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) – Stationary Source Group (SSG) 138, MXG-Logistics MB

Location: Edwards Air Force Base
412th Maintenance Group (412 MXG) Logistics
120 N. Rosamond Boulevard, Suite A
Edwards Air Force Base CA 93524

Permit No: 9006-V-2022-1

Issuance Date: Month XX, 2022

Expiration Date: Month XX, 2027

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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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.	**Inspections** 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.	Reg. I, Rule 107
2.	**Source Sampling** 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. 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 (PM_{10}) 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.	Reg. I, Rule 108.1
3.	**Severability** 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.	Reg. I, Rule 114

	Federally Enforceable Conditions	**Reg/Rule**
4.	**Applicability of Federally Enforceable Conditions** Federally Enforceable Conditions **shall apply** 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.	Reg. II, Rule 201.1
5.	**Compliance with Permit Conditions** A. Edwards AFB shall comply with all permit conditions; B. Permit does not convey any property rights or any exclusive privilege; C. Non-compliance with any permit condition shall be grounds for permit termination, revocation and reissuance, modification, enforcement action or denial of permit renewal; 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; E. Pending permit action or notification of anticipated non-compliance does not stay any permit condition; and 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.	Reg. II, Rule 201.1
6.	**Permit Life** The life of this permit shall be five years from the date of issuance.	Reg. II, Rule 201.1
7.	**Administrative Permit Amendment and Minor Permit Modification** Administrative Permit Amendment and Minor Permit Modification are those actions taken by the District as defined in Rule 201.1.	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
8.	**Emergency Provisions** A. Edwards AFB shall comply with the requirements 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; 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: 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; C. In any enforcement proceeding, the permittee has the burden of proof for establishing that an emergency occurred.	Reg. II, Rule 201.1
9.	**Record Keeping** 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: 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; 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 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.	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
10.	**Referencing of District and Applicable Requirements** 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: 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.	Reg. II, Rule 201.1
11.	**Reporting** 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 notification requirement set forth in the applicable federal regulation or District Rule; 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; C. All reports of non-conformance with permit requirements shall include probable cause of non-conformance and any preventative or corrective action taken; D. Progress report shall be made on a compliance schedule at least semi-annually and including: 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 E. Each monitoring report shall be accompanied by a written statement from the responsible official certifying the truth, accuracy, and completeness of the report.	Reg. II, Rule 201.1
12	**Right of Entry** Edwards AFB shall allow entry of District, CARB, or U.S. EPA officials for purpose of inspection and sampling, including: A. Inspection of the stationary source, including equipment, work practices, operations, and emission-related activity; B. Inspection and duplication of records required by the permit to operate; and C. Source sampling or other monitoring activities.	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
13.	**Periodic Monitoring** **Non-Point** Edwards AFB shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all active non-point sources where conditions allow for a valid Method 22. 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 operating under normal operating conditions, 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. NOTE: This requirement does not apply to permitted emission sources such as the application of paint that is not sprayed or atomized, or 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. Additionally, this requirement does not apply to classified operations that do not have external venting to an unclassified area. **Point** 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 condition is only applicable to areas where a valid Method 22 or Method 9 can be performed. 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 non-point source operating under normal operating conditions, Edwards AFB shall conduct testing on that point source: 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: 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.	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
14.	**Additional Monitoring** For paint booths or hangars, operator shall maintain daily records of key system operating parameters and maintenance procedures while in operation. Key system operating parameters are those necessary to ensure compliance with VOC and inorganic HAP limits. The parameters may include, but are not limited to, temperatures, pressures, flow rates and filter changes. Control efficiency of paint booth shall be tested in accordance with Carbon Adsorption Plan. Alternatively, compliance with the VOC emission limits may be demonstrated by using coatings with a VOC content that meets the requirements of Section V of Rule 410.8 for aerospace coatings or Section VI of Rule 410-4A for motor vehicles and mobile equipment coating operations. 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. 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. Record keeping provisions associated with all monitoring requirements shall include the following information: 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.	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
15.	**Conditional Approval** 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.	Reg. II, Rule 209
16.	**Standards for Authority to Construct** 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: 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. 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; C. Upon satisfying the requirements of paragraph B above, the Permittee may make the proposed change; D. Changes that qualify under this section are not subject to the requirements for Part 70 revisions; E. The Permittee shall include each off-permit change made under this section in the application for renewal of this Part 70 permit; and F. The permit shield(s) provided in this permit do not apply to off-permit changes made under this section.	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
17.	**Prevention of Significant Deterioration (PSD)** Edwards AFB may be subject to District Rule 210.4, Prevention of Significant Deterioration (PSD) if it undergoes major modification(s).	Reg. II, Rule 210.4
18.	**Permit Fees** 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. 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. **Payment of Supplemental Fee** 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 VII.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 VII.B.2. applies.	Reg. III, Rule 301 Rule 201.1 Section VII.B.
19.	**Greenhouse Gas Fee** 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.	Reg. III, Rule 301.4
20.	**Visible Emissions** Unless otherwise stated in equipment specific permits, the following limits apply: **Limits** 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:	Reg. IV, Rule 401

	Federally Enforceable Conditions	**Reg/Rule**
20.	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 20% opacity equivalent to No. 1 on the Ringlemann. 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.	
21.	**Particulate Matter Concentration - Desert Basin** 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. This condition does not apply to rocket engine testing meeting the requirements of Rule 431, fires set in accordance with Rule 416, or boilers, steam generators, water or process heaters that combust only CARB certified or PUC regulated liquid or gaseous fuel.	Reg. IV, Rule 404.1
22.	**Particulate Matter - Emission Rate** 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.	Reg. IV, Rule 405
23.	**Organic Solvents** 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).	Reg. IV, Rule 410
24.	**Disposal and Evaporation of Solvents** 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.X, or of any material containing more than 1½ gallons of any such photochemically reactive solvent into the atmosphere.	Reg. IV, Rule 410.2

	Federally Enforceable Conditions	Reg/Rule
25.	**Organic Solvent Degreasing Operation** A person shall not operate any organic solvent degreasing operation unless the equipment utilized complies with all applicable requirements of Rule 410.3. Organic solvent degreasing operations as defined in Rule 410.3 shall maintain adequate records demonstrating compliance or any exemption to the requirements of Rule 410.3.	Reg. IV, Rule 410.3
26.	**Metal, Plastic, and Pleasure Craft Parts and Products Coating Operations** EAFB 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. This provision does not apply with coating of vehicles or mobile equipment complying with District Rule 410.4A or aircraft or aerospace parts complying with Distr Rule 410.8. Metal, Plastic, Pleasure Craft part coating operations as defined in Rule 410.4 shall maintain adequate records demonstrating compliance or any exemption to the requirements of Rule 410.4.	Reg. IV, Rule 410.4
27.	**Motor Vehicle and Mobile Equipment Refinishing Operations** Edwards AFB may be subject to provisions of Rule 410.4A that apply to the use or application of automotive coatings or associated solvents use on vehicles, mobile equipment, or associated parts or components within the District. Vehicles, mobile equipment, and associated components coating operations as defined in Rule 410.4A shall maintain adequate records demonstrating compliance and / or any exemption to the requirements of Rule 410.4A.	Reg. IV, Rule 410.4A
28.	**Aerospace Assembly and Coating Operations** Edwards AFB shall comply with all applicable requirements of Rule 410.8 that apply to the manufacturing, assembling, coating, masking, bonding, paint stripping, surface cleaning, service, and maintenance of aerospace components and cleanup of associated equipment, storage, and disposal of solvents and waste solvent materials. Aerospace and associated components coating operations as defined in Rule 410.8 shall maintain adequate records demonstrating compliance or any exemption to the requirements of Rule 410.8.	Reg. IV, Rule 410.8

	Federally Enforceable Conditions	**Reg/Rule**
29.	**Federal New Source Performance Standards (NSPS)** 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. All applicable requirements of 40 CFR Part 60, Subparts A (General Requirements), (IIII) Stationary Compression Ignition Internal Combustion Engines, and (JJJJ) Stationary Spark Ignition Internal Combustion Engines apply to this facility.	Reg. IV, Rule 422
30.	**National Emission Standards for Hazardous Air Pollutants and Source Categories (NESHAPS)** 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. All applicable requirements of 40 CFR Part 61, Subpart M (Asbestos); and 40 CFR Part 63, Subparts A (General Provisions), GG (Aerospace Manufacturing), and ZZZZ (Stationary Reciprocating Internal Combustion Engine) sapply to this facility. **Asbestos** EAFB 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.	Reg. IV, Rule 423
31.	**Polyester Resin Operations** Edwards AFB shall comply with all applicable requirements of Rule 432. 2 that apply to the commercial and industrial polyester resin operations and cleanup of associated equipment, storage, and disposal of solvents and waste solvent materials. Polyester resin and associated components coating operations as defined in Rule 432 shall maintain adequate records demonstrating compliance and / or any exemption to the requirements of Rule 432.	Reg. IV, Rule 432

	Federally Enforceable Conditions	Reg/Rule
32.	**Risk Management Plan** 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.	40 CFR 68
33.	**Compliance Certification** The owner/operator shall comply with the following procedures for compliance certification: A. Submittal of a compliance certification by the owner or operator to the U.S. EPA and copy to the APCO within 90 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 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. 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. U.S. EPA's Mailing Address: Director, Air Division 75 Hawthorne Street AIR-3 San Francisco, CA 94105	40 CFR 70.5d

	Federally Enforceable Conditions	**Reg/Rule**
34.	**Protection of Stratospheric Ozone** Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156. 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.	40 CFR 82

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List of Insignificant Air Pollutant Emitting Equipment

Air Conditioning Equipment Used for Comfort

Architectural Surface Coatings

Boilers, Steam Generators & Heaters < 5 MM Btu/hr

Brazing, Soldering, Welding Equipment

Bunsen Burners

Cooling Towers

Small Degreasing Operations

Electric Baking Oven

Electric Fired Kiln

Emissions Unit Emitting < 2 lbs in any 24 hr Period

Emissions Unit Tempory Operations

Fugitive Emission Sources

Inductively Coupled Plasma

Laboratory Hood

Loading Racks and Equipment, (Heavy Oil)

Motor Vehicles as Defined in the CH&SC

Portable Engines, (California Registered)

Printing and Reproduction Equipment

Sources emitting less 10lbs/day or 180lbs/year of NOx and VOC; uncontrolled

Small IC Engines < 50 bhp

Small Turbine Engine Test Stand

Space Heating Equipment

Spectrophotometer

Steam Cleaners, Natural Gas < 5 MM Btu/hr

Storage Vessels

Surface Coating and Cleaning Operations (Small)

Unvented Pressure Vessels Excluding PV vent

Wastewater Separator, (Nuisance Applies)

Wet Scrubber, (Control Equipment is Not Exempt)

Edwards AFB 412 Test Wing SSG 138

Emission Unit 0138057 Permit Conditions

Facility Number	Emissions Unit	Description of Source
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. Unless specifically denoted within this permit, all surface coating shall be completed by brush, dip, or roll coating. (Rule 210.1 BACT Requirement)
2. Aerosol application of surface coatings shall only be utilized for surface coatings containing no hexavalent chromium compounds. (Rule 210.1 BACT Requirement)
3. Total paints, lacquers, thinners, additives and other materials containing solvents used in surface coating operation shall not exceed 1474 gallons/year. (Rule 210.1)
4. 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 (Rule 210.1 BACT Requirement)

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

Emission Unit 0138057 Permit Conditions

VOC Containing Material	Limit, g/l
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

Emission Unit 0138057 Permit Conditions

5. All solvents and any materials containing solvents shall be stored in enclosed containers when not in use. (Rule 210.1)
6. There shall be no odors detectable at or beyond the property boundary. (Rule 419)
7. 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)
8. 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)
9. 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)
10. 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)]
11. 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)
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 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. Coatings applied to non-aerospace components shall meet the requirements of Rules 410 or 410-A, as applicable. (Rule 201.1)
14. 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)
15. 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)

16. 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)
17. 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)
18. Owner/operator shall maintain records necessary to verify compliance with operational conditions. (Rule 209)
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 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);
20. 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)

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)

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Emission Unit 0138057 Permit Conditions

EMISSION LIMITS:

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

Volatile Organic Compounds (VOC):
(as defined in Rule 210.1)
18.50 lb/day
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)

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Emission Unit 0138063 Permit Conditions

Facility Number	Emissions Unit	Description of Source
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))

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

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.

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)

Edwards AFB 412 Test Wing SSG 138

Emission Unit 0138063 Permit Conditions

EMISSION LIMITS:

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

Volatile Organic Compounds (VOC):
(as defined in Rule 210.1)
24.05 lb/day
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)

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 IIII
Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Requirements for Emergency *Compression Ignition Diesel Engines* (CI RICE) that Commenced Construction after July 11, 2005 and were Manufactured after April 1, 2006 or after July 1, 2006 for Fire Pump Engines

Applicable provisions of 40 CFR 60 Subpart IIII shall apply.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

General Requirements

§60. 4218	The General Provisions in 40 CFR 60.1 through 60.19 apply as specified in Table 8 to Subpart IIII of part 60. [40 CFR 60.4218]

Emission Standards and Work Practices

§60.4205	1. Each 2007 model year or later CI RICE with a displacement less than 30 liters per cylinder that are not fire pump engines shall comply with the emission standards in 40 CFR 60.4201 for non-emergency engines and 40 CFR 40.4202 for emergency engines at the applicable model year and maximum engine power. You must comply by purchasing an engine certified to the emission standards by the manufacturer for the appropriate model year and maximum engine power in 40 CFR 60.4204(b) for non-emergency engines or 40 CFR 60.4205(b) or (c) for emergency engines. The engine must be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4204(b), 40 CFR 60.4205(b), 40 CFR 60.4211(c)] 2. Each pre-2007 model year RICE that are not fire pump engines shall comply with the emission standards in Table 1 to Subpart IIII of 40 CFR part 60. You must demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(b)(1) through (5). [40 CFR 60.4204(a), 40 CFR 60.4205(a), 40 CFR 60.4211(b)] 3 .Each fire pump CI RICE shall comply with the emission standards in Table 4 to Subpart IIII of 40 CFR part 60. You must demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(b)(1) through (5). [40 CFR 60.4205(c), 40 CFR 60.4211(b)] 4. Each emergency CI RICE with a displacement greater than 30 liters per cylinder shall comply with the NOx and PM emissions limits in 40 CFR 60.4205 (d). You must demonstrate compliance according to the requirements specified in paragraphs 40 CFR 60.4211(d). [40 CFR 60.4205 (d), 40 CFR 60.4211(d)] 5. Any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (d) of 40 CFR 60.4204 for non-emergency engines or paragraphs (a) through (e) of 40 CFR 60.4205. [40 CFR 60.4204(e), 40 CFR 60.4205(f), 40 CFR 60.4211(e)]

§60.4206	Owners and operators of CI RICE must operate and maintain the RICE over the entire life of the engine. [40 CFR 60.4206]
§60.4207	Diesel fuel must meet the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any diesel fuel used in stationary CI RICE with a displacement greater than 30 liters per cylinder must use low sulfur fuel meeting a maximum 1,000 ppm sulfur content. [40 CFR 60.4207(b) & (d)]
§60.4211	1. The owner/operator shall: a. Operate and maintain the CI RICE and control devices according to the manufacturer's emission-related written instructions, b. Change only those emission-related settings that are permitted by the manufacturer; and c. Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you. [40 CFR 60.4211(a)] 2. You must operate the emergency CI RICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency RICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and as otherwise described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to these requirements, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]

Monitoring and Recordkeeping Requirements

§60.4209	1.You must install a non-resettable hour meter prior to startup of the engine.[40 CFR 60.4209(a)] 2. If your CI RICE is equipped with a diesel particulate filter, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. You must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [40 CFR 60.4209(b), 40 CFR 60.4214(c)]
§60.4214	3. Starting with the model years in Table 5 to Subpart IIII of 40 CFR part 60 the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

Reports and Notification

§60. 4214	1. 1. For emergency CI RICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 60.4211(f)(2)(ii) and (iii), or that operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs 40 CFR 60.4214(d)(1) through (3). [40 CFR 60.4214(d)] 2. 2. For non-emergency CI RICE with a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must submit an initial notification as required in § 60.7(a)(1), keep records supporting maintenance conducted on engine and certification of emissions standards. [40CFR 60.4214(a)]

FEDERAL REGULATIONS
40 CFR 60 SUBPART JJJJ
Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Requirements for Emergency Spark Ignition Engines (SI RICE) that Commenced Construction after June 12, 2006 and were Manufactured on or after January 1, 2009

Applicable provisions of 40 CFR 60 Subpart JJJJ shall apply.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37972, June 28, 2011]

General Requirements

§60. 4218	The General Provisions in 40 CFR 60.1 through 60.19 apply as specified in Table 8 to Subpart IIII of part 60. [40 CFR 60.4218]

Emission Standards and Work Practices

§60. .4243	1. Each SI RICE with a maximum engine power less than or equal to 19 KW (25 HP) that is manufactured on or after July 1, 2008, must comply with the emission standards in 40 CFR 60.4231(a). You must comply by purchasing an engine certified to these standards, as applicable, for the same engine class and maximum engine power. [40 CFR 60.4233(a), 40 CFR 60.4243(a)] 2. Each SI RICE with a maximum engine power greater than 19 KW (25 HP) that uses gasoline must comply with the emission standards in 40 CFR 60.4231(b). You must comply by purchasing an engine certified to these standards, as applicable, for the same engine class and maximum engine power. [40 CFR 60.4233(b), 40 CFR 60.4243(a)] 3. Each SI RICE with a maximum engine power greater than 19 KW (25 HP) that are rich burn engines that use LPG must comply with the emission standards in 40 CFR 60.4231(c). You must comply by purchasing an engine certified to these standards, as applicable, for the same engine class and maximum engine power. [40 CFR 60.4233(c), 40 CFR 60.4243(a)] 4. Each SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to Subpart JJJJ of 40 CFR part 60 for their emergency SI RICE. For such SI RICE manufactured prior to January 1, 2011, that were certified to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP, may optionally choose to meet those standards. You may comply with these standards by purchasing a certified or non-certified engine. [40 CFR 60.4233(d), 40 CFR 60.4243(b)] 5. Each SI RICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to Subpart JJJJ of 40 CFR part 60. For such engines that were manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified. You may comply with these standards by purchasing a certified or non-certified engine. [40 CFR 60.4233(e), 40 CFR 60.4243(b)]

	6. For each certified engine you must operate and maintain the certified SI RICE and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your SI RICE will not be considered out of compliance. [40 CFR 60.4243(a)] 7. For each non-certified engine, that is not required to be certified, you must demonstrate compliance with the emission standards specified in 40 CFR 60.4233(d) or (e) and according to the requirements specified in 40 CFR 60.4244, as applicable, and according to40 CFR 60.4243(b)(2)(i) and (ii). 8. Each emergency SI RICE must be operated according to the requirements in 40 CFR 60.4243(d)(1) through (3). In order for the engine to be considered an emergency RICE, any operation other than emergency operation, maintenance and testing, or as otherwise allowed in 40 CFR 60.4243(d)(1) through (3) is prohibited. If you do not operate the engine according to the requirements in 40 CFR 60.4243(d)(1) through (3), the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.
§60. 4233	Each SI RICE that is required to meet standards that reference 40 CFR 1048.101 must, if testing the engine in use, meet the standards in that section applicable to field testing, except as indicated in 40 CFR 60.4233(e). [40 CFR 60.4233(h)]
§60. 4234	Owners and operators must operate and maintain their SI RICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4234]
§60. 4235	SI RICE that use gasoline must use gasoline that meets the per sulfur limit in 40 CFR 80.195. [40 CFR 60.4235]
§60. 4243	1. Owners and operators of stationary SI natural gas-fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233. [40 CFR 60.4243(e)] 2. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 CFR 60.4243(g)] 3. If you are an owner/operator of an stationary SI internal combustion engine with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and must comply with the emission standards specified in sections 60.4233(b) or (c), you must comply by one of the methods specified in 40 CFR 60.4243(h)(1) through (h)(4). [40 CFR 60.4243(h)]

Testing Requirements

§60. 4243	Each SI RICE that is less than or equal to 500 HP and a non-certified engine, you are required to perform initial performance testing as required, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). [40 CFR 60.4243(f)]
§60. 4244	Any required performance tests must follow the procedures in 40 CFR 60.4244(a) through (f). [40 CFR 60.4244]

Monitoring and Recordkeeping Requirements

§60. 4245	1. Owners and operators of all SI RICE must keep records of: a. All notifications submitted to comply with 40 CFR 60 Subpart IIII and all documentation supporting any notification. b. Maintenance conducted on the engine. c. If the RICE is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable. d. If the RICE is not a certified engine, documentation that the engine meets the emission standards. [40 CFR 60.4245(a)] 2. You must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. You 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. [40 CFR 60.4245(b)]

Reports and Notification

§60. 4245	1. For each SI RICE greater than or equal to 500 HP that has not been certified by an engine manufacturer you must submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the information in 40 CFR 60.4245(c)(1) through (5). [40 CFR 60.4245(c)] 2. A copy of each performance test must be submitted to the Administrator within 60 days after the test has been completed.[40 CFR 60.4245(d)] 3. For each emergency SI RICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 60.4243(d)(2)(ii) and (iii) or that operates for the purposes specified in 40 CFR 60.4243(d)(3)(i), you must submit an annual report according to the requirements in 40 CFR 60.4245(e)(1) through (3). [40 CFR 60.4245(e)]

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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.

Standard for Roadways

§61.143	No person may construct or maintain a roadway with asbestos tailings or asbestos-containing waste material on that roadway, unless, for asbestos tailings. (a) It is a temporary roadway on an area of asbestos ore deposits (asbestos mine): or (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 (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.

Standard for Demolition and Renovation

§61.145	(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: (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 (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 (ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.

§61.145	(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 (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 (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. (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. (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 (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 (ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously. (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. (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. (5) Owners or operators of demolition and renovation operations are exempt from the requirements of §§61.05(a), 61.07, and 61.09. **Notification Requirements** (b)Each owner or operator of a demolition or renovation activity to which this section applies shall: (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. (2) Update notice, as necessary, including when the amount of asbestos affected changes by at least 20 percent. (3) Postmark or deliver the notice as follows: (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. (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.

§61.145	(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. (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.

§61.145(b)	(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. **Procedures for Asbestos Emission Control.** (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: (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: (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.

§61.145	(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. (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: (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. (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. (i) In renovation operations, wetting is not required if: (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: (*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. (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. (iii) A copy of the Administrator's written approval shall be kept at the worksite and made available for inspection. (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: (i) Adequately wet the RACM during stripping; or (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. (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: (i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.

§61.145	(ii) The component is encased in a leak-tight wrapping. (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. (6) For all RACM, including material that has been removed or stripped: (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 (ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material. (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. (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. (7) When the temperature at the point of wetting is below 0 °C (32 °F): (i) The owner or operator need not comply with paragraph (c)(2)(i) and the wetting provisions of paragraph (c)(3) of this section. (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. (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. (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. (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. (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.

Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations

§61.150	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: (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. (1) Adequately wet asbestos-containing waste material as follows: (i) Mix control device asbestos waste to form a slurry; adequately wet other asbestos-containing waste material; and (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 (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 (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:

§61.150	(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. (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

§61.152	(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)(*1*), 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: (1) Use fabric filter collection devices, except as noted in paragraph (b) of this section, doing all of the following: (i) Ensuring that the airflow permeability, as determined by ASTM Method D737-75, does not exceed 9 $m^3/min/m^2$ (30 $ft^3/min/ft^2$) for woven fabrics or $11^3/min/m^2$(35 $ft^3/min/ft^2$) for felted fabrics, except that 12 $m^3/min/m^2$ (40 ft^3min/ft^2) for woven and 14 $m^3/min/m^2$ (45 ft $^3min/ft^2$) for felted fabrics is allowed for filtering air from asbestos ore dryers; and (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 (iii) Avoiding the use of synthetic fabrics that contain fill yarn other than that which is spun. (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. (3) For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags. (b) There are the following exceptions to paragraph (a)(1): (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). (2) Use a HEPA filter that is certified to be at least 99.97 percent efficient for 0.3 micron particles. (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.

Reporting

§61.153	(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.

§61.153	(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 $m^3/min/m^2$ 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 $m^3/min/m^2$. (2) If a fabric filter device is used to control emissions, (i) The airflow permeability in $m^3/min/m^2$ ($ft^3/min/ft^2$) 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 $m^3/min/m^2$ ($ft^3/min/ft^2$). (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) General.* (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. (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. (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. (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. (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. (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. (5) [Reserved] (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. (7)-(9) [Reserved] (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.

§63.1	(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. (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). (b) *Initial applicability determination for this part.* (1) The provisions of this part apply to the owner or operator of any stationary source that— (i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and (ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part. (2) [Reserved] (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). (c) *Applicability of this part after a relevant standard has been set under this part.* (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. (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— (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); (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 (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. (3)-(4) [Reserved]

§63.1(c)	(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. (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.

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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	(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. (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. (c) *Affected sources.* The affected sources to which the provisions of this subpart apply are specified in paragraphs (c)(1) through (8) 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. (1) Each cleaning operation as follows: (i) All hand-wipe cleaning operations constitute an affected source. (ii) Each spray gun cleaning operation constitutes an affected source. (iii) All flush cleaning operations constitute an affected source. (2) For organic HAP or VOC emissions, each primer application operation, which is the total of all primer applications at the facility. (3) For organic HAP or VOC emissions, each topcoat application operation, which is the total of all topcoat applications at the facility. (4) For organic HAP or VOC emissions, each specialty coating application operation, which is the total of all specialty coating applications at the facility. (5) For organic HAP or VOC emissions, each depainting operation, which is the total of all depainting at the facility. (6) Each chemical milling maskant application operation, which is the total of all chemical milling maskant applications at the facility. (7) Each waste storage and handling operation, which is the total of all waste handling and storage at the facility. (8) For inorganic HAP emissions, each spray booth, portable enclosure, or hangar that contains a primer, topcoat, or specialty coating application operation subject to § 63.745(g), or a depainting operation subject to § 63.746(b)(4).

§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) [Reserved] (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	(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: (1) §63.4, Prohibited activities and circumvention; (2) §63.5, Construction and reconstruction; and (3) §63.6, Compliance with standards and maintenance requirements. (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. (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. (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. (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). (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. (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). (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). (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).

§63.743	(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) [Reserved] (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), specialty coatings, 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, specialty coatings, 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), specialty coatings, Type I chemical milling maskants, or Type II chemical milling maskants. (3) Averaging is not allowed between specialty coating types defined in appendix A to this subpart, or between the different types of coatings specified in paragraphs (d)(3)(i) through (vii) of this section. (i) Primers and topcoats (including self-priming topcoats). (ii) Type I and Type II chemical milling maskants. (iii) Primers and chemical milling maskants. (iv) Topcoats and chemical milling maskants. (v) Primers and specialty coatings. (vi) Topcoats and specialty coatings. (vii) Chemical milling maskants and specialty coatings. (4) - (5) [Reserved]

§63.743	(6) Each averaging scheme shall be approved in advance by the permitting agency and adopted as part of the facility's title V permit. (e) At all times, the owner or operator 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 the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements 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.

Standards: Cleaning Operations

§63.744	(a) *Housekeeping measures.* 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). (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. (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. (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. (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. (b) *Hand-wipe cleaning.* 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. (1) Meet one of the composition requirements in Table 1 of this section; (2) Have a composite vapor pressure of 45 mm Hg (24.1 in. H_2 O) or less at 20 °C (68 °F); or

§63.744	(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. (c) *Spray gun cleaning.* 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. (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;

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(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;

(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. H2O and 68 °F). These cleaners also contain no HAP.

Standards: Primer and Topcoat Application Operations

§63.745	(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. (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. (5) Organic HAP emissions from specialty coatings shall be limited to an organic HAP content level of no more than the HAP content limit specified in Table 1 of this section for each applicable specialty coating type. (6) VOC emissions from specialty coatings shall be limited to a VOC content level of no more than the VOC content limit specified in Table 1 of this section for each applicable specialty coating type.

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TABLE 1—SPECIALTY COATINGS—HAP AND VOC CONTENT LIMITS

Coating Type	HAP Limit g/L (lb/gallon)[1]	VOC Limit g/L (lb/gallon)[1]
Ablative Coating	600 (5.0)	600 (5.0)
Adhesion Promoter	890 (7.4)	890 (7.4)
Adhesive Bonding Primers: Cured at 250 °F or below	850 (7.1)	850 (7.1)
Adhesive Bonding Primers: Cured above 250 °F	1030 (8.6)	1030 (8.6)
Commercial Interior Adhesive	760 (6.3)	760 (6.3)
Cyanoacrylate Adhesive	1,020 (8.5)	1,020 (8.5)
Fuel Tank Adhesive	620 (5.2)	620 (5.2)
Nonstructural Adhesive	360 (3.0)	360 (3.0)
Rocket Motor Bonding Adhesive	890 (7.4)	890 (7.4)
Rubber-based Adhesive	850 (7.1)	850 (7.1)
Structural Autoclavable Adhesive	60 (0.5)	60 (0.5)
Structural Nonautoclavable Adhesive	850 (7.1)	850 (7.1)
Antichafe Coating	660 (5.5)	660 (5.5)
Bearing Coating	620 (5.2)	620 (5.2)
Caulking and Smoothing Compounds	850 (7.1)	850 (7.1)
Chemical Agent-Resistant Coating	550 (4.6)	550 (4.6)
Clear Coating	720 (6.0)	720 (6.0)
Commercial Exterior Aerodynamic Structure Primer	650 (5.4)	650 (5.4)
Compatible Substrate Primer	780 (6.5)	780 (6.5)
Corrosion Prevention System	710 (5.9)	710 (5.9)
Cryogenic Flexible Primer	645 (5.4)	645 (5.4)
Cryoprotective Coating	600 (5.0)	600 (5.0)
Dry Lubricative Material	880 (7.3)	880 (7.3)
Electric or Radiation-Effect Coating	800 (6.7)	800 (6.7)
Electrostatic Discharge and Electromagnetic Interference (EMI) Coating	800 (6.7)	800 (6.7)
Elevated-Temperature Skydrol-Resistant Commercial Primer	740 (6.2)	740 (6.2)
Epoxy Polyamide Topcoat	660 (5.5)	660 (5.5)
Fire-Resistant (interior) Coating	800 (6.7)	800 (6.7)
Flexible Primer	640 (5.3)	640 (5.3)
Flight-Test Coatings: Missile or Single Use Aircraft	420 (3.5)	420 (3.5)
Flight-Test Coatings: All Other	840 (7.0)	840 (7.0)

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Fuel-Tank Coating	720 (6.0)	720 (6.0)
High-Temperature Coating	850 (7.1)	850 (7.1)
Insulation Covering	740 (6.2)	740 (6.2)
Intermediate Release Coating	750 (6.3)	750 (6.3)
Lacquer	830 (6.9)	830 (6.9)
Bonding Maskant	1,230 (10.3)	1,230 (10.3)
Critical Use and Line Sealer Maskant	1,020 (8.5)	1,020 (8.5)
Seal Coat Maskant	1,230 (10.3)	1,230 (10.3)
Metallized Epoxy Coating	740 (6.2)	740 (6.2)
Mold Release	780 (6.5)	780 (6.5)
Optical Anti-Reflective Coating	750 (6.3)	750 (6.3)
Part Marking Coating	850 (7.1)	850 (7.1)
Pretreatment Coating	780 (6.5)	780 (6.5)
Rain Erosion-Resistant Coating	850 (7.1)	850 (7.1)
Rocket Motor Nozzle Coating	660 (5.5)	660 (5.5)
Scale Inhibitor	880 (7.3)	880 (7.3)
Screen Print Ink	840 (7.0)	840 (7.0)
Extrudable/Rollable/Brushable Sealant	280 (2.3)	280 (2.3)
Sprayable Sealant	600 (5.0)	600 (5.0)
Silicone Insulation Material	850 (7.1)	850 (7.1)
Solid Film Lubricant	880 (7.3)	880 (7.3)
Specialized Function Coating	890 (7.4)	890 (7.4)
Temporary Protective Coating	320 (2.7)	320 (2.7)
Thermal Control Coating	800 (6.7)	800 (6.7)
Wet Fastener Installation Coating	675 (5.6)	675 (5.6)
Wing Coating	850 (7.1)	850 (7.1)

[1] Coating limits for HAP are expressed in terms of mass (grams or pounds) of HAP per volume (liters or gallons) of coating less water. Coating limits for VOC are expressed in terms of mass (grams or pounds) of VOC per volume (liters or gallons) of coating less water and less exempt solvent.

(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.

§63.745	(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 spray applied primers, topcoats (including self-priming topcoats), and specialty coatings shall be applied using one or more of the spray application techniques specified in paragraphs (f)(1)(i) through (f)(1)(v) of this section. (i) High volume low pressure (HVLP) spraying; (ii) Electrostatic spray application; (iii) Airless spray application; (iv) Air-assisted airless spray application; or (v) Any other coating spray application methods that achieve emission reductions or a transfer efficiency equivalent to or better than HVLP spray, electrostatic spray, airless spray, or air-assisted airless 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 alltimes. 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 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; (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, and the spray application of no more than 3.0 fluid ounces of coating in a single application (i.e., the total volume of a single coating formulation applied during any one day to any one aerospace vehicle or component) from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces (89 cubic centimeters). Using multiple small paint cups or refilling a small paint cup to apply more than 3.0 fluid ounces under the requirements of this paragraph is prohibited. If a paint cup liner is used in a reusable holder or cup, then the holder or cup must be designed to hold a liner with a capacity of no more than 3.0 fluid ounces. For example, a 3.0 ounce liner cannot be used in a holder that can also be used with a 6.0 ounce liner under the requirements of this paragraph;

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(v) The use of hand-held non-refillable aerosol containers;

(vi) Touch-up and repair operations;

(vii) Adhesives, sealants, maskants, caulking materials, and inks; and

(viii) The application of coatings that contain less than 20 grams of VOC per liter of coating.

(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

TABLE 2—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 3—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

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TABLE 4—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 5—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.

(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, or install an interlock system that will automatically shut down the coating spray application system if the pressure drop exceeds or falls below the filter manufacturer's recommended limit(s); 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, or install an interlock system that will automatically shut down the coating spray application system if the water flow rate falls below or exceeds the limit(s) specified by the booth manufacturer or in locally prepared operating procedures. 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, or install an interlock system that will automatically shut down the coating spray application system if the booth parameters are outside the parameter range in the manufacturer's recommendations.

§63.745	(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. (xi) The spray application of no more than 3.0 fluid ounces of coating in a single application (i.e., the total volume of a single coating formulation applied during any one day to any one aerospace vehicle or component) from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces (89 cubic centimeters). Using multiple small paint cups or refilling a small paint cup to apply more than 3.0 fluid ounces under the requirements of this paragraph is prohibited. If a paint cup liner is used in a reusable holder or cup, then the holder or cup must be designed to hold a liner with a capacity of no more than 3.0 fluid ounces. For example, under the requirements of this paragraph, a 3.0 ounce liner cannot be used in a holder that can also be used with a 6.0 ounce liner.

Standards: Depainting Operations

§63.746	(a) Applicability. 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 depaints six or less completed aerospace vehicles in a calendar year. (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. (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. (3) The following depainting operations are exempt from the requirements of this section: (i) Depainting of radomes; and (ii) Depainting of parts, subassemblies, and assemblies normally removed from the primary aircraft structure before depainting. (b)(1) HAP emissions - non-HAP chemical strippers and technologies. 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. (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. (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 depainted; or more than 50 gallons of organic HAP-containing chemical strippers or alternatively 365 pounds of organic HAP per military aircraft depainted for spot stripping and decal removal. (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. (i) Perform the depainting operation in an enclosed area, unless a closed-cycle depainting system is used. (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 2 and 3 of § 63.745, through a baghouse, or through a waterwash system before exhausting it to the atmosphere.

§63.746	(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 4 and 5 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.* (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.

§63.746	(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. (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.

Standards: Chemical Milling Maskant Application Operations

§63.747	(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). (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. (c) *Uncontrolled maskants—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) and (c)(2) of this section for each chemical milling maskant that is uncontrolled. (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. (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. (3) The requirements of paragraphs (c)(1) and (c)(2) of this section do not apply to the following: (i) Touch-up of scratched surfaces or damaged maskant; and (ii) Touch-up of trimmed edges. (d) *Controlled maskants—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) 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. (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. (2) Use the averaging provisions described in §63.743(d).

Standards: Handling and Storage of Waste

§63.748	(a) The owner or operator of each facility subject to this subpart that produces a waste that contains organic HAP from aerospace primer, topcoat, specialty coating, chemical milling maskant, or chemical depainting operations must be handled and stored as specified in paragraph (a)(1) or (a)(2) of this section. The requirements of paragraphs (a)(1) and (a)(2) of this section do not apply to spent wastes that contain organic HAP that are subject to and handled and stored in compliance with 40 CFR parts 262 through 268 (including the air emission control requirements in 40 CFR part 265, subpart CC). (1) 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. (2) Store all waste that contains organic HAP in closed containers.

Compliance dates and determinations

§63.749	(a) Compliance dates. (1) Each owner or operator of an existing affected source subject to this subpart shall comply with the requirements of this subpart by September 1, 1998, except as specified in paragraphs (a)(2) and (3) of this section. Owners or operators of new affected sources subject to this subpart shall comply on the effective date or upon startup, whichever is later. In addition, each owner or operator shall comply with the compliance dates specified in § 63.6(b) and (c) as indicated in Table 1 to this subpart. (2) Owners or operators of existing primer, topcoat, or specialty coating application operations and depainting operations who construct or reconstruct a spray booth or hangar must comply with the new source requirements for inorganic HAP specified in §§ 63.745(g)(2)(ii) and 63.746(b)(4) for that new spray booth or hangar upon startup. Such sources must still comply with all other existing source requirements by September 1, 1998. (3) Each owner or operator of a specialty coating application operation or handling and storage of waste operation that begins construction or reconstruction after February 17, 2015, shall be in compliance with the requirements of this subpart on December 7, 2015, or upon startup, whichever is later. Each owner or operator of a specialty coating application operation or handling and storage of waste operation that is existing on February 17, 2015, shall be in compliance with the requirements of this subpart on or before December 7, 2018. (b) General. Each facility subject to this subpart shall be considered in noncompliance if the owner or operator uses a control device, other than one specified in this subpart, that has not been approved by the Administrator, as required by § 63.743(c). (c) Cleaning operations. Each cleaning operation subject to this subpart shall be considered in noncompliance if the owner or operator fails to institute and carry out the housekeeping measures required under § 63.744(a). Incidental emissions resulting from the activation of pressure release vents and valves on enclosed cleaning systems are exempt from this paragraph. (1) Hand-wipe cleaning. An affected hand-wipe cleaning operation shall be considered in compliance when all hand-wipe cleaning solvents, excluding those used for hand cleaning of spray gun equipment under § 63.744(c)(3), meet either the composition requirements specified in § 63.744(b)(1) or the vapor pressure requirement specified in § 63.744(b)(2). (2) Spray gun cleaning. An affected spray gun cleaning operation shall be considered in compliance when each of the following conditions is met: (i) One of the four techniques specified in § 63.744 (c)(1) through (c)(4) is used;

§63.749	(ii) The technique selected is operated according to the procedures specified in § 63.744 (c)(1) through (c)(4) as appropriate; and (iii) If an enclosed system is used, monthly visual inspections are conducted and any leak detected is repaired within 15 days after detection. If the leak is not repaired by the 15th day after detection, the solvent shall be removed and the enclosed cleaner shall be shut down until the cleaner is repaired or its use is permanently discontinued. (3) Flush cleaning. An affected flush cleaning operation shall be considered in compliance if the operating requirements specified in § 63.744(d) are implemented and carried out. (d) Organic HAP and VOC content levels - primer, topcoat, and specialty coating application operations. (1) Performance test periods. For uncontrolled coatings that are not averaged, each 24 hours is considered a performance test. For compliant and non-compliant coatings that are averaged together, each 30-day period is considered a performance test, unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program. When using a control device other than a carbon adsorber, three 1-hour runs constitute the test period for the initial and any subsequent performance test. When using a carbon adsorber, each rolling material balance period is considered a performance test. (2) Initial performance tests. If a control device is used, each owner or operator shall conduct an initial performance test to demonstrate compliance with the overall reduction efficiency specified in paragraph § 63.745, unless a waiver is obtained under either § 63.7(e)(2)(iv) or § 63.7(h). The initial performance test shall be conducted according to the procedures and test methods specified in §§ 63.7 and 63.750(g) for carbon adsorbers and in § 63.750(h) for control devices other than carbon adsorbers. For carbon adsorbers, the initial performance test shall be used to establish the appropriate rolling material balance period for determining compliance. The procedures in paragraphs (d)(2)(i) through (d)(2)(vi) of this section shall be used in determining initial compliance with the provisions of this subpart for carbon adsorbers. (i)(A) 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 § 63.750(g) (2) or (4), 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. (B) 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. (ii) EPA Method 1 or 1A of appendix A of part 60 is used for sample and velocity traverses. (iii) EPA Method 2, 2A, 2C, or 2D of appendix A of part 60 is used for velocity and volumetric flow rates. (iv) EPA Method 3 of appendix A of part 60 is used for gas analysis. (v) EPA Method 4 of appendix A of part 60 is used for stack gas moisture. (vi) EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period.

§63.749	(3) The primer application operation is considered in compliance when the conditions specified in paragraphs (d)(3)(i) through (d)(3)(iv) of this section, as applicable, and in paragraph (e) of this section are met. Failure to meet any one of the conditions identified in these paragraphs shall constitute noncompliance. The compliance demonstration for a primer may be based on the organic HAP content or the VOC content of the primer; demonstrating compliance with both the HAP content limit and the VOC content limit is not required. If a primer contains HAP solvents that are exempt from the definition of VOC in § 63.741 and 40 CFR 51.100, then the HAP content must be used to demonstrate compliance. (i) For all uncontrolled primers, all values of Hi and Ha (as determined using the procedures specified in § 63.750(c) and (d)) are less than or equal to the applicable HAP content limit in § 63.745(c)(1), and all values of Gi and Ga (as determined using the procedures specified in § 63.750(e) and (f)) are less than or equal to the applicable VOC content limit in § 63.745(c)(2). (ii) If a control device is used: (A) The overall control system efficiency, Ek, as determined using the procedures specified in § 63.750(g) for control systems containing carbon adsorbers and in § 63.750(h) for control systems with other control devices, is equal to or greater than 81% during the initial performance test and any subsequent performance test; (B) If an incinerator other than a catalytic incinerator is used, the average combustion temperature for all 3-hour periods is greater than or equal to the average combustion temperature established under § 63.751(b)(11); and (C) If a catalytic incinerator is used, the average combustion temperatures for all 3-hour periods are greater than or equal to the average combustion temperatures established under § 63.751(b)(12). (iii)(A) Uses an application technique specified in § 63.745 (f)(1)(i) through (f)(1)(viii), or (B) Uses an alternative application technique, as allowed under § 63.745(f)(1)(ix), such that the emissions of both organic HAP and VOC for the implementation period of the alternative application method are less than or equal to the emissions generated using HVLP or electrostatic spray application methods as determined using the procedures specified in § 63.750(i). (iv) Operates all application techniques in accordance with the manufacturer's specifications or locally prepared operating procedures, whichever is more stringent. (4) The topcoat or specialty coating application operation is considered in compliance when the conditions specified in paragraphs (d)(4)(i) through (d)(4)(iv) of this section, as applicable, and in paragraph (e) of this section are met. Failure to meet any of the conditions identified in these paragraphs shall constitute noncompliance. (i) The topcoat application operation is considered in compliance when the conditions specified in paragraph (d)(4)(i)(A) of this section are met. The specialty coating application operation is considered in compliance when the conditions specified in paragraph (d)(4)(i)(B) are met. The compliance demonstration for a topcoat or a specialty coating may be based on the organic HAP content or the VOC content of the coating; demonstrating compliance with both the HAP content limit and the VOC content limit is not required. If a topcoat or specialty coating contains HAP solvents that are exempt from the definition of VOC in § 63.741 and 40 CFR 51.100, then the HAP content must be used to demonstrate compliance. (A) For all uncontrolled topcoats, all values of Hi and Ha (as determined using the procedures specified in § 63.750(c) and (d)) are less than or equal to the applicable HAP content limit in § 63.745(c)(3), and all values of Gi and Ga (as determined using the procedures specified in § 63.750(e) and (f)) are less than or equal to the applicable VOC content limit in § 63.745(c)(4).

§63.749	(B) For all uncontrolled specialty coatings, all values of Hi and Ha (as determined using the procedures specified in § 63.750(c) and (d)) are less than or equal to the HAP content limits specified in Table 1 to § 63.745 for the applicable specialty coating types (less water) as applied, and all values of Gi and Ga (as determined using the procedures specified in § 63.750(e) and (f)) are less than or equal to the VOC content limits specified in Table 1 to § 63.745 for the applicable specialty coating types (less water and exempt solvents) as applied. (ii) If a control device is used, (A) The overall control system efficiency, Ek, as determined using the procedures specified in § 63.750(g) for control systems containing carbon adsorbers and in § 63.750(h) for control systems with other control devices, is equal to or greater than 81% during the initial performance test and any subsequent performance test; (B) If an incinerator other than a catalytic incinerator is used, the average combustion temperature for all 3-hour periods is greater than or equal to the average combustion temperature established under § 63.751(b)(11); and (C) If a catalytic incinerator is used, the average combustion temperatures for all 3-hour periods are greater than or equal to the average combustion temperatures established under § 63.751(b)(12). (iii)(A) Uses an application technique specified in § 63.745(f)(1)(i) through (f)(1)(iv); or (B) Uses an alternative application technique, as allowed under § 63.745(f)(1)(v), such that the emissions of both organic HAP and VOC for the implementation period of the alternative application method are less than or equal to the emissions generated using HVLP spray, electrostatic spray, airless spray, or air-assisted airless spray application methods, as determined using the procedures specified in § 63.750(i) (iv) Operates all application techniques in accordance with the manufacturer's specifications or locally prepared operating procedures. (e) Inorganic HAP emissions - primer, topcoat, and specialty coating application operations. For each primer, topcoat, or specialty coating application operation that emits inorganic HAP, the operation is in compliance when: (1) It is operated according to the requirements specified in § 63.745(g)(1) through (g)(3); and (2) It is shut down immediately whenever the pressure drop or water flow rate is outside the limit(s) established for them and is not restarted until the pressure drop or water flow rate is returned within these limit(s), as required under § 63.745(g)(3). (f) Organic HAP emissions - Depainting operations - (1) Performance test periods. When using a control device other than a carbon adsorber, three 1-hour runs constitute the test period for the initial and any subsequent performance test. When a carbon adsorber is used, each rolling material balance period is considered a performance test. Each 24-hour period is considered a performance test period for determining compliance with § 63.746(b)(1). For uncontrolled organic emissions from depainting operations, each calendar year is considered a performance test period for determining compliance with the HAP limits for organic HAP-containing chemical strippers used for spot stripping and decal removal.

§63.749	(2) Initial performance tests. If a control device is used, each owner or operator shall conduct an initial performance test to demonstrate compliance with the overall reduction efficiency specified in § 63.746(c), unless a waiver is obtained under either § 63.7(e)(2)(iv) or § 63.7(h). The initial performance test shall be conducted according to the procedures and test methods specified in §§ 63.7 and 63.750(g) for carbon adsorbers and in § 63.750(h) for control devices other than carbon adsorbers. For carbon adsorbers, the initial performance test shall be used to establish the appropriate rolling material balance period for determining compliance. The procedures in paragraphs (2)(i) through (2)(vi) of this section shall be used in determining initial compliance with the provisions of this subpart for carbon adsorbers. (i)(A) 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 § 63.750(g)(2) or (4), 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. (B) 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. (ii) EPA Method 1 or 1A of appendix A of part 60 is used for sample and velocity traverses. (iii) EPA Method 2, 2A, 2C, or 2D of appendix A of part 60 is used for velocity and volumetric flow rates. (iv) EPA Method 3 of appendix A of part 60 is used for gas analysis. (v) EPA Method 4 of appendix A of part 60 is used for stack gas moisture. (vi) EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period. (3) An organic HAP-containing chemical stripper depainting operation is considered in compliance when the conditions specified in paragraph (g)(3)(i) of this section are met. (i) If a carbon adsorber (or other control device) is used, the overall control efficiency of the control system, as determined using the procedures specified in § 63.750(g) (or other control device as determined using the procedures specified in § 63.750(h)), is equal to or greater than 81% for control systems installed before the effective date, or equal to or greater than 95% for control systems installed on or after the effective date, during the initial performance test and all subsequent material balances (or performance tests, as appropriate). (ii) For non-HAP depainting operations complying with § 63.746(b)(1); (A) For any spot stripping and decal removal, the value of C, as determined using the procedures specified in § 63.750(j), is less than or equal to 26 gallons of organic HAP-containing chemical stripper or 190 pounds of organic HAP per commercial aircraft depainted calculated on a yearly average; and is less than or equal to 50 gallons of organic HAP-containing chemical stripper or 365 pounds of organic HAP per military aircraft depainted calculated on a yearly average; and (B) The requirements of § 63.746(b)(2) are carried out during malfunctions of non-chemical based equipment.

§63.749	(g) Inorganic HAP emissions - depainting operations. Each depainting operation is in compliance when: (1) The operating requirements specified in § 63.746(b)(4) are followed; and (2) It is shut down immediately whenever the pressure drop or water flow rate is outside the limit(s) established for them and is not restarted until the pressure drop or water flow rate is returned within these limit(s), as required under § 63.746(b)(4)(v). (h) Chemical milling maskant application operations - (1) Performance test periods. For uncontrolled chemical milling maskants that are not averaged, each 24-hour period is considered a performance test. For compliant and noncompliant chemical milling maskants that are averaged together, each 30-day period is considered a performance test, unless the permitting agency specifies a shorter period as part of an ambient ozone control program. When using a control device other than a carbon adsorber, three 1-hour runs constitute the test period for the initial and any subsequent performance test. When a carbon adsorber is used, each rolling material balance period is considered a performance test. (2) Initial performance tests. If a control device is used, each owner or operator shall conduct an initial performance test to demonstrate compliance with the overall reduction efficiency specified in § 63.747(d), unless a waiver is obtained under either § 63.7(e)(2)(iv) or § 63.7(h). The initial performance test shall be conducted according to the procedures and test methods specified in § 63.7 and § 63.750(g) for carbon adsorbers and in § 63.750(h) for control devices other than carbon adsorbers. For carbon adsorbers, the initial performance test shall be used to establish the appropriate rolling material balance period for determining compliance. The procedures in paragraphs (h)(2) (i) through (vi) of this section shall be used in determining initial compliance with the provisions of this subpart for carbon adsorbers. (i)(A) 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 § 63.750(g) (2) or (4), 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. (B) 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. (ii) EPA Method 1 or 1A of appendix A of part 60 is used for sample and velocity traverses. (iii) EPA Method 2, 2A, 2C, or 2D of appendix A of part 60 is used for velocity and volumetric flow rates. (iv) EPA Method 3 of appendix A of part 60 is used for gas analysis. (v) EPA Method 4 of appendix A of part 60 is used for stack gas moisture. (vi) EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period. (3) The chemical milling maskant application operation is considered in compliance when the conditions specified in paragraphs (i)(3)(i) and (ii) of this section are met. The compliance demonstration for a chemical milling maskant may be based on the organic HAP content or the VOC content of the chemical milling maskant; demonstrating compliance with both the HAP content limit and the VOC content limit is not required. If a chemical milling maskant contains HAP solvents that are exempt from the definition of VOC in § 63.741 and 40 CFR 51.100, then the HAP content must be used to demonstrate compliance.

§63.749	(i) For all uncontrolled chemical milling maskants, all values of Hi and Ha (as determined using the procedures specified in § 63.750 (k) and (l)) are less than or equal to 622 grams of organic HAP per liter (5.2 lb/gal) of Type I chemical milling maskant as applied (less water), and 160 grams of organic HAP per liter (1.3 lb/gal) of Type II chemical milling maskant as applied (less water). All values of Gi and Ga (as determined using the procedures specified in § 63.750 (m) and (n)) are less than or equal to 622 grams of VOC per liter (5.2 lb/gal) of Type I chemical milling maskant as applied (less water and exempt solvents), and 160 grams of VOC per liter (1.3 lb/gal) of Type II chemical milling maskant (less water and exempt solvents) as applied. (ii) If a carbon adsorber (or other control device) is used, the overall control efficiency of the control system, as determined using the procedures specified in § 63.750(g) (or systems with other control devices as determined using the procedures specified in § 63.750(h)), is equal to or greater than 81% during the initial performance test period and all subsequent material balances (or performance tests, as appropriate). (i) Handling and storage of waste. For those wastes subject to this subpart, failure to comply with the requirements specified in § 63.748 shall be considered a violation. (j) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown unless specified by the Administrator or an applicable subpart. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

Test methods and Procedures

§63.750	(a) *Composition determination.* 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. (b) *Vapor pressure determination.* The composite vapor pressure of hand-wipe cleaning solvents used in a cleaning operation subject to this subpart shall be determined as follows: (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. (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: $$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \sum_{e=1}^{n} \frac{W_e}{MW_e} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

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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, topcoats, and specialty coatings. For those uncontrolled primers, topcoats, and specialty coatings complying with the primer, topcoat, or specialty coating organic HAP content limits specified in § 63.745(c) without being averaged, the procedures in paragraphs (c)(1) through (3) of this section shall be used to determine the mass of organic HAP emitted per volume of coating (less water) as applied. As an alternative to the procedures in paragraphs (c)(1) through (3) of this section, an owner or operator may use the coating manufacturer's supplied data to demonstrate that organic HAP emitted per volume of coating (less water), as applied, is less than or equal to the applicable organic HAP limit specified in § 63.745(c). Owners and operators that use the coating manufacturer's supplied data to demonstrate compliance based on the HAP content of the coating may add non-HAP solvent to those coatings provided that the owner or operator also maintains records of the non-HAP solvent added to the coating.

(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 the value for organic HAP weight fraction cannot be determined using the manufacturer's data, the owner or operator shall use Method 311 of 40 CFR part 63, appendix A, or submit an alternative procedure for determining the value for approval by the Administrator. If the values for water weight fraction (if applicable) and density 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. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 311 analysis, compliance shall be based on the results from the Method 311 analysis.

(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:

$$V_{wi} = \frac{D_{ci} W_{wi}}{D_w} \qquad Eq.\ 1$$

where:
V_{wi} = volume (gal) of water in one gal of coating i.
D_{ci} = 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.

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$$M_{Hi} = D_{ci} W_{Hi} \qquad Eq.\ 2$$

where:
M_{Hi} = mass (lb) of organic HAP in one gal of coating i.
D_{ci} = 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.

$$H_i = \frac{M_{Hi}}{(1 - V_{wi})} \qquad Eq.\ 3$$

where:
H_i = mass of organic HAP emitted per volume of coating i (lb/gal) less water as applied.
M_{Hi} = 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 use Method 311 of 40 CFR part 63, appendix A for determining the total organic HAP weight fraction, or shall submit an alternative procedure for determining the total organic HAP weight fraction for approval by the Administrator. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 311 analysis, compliance shall be based on the results from the Method 311 analysis.

(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.

§63.750	(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. (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: $$H_a = \frac{\sum_{i=1}^{n} W_{Hi} D_{ci} V_{ci}}{C_{lw}} \qquad Eq.\ 4$$ 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_{ci} = density (lb of coating per gal of coating) of coating i as applied that is being averaged during each 30-day period. V_{ci} = volume (gal) of coating i as applied that is being averaged during the 30-day period. C_{lw} = 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, topcoats, and specialty coatings. For those uncontrolled primers, topcoats, and specialty coatings complying with the primer, topcoat, and specialty coating VOC content levels specified in § 63.745(c) without being averaged, the procedures in paragraphs (e)(1) through (3) of this section shall be used to determine the mass of VOC emitted per volume of coating (less water and exempt solvents) as applied. As an alternative to the procedures in paragraphs (e)(1) through (3) of this section, an owner or operator may use coating manufacturer's supplied data to demonstrate that VOC emitted per volume of coating (less water and exempt solvents), as applied, is less than or equal to the applicable VOC limit specified in § 63.745(c).* (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:

$$V_{wi} = \frac{D_{ci} W_{wi}}{D_w} \qquad Eq.\ 5$$

where:
V_{wi} = volume (gal) of water in one gal of coating i.
D_{ci} = 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.

$$M_{Vi} = D_{ci} W_{Vi} \qquad Eq.\ 6$$

where:
M_{Vi} = mass (lb) of VOC in one gal of coating i.
D_{ci} = density (lb of coating per gal of coating) of coating i.
W_{Vi} = weight fraction (expressed as a decimal) of VOC in coating i.

$$G_i = \frac{M_{vi}}{(1 - V_{wi}) - V_{xi}} \qquad Eq.\ 7$$

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_a, 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_a 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.

(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.

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(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:

$$G_a = \frac{\sum_{i=1}^{n} (VOC)_{ci} V_{ci}}{C_{lwes}} \qquad Eq.\ 8$$

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.

$(VOC)_{ci}$ = 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_{ci} = 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.

(iii) The recalculated value of G_a 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.

§63.750	(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: $$R = \frac{M_r}{\sum_{i=1}^{n} [W_{oi} M_{ci} - RS_i]} \times 100 \qquad Eq. 9$$ (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 (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).

§63.750	(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: $$E = \frac{\sum_{i=1}^{N} Q_{bi} C_{bi} - \sum_{j=1}^{P} Q_{aj} C_{aj}}{\sum_{i=1}^{N} Q_{bi} C_{bi}} \qquad Eq. 10$$ $$F = \frac{\sum_{i=1}^{N} Q_{di} C_{di}}{\sum_{i=1}^{N} Q_{di} C_{di} + \sum_{k=1}^{P} Q_{fk} C_{fk}} \qquad Eq. 11$$ (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). (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;

§63.750	(iv) Determine the efficiency (H_v) of each individual carbon adsorber vessel (v) using equation 12: $H_v = \frac{Q_{gv} C_{gv} - Q_{kv} C_{kv}}{Q_{gv} C_{gv}}$ *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: $H_{sys} = \frac{\sum_{v=1}^{q} H_v Q_{kv}}{\sum_{v=1}^{q} Q_{kv}}$ *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}) × (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: (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

§63.750	(*2*) Determine FV by equation 14: $$FV = \frac{\sum_{j=1}^{n} Q_{out\,j} - \sum_{i=1}^{p} Q_{in\,i}}{\sum_{k=1}^{q} A_k} \qquad Eq.\ 14$$ (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_{sys} 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. (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). (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). (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. (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.

§63.750	(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. (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. (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. (10) EPA Method 1 or 1A of appendix A of part 60 is used for sample and velocity traverses. (11) EPA Method 2, 2A, 2C, or 2D of appendix A of part 60 is used for velocity and volumetric flow rates. (12) EPA Method 3 of appendix A of part 60 is used for gas analysis. (13) EPA Method 4 of appendix A of part 60 is used for stack gas moisture. (14) EPA Methods 2, 2A, 2C, 2D, 3, and 4 shall be performed, as applicable, at least twice during each test period. (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: $E_k = R_k F_k$ 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.

§63.750	(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: $$E_i = K_2 \left(\sum_{j=1}^{n} C_{ij} M_{ij} \right) Q_i \qquad Eq.\ 16$$ $$E_o = K_2 \left(\sum_{j=1}^{n} C_{oj} M_{oj} \right) Q_o \qquad Eq.\ 17$$ 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_2 = 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:

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$$R = \frac{E_i - E_o}{E_i} \times 100 \qquad Eq.\ 18$$

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.

(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:

$$P = \frac{E_b - E_a}{E_b} \times 100 \qquad Eq.\ 19$$

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 of VOC emissions, in pounds, after the alternative application technique was implemented, as determined under paragraph (i)(2)(ii) of this section.

§63.750	(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. (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): $$C = \frac{\sum_{i=1}^{n} V_{si}}{A} \qquad Eq.\ 20$$ 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. $$C = \frac{\sum_{i=1}^{n}\left(V_{si} D_{hi}\left(\sum_{i=1}^{m} W_{hi}\right)\right)}{A} \qquad Eq.\ 21$$ 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.

§63.750	(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 procedure in paragraph (k)(1) of this section shall be used to determine the mass of organic HAP emitted per unit volume of coating (chemical milling maskant) i as applied (less water), Hi (lb/gal). As an alternative to the procedures in paragraph (k)(1) of this section, an owner or operator may use coating manufacturer's supplied data to demonstrate that organic HAP emitted per volume of coating (less water), as applied, is less than or equal to the applicable organic HAP limit specified in § 63.747(c). Owners and operators that use the coating manufacturer's supplied data to demonstrate compliance based on the HAP content of the coating may add non-HAP solvent to those coatings provided that the owner or operator also maintains records of the non-HAP solvent added to the coating. (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. (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:

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$$H_a = \frac{\sum_{i=1}^{n} W_{Hi} D_{mi} V_{mi}}{M_{lw}} \qquad \text{Eq. 22}$$

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 (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. As an alternative to the procedures in paragraphs (m)(1) and (2) of this section, an owner or operator may use coating manufacturer's supplied data to demonstrate that VOC emitted per volume of coating (less water and exempt solvents), as applied, is less than or equal to the applicable VOC limit specified in § 63.747(c).

(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.

(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_i, 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.

§63.750	(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: $$G_a = \frac{\sum_{i=1}^{n} (VOC)_{mi} V_{mi}}{M_{lwes}} \qquad \text{Eq. 23}$$ 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_{lwes} = 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. (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. (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. (o) *Inorganic HAP emissions—dry particulate filter certification requirements.* 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.

Monitoring Requirements

§63.751	(a) *Enclosed spray gun cleaners.* 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.

§63.751	(b) *Incinerators and carbon absorbers—initial compliance demonstrations.* 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. (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. (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 (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). (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). (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).

§63.751	(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. (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. (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. (A) The owner or operator shall install, calibrate, operate, and maintain a continuous emission monitor. (*1*) 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 (*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)(*1*) 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. (*a*) The monitoring device shall be calibrated, operated, and maintained in accordance with the manufacturer's specifications. (*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. (*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.

§63.751	(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. (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. (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. (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. (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. (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). (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. (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. (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. (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).

§63.751	(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). (c) *Dry particulate filter, HEPA filter, and waterwash systems—primer and topcoat application operations.* (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). (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) (1)*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.

§63.751	(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. (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. (5) *Approval of request to use alternative monitoring method.* (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: (A) Notice of the information and findings on which the intended disapproval is based; and (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. (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. (f) *Reduction of monitoring data.* (1) The data may be recorded in reduced or nonreduced form (e.g., parts per million (ppm) pollutant and % O_2 or nanograms per Joule (ng/J) of pollutant). (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).

Recordkeeping Requirements

§63.752	(a) *General.* ll fulfill all recordkeeping requirements specified in § 63.10(a), (b), (d), and (f), except § 63.10(b)(2)(i), (iv) and (v). Each owner or operator must also record and maintain according to § 63.10(b)(1) the information specified in paragraph (a)(1) through (3) of this section. (1) In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure record the date, time, and duration of each failure. (2) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions. (3) Record actions taken to minimize emissions in accordance with § 63.743(e), and any corrective actions taken to return the affected unit to its normal or usual manner of operation. (b) *Cleaning operation.* 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. (1) The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility. (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: (i) The name of each cleaning solvent used; (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

§63.752	(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, topcoat, and specialty coating 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 (6) of this section, as appropriate. Each owner and operator using coating manufacturer's supplied data to demonstrate compliance with the applicable organic HAP or VOC limit specified in § 63.745(c) may retain the manufacturer's documentation and annual purchase records in place of the records specified in paragraphs (c)(2) and (3) of this section. Owners and operators using the coating manufacturer's supplied data to demonstrate compliance based on the HAP content of the coating, and adding non-HAP solvent to those coatings, must also maintain records of the non-HAP solvent added to the coating. (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)); (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

§63.752	(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. (d) *Primer and topcoat application operations—inorganic HAP emissions.* (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. (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. (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. (e) *Depainting operations.* 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. (1) *General.* For all chemical strippers used in the depainting operation: (i) The name of each chemical stripper; and (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.

§63.752	(2) For HAP-containing chemical strippers 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. (3) For HAP-containing chemical strippers 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; (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.

§63.752	(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 (4) of this section, as appropriate. Each owner and operator using coating manufacturer's supplied data to demonstrate compliance with the applicable organic HAP or VOC limit specified in § 63.747(c) may retain the manufacturer's documentation and annual purchase records in place of the records specified in paragraph (f)(1) of this section. Owners and operators using the coating manufacturer's supplied data to demonstrate compliance based on the HAP content of the coating, and adding non-HAP solvent to those coatings, must also maintain records of the non-HAP solvent added to the coating. (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)); (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 chemical milling maskant formulation used each month. (2) For chemical milling maskants 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 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 (ii) All data, calculations, and test results (including EPA Method 24 results) used to determine the values of H_a and G_a. (3) For chemical milling maskants 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

§63.752	(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. (4) For chemical milling maskants 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.

Reporting Requirements

§63.753	(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: (i) Information detailing whether the source has operated within the specified ranges of its designated operating parameters. (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. (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. (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). (4) Each owner or operator subject to this subpart is not required to comply with § 63.10(b)(2)(i), (b)(2)(iv), (b)(2)(v), and (d)(5). (5) If a source fails to meet an applicable standard specified in §§ 63.744 through 63.748, report such events in the semiannual report:

§63.753	(i) The number of failures to meet an applicable standard. (ii) For each instance, report the date, time, and duration of each failure. (iii) For each failure the report must include a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions. (b) *Cleaning operation.* Each owner or operator of a cleaning operation subject to this subpart shall submit the following information: (1) Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify: (i) Any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation; (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); (iii) Any instance where a noncompliant spray gun cleaning method is used; (iv) Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days; and (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. (c) *Primer and topcoat application operations.* Each owner or operator of a primer or topcoat application operation subject to this subpart shall submit the following information: (1) Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify: (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); (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); (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; (iv) If a carbon adsorber is used; (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,

§63.753	(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. (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; (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; (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, (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. (d) *Depainting operation.* Each owner or operator of a depainting operation subject to this subpart shall submit the following information: (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;

§63.753	(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. (3) Where a control device is used to control organic HAP emissions, semiannual reports that identify: (i) If a carbon adsorber is used, (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, (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. (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; (iii) Descriptions of any control devices currently in use that were not listed in the notification of compliance status or any subsequent report. (e) *Chemical milling maskant application operation.* 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: (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); (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); (3) Where a control device is used,

§63.753	(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; (ii) If a carbon adsorber is used, (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, (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. (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; (4) All chemical milling maskants currently in use that were not listed in the notification of compliance status or any other subsequent semiannual report; (5) Descriptions of any control devices currently in use that were not listed in the notification of compliance status or any subsequent report; and (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. (f) Within 60 days after the date of completing each performance test (as defined in § 63.2) required by this subpart, you must submit the results of the performance tests following the procedure specified in either paragraph (f)(1) or (2) of this section. (1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (http://www.epa.gov/ttn/chief/ert/index.html) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (http://cdx.epa.gov/)). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (f). (2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 63.13.

FEDERAL REGULATIONS
40 CFR 63 SUBPART ZZZZ
National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Requirements for Existing Emergency RICE Rated Less than 500 HP at a Major Source of HAP – 40 CFR 63 Subpart ZZZZ – Commenced Construction before June 12, 2006

Applicable provisions of 40 CFR 63 Subpart ZZZZ shall apply.

[73 FR 3603, Jan. 18, 2008, as amended at 75 FR 9678, Mar 3 2010]

General Requirements

§63.6559	(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.
§63.6590	(b) Stationary RICE subject to Regulations under 40 CFR Part 60. 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. (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; (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; (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; (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; (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.

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Appendix A

SSG 138 Potential Emissions

Criteria Pollutant Emissions (tons per year)					
Pollutant:	PM_{10}	SOx	NOx	VOC	CO
Potential Emissions:	-	-	-	-	-
Pre-modification Emissions[1]	0.04	0.03	0.53	0.16	0.78
Emissions Change[2]	-0.04	-0.03	-0.53	-0.16	-0.78

[1]Potential to emit prior to project modifications
[2]Difference between pre-modification emissions and potential emissions, excluding exempted.

Greenhouse Gas Emissions (tons per year)							
Pollutants:	CO_2	CH_4	N_2O	HFCs	PFCs	SF_6	Total
Emissions (tpy):	-	-	-	N/A	N/A	N/A	
*GWP:	1	21	310	**	**	23,900	
CO2e (tpy):	-	-	-	N/A	N/A	N/A	0

Greenhouse Gases:
Carbon dioxide (CO_2),
Nitrous oxide (N_2O),
Methane (CH_4),
Hydrofluorocarbons (HFCs),
Perfluorocarbons (PFCs), and
Sulfur Hexafluoride (SF_6).

GHGs in table above are Potential to Emit (PTE) for year 2019 and exclude exempt sources.

*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.