <p>(3) Previous (<i>i.e.</i>, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).</p> <p>(4) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).</p> <p>(5) Records of the date and time that each deviation started and stopped.</p>
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(c) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that applies to you.

(d) For each boiler or process heater subject to an emission limit in Tables 1, 2, or 11 through 13 to this subpart, you must also keep the applicable records in paragraphs (d)(1) through (11) of this section.

(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.

(2) If you combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §241.3(b)(1) and (2) of this chapter, you must keep a record that documents how the secondary material meets each of the legitimacy criteria under §241.3(d)(1) of this chapter. If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to §241.3(b)(4) of this chapter, you must keep records as to how the operations that produced the fuel satisfy the definition of processing in §241.2 of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under §241.3(c) of this chapter, you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per §241.4 of this chapter, you must keep records documenting that the material is listed as a non-waste under §241.4(a) of this chapter. Units exempt from the incinerator standards under section 129(g)(1) of the Clean Air Act because they are qualifying facilities burning a homogeneous waste stream do not need to maintain the records described in this paragraph (d)(2).

(3) For units in the limited use subcategory, you must keep a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and fuel use records for the days the boiler or process heater was operating.

(4) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of §63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 12 of §63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler and process heater.

(5) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of §63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 13 of §63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

(6) If, consistent with §63.7515(b), you choose to stack test less frequently than annually, you must keep a record that documents that your emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit (or, in specific instances noted in Tables 1 and 2 or 11 through 13 to this subpart, less than the applicable emission limit), and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.

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(7) Records of the occurrence and duration of each malfunction of the boiler or process heater, or of the associated air pollution control and monitoring equipment.

(8) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the malfunctioning boiler or process heater, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(9) A copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 9 of §63.7530, that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 14 of §63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate TSM fuel input, or TSM emission rates, for each boiler and process heater.

(10) You must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.

(11) You must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.

(e) If you elect to average emissions consistent with §63.7522, you must additionally keep a copy of the emission averaging implementation plan required in §63.7522(g), all calculations required under §63.7522, including monthly records of heat input or steam generation, as applicable, and monitoring records consistent with §63.7541.

(f) If you elect to use efficiency credits from energy conservation measures to demonstrate compliance according to §63.7533, you must keep a copy of the Implementation Plan required in §63.7533(d) and copies of all data and calculations used to establish credits according to §63.7533(b), (c), and (f).

(g) If you elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory, you must maintain monthly records (or at the frequency required by §63.7540(c)) of the calculations and results of the fuel specification for mercury in Table 6.

(h) If you operate a unit in the unit designed to burn gas 1 subcategory that is subject to this subpart, and you use an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under this part, other gas 1 fuel, or gaseous fuel subject to another subpart of this part or part 60, 61, or 65, you must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies.

(i) You must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.

(j) You must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7185, Jan. 31, 2013]

Record Retention Requirements

§63.7560	<p>(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).</p> <p>(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.</p> <p>(c) You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off site for the remaining 3 years.</p>
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Appendix A

Greenhouse Gas Facility Wide Reporting

Greenhouse Gases:

Carbon dioxide (CO₂),
 Nitrous oxide (N₂O),
 Methane (CH₄),
 Hydrofluorocarbons (HFCs),
 Perfluorocarbons (PFCs), and
 Sulfur Hexafluoride (SF₆).

CO₂e reported for the year 2012

GHG EMISSIONS (Metric tons per year)							
Pollutants:	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	Total
Emissions (tpy):	367,793	442.438	2.94	N/A	N/A	N/A	
*GWP:	1	21	310	**	**	23,900	
CO ₂ e (tpy):	367,793	9,291.2	911.4	N/A	N/A	N/A	377,995.6

GHGs in table above are Potential to Emit (PTE) for year 2012. Actual CO₂e (including landfill emissions) were 29,000.2 metric tons.

*Global Warming Potential (GWP): The capacity to heat the atmosphere, calculated as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram (kg) of a substance relative to that of 1 kg of CO₂. GWP shall be calculated according to the factors for a 100-year time horizon, as stated in 40 CFR Part 98 Subpart A Table A-1 (Global Warming Potentials).

** GWP varies based on each pollutant.