### **Eastern Kern Air Pollution Control District**

# **RULE 402 FUGITIVE DUST**

STAFF REPORT
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#### I. INTRODUCTION

The Eastern Kern Air Pollution Control District (District) is proposing to adopt amendments to Rule 402, Fugitive Dust. Rule 402 was originally adopted November 29, 1993 and amended March 7, 1994, September 7, 1995, and November 3, 2004. This staff report presents an extensive revision of the Rule.

Fugitive dust contains varying sizes of respirable particulate mater including those with an aerodynamic diameter of 10 micrometers or less ( $PM_{10}$ ). The purpose of Rule 402 is to prevent, reduce, and mitigate ambient concentrations of anthropogenic fugitive dust emissions to an amount sufficient to maintain the National Ambient Air Quality Standards (NAAQS). Controlling fugitive dust when visible emissions are detected may not prevent all  $PM_{10}$  emissions, but will substantially reduce ambient concentrations.

District Rule 419, Nuisance shall still be used to prevent or correct specific public nuisances and health hazards.

Appendix A: Clean copy of Proposed Revision Rule 402, Fugitive Dust.

Appendix B: Strikeout underline of Proposed Revision Rule 402, Fugitive Dust.

#### II. APPLICABILITY

Provisions of amended Rule 402 are applicable to specified outdoor fugitive dust producing activities, which include: handling, storage, and transport of bulk storage piles, off-field agricultural sources, construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, on-site travel including travel on access roads to and from the job site, and any other anthropogenic condition resulting in wind erosion.

#### III. HEALTH EFFECTS OF PARTICLE POLLUTION

Particle exposure can lead to a variety of health effects. People with heart or lung diseases, children and older adults are the most likely to be affected by particle pollution exposure. However, even if you are healthy, you may experience temporary symptoms from exposure to elevated levels of particle pollution. Numerous studies have linked particle levels to increased hospital admissions and emergency room visits and even to death from heart or lung diseases.

The size of particles is directly related to their potential for causing health problems. Small particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into your lungs, and some may even get into your bloodstream.

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Exposure to such particles can affect both your lungs and your heart. Small particles of concern include "inhalable coarse particles" (such as those found near roadways and dusty industries), which are larger than 2.5 micrometers and smaller than 10 micrometers in diameter; and "fine particles" (such as those found in smoke and haze), which are 2.5 micrometers in diameter and smaller.

Numerous scientific studies have linked both long and short-term particle pollution exposure to a variety of health problems.

Long-term exposures, such as those experienced by people living for many years in areas with high particle levels, have been associated with problems such as reduced lung function and the development of chronic bronchitis and even premature death.

Short-term exposures to particles (hours or days) can aggravate lung disease, causing asthma attacks and also acute bronchitis, and may also increase susceptibility to respiratory infections. In people with heart disease, short-term exposures have been linked to heart attacks and arrhythmias. Healthy children and adults have not been reported to suffer serious effects from short term exposures, although they may experience temporary minor irritation when particle levels are elevated.

#### IV. DEFINITIONS

To enhance clarity and enforcement, Section III of the proposed revision provides definitions for revised and new terms that may not be self-explanatory.

The following definitions have been revised in Rule 402:

- Dust Suppressant
- Earthmoving
- Fugitive Dust
- Large Operation

- Particulate Matter (PM)
- Stabilized Surface
- Unpaved Road

The following definitions have been added to Rule 402:

- Agricultural Source
- Anthropogenic
- APCO
- Blasting
- Bulk Material Handling, Storage, and/or Transporting Operation
- Carryout/Trackout
- Chemical/Organic
   Stabilization/Suppression

- Landfill Disposal Site
- Land Preparation
- Off-Field Agricultural Source
- On-Field Agricultural Source
- Open-Pit Mine
- Outdoor Handling, Storage, and Transport
- Owner/Operator
- Paved Road/Area

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Added definitions continued.

- Emergency
- Event Material
- Excavation
- Extraction
- Fallow Land
- Good Agricultural Practices (GAP)
- Gravel Pad
- Grizzly
- Haul Truck
- Landfill Daily Cover

- Site
- Soil Stabilization
- Trackout Control Device
- Unpaved Access/Haul Road
- Unpaved Vehicle/Equipment Traffic Area
- Visible Dust Emissions (VDE)
- Wind Barrier
- Wind Generated Fugitive Dust

#### V. EXEMPTIONS

Exemptions for *On-field agricultural* and *Emergency activities* have been revised. Exemptions for *Off-field agricultural, Carryout and trackout caused by an agricultural source,* and various provisions for *Bulk Materials* have been added. Two exemptions pertaining to contractors have been deleted. See Section IV, Exemptions of Appendix B for complete details in strikeout underline form.

#### VI. REQUIREMENTS

Pursuant to Section V, Requirements of Proposed Amended Rule 402: A person shall not cause or allow fugitive dust emissions from any active operation to remain visible in the atmosphere beyond the property line of the emission source.

In addition, an owner/operator of any active operation subject to Rule 402 shall implement one or more fugitive dust emission control strategy listed in Table 1, Reasonably Available Control Measure (RACM) or Table 2, Bulk Material Control Measures (BMCM) to limit visible dust emissions (VDE) to no more than 20% opacity or meet the conditions for a stabilized surface.

A stabilized surface is defined as: Any disturbed surface area or open bulk material storage pile that is resistant to wind blown fugitive dust emissions. A surface is considered to be stabilized if it meets at least one of the following conditions:

- A visible crust;
- A threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 centimeters per second or greater;

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- A flat vegetative cover of at least 50 percent that is attached or rooted vegetation; or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind;
- A standing vegetative cover of at least 30 percent that is attached or rooted vegetation with a predominant vertical orientation;
- A standing vegetative cover that is attached or rooted vegetation with a
  predominant vertical orientation that is at least 10 percent and where the TFV
  is at least 43 centimeters per second when corrected for nonerodible
  elements; or
- A surface that is greater than or equal to 10 percent of non- erodible elements such as rocks, stones, or hard-packed clumps of soil.

#### **Fugitive Dust Emission Control Plan**

An owner/operator of a Large Operation will be required to submit a Fugitive Dust Emission Control Plan to the APCO prior to the start of any earthmoving activity. Project commence shall not begin until APCO has approved or conditionally approved the Plan.

A Large Operation is defined as: Any construction activity on any site involving 10 or more contiguous acres of disturbed surface area, or any earthmoving activity exceeding a daily volume of 10,000 cubic yards, or relocating more than 2,500 cubic yards per day of bulk materials at least three days per year.

Section V of the proposed amended Rule also contains provisions for the following subcategories:

- Earthmoving Activities
- Carryout and Trackout
- Bulk Materials

See Section V, Requirements of Appendix A for complete details.

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TABLE 1
REASONABLY AVAILABLE CONTROL MEASURES (RACM)

<b>Source Category</b>	Control Measure
Unpaved Road:	Control Vehicular Speed (signage/enforcement)
	Improve Road Surface (leveling/grading)
	Use Water Trucks to Keep Soil Damp
	Apply Dust Suppressant (palliatives/gravel/ect.)
Construction, Demolition,	Minimize/Limit Cut-Fill Grading
and Earth-Moving:	Phase Work to Reduce Disturbed Surface Area
	Use Wind Breaks (screens/fencing/barriers/burms)
	Compact Disturbed Surfaces
	Limit Equipment/Vehicular Access
	Use Water Trucks to Keep Soil Damp
	Apply Dust Suppressant (palliative/gravel/ect.)
Open Storage Pile:	Use Enclosures Around Storage Piles
	Keep Pile Damp
	Apply Dust Suppressant (palliative/gravel/ect.)
	Cover with Hydro-mulch or Woodchips
Disturbed Surface Area	Compact Disturbed Surfaces
Stabilization During	Restrict Equipment/Vehicular Access
Inactivity:	Use Wind Breaks (screens/fencing/barriers/burms)
	Apply Dust Suppressant (palliative/gravel/ect.)
	Apply Hydro-mulch or Woodchips
	Re-vegetate

NOTE: Use non-potable water if water is being used as a dust suppressant.

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# TABLE 2 BULK MATERIAL CONTROL MEASURES (BMCM)

Category	Control Measure
Handling	Apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity or;
	Construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity. If utilizing fences or wind barriers, also apply water or chemical/organic
	stabilizers/suppressants.
Storage	When storing bulk materials, comply with the conditions for a stabilized surface as defined in this Rule; or
	Cover bulk materials stored outdoors with tarps, plastic, or other suitable material and anchor in such a manner that prevents the cover from being removed by wind action; or
	Construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity. If utilizing fences or wind barriers, apply water or chemical/organic stabilizers/suppressants to limit VDE to 20% opacity or;
	Utilize a 3-sided structure with a height at least equal to the height of the storage pile and with less than 50% porosity.
On-Site Transporting	Limit vehicular speed while traveling on the work site sufficient to limit VDE to 20% opacity; or
	Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported across any paved public access road sufficient to limit VDE to 20% opacity, or
	Apply water to the top of the load sufficient to limit VDE to 20% opacity, or
	Cover haul trucks with a tarp or other suitable cover.
Off-Site Transporting	Clean interior of the cargo compartment or cover cargo compartment before empty truck leaves the site; and
	Prevent spillage or loss of bulk material from holes or other openings in cargo compartment's floor, sides, and/or tailgate; and Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported on any paved public access road, and apply water to top of load sufficient to limit VDE to 20% opacity; or cover haul trucks with a tarp or other suitable cover.
Outdoor Chute & Conveyor	Fully enclose the chute/conveyor; or
	Operate water spray equipment that sufficiently wets materials to limit VDE to 20% opacity; or  Wash separated or screened materials to remove conveyed
	materials having an aerodynamic diameter of 10 microns or less sufficient to limit VDE to 20% opacity.

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#### VII. PM<sub>10</sub> AIR MONITORING

The heading for Section VI has been changed from Compliance Schedule to PM<sub>10</sub> Air Monitoring. Language for PM<sub>10</sub> air monitoring requirements has been moved from Subsection V.D. Special Requirements for Large Operations to Section VI.

Section VI is applicable to any large operation causing downwind  $PM_{10}$  ambient concentrations to increase more than 50 micrograms per cubic meter above upwind concentrations or continually causing a public nuisance may be required to conduct on-site  $PM_{10}$  monitoring.

See Section VI, PM<sub>10</sub> Air Monitoring of Appendix A for complete details.

#### VIII. PROHIBITIONS

Section VII, Prohibitions has been added to the Proposed Revision of Rule 402 to detail types and uses of applicable soil stabilizers and dust suppressants. See Section VII, Prohibitions of Appendix A for complete details.

#### IX. ECONOMIC IMPACTS

Pursuant to California Health & Safety Code (CH&SC) §40920.6(a), the District is required to analyze the cost effectiveness of new rules or rule amendments that implement Best Available Retrofit Control Technology (BARCT) or all feasible measures. Proposed amendments to Rule 402 do not employ BARCT and therefore is not subject to the cost effectiveness analysis mandate.

#### X. ENVIRONMENTAL IMPACTS

Both the California Environmental Quality Act (CEQA) and ARB policy require an evaluation of the potential adverse environmental impacts of proposed projects. The intent of Amended Rule 402 is to protect public health by reducing the public's exposure to potentially harmful PM<sub>10</sub> emissions. An additional consideration is the impact that the proposed rule may have on the environment. District has determined that no significant adverse environmental impacts should occur as a result of adopting Amended Rule 402.

Pursuant to the Section 15061, Subsections (2) & (3) of the CEQA Guidelines, staff will prepared and file a Notice of Exemption for this project upon adoption.

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#### XI. SOCIOECONOMIC IMPACTS

CHSC Section 40728.5 exempts districts with a population of less than 500,000 persons from the requirement to assess the socioeconomic impacts of proposed rules. Eastern Kern County population is below 500,000 persons.

#### XII. RULE APPROVAL PROCESS

The District will be accepting written comments and concerns from persons interested in Rule 402 for a period of 30 days following the September 16, 2014 workshop. District anticipates that Rule 402 will be considered for adoption by the Board at the November 2014 Board Hearing.

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# APPENDIX A: PROPOSED REVISION RULE 402 FUGITIVE DUST

**RULE 402** Fugitive Dust - Adopted 11/29/93, Amended 3/07/94, 9/7/95, 11/3/04, X/X/XX

#### I. Purpose

Fugitive dust contains varying sizes of respirable particulate mater including those with an aerodynamic diameter of 10 micrometers or less ( $PM_{10}$ ). The purpose of this Rule is to prevent, reduce, and mitigate ambient concentrations of anthropogenic fugitive dust emissions to an amount sufficient to maintain the National Ambient Air Quality Standards (NAAQS).

District Rule 419, Nuisance shall still be used to prevent or correct specific public nuisances and health hazards.

#### II. Applicability

Provisions of this Rule are applicable to specified outdoor fugitive dust producing activities, which include: handling, storage, and transport of bulk storage piles, off-field agricultural sources, construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, onsite travel including travel on access roads to and from the job site, and any other anthropogenic condition resulting in wind erosion.

#### III. Definitions

- A. <u>Active Operation</u>: Activity capable of generating fugitive dust, including any open storage pile, earth-moving activity, construction/demolition activity, disturbed surface area, and non-emergency movement of motor vehicles on unpaved roadways and any parking lot served by an unpaved road subject to this Rule.
- B. <u>Agricultural Source</u>: Any activity or portion of land associated with the commercial growing of crops or the raising of fowl or animals.
- C. Anthropogenic: Caused, created, or produced by people or human activity.
- D. <u>APCO</u>: Air Pollution Control Officer of the Eastern Kern Air Pollution Control District.
- E. Blasting: Any excavation or demolition conducted with the use of explosives.
- F. <u>Bulk Material</u>: Sand, gravel, soil, aggregate, and any other organic or inorganic solid matter capable of releasing dust.
- G. <u>Bulk Material Handling, Storage, and/or Transporting Operation</u>: Includes but is not limited to the use of equipment, haul trucks, and/or motor vehicles for the loading, unloading, conveying, transporting, piling, stacking, screening, grading, or moving of bulk materials at an industrial, institutional, commercial and/or governmental owned or operated site or facility.

- H. <u>Calendar Quarter</u>: Consecutive three month period and each consecutive three-month period thereafter, beginning on the first day of the calendar month in which an activity qualifies as a large operation.
- I. <u>Carryout/Trackout</u>: Any and all materials that adheres to and agglomerates on vehicles, haul trucks, and/or equipment (including trailers, tires, etc.) and falls onto a paved public road or the paved shoulder of a paved public road.
- J. <u>Chemical/Organic Stabilization/Suppression</u>: Method of controlling PM<sub>10</sub> emissions from fugitive dust by applying any non-toxic chemical or organic dust suppressant, other than water, which meets any specifications, criteria, or tests required by any federal, state, or local water agency and is not prohibited for use by any applicable law, rule, or regulations.
- K. <u>Construction and Demolition Activity</u>: Any on-site mechanical activity preparatory to or related to building, alteration, rehabilitation, demolition or improvement of property, including the following activities: grading, excavation, loading, crushing, cutting, planning, shaping or ground breaking.
- L. <u>Contractor</u>: Any person or company, or licensed construction contractor having a contractual arrangement to conduct an active operation subject to this Rule for another person.
- M. <u>Contingency Measure</u>: Additional PM<sub>10</sub> control requirements automatically triggered in the event of failure to maintain the NAAQS for PM<sub>10</sub> in the Indian Wells Valley.
- N. <u>Disturbed Surface Area</u>: Portion of the earth's surface having been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural condition, thereby increasing the potential for emission of fugitive dust. Disturbed surface area does not include areas restored to a natural state with vegetative ground cover and soil characteristics similar to adjacent or nearby natural conditions.
- O. <u>Dust Suppressant</u>: Water, hygroscopic materials, or chemical/organic stabilization/suppression materials used as treatment to reduce fugitive dust emissions. A suppressant shall not be used if prohibited by the Regional Water Quality Control Board, the California Air Resources Board, the Environmental Protection Agency, or any other applicable law, rule or regulation. All suppressants shall meet all specifications, criteria, or tests required by any federal, state, or local water agency. The use of dust suppressants shall be of sufficient concentration and application frequency to maintain a stabilized surface.
- P. <u>Earthmoving</u>: The use of any equipment for an activity that may generate fugitive dust emissions, including, but not limited to, grading, cutting, filling, leveling, excavating, trenching, loading or unloading of dirt or bulk material, demolishing, blasting, drilling, adding to or removing of material from open storage piles, backfilling, soil mulching, or weed abatement through disking.

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- Q. <u>Emergency</u>: Any situation where immediate action on the part of a federal, state or local agency involved is needed and where the timing of such federal, state or local activities makes it impractical to meet the requirements of this Regulation, such as natural disasters, civil disturbances, or hazardous materials spills. Only an authorized official of a federal, state or local agency may declare an emergency when deemed necessary to protect the general public.
- R. <u>Event Material</u>: Wind, storm, or water erosion and runoff resulting in the accumulation of mud, soil, or other material onto a public paved road surface travel lane or shoulder.
- S. Excavation: Any digging, trenching, quarrying, extraction, or tunneling.
- T. <u>Extraction</u>: Removal of minerals, aggregate, or fossil fuels from the earth by excavation; including mining, surface stripping, open pit excavation, or tunneling.
- U. <u>Fallow Land</u>: Agriculturally productive land which has been developed and used for agricultural purposes in the past that is allowed to lie idle during the growing season, including agricultural land that has been plowed, harrowed, and broken up without seeding.
- V. <u>Fugitive Dust</u>: Any particulate matter directly or indirectly becoming airborne, other than being emitted from an exhaust stack or duct designed to control flow, as a result of human activity.
- W. <u>Good Agricultural Practices (GAP)</u>: Practices that address environmental, economic and social sustainability for on-farm processes, and result in safe and quality food and non-food agricultural products
- X. <u>Gravel Pad</u>: A layer of washed gravel, rock, or crushed rock located at the point of intersection of a paved public roadway and an unpaved work site exit, and maintained to dislodge mud, dirt, and/or debris from the tires of motor vehicles and/or haul trucks, prior to exiting the work site.
- Y. <u>Grizzly</u>: A device (i.e., rails, pipes, or grates) used to dislodge mud, dirt, and/or debris from the tires and undercarriage of motor vehicles or haul truck prior to leaving the work site.
- Z. <u>Haul Truck</u>: Any fully or partially open-bodied, self-propelled vehicle including any non-motorized attachments used for transporting bulk materials, including, but not limited to, trailers or other conveyances which are connected to or propelled by the actual motorized portion of the vehicle.
- AA. <u>Inactive Disturbed Surface Area</u>: Any disturbed surface area upon which an active operation has not occurred for a period of at least ten consecutive days.
- BB. <u>Landfill Daily Cover</u>: Soil excavated and stockpiled from a landfill borrow site that is used for daily operations to cover solid waste, trash, garbage, or other waste at a landfill disposal site.

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- CC. <u>Landfill Disposal Site</u>: A site where solid waste, trash, garbage, or other waste is disposed of by burying between layers of earth.
- DD. <u>Land Preparation</u>: Any activity that disturbs the natural condition of land, including, but not limited to, brush or timber clearing, grubbing, scraping, ground excavation, land leveling, or grading.
- EE. <u>Large Operation</u>: Any construction activity on any site involving 10 or more contiguous acres of disturbed surface area, or any earthmoving activity exceeding a daily volume of 10,000 cubic yards, or relocating more than 2,500 cubic yards per day of bulk materials at least three days per year.
- FF. Motor vehicle: Any engine-powered device used to convey people, or freight and registered for use on public highways.
- GG. <u>Non-Routine</u>: Non-periodic active operation occurring no more than three times per year, lasting less than 30 cumulative days per year, and scheduled less than 30 days in advance.
- HH. <u>Off-Field Agricultural Source</u>: Any agricultural source that meets the definition of: outdoor handling or storage and transport of bulk material.
- II. <u>On-Field Agricultural Source</u>: Any agricultural source that is not an off-field agricultural source, including:
  - a. Activities conducted solely for the purpose of preparing land for the growing of crops or the raising of fowl or animals, such as brush or timber clearing, grubbing, scraping, ground excavation, land leveling, grading, turning under stalks, disking, or tilling;
  - b. Drying or pre-cleaning of agricultural crop material on the field where it was harvested;
  - c. Handling or storage of agricultural crop material that is baled, cubed, pelletized, or long-stemmed, on the field where it was harvested, and the handling of fowl or animal feed materials at sites where animals or fowl are raised:
  - d. Disturbances of cultivated land as a result of fallowing, planting, fertilizing or harvesting.
- JJ. Open-Pit Mine: An excavation for a mining operation which, excluding entrances and egresses, is encircled by a "high-wall" at least 10 feet high. A "high wall" is a berm or cut having a slope of at least 1:1.
- KK. Open Storage Pile: Any accumulation of bulk material with 5 percent or greater silt content not fully enclosed, covered or chemically stabilized, and attaining a height of three feet or more and a total surface area of 500 or more square feet. Silt content level shall be assumed to be 5 percent or greater unless a person shows, by sampling and analysis in accordance with ASTM Method C-136, the silt content is less. Results of

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- ASTM Method C-136 are valid for 60 days from the date the sample was taken unless the Control Officer is provided with a logical explanation as to why the silt content should be considered constant. If he concurs it is constant, future sampling may be required to confirm this conclusion.
- LL. <u>Outdoor Handling, Storage, and Transport</u>: Handling (including loading and unloading), storage, and transport, and any accumulation of bulk material, temporarily or permanently stored outside of an enclosed structure.
- MM. <u>Owner/Operator</u>: Includes, but is not limited to, any person who leases, supervises, or operates equipment, or owns/operates a fugitive dust source, in addition to the normal meaning of owner or operator.
- NN. <u>Particulate Matter (PM)</u>: A complex mixture of extremely small particles and liquid droplets made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. Any solid material, existing in finely divided form.
- OO. <u>Paved Road/Area</u>: Any road/area that is covered by concrete, asphaltic concrete, asphalt, or other materials which provides structural support for vehicles.
- PP.  $\underline{PM_{10}}$ : Particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by California Air Resources Board Test Method 501.
- QQ. <u>Prevailing Wind Direction</u>: From Southwest to Northeast (in the Indian Wells Valley) or as specified by the Control Officer as being representative of local conditions.
- RR. <u>Property Line</u>: Boundaries of an area in which either a person causing fugitive dust emissions or a person allowing fugitive dust emissions has ownership or legal right to use the property.
- SS. Reasonably Available Control Measure (RACM): Any technique or procedure used to prevent or reduce the emission and airborne transport of fugitive dust. RACM includes, but is not limited to, application of dust suppressants, use of coverings or enclosures, paving, enshrouding, planting, control of vehicle speed, and any other measure recognized by the APCO as providing equivalent dust control. Table 1 and EPA's reference document "Control of Open Fugitive Dust Sources", Midwest Research Institute, September 1988 shall be used for guidance.
- TT. <u>Simultaneous Sampling</u>: Operation of two PM<sub>10</sub> samplers such that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period of not less than 290 minutes and not more than 310 minutes.
- UU. Site: Real property or land used or set aside for any specific use.
- VV. <u>Soil Stabilization</u>: The process used to control PM<sub>10</sub> emissions from fugitive dust for an extended period of time by applying dust suppressants or planting vegetative cover.

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- WW. <u>Stabilized Surface</u>: Any disturbed surface area or open bulk material storage pile that is resistant to wind blown fugitive dust emissions. A surface is considered to be stabilized if it meets at least one of the following conditions:
  - a. A visible crust;
  - b. A threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 centimeters per second or greater;
  - c. A flat vegetative cover of at least 50 percent that is attached or rooted vegetation; or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind;
  - d. A standing vegetative cover of at least 30 percent that is attached or rooted vegetation with a predominant vertical orientation;
  - e. A standing vegetative cover that is attached or rooted vegetation with a predominant vertical orientation that is at least 10 percent and where the TFV is at least 43 centimeters per second when corrected for nonerodible elements; or
  - f. A surface that is greater than or equal to 10 percent of non- erodible elements such as rocks, stones, or hard-packed clumps of soil.
- XX. <u>Trackout Control Device</u>: A gravel pad, grizzly, wheel wash system, or a paved area located at the point of intersection of an unpaved area and a paved road that prevents or controls trackout.
- YY. <u>Unpaved Road</u>: Any road that is not covered by one of the materials described in the paved road definition.
- ZZ. <u>Unpaved Access/Haul Road</u>: Any road or path that is not covered by one of the materials described in the paved road definition that is associated with any construction, demolition, excavation, extraction, and other earthmoving activity and used by vehicles, equipment, haul trucks, or any conveyances to travel within a site, to move materials from one part of a site to another part within the same site, or to provide temporary access to a site.
- AAA. <u>Unpaved Vehicle/Equipment Traffic Area</u>: Any nonresidential area that is not covered by asphalt, recycled asphalt, asphaltic concrete, concrete, or concrete pavement that is used for fueling and servicing; shipping, receiving and transfer; or parking or storing equipment, haul trucks, vehicles, and any conveyances.
- BBB. <u>Visible Dust Emissions (VDE)</u>: Dust emissions visible to an observer.
- CCC. <u>Wind Barrier</u>: A fence or structure constructed, or row of trees planted, to reduce the shearing effects caused by wind thereby reducing or eliminating the amount of entrained fugitive dust.

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- DDD. <u>Wind Generated Fugitive Dust</u>: Visible emissions from any disturbed surface area which is generated by wind action alone.
- EEE. <u>Wind Gust</u>: Maximum instantaneous wind speed, as measured by an anemometer or as provided by the nearest local meteorological station.

#### IV. Exemptions

- A. Provisions of this Rule shall not apply to:
  - 1. On-field agricultural operations implementing Good Agricultural Practices (GAP), including activities directly related to raising fowl or animals, or growing crops, for a profit;
  - 2. Off-field agricultural sources necessary to minimize or respond to adverse effects on agricultural crops caused during freezing temperatures as declared by the National Weather Service.
  - 3. Carryout and trackout caused by an agricultural source;
  - 4. Actions required by federal or state endangered species legislation, or the Surface Mining and Reclamation Act;
  - 5. Any disturbed surface area less than three acres on residential property in the Indian Wells Valley and less than two acres in the remainder of the District;
  - 6. Active operation conducted during emergency life-threatening situations, or in conjunction with any officially-declared disaster or state of emergency. Emergency activities lasting more than 30 days shall be subject to this regulation, except where compliance would limit effectiveness of ensuring public health and safety.;
  - 7. Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions;
  - 7. Unpaved roads that are not part of a large operation and are outside the Indian Wells Valley and unpaved roads within the Indian Wells Valley provided such roads:
    - a. Are less than 75 (50, if contingency measure triggered) feet long or,
    - b. Have a motor vehicle traffic volume less than 25 (15, if contingency measure triggered) vehicle-trips per day, or
    - c. Have a motor vehicle traffic volume greater than 25 (15, if contingency measure triggered) vehicle-trips per day not more than six times per year, or
    - d. Provide access to not more than 10 residences;

Contingency measure is triggered if EPA publishes a finding in the Federal Register that District's portion of the Indian Wells Valley Planning Area has failed to maintain NAAQS for  $PM_{10}$ .

- 8. Restorative grading of unpaved shoulders of paved roads;
- 9. Non-routine or emergency maintenance of flood control channels and water spreading basins;
- 10. Weed and dried vegetation removal required by a fire prevention/control agency;
- 11. Active operations conducted during freezing weather if applicable RACM involves application of water;
- 12. County or properly permitted private sanitary landfill disposal sites provided such sites conform to California Code of Regulations Title 14: Sections 17659, 17660 and 17706 (County) or District dust control permit to operate conditions;
- 13. Blasting operations permitted by the California Division of Industrial Safety;
- 14. Motion picture, television, and video production activities when dust emissions are required for visual effects. This exemption shall be obtained from the APCO;
- 15. Officially designated public parks and recreational areas, including national parks, national monuments, national forests, state parks, state recreational areas, and County regional parks;
- 16. Federal facilities (outside Indian Wells Valley) required by National Environmental Protection Act (NEPA) to implement fugitive dust RACM's for activities otherwise subject to this rule, provided District receives an up-to-date description, including all RACM's employed.
- B. Provisions of Section V.A. shall not apply when wind gusts exceed 25 miles per hour, provided:
  - 1. Table 1 RACM is implemented for each applicable fugitive dust source type; or
  - An owner/operator has on file with the District an approved "High Wind Fugitive Dust Control Plan" indicating technical reasons why RACM cannot be implemented. Such plan shall provide alternative measures for fugitive dust control, if technically feasible, and shall be subject to the same approval conditions as specified in Section V.D.

#### C. Bulk Materials

1. Any outdoor storage, handling, or transport of bulk materials which would be damaged by wetting with water or by the application of chemical/organic dust suppressants, provided owners/operators demonstrate to the satisfaction of the APCO and EPA that none of the control measures specified in Table 2 Bulk

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Material Control Measures (BMCM) can be implemented to limit VDE to no more than 20% opacity or provide a stabilized surface.

- 2. Spreading of daily landfill cover.
- 3. Transport of a bulk material in an outdoor area for a distance of twelve feet or less with the use of a chute or conveyor device.
- 4. Outdoor storage of any bulk material at a single site where no material is actively being added or removed at the end of the workday or overnight and where the total material stored is less than 100 cubic yards.

#### V. Requirements

- A. A person shall not cause or allow fugitive dust emissions from any active operation to remain visible in the atmosphere beyond the property line of the emission source.
- B. An owner/operator of any active operation subject to this Rule shall implement one or more fugitive dust emission control strategy listed in Table 1, Reasonably Available Control Measure (RACM) or Table 2, Bulk Material Control Measures (BMCM) to limit visible dust emissions (VDE) to no more than 20% opacity or meet the conditions for a stabilized surface as defined in Section III.WW.

TABLE 1
REASONABLY AVAILABLE CONTROL MEASURES (RACM)

Source Category	Control Measure
Unpaved Road:	Control Vehicular Speed (signage/enforcement)
	Improve Road Surface (leveling/grading)
	Use Water Trucks to Keep Soil Damp
	Apply Dust Suppressant (palliatives/gravel/ect.)
Construction, Demolition, and Earth-Moving:	Minimize/Limit Cut-Fill Grading
	Phase Work to Reduce Disturbed Surface Area
	Use Wind Breaks (screens/fencing/barriers/burms)
	Compact Disturbed Surfaces
	Limit Equipment/Vehicular Access
	Use Water Trucks to Keep Soil Damp
	Apply Dust Suppressant (palliative/gravel/ect.)
Open Storage Pile:	Use Enclosures Around Storage Piles
	Keep Pile Damp
	Apply Dust Suppressant (palliative/gravel/ect.)
	Cover with Hydro-mulch or Woodchips

#### **TABLE 1 Continued**

Disturbed Surface Area	Compact Disturbed Surfaces
Stabilization During	Restrict Equipment/Vehicular Access
Inactivity:	Use Wind Breaks (screens/fencing/barriers/burms)
	Apply Dust Suppressant (palliative/gravel/ect.)
	Apply Hydro-mulch or Woodchips
	Re-vegetate

NOTE: Use non-potable water if water is being used as a dust suppressant.

#### C. Bulk Materials

No person shall perform any outdoor handling, storage, and transport of bulk materials unless the appropriate control measures as listed in Table 2 are sufficiently implemented in order to limit VDE to no more than 20% opacity. Conditions of Stabilized Surface, as defined in Section III.WW of this Rule, must also be met.

TABLE 2
BULK MATERIAL CONTROL MEASURES (BMCM)

Category	Control Measure
Handling	Apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity or;
	Construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity. If utilizing fences or wind barriers, also apply water or chemical/organic stabilizers/suppressants.
Storage	When storing bulk materials, comply with the conditions for a stabilized surface as defined in this Rule; or
	Cover bulk materials stored outdoors with tarps, plastic, or other suitable material and anchor in such a manner that prevents the cover from being removed by wind action; or
	Construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity. If utilizing fences or wind barriers, apply water or chemical/organic stabilizers/suppressants to limit VDE to 20% opacity or;
	Utilize a 3-sided structure with a height at least equal to the height of the storage pile and with less than 50% porosity.
On-Site Transporting	Limit vehicular speed while traveling on the work site sufficient to limit VDE to 20% opacity; or
	Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported across any paved public access road sufficient to limit VDE to 20% opacity, or
	Apply water to the top of the load sufficient to limit VDE to 20% opacity, or
	Cover haul trucks with a tarp or other suitable cover.

#### **TABLE 2 Continued**

Off-Site Transporting	Clean interior of the cargo compartment or cover cargo compartment before empty truck leaves the site; and
	Prevent spillage or loss of bulk material from holes or other openings in cargo compartment's floor, sides, and/or tailgate; and
	Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported on any paved public access road, and apply water to top of load sufficient to limit VDE to 20% opacity; or cover haul trucks with a tarp or other suitable cover.
Outdoor Chute & Conveyor	Fully enclose the chute/conveyor; or
	Operate water spray equipment that sufficiently wets materials to limit VDE to 20% opacity; or
	Wash separated or screened materials to remove conveyed materials having an aerodynamic diameter of 10 microns or less sufficient to limit VDE to 20% opacity.

#### D. Fugitive Dust Emission Control Plan

- 1. An owner/operator shall submit a Fugitive Dust Emission Control Plan to the APCO prior to the start of any Large Operation as defined in Section III.EE. Activity shall not commence until APCO has approved or conditionally approved a Fugitive Dust Emission Control Plan.
- 2. Any operation subject to the requirements of this section must post visible signage on location that clearly displays:
  - a. Message stating "If you see blowing dust please call";
  - b. Contact phone number for person responsible for on-site dust control; and
  - c. District primary contact phone number.
- 3. A Fugitive Dust Emission Control Plan must include:
  - a. Name(s), address(es), and phone number(s) of person(s) and owner(s)/operator(s) responsible for the preparation, submittal, and implementation of the plan and responsible for the dust generating operation and the application of dust control measures;
  - b. Description and location of operation;
  - c. Plot plan which shows the type and location of each project;
  - d. Listing of all fugitive dust emissions sources included in the large operation;

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- e. Total area of land surface to be disturbed, daily throughput volume of earthmoving in cubic yards, and total area in acres of the entire project site;
- f. Actual and potential sources of fugitive dust emissions on the site and the location of bulk material handling and storage areas, paved and unpaved roads; entrances and exits where carryout/trackout may occur; and traffic areas;
- g. All RACM or BMCM to be implemented before, during, and after any dust generating activity. Such description must be sufficiently detailed to demonstrate RACM or BMCM will be utilized and/or installed during all periods of active operations;
- h. Expected start and completion dates of dust generating and soil disturbance activities to be performed on the site; and
- i. Any special technical, e.g., non-economic, circumstances preventing use of RACM or BMCM for any source, justification shall be provided in lieu of the description. A justification statement shall explain reason(s) why RACM or BMCM cannot be implemented.
- 4. APCO shall approve, conditionally approve, or disapprove a plan in writing within 30 calendar days of receipt. For a plan to be approved or conditionally approved the following three conditions shall be satisfied:
  - a. All sources of fugitive dust emissions shall be identified, e.g., earth-moving, storage piles, vehicular traffic on unpaved roads, etc;
  - b. At least one RACM or BMCM shall be implemented for each source identified; and
  - c. List of standby/additional contingency control measures (e.g. increase watering, stop work, additional palliative, ect.) shall be specified for immediate implementation in the event visible dust emissions cross property line(s).
- 5. The applicant shall be notified in writing if a plan can be conditionally approved by adding actions not specified in the proposed plan. Such actions shall be incorporated into a revised plan and submitted to the APCO within 30 days of receipt or the plan will be disapproved.
- 6. An owner/operator must submit a Fugitive Dust Emission Control Plan for each large operation if multiple sites/projects are involved.
- 7. An owner/operator shall notify the APCO in writing 10 days prior to the commencement of any large operation via email or fax.
- 8. An owner/operator shall retain a copy of the approved plan at the project site.

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- 9. An approved plan is valid for a period of one year from date of approval or conditional approval. A plan shall be resubmitted annually, at least 60 days prior to expiration date, or the plan will be disapproved as of the expiration date. If all fugitive dust sources and corresponding RACM, BMCM, or special circumstances remain identical to those identified in the previously approved plan, the resubmittal may contain a simple statement of "no-change". Otherwise a resubmittal shall contain all items specified in Section V.D.2.
- 10. Failure to comply with any provisions of the approved or conditionally approved plan shall result in a notice of violation (NOV).

#### E. Earthmoving Activities

No person shall perform or authorize any earthmoving activity subject to requirements of this Rule unless the appropriate fugitive dust emission control measure(s) as described herein are implemented to limit VDE to no more than 20% opacity.

Earthmoving activities include but not limited to, construction, demolition, excavation, extraction, land clearing, grubbing, scraping, on-site travel, and travel on access roads to and from site. This section also applies to the construction of new landfill disposal sites or modification to existing landfill disposal sites prior to commencement of normal landfill operations.

- 1. Any Large Operation earthmoving activity as defined in Section III.EE. shall comply with the requirements of Section V.D.
- 2. Implement one or more strategy from Table 1.
- 3. Speed Limitations and Posting of Speed Limit Signs on Uncontrolled Unpaved Access/Haul Roads on Construction Sites.
  - a. An owner/operator shall limit the speed of vehicles traveling on uncontrolled unpaved access/haul roads within construction sites to a maximum of 15 miles per hour.
  - b. An owner/operator shall post speed limit signs that meet State and Federal Department of Transportation standards at each construction site's uncontrolled unpaved access/haul road entrance. At a minimum, speed limit signs shall also be posted at least every 500 feet and shall be readable in both directions of travel along uncontrolled unpaved access/haul roads.
- 4. Wind Generated Fugitive Dust Requirements.
  - a. Cease outdoor construction, excavation, extraction, and other earthmoving activities that disturb the soil whenever VDE exceeds 20% opacity. Indoor activities such as electrical, plumbing, dry wall installation, painting, and any other activity that does not cause any disturbances to the soil are not subject to this requirement.

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- b. Continue operation of water trucks/devices when outdoor construction excavation, extraction, and other earthmoving activities cease, unless unsafe to do so.
- 5. An owner/operator shall provide written notification to the District at least 48 hours prior to any earthmoving activity involving 5.0 to less than 10.0 contiguous acres of disturbed surface area.

#### F. Carryout and Trackout

An owner/operator shall sufficiently prevent or cleanup carryout/trackout as follows:

- 1. Owners/operators shall remove all visible carryout/trackout at the end of each workday.
- 2. Cleanup of carryout/trackout shall be accomplished by:
  - a. Manually sweeping and picking-up; or
  - b. Operating a rotary brush or broom accompanied or preceded by sufficient wetting to limit VDE to at least 20% opacity; or
  - c. Operating a PM<sub>10</sub>-efficient street sweeper that has a pick-up efficiency of at least 80 percent.
  - d. Flushing with water, if curbs or gutters are not present and where the use of water will not result as a source of trackout material or result in adverse impacts on storm water drainage systems or violate any National Pollutant Discharge Elimination System permit program.
- 3. <u>Urban areas</u>: An owner/operator shall prevent or immediately remove carryout/trackout when it extends 50 feet or more from the nearest unpaved surface exit point of a site.
- 4. <u>Rural areas</u>: An owner/operator shall prevent or immediately remove carryout/trackout on construction projects 10 acres or more in size, when it extends 50 feet or more from the nearest unpaved surface exit point of a site.
- 5. Carryout/trackout shall be prevented and mitigated as follows:
  - a. Installing and maintaining a trackout control device meeting the specifications contained in Section V.F.6. at all access points to paved public roads; or
  - b. Utilizing a carryout and trackout prevention procedure which has been demonstrated to the satisfaction of the APCO and EPA as achieving an equivalent or greater level of control than specified in Section V.F.5.a.

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- c. In the event that measures specified in Sections V.F.5.a. and V.F.5.b. are insufficient to prevent carryout/trackout, removal of any carryout/trackout must be accomplished within one-half hour of the generation of such carryout/trackout.
- 6. Specifications for Section V.F.5 shall meet the following conditions or combination of conditions:
  - a. For use of grizzlies or other similar devices designed to removed dirt/mud from tires, the devices shall extend from the intersection with the public paved road surface for a distance of at least 25 feet, and cover the full width of the unpaved exit surface for at least 25 feet.
  - b. For use of gravel pads, coverage with gravel shall be at least one inch or larger in diameter and at least 3 inches deep, shall extend from the intersection with the public paved road surface for a distance of at least 50 feet, and cover the full width of the unpaved exit surface for at least 50 feet. Any gravel deposited onto a public paved road travel lane or shoulder must be removed at the end of the workday or immediately following the last vehicle using the gravel pad, or at least once every 24 hours, whichever occurs first.
  - c. For use of paving, paved surfaces shall extend from the intersection with the public paved road surface for a distance of at least 100 feet, and cover the full width of the unpaved access road for that distance to allow mud and dirt to drop off of vehicles before exiting the site. Mud and dirt deposits accumulating on paved interior roads shall be removed with sufficient frequency, but not less frequently than once per workday, to prevent carryout and trackout onto paved public roads.
- 7. An owner/operator of any site with 150 or more vehicle trips per day or 20 or more vehicle trips per day by vehicles with three or more axles shall take the actions for carryout/trackout as specified in Section V.F.5.
- 8. An owner/operator subject to the requirements of a Fugitive Dust Emission Control Plan as specified in Section V.D. shall take the actions for carryout/trackout as specified in Section V.F.5.
- 9. For sites with paved interior roads, an owner/operator shall prevent and mitigate carryout/trackout as specified in Section V.F.5.

#### VI. PM<sub>10</sub> Air Monitoring

Any large operation causing downwind  $PM_{10}$  ambient concentrations to increase more than 50 micrograms per cubic meter above upwind concentrations or continually causing a public nuisance may be required to conduct on-site  $PM_{10}$  monitoring.

A. Any source required to conduct on-site  $PM_{10}$  monitoring shall:

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- 1. Operate, maintain, and calibrate monitors in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate EPA-published documents for EPA-approved equivalent methods(s) for PM<sub>10</sub> sampling;
- 2. Reasonably place monitors upwind and downwind of operation, based on prevailing wind direction and as close to property lines as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized;
- 3. Notify APCO of intent to monitor PM<sub>10</sub> at least seven days prior to initiating such monitoring. Notification shall contain, at a minimum, the person's name, address, telephone number, brief description and location of the operation(s), and anticipated first date of sampling;
- 4. Collect samples on at least four separate days per month. Each sampling day shall be conducted during typical operations and during prevailing wind direction conditions. All other provisions of this Rule shall continue to be applicable;
- 5. Collect additional samples as requested by APCO based on receipt of public complaints, visible dust emissions, high wind events, or other determinations made by District staff indicating violations may be occurring;
- 6. Compile and submit records to the District on a quarterly basis, not later than 30 days after the end of each calendar quarter. Such records shall include:
  - a. Brief description and location of the operation;
  - b. Hours of active operation on days when particulate sampling occurred;
  - c. Location, vendor, model, and serial number of  $PM_{10}$  samplers used on each sampling day;
  - d. Date, start and end times of all  $PM_{10}$  sampling;
  - e. Laboratory results (measured ambient concentrations) of all PM<sub>10</sub>samples;
  - f. List of consultants, laboratories, and other groups of individuals responsible for collection, analysis, evaluation and validation of each  $PM_{10}$  sample; and
  - g. Documentation of any maintenance and calibration actions performed on each  $PM_{10}$  sampler conducted in accordance with 40 CFR, Part 50, Appendix J.

#### VII. Prohibitions

A. Materials used for chemical/organic stabilization of soils, including petroleum resins, asphaltic emulsions, acrylics, and adhesives shall not violate State Water Quality Control Board standards for use as a soil stabilizer. Materials accepted by CARB and EPA, and which meet State water quality standards, shall be considered acceptable to the APCO.

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- B. Any material prohibited for use as dust suppressant by CARB, EPA, or other applicable law, rule, or regulation is also prohibited.
- C. Use of hygroscopic materials may be prohibited by the APCO in areas lacking sufficient atmospheric moisture of soil for such materials to effectively reduce fugitive dust emissions. The atmospheric moisture of soil is considered to be sufficient if it meets the application specifications of the hygroscopic product manufacturer. Use of such materials may be approved in conjunction with sufficient wetting of the controlled area.
- D. Any use of dust suppressants or gravel pads, and paving materials such as asphalt or concrete for paving, shall comply with all other applicable District Rules.
- E. The use of blower devices or dry rotary brushes/brooms for removal of carryout and trackout on public roads is expressly prohibited. Removal of carryout and trackout from paved public roads does not exempt an owner/operator from obtaining state or local agency permits which may be required for the cleanup of mud and dirt on paved public roads.

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# Eastern Kern Air Pollution Control District Portion of Searles Valley/Indian Wells Valley Planning Area (18090295)



### **APPENDIX B:**

# PROPOSED REVISION RULE 402 FUGITIVE DUST STRIKEOUT UNDERLINE VERSION

**RULE 402** Fugitive Dust - Adopted 11/29/93, Amended 3/07/94, 9/7/95, 11/3/04, X/X/XX

#### I. Purpose

Fugitive dust contains varying sizes of respirable particulate mater including those with an aerodynamic diameter of 10 micrometers or less (PM<sub>10</sub>). The purpose of this Rule is to prevent, reduce, and mitigate ambient concentrations of anthropogenic fugitive dust emissions to the amount of respirable particulate matter (PM10) emitted from significant man made fugitive dust sources and in an amount sufficient to maintain the National Ambient Air Quality Standards (NAAQS).

<u>District</u> Rule 419, <u>Nuisance</u> shall still be used to prevent <u>or</u> /correct specific public nuisances and health hazards.

#### II. Applicability

The provisions of this Rule are applicable to specified outdoor fugitive dust producing activities, which include: shall apply to specified handling, storage, and transport of bulk storage piles, off-field agricultural sources, construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, on-site travel including travel on access roads to and from the job site, earthmoving, construction and demolition, and any other anthropogenic man-made conditions resulting in wind erosion. It shall also apply to unpaved roadways located in the Kern County portion of the "Searles Valley Planning Area" shown on Page 402-11.

#### III. Definitions

- A. <u>Active Operation</u>: Activity capable of generating fugitive dust, including any open storage pile, earth-moving activity, construction/demolition activity, disturbed surface area, and non-emergency movement of motor vehicles on unpaved roadways and any parking lot served by an unpaved road subject to this Rule.
- B. Agricultural Source: Any activity or portion of land associated with the commercial growing of crops or the raising of fowl or animals.
- C. Anthropogenic: Caused, created, or produced by people or human activity.
- D. APCO: Air Pollution Control Officer of the Eastern Kern Air Pollution Control District.
- E. Blasting: Any excavation or demolition conducted with the use of explosives.
- B.F. Bulk Material: Sand, gravel, soil, aggregate, and any other organic or inorganic solid matter capable of releasing dust.
- G. Bulk Material Handling, Storage, and/or Transporting Operation: Includes but is not limited to the use of equipment, haul trucks, and/or motor vehicles for the loading, unloading, conveying, transporting, piling, stacking, screening, grading, or moving of

bulk materials at an industrial, institutional, commercial and/or governmental owned or operated site or facility.

- <u>C.H.</u> Calendar Quarter consecutive three month period and each consecutive three-month period thereafter, beginning on the first day of the calendar month in which an activity qualifies as a large operation.
- I. Carryout/Trackout: Any and all materials that adheres to and agglomerates on vehicles, haul trucks, and/or equipment (including trailers, tires, etc.) and falls onto a paved public road or the paved shoulder of a paved public road.
- J. Chemical/Organic Stabilization/Suppression: Method of controlling PM<sub>10</sub> emissions from fugitive dust by applying any non-toxic chemical or organic dust suppressant, other than water, which meets any specifications, criteria, or tests required by any federal, state, or local water agency and is not prohibited for use by any applicable law, rule, or regulations.
- D.K. Construction and Demolition Activity: Any on-site mechanical activity preparatory to or related to building, alteration, rehabilitation, demolition or improvement of property, including the following activities: grading, excavation, loading, crushing, cutting, planning, shaping or ground breaking.
- E.L. Contractor: Any person or company, or licensed construction contractor having a contractual arrangement to conduct an active operation subject to this Rule for another person.
- F.M. Contingency Measure: Additional PM<sub>10</sub>PM10 control requirements automatically triggered in the event of failure to maintain the National Ambient Air Quality StandardsNAAQS for PM<sub>10</sub>PM10 in the Indian Wells Valley.
- G.N. Disturbed Surface Area: Portion of the earth's surface having been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural condition, thereby increasing the potential for emission of fugitive dust. Disturbed surface area does not include areas restored to a natural state with vegetative ground cover and soil characteristics similar to adjacent or nearby natural conditions.
- H.O. Dust Suppressant: Water, hygroscopic materials, or non-toxic chemical chemical/organic stabilization/suppression materials stabilizers used as treatment to reduce fugitive dust emissions. A suppressant shall not be used if prohibited by the Regional Water Quality Control Board, the California Air Resources Board, the Environmental Protection Agency, or any other applicable law, rule or regulation. All suppressants shall meet all specifications, criteria, or tests required by any federal, state, or local water agency. The use of dust suppressants shall be of sufficient concentration and application frequency to maintain a stabilized surface.
- <u>I.P.</u> <u>Earth-Mmoving Activity</u>: <u>The use of any equipment for an activity that may generate fugitive dust emissions, including, but not limited to, Ggrading, earth-cutting, and filling, leveling, excavating, trenching, loading or unloading of dirt or bulk</u>

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- material, <u>demolishing</u>, <u>blasting</u>, <u>drilling</u>, adding to or removing <u>of material</u> from open storage piles <u>of bulk material</u>, <u>landfillingbackfilling</u>, <u>or soil mulching</u>, <u>or weed abatement through disking</u>.
- Q. Emergency: Any situation where immediate action on the part of a federal, state or local agency involved is needed and where the timing of such federal, state or local activities makes it impractical to meet the requirements of this Regulation, such as natural disasters, civil disturbances, or hazardous materials spills. Only an authorized official of a federal, state or local agency may declare an emergency when deemed necessary to protect the general public.
- R. Event Material: Wind, storm, or water erosion and runoff resulting in the accumulation of mud, soil, or other material onto a public paved road surface travel lane or shoulder.
- S. Excavation: Any digging, trenching, quarrying, extraction, or tunneling.
- T. Extraction: Removal of minerals, aggregate, or fossil fuels from the earth by excavation; including mining, surface stripping, open pit excavation, or tunneling.
- U. Fallow Land: Agriculturally productive land which has been developed and used for agricultural purposes in the past that is allowed to lie idle during the growing season, including agricultural land that has been plowed, harrowed, and broken up without seeding.
- J.V. Fugitive Dust: Any particulate matter <u>directly or indirectly</u> becoming airborne, other than being emitted from an exhaust stack <u>or duct designed to control flow, directly or indirectly</u> as a result of human activity.
- W. Good Agricultural Practices (GAP): Practices that address environmental, economic and social sustainability for on-farm processes, and result in safe and quality food and non-food agricultural products
- X. Gravel Pad: A layer of washed gravel, rock, or crushed rock located at the point of intersection of a paved public roadway and an unpaved work site exit, and maintained to dislodge mud, dirt, and/or debris from the tires of motor vehicles and/or haul trucks, prior to exiting the work site.
- Y. Grizzly: A device (i.e., rails, pipes, or grates) used to dislodge mud, dirt, and/or debris from the tires and undercarriage of motor vehicles or haul truck prior to leaving the work site.
- Z. Haul Truck: Any fully or partially open-bodied, self-propelled vehicle including any non-motorized attachments used for transporting bulk materials, including, but not limited to, trailers or other conveyances which are connected to or propelled by the actual motorized portion of the vehicle.
- <u>K.AA.</u> Inactive Disturbed Surface Area: Any disturbed surface area upon which an active operation has not occurred for a period of at least ten consecutive days.

- BB. Landfill Daily Cover: Soil excavated and stockpiled from a landfill borrow site that is used for daily operations to cover solid waste, trash, garbage, or other waste at a landfill disposal site.
- CC. Landfill Disposal Site: A site where solid waste, trash, garbage, or other waste is disposed of by burying between layers of earth.
- DD. Land Preparation: Any activity that disturbs the natural condition of land, including, but not limited to, brush or timber clearing, grubbing, scraping, ground excavation, land leveling, or grading.
- L.EE. Large Operation: Any active-construction activity on any site operation, including vehicle movement on unpaved roadways, on property involving in excess of 100 or more contiguous acres of disturbed surface area, or any earthmoving activity exceeding a daily volume of 7,700 cubic meters (10,000 cubic yards), or relocating more than 2,500 cubic yards per day of bulk materials at least three days per year.three times during the most recent 365-day period.
- M.FF. Motor vehicle: Any engine-powered device used to convey people, or freight and registered for use on public highways.
- Non-Routine Non-periodic active operation occurring no more than three times per year, lasting less than 30 cumulative days per year, and scheduled less than 30 days in advance.
- HH. Off-Field Agricultural Source: Any agricultural source that meets the definition of: outdoor handling or storage and transport of bulk material.
- II. On-Field Agricultural Source: Any agricultural source that is not an off-field agricultural source, including:
  - a. Activities conducted solely for the purpose of preparing land for the growing of crops or the raising of fowl or animals, such as brush or timber clearing, grubbing, scraping, ground excavation, land leveling, grading, turning under stalks, disking, or tilling;
  - <u>b.</u> Drying or pre-cleaning of agricultural crop material on the field where it was harvested;
  - c. <u>Handling or storage of agricultural crop material that is baled, cubed, pelletized, or long-stemmed, on the field where it was harvested, and the handling of fowl or animal feed materials at sites where animals or fowl are raised;</u>
  - <u>d.</u> <u>Disturbances of cultivated land as a result of fallowing, planting, fertilizing or harvesting.</u>

- JJ. Open-Pit Mine: An excavation for a mining operation which, excluding entrances and egresses, is encircled by a "high-wall" at least 10 feet high. A "high wall" is a berm or cut having a slope of at least 1:1.
- Open Storage Pile: Any accumulation of bulk material with 5 percent or greater silt content not fully enclosed, covered or chemically stabilized, and attaining a height of three feet or more and a total surface area of 500 or more square feet. Silt content level shall be assumed to be 5 percent or greater unless a person shows, by sampling and analysis in accordance with ASTM Method C-136, the silt content is less. Results of ASTM Method C-136 are valid for 60 days from the date the sample was taken unless the Control Officer is provided with a logical explanation as to why the silt content should be considered constant. If he concurs it is constant, future sampling may be required to confirm this conclusion.
- LL.Outdoor Handling, Storage, and Transport: Handling (including loading and unloading), storage, and transport, and any accumulation of bulk material, temporarily or permanently stored outside of an enclosed structure.
- MM. Owner/Operator: Includes, but is not limited to, any person who leases, supervises, or operates equipment, or owns/operates a fugitive dust source, in addition to the normal meaning of owner or operator.
- NN. Particulate Matter (PM): A complex mixture of extremely small particles and liquid droplets made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. Any solid material, existing in finely divided form. Any solid material, existing in finely divided form.
- OO. Paved Road/Area: Any road/area that is covered by concrete, asphaltic concrete, asphalt, or other materials which provides structural support for vehicles.
- <u>Q.PP. PM<sub>10</sub>PM10</u>: Particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by California Air Resources Board Test Method 501.
- R-QQ. Prevailing Wind Direction: From Southwest to Northeast (in the Indian Wells Valley) or as specified by the Control Officer as being representative of local conditions.
- S.RR. Property Line: Boundaries of an area in which either a person causing fugitive dust emissions or a person allowing fugitive dust emissions has ownership or legal right to use the property.
- T.SS. Reasonably Available Control Measure (RACM): Any technique or procedure used to prevent or reduce the emission and airborne transport of fugitive dust. RACM's includes, but are is not limited to, application of dust suppressants, use of coverings or enclosures, paving, enshrouding, planting, control of vehicle speeds, and any other measure recognized by the Control OfficerAPCO as providing equivalent dust control. Table I-1 (Page 402-4) and U.S. EPA's reference document "Control of Open Fugitive Dust Sources", Midwest Research Institute, September 1988 shall be used for guidance.

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- <u>U.TT.</u> Simultaneous Sampling: Operation of two <u>PM<sub>10</sub>PM10</u> samplers such that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period of not less than 290 minutes and not more than 310 minutes.
- <u>UU.</u> Site: Real property or land used or set aside for any specific use.
- VV. Soil Stabilization: The process used to control PM<sub>10</sub> emissions from fugitive dust for an extended period of time by applying dust suppressants or planting vegetative cover.
- <u>UU.WW</u>. <u>Stabilized surfaceSurface</u>: <u>Previously disturbed surface area showing</u> visual or other evidence of surface particle conglomeration after application of a dust suppressant. Any disturbed surface area or open bulk material storage pile that is resistant to wind blown fugitive dust emissions. A surface is considered to be stabilized if it meets at least one of the following conditions:
  - a. A visible crust;
  - b. A threshold friction velocity (TFV) for disturbed surface areas corrected for nonerodible elements of 100 centimeters per second or greater;
  - c. A flat vegetative cover of at least 50 percent that is attached or rooted vegetation; or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind;
  - d. A standing vegetative cover of at least 30 percent that is attached or rooted vegetation with a predominant vertical orientation;
  - e. A standing vegetative cover that is attached or rooted vegetation with a predominant vertical orientation that is at least 10 percent and where the TFV is at least 43 centimeters per second when corrected for nonerodible elements; or
  - f. A surface that is greater than or equal to 10 percent of non- erodible elements such as rocks, stones, or hard-packed clumps of soil.
- XX. Trackout Control Device: A gravel pad, grizzly, wheel wash system, or a paved area located at the point of intersection of an unpaved area and a paved road that prevents or controls trackout.
- YY. <u>Unpaved Road</u>: <u>Any road that is not covered by one of the materials described in the paved road definition.</u>
- S.Any straight or curved length of well-defined travel way for motor vehicles not covered by one or the following: concrete, asphaltic concrete, or asphalt.
- ZZ. <u>Unpaved Access/Haul Road</u>: Any road or path that is not covered by one of the materials described in the paved road definition that is associated with any construction, demolition, excavation, extraction, and other earthmoving activity and used by

vehicles, equipment, haul trucks, or any conveyances to travel within a site, to move materials from one part of a site to another part within the same site, or to provide temporary access to a site.

- AAA. <u>Unpaved Vehicle/Equipment Traffic Area: Any nonresidential area that is not covered by asphalt, recycled asphalt, asphaltic concrete, concrete, or concrete pavement that is used for fueling and servicing; shipping, receiving and transfer; or parking or storing equipment, haul trucks, vehicles, and any conveyances.</u>
- BBB. Visible Dust Emissions (VDE): Dust emissions visible to an observer.
- CCC. Wind Barrier: A fence or structure constructed, or row of trees planted, to reduce the shearing effects caused by wind thereby reducing or eliminating the amount of entrained fugitive dust.
- <u>DDD.</u> Wind Generated Fugitive Dust: Visible emissions from any disturbed surface area which are generated by wind action alone.
- X.EEE. Wind Gust: Maximum instantaneous wind speed, as measured by an anemometer or as provided by the nearest local meteorological station.

### **TABLE I**

#### SUGGESTED

#### FUGITIVE DUST REASONABLY AVAILABLE CONTROL MEASURES

Source Category	<u>Control Measure</u>
Unpaved Road	Improve Road Surface Control Vehicular Traffic Speed Apply Dust Suppressants
Construction/Demolition Activity	Use Wind Breaks Apply Dust Suppressants
Earth-moving or Open Storage Pile	Use Wind Screens Use Enclosures Around Storage Piles Apply Dust Suppressants
Disturbed Surface Area	Use Fences/Barriers Vegetate Apply Dust Suppressants Cover with Gravel Compact Surface

NOTE: If water is selected as a dust suppressant, use of nonpotable water is encouraged.

### IV. Exemptions

- A. Provisions of this Rule shall not apply to:
  - 1. On-field Agricultural agricultural operations implementing Good Agricultural Practices (GAP), including activities directly related to raising fowl or animals, or growing crops, for a profit;
  - Off-field agricultural sources necessary to minimize or respond to adverse effects on agricultural crops caused during freezing temperatures as declared by the National Weather Service.
  - 3. Carryout and trackout caused by an agricultural source;
  - 24. Actions required by federal or state endangered species legislation, or the Surface Mining and Reclamation Act;
  - 35. Any disturbed surface area less than three acres on residential property in the Indian Wells Valley (see page 11) and less than two acres in the remainder of the District;
  - 4<u>6</u>. Active operations conducted during emergency life-threatening situations, or in conjunction with any officially-declared disaster or state of emergency. <u>Emergency activities lasting more than 30 days shall be subject to this regulation, except where compliance would limit effectiveness of ensuring public health and safety.;</u>
  - 57. Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions;
  - 67. Unpaved roads that are not part of a large operation and are outside the Indian Wells Valley and unpaved roads within the Indian Wells Valley, provided such Indian Wells Valley roads:
    - a. are Are less than 75 (50, if contingency measure triggered) feet long or,
    - b. <u>have Have</u> a motor vehicle traffic volume less than 25 (15, if contingency measure triggered) vehicle-trips per day, or
    - c. <u>have Have</u> a motor vehicle traffic volume <u>greater than</u> of 25 (15, if contingency measure triggered) vehicle-trips per day or more, not more than six times per year, or
    - d. provide Provide access to not more than 10 residences;

Contingency measure is triggered if U.S. EPA publishes a finding in the Federal Register that <u>DistrictKCAPCD</u>'s portion of the <u>Searles Indian Wells</u> Valley Planning Area (see Page 402-11) has failed to maintain <u>National Ambient Air Quality StandardsNAAQS</u> for <u>PM<sub>10</sub>PM10</u>.

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- 78. Restorative grading of unpaved shoulders of paved roads;
- 89. Non-routine or emergency maintenance of flood control channels and water spreading basins;
- 9<u>10</u>. Weed and dried vegetation removal required by a fire prevention/control agency;
- 4011. Active operations conducted during freezing weather if applicable RACM involves application of water;
- 112. County or properly permitted private sanitary landfill disposal sites provided such sites conform to California Code of Regulations Title 14: Sections 17659, 17660 and 17706 (County) or KCAPCD dust control permit to operate conditions (private);
- 1213. Blasting operations permitted by the California Division of Industrial Safety;
- 4314. Motion picture, television, and video production activities when dust emissions are required for visual effects. This exemption shall be obtained from the Control OfficerAPCO;
- 14<u>15</u>. Officially-designated public parks and recreational areas, including national parks, national monuments, national forests, state parks, state recreational areas, and County regional parks;
- 15. Any contractor subsequent to a contract termination date, provided such contractor implemented Reasonably Available Control Measures during the contractual period; and
- 16. Any grading contractor, for a phase of active operations conducted after his completion of earth moving activities, provided such contractor implemented Reasonably Available Control Measures during the entire phase of earth moving activities and until the final grading inspection.
- 1716. Federal facilities (outside of Indian Wells Valley) required by the National Environmental Protection Act (NEPA) to implement fugitive dust RACM's for activities otherwise subject to this rule, provided District receives an up-to-date description, including all RACM's employed, of such activities.
- B. Provisions of Subsection V.A. (visible emissions limit) shall not apply when wind gusts exceed 25 miles per hour, provided:
  - 1. Table I<u>1</u> (Page 402-4) Reasonably Available Control Measures RACM are is implemented for each applicable fugitive dust source type; or;

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2. An owner/operator A person has on file with the District an approved "High Wind Fugitive Dust Control Plan" indicating technical reasons why any Reasonably Available Control Measure RACM cannot be implemented. Such Plan plan shall provide an alternative measures of for fugitive dust control, if technically feasible, and shall be subject to the same approval conditions as specified in Section V.C.

#### C. Bulk Materials

- 1. Any outdoor storage, handling, or transport of bulk materials which would be damaged by wetting with water or by the application of chemical/organic dust suppressants, provided owners/operators demonstrate to the satisfaction of the APCO and EPA that none of the control measures specified in Table 2 Bulk Material Control Measures (BMCM) can be implemented to limit VDE to no more than 20% opacity or provide a stabilized surface.
- 2. Spreading of daily landfill cover.
- 3. Transport of a bulk material in an outdoor area for a distance of twelve feet or less with the use of a chute or conveyor device.
- 4. Outdoor storage of any bulk material at a single site where no material is actively being added or removed at the end of the workday or overnight and where the total material stored is less than 100 cubic yards.
- C. If applicable, provisions of Subsection V.D.2. (large operation PM10 monitoring) shall not apply for a period of:
  - a. One calendar quarter for each new large operation, or;
  - b. Fourteen calendar days after approval or conditional approval of a fugitive dust emission control plan.

#### V. Requirements

- A. A person shall not cause or allow <u>fugitive dust</u> emissions of <u>fugitive dust</u> from any active operation to remain visible in the atmosphere beyond the property line of the emission source. This <u>Subsection shall not apply to unpaved roadways</u>.
- B. An person-owner/operator of any active operation subject to this Rule shall utilize implement one or more fugitive dust emission control strategy Reasonably Available Control Measures listed in Table 1, Reasonably Available Control Measure (RACM) or Table 2, Bulk Material Control Measures (BMCM) to limit visible dust emissions (VDE) to no more than 20% opacity or meet the conditions for a stabilized surface as defined in Section III.WW. minimize fugitive dust emissions from each fugitive dust source type which is part of any active operation subject to this Rule, including unpaved roadways.

# TABLE 1 REASONABLY AVAILABLE CONTROL MEASURES (RACM)

Source Category	Control Measure
Unpaved Road:	Control Vehicular Speed (signage/enforcement)
	Improve Road Surface (leveling/grading)
	Use Water Trucks to Keep Soil Damp
	Apply Dust Suppressant (palliatives/gravel/ect.)
Construction, Demolition, and Earth-Moving:	Minimize/Limit Cut-Fill Grading
	Phase Work to Reduce Disturbed Surface Area
	Use Wind Breaks (screens/fencing/barriers/burms)
	Compact Disturbed Surfaces
	Limit Equipment/Vehicular Access
	Use Water Trucks to Keep Soil Damp
	Apply Dust Suppressant (palliative/gravel/ect.)
Open Storage Pile:	<u>Use Enclosures Around Storage Piles</u>
	Keep Pile Damp
	Apply Dust Suppressant (palliative/gravel/ect.)
	Cover with Hydro-mulch or Woodchips
Disturbed Surface Area	Compact Disturbed Surfaces
Stabilization During Inactivity:	Restrict Equipment/Vehicular Access
	Use Wind Breaks (screens/fencing/barriers/burms)
	Apply Dust Suppressant (palliative/gravel/ect.)
	Apply Hydro-mulch or Woodchips
	Re-vegetate

NOTE: Use non-potable water if water is being used as a dust suppressant.

# C. Bulk Materials

No person shall perform any outdoor handling, storage, and transport of bulk materials unless the appropriate control measures as listed in Table 2 are sufficiently implemented in order to limit VDE to no more than 20% opacity. Conditions of Stabilized Surface, as defined in Section III.WW of this Rule, must also be met.

# TABLE 2 BULK MATERIAL CONTROL MEASURES (BMCM)

G 4	
Category	<u>Control Measure</u>
Handling	Apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity or; Construct and maintain wind barriers sufficient to limit VDE to
	20% opacity and with less than 50% porosity. If utilizing fences or wind barriers, also apply water or chemical/organic
	stabilizers/suppressants.
Storage	When storing bulk materials, comply with the conditions for a stabilized surface as defined in this Rule; or
	Cover bulk materials stored outdoors with tarps, plastic, or other suitable material and anchor in such a manner that prevents the cover from being removed by wind action; or
	Construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity. If utilizing fences or wind barriers, apply water or chemical/organic
	stabilizers/suppressants to limit VDE to 20% opacity or; Utilize a 3-sided structure with a height at least equal to the height of the storage pile and with less than 50% porosity.
On-Site Transporting	Limit vehicular speed while traveling on the work site sufficient to limit VDE to 20% opacity; or
	Load all haul trucks such that the freeboard is not less than six  (6) inches when material is transported across any paved public access road sufficient to limit VDE to  20% opacity, or
	Apply water to the top of the load sufficient to limit VDE to 20% opacity, or
	Cover haul trucks with a tarp or other suitable cover.
Off-Site Transporting	Clean interior of the cargo compartment or cover cargo compartment before empty truck leaves the site; and
	Prevent spillage or loss of bulk material from holes or other openings in cargo compartment's floor, sides, and/or tailgate; and
	Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported on any paved public access road, and apply water to top of load sufficient to limit VDE to 20% opacity; or cover haul trucks with a tarp or other suitable cover.
	Saturde Cover.
Outdoor Chute & Conveyor	Fully enclose the chute/conveyor; or
	Operate water spray equipment that sufficiently wets materials to limit VDE to 20% opacity; or

Wash separated or screened materials to remove conveyed
materials having an aerodynamic diameter of 10 microns or less
sufficient to limit VDE to 20% opacity.

# D. Fugitive Dust Emission Control Plan

- An owner/operator shall submit a Fugitive Dust Emission Control Plan to the
   APCO prior to the start of any Large Operation as defined in Section III.EE.

   Activity shall not commence until APCO has approved or conditionally approved a
   Fugitive Dust Emission Control Plan.
- 2. Any operation subject to the requirements of this section must post visible signage on location that clearly displays:
  - a. Message stating "If you see blowing dust please call";
  - b. Contact phone number for person responsible for on-site dust control; and
  - c. District primary contact phone number.
- 3. A Fugitive Dust Emission Control Plan must include:
  - a. Name(s), address(es), and phone number(s) of person(s) and owner(s)/operator(s) responsible for the preparation, submittal, and implementation of the plan and responsible for the dust generating operation and the application of dust control measures;
  - b. Description and location of operation;
  - c. Plot plan which shows the type and location of each project;
  - d. Listing of all fugitive dust emissions sources included in the large operation;
  - e. Total area of land surface to be disturbed, daily throughput volume of earthmoving in cubic yards, and total area in acres of the entire project site;
  - f. Actual and potential sources of fugitive dust emissions on the site and the location of bulk material handling and storage areas, paved and unpaved roads; entrances and exits where carryout/trackout may occur; and traffic areas;
  - g. All RACM or BMCM to be implemented before, during, and after any dust generating activity. Such description must be sufficiently detailed to demonstrate RACM or BMCM will be utilized and/or installed during all periods of active operations;
  - h. Expected start and completion dates of dust generating and soil disturbance activities to be performed on the site; and

- i. Any special technical, e.g., non-economic, circumstances preventing use of RACM or BMCM for any source, justification shall be provided in lieu of the description. A justification statement shall explain reason(s) why RACM or BMCM cannot be implemented.
- 4. APCO shall approve, conditionally approve, or disapprove a plan in writing within 30 calendar days of receipt. For a plan to be approved or conditionally approved the following three conditions shall be satisfied:
  - a. All sources of fugitive dust emissions shall be identified, e.g., earth-moving, storage piles, vehicular traffic on unpaved roads, etc;
  - b. At least one RACM or BMCM shall be implemented for each source identified; and
  - c. List of standby/additional contingency control measures (e.g. increase watering, stop work, additional palliative, ect.) shall be specified for immediate implementation in the event visible dust emissions cross property line(s).
- 5. The applicant shall be notified in writing if a plan can be conditionally approved by adding actions not specified in the proposed plan. Such actions shall be incorporated into a revised plan and submitted to the APCO within 30 days of receipt or the plan will be disapproved.
- 6. An owner/operator must submit a Fugitive Dust Emission Control Plan for each large operation if multiple sites/projects are involved.
- 7. An owner/operator shall notify the APCO in writing 10 days prior to the commencement of any large operation via email or fax.
- 8. An owner/operator shall retain a copy of the approved plan at the project site.
- 9. An approved plan is valid for a period of one year from date of approval or conditional approval. A plan shall be resubmitted annually, at least 60 days prior to expiration date, or the plan will be disapproved as of the expiration date. If all fugitive dust sources and corresponding RACM, BMCM, or special circumstances remain identical to those identified in the previously approved plan, the resubmittal may contain a simple statement of "no-change". Otherwise a resubmittal shall contain all items specified in Section V.D.2.
- 10. Failure to comply with any provisions of the approved or conditionally approved plan shall result in a notice of violation (NOV).
- C. For any large operation, except those satisfying Subsection V.D.3. (implementation of RACM's), a person shall not cause or allow downwind PM10 ambient concentrations to increase more than 50 micrograms per cubic meter above upwind concentrations as

determined by simultaneous upwind and downwind sampling. High volume particulate matter samplers, or other EPA-approved equivalent method(s) for PM10 monitoring shall be used. Samplers shall be:

- a. Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate EPA published documents for EPA-approved equivalent methods(s) for PM10 sampling;
- Reasonably placed upwind and downwind of the large operation based on prevailing wind direction and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized; and
- c. Operated during active operations.

#### D. Special Requirements for Large Operations

- 1. No person shall conduct or authorize conducting a large operation subject to requirements of this Rule without either: 1) conducting on site PM10 air quality monitoring and associated recordkeeping, or 2) filing for and obtaining an approved fugitive dust emissions control plan pursuant to Subsection V.D.3.
- 2. Any person subject to Subsection V.D.1. electing to conduct on-site PM10 monitoring and recordkeeping shall take the following actions:
  - a. Notify the Control Officer of intent to monitor PM10 at least seven days prior to initiating such monitoring. Notification shall contain, at a minimum, the person's name, address, telephone number, brief description and location of the operation(s), and anticipated first date of sampling.
  - b. Be responsible for acquisition, calibration and operation of PM10 samplers.
  - c. Collect samples on four separate days during each calendar quarter. Sampling shall be conducted during typical operations, and during prevailing wind direction conditions. All other provisions of this Rule shall continue to be applicable on days when monitoring is not conducted.
  - d. Collect samples on four additional days during one calendar quarter if requested by the Control Officer based on receipt of complaints from the public, visible dust emissions, or other determinations by District personnel indicating violations of conditions specified in Subsection V. C. may be occurring. Each sampling day shall be conducted during typical operations, and during prevailing wind direction conditions.
  - e. Conduct laboratory analyses in accordance with 40 CFR, Part 50, Appendix J, for all samples collected as required by Subsections V.D.2.c and V.D.2.d.
  - f. Compile and submit records to the District on a quarterly basis, not later than 30 days after the end of each calendar quarter. Such records shall include:

- 1) Brief description and location of the operation(s);
- 2) Hours of active operations on days when particulate sampling occurred;
- 3) Location, vendor, model, and serial number of PM10 samplers used on each sampling day;
- 4) Date, start and end times of all PM10 sampling;
- 5) Laboratory results (measured ambient concentrations) of all PM10 samples;
- 6) List of consultants, laboratories, and other groups of individuals responsible for collection, analysis, evaluation and validation of each PM10 sample; and
- Documentation of any maintenance and calibration actions performed on each PM10 sampler conducted in accordance with 40 CFR, Part 50, Appendix J.
- 3. Any person subject to Subsection V.D.1. electing to obtain an approved fugitive dust emissions control plan shall take the following actions:
  - a. At least 45 calendar days prior to a calendar quarter during which air monitoring would be conducted in accordance with Subsection V.D.2. submit to the Control Officer a fugitive dust emissions control plan, including at least:
    - 1) Name(s), address(es), and phone number(s) of person(s) responsible for the preparation, submission, and implementation of the plan;
    - 2) Description and location of operation(s);
    - 3) Listing of all fugitive dust emissions sources included in the large operation;
    - 4) Description of Reasonably Available Control Measures to be applied to each source identified in Subsection V.D.3.a.3). Such description must be sufficiently detailed to demonstrate Reasonably Available Control Measures will be utilized and/or installed during all periods of active operations.
  - b. If there are special technical, e.g., non-economic, circumstances preventing use of Reasonably Available Control Measures for any source identified in Subsection V.D.3.a.3), justification shall be provided in lieu of the description required in Subsection V.D.3.a.4). A justification statement shall explain reason(s) why Reasonably Available Control Measures cannot be implemented.
- 4. The Control Officer shall either approve, conditionally approve, or disapprove the plan, in writing, within 30 calendar days of receipt of the plan. For a plan to be approved or conditionally approved, three conditions shall be satisfied:

- a. All sources of fugitive dust emissions shall be identified, e.g., earth-moving, storage piles, vehicular traffic on unpaved roads, etc.;
- b. For each source identified, at least one Reasonably Available Control Measure shall be implemented; and
- c. If, after implementation of control measures, visible dust emissions cross property line(s), standby control measures, e.g., increased watering, shall be specified for immediate implementation.
- 5. If a plan can be conditionally approved with actions not specified in the plan, the applicant shall be notified in writing. Such modifications shall be incorporated into the plan within 30 days of receipt of the notice of conditional approval, or the plan shall be disapproved. A letter to the Control Officer stating such modifications will be incorporated into the plan shall be used as a basis to approve the plan.
- 6. Any plan disapproved by the Control Officer shall require air monitoring and recordkeeping in accordance with Subsection V.D.2.
- 7. Failure to comply with any provisions in an approved or conditionally approved plan shall result in a violation of Subsection V.D.1.
- 8. An approved plan for a specific project shall be valid for a period of one year from date of approval or conditional approval. Plans shall be resubmitted, annually, at least 60 days prior to expiration date, or the plan shall be disapproved as of the expiration date. If all fugitive dust sources and corresponding Reasonably Available Control Measures or special circumstances remain identical to those identified in the previously approved plan, the resubmittal may contain a simple statement of "no change". Otherwise a resubmittal shall contain all items specified in Subsections V.D.3.a.and V.D.3.b.
- 9. A contractor may have on file with the District a pre-approved plan or plans for one or more types of large projects subject to Subsection V.D.3. Prior to initiation of any project, one or more applicable preapproved plans may be specified by the contractor in lieu of filing a new plan or plans.
- 10. Any person subject to requirements of Subsection V.D.1. making changes to an active operation resulting in it not fitting the definition for a large operation for a period of at least one year, may request reclassification as a non-large operation. To obtain this reclassification, a person shall submit a request in writing to the Control Officer specifying actions having taken place to reduce disturbed surface area and/or earth-moving process rate to levels below criteria for large operations. A person shall also indicate criteria for a large operation will not be exceeded during the subsequent 12 month period. The Control Officer shall either approve or disapprove reclassification within 60 days from receipt of a reclassification request. The Control Officer shall disapprove the request if indicated changes cannot be verified. If approved, a person shall be relieved of all requirements under Subsections V.D.1, V.D.2, and V.D.3. Any person so reclassified shall again be

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subject to requirements of Subsection V.D.1. if, at any time subsequent to reclassification, criteria for large operations are met.

#### E. Earthmoving Activities

No person shall perform or authorize any earthmoving activity subject to requirements of this Rule unless the appropriate fugitive dust emission control measure(s) as described herein are implemented to limit VDE to no more than 20% opacity.

Earthmoving activities include but not limited to, construction, demolition, excavation, extraction, land clearing, grubbing, scraping, on-site travel, and travel on access roads to and from site. This section also applies to the construction of new landfill disposal sites or modification to existing landfill disposal sites prior to commencement of normal landfill operations.

- 1. Any Large Operation earthmoving activity as defined in Section III.EE. shall comply with the requirements of Section V.D.
- 2. Implement one or more strategy from Table 1.
- 3. Speed Limitations and Posting of Speed Limit Signs on Uncontrolled Unpaved Access/Haul Roads on Construction Sites.
  - a. An owner/operator shall limit the speed of vehicles traveling on uncontrolled unpaved access/haul roads within construction sites to a maximum of 15 miles per hour.
  - b. An owner/operator shall post speed limit signs that meet State and Federal
     Department of Transportation standards at each construction site's uncontrolled unpaved access/haul road entrance. At a minimum, speed limit signs shall also be posted at least every 500 feet and shall be readable in both directions of travel along uncontrolled unpaved access/haul roads.
- 4. Wind Generated Fugitive Dust Requirements.
  - a. Cease outdoor construction, excavation, extraction, and other earthmoving activities that disturb the soil whenever VDE exceeds 20% opacity. Indoor activities such as electrical, plumbing, dry wall installation, painting, and any other activity that does not cause any disturbances to the soil are not subject to this requirement.
  - b. Continue operation of water trucks/devices when outdoor construction excavation, extraction, and other earthmoving activities cease, unless unsafe to do so.

5. An owner/operator shall provide written notification to the District at least 48 hours prior to any earthmoving activity involving 5.0 to less than 10.0 contiguous acres of disturbed surface area.

#### F. Carryout and Trackout

An owner/operator shall sufficiently prevent or cleanup carryout/trackout as follows:

- 1. Owners/operators shall remove all visible carryout/trackout at the end of each workday.
- 2. Cleanup of carryout/trackout shall be accomplished by:
  - a. Manually sweeping and picking-up; or
  - b. Operating a rotary brush or broom accompanied or preceded by sufficient wetting to limit VDE to at least 20% opacity; or
  - c. Operating a PM<sub>10</sub>-efficient street sweeper that has a pick-up efficiency of at least 80 percent.
  - d. Flushing with water, if curbs or gutters are not present and where the use of water will not result as a source of trackout material or result in adverse impacts on storm water drainage systems or violate any National Pollutant Discharge Elimination System permit program.
- 3. Urban areas: An owner/operator shall prevent or immediately remove carryout/trackout when it extends 50 feet or more from the nearest unpaved surface exit point of a site.
- 4. Rural areas: An owner/operator shall prevent or immediately remove carryout/trackout on construction projects 10 acres or more in size, when it extends 50 feet or more from the nearest unpaved surface exit point of a site.
- 5. Carryout/trackout shall be prevented and mitigated as follows:
  - a. Installing and maintaining a trackout control device meeting the specifications contained in Section V.F.6. at all access points to paved public roads; or
  - b. Utilizing a carryout and trackout prevention procedure which has been demonstrated to the satisfaction of the APCO and EPA as achieving an equivalent or greater level of control than specified in Section V.F.5.a.
  - c. In the event that measures specified in Sections V.F.5.a. and V.F.5.b. are insufficient to prevent carryout/trackout, removal of any carryout/trackout must be accomplished within one-half hour of the generation of such carryout/trackout.

- <u>6. Specifications for Section V.F.5 shall meet the following conditions or combination</u> of conditions:
  - a. For use of grizzlies or other similar devices designed to removed dirt/mud from tires, the devices shall extend from the intersection with the public paved road surface for a distance of at least 25 feet, and cover the full width of the unpaved exit surface for at least 25 feet.
  - b. For use of gravel pads, coverage with gravel shall be at least one inch or larger in diameter and at least 3 inches deep, shall extend from the intersection with the public paved road surface for a distance of at least 50 feet, and cover the full width of the unpaved exit surface for at least 50 feet. Any gravel deposited onto a public paved road travel lane or shoulder must be removed at the end of the workday or immediately following the last vehicle using the gravel pad, or at least once every 24 hours, whichever occurs first.
  - c. For use of paving, paved surfaces shall extend from the intersection with the public paved road surface for a distance of at least 100 feet, and cover the full width of the unpaved access road for that distance to allow mud and dirt to drop off of vehicles before exiting the site. Mud and dirt deposits accumulating on paved interior roads shall be removed with sufficient frequency, but not less frequently than once per workday, to prevent carryout and trackout onto paved public roads.
- 7. An owner/operator of any site with 150 or more vehicle trips per day or 20 or more vehicle trips per day by vehicles with three or more axles shall take the actions for carryout/trackout as specified in Section V.F.5.
- 8. An owner/operator subject to the requirements of a Fugitive Dust Emission Control Plan as specified in Section V.D. shall take the actions for carryout/trackout as specified in Section V.F.5.
- 9. For sites with paved interior roads, an owner/operator shall prevent and mitigate carryout/trackout as specified in Section V.F.5.

#### F. Bulk Materials

No person shall perform any outdoor handling, storage, and transport of bulk materials unless the appropriate control measures as listed in Table 2 are sufficiently implemented in order to limit VDE to no more than 20% opacity. Conditions of Stabilized Surface, as defined in Section III.WW of this Rule, must also be met.

### VI. PM<sub>10</sub> Air Monitoring

Any large operation causing downwind  $PM_{10}$  ambient concentrations to increase more than 50 micrograms per cubic meter above upwind concentrations or continually causing a public nuisance may be required to conduct on-site  $PM_{10}$  monitoring.

- A. Any source required to conduct on-site PM<sub>10</sub> monitoring shall:
  - 1. Operate, maintain, and calibrate monitors in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate EPA-published documents for EPA-approved equivalent methods(s) for PM<sub>10</sub> sampling;
  - 2. Reasonably place monitors upwind and downwind of operation, based on prevailing wind direction and as close to property lines as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized;
  - 3. Notify APCO of intent to monitor PM<sub>10</sub> at least seven days prior to initiating such monitoring. Notification shall contain, at a minimum, the person's name, address, telephone number, brief description and location of the operation(s), and anticipated first date of sampling;
  - 4. Collect samples on at least four separate days per month. Each sampling day shall be conducted during typical operations and during prevailing wind direction conditions. All other provisions of this Rule shall continue to be applicable;
  - 5. Collect additional samples as requested by APCO based on receipt of public complaints, visible dust emissions, high wind events, or other determinations made by District staff indicating violations may be occurring;
  - 6. Compile and submit records to the District on a quarterly basis, not later than 30 days after the end of each calendar quarter. Such records shall include:
    - a. Brief description and location of the operation;
    - b. Hours of active operation on days when particulate sampling occurred;
    - $\underline{\text{c. Location, vendor, model, and serial number of } PM_{10}} \underline{\text{samplers used on each}} \underline{\text{sampling day;}}$
    - d. Date, start and end times of all PM<sub>10</sub> sampling;
    - e. Laboratory results (measured ambient concentrations) of all PM<sub>10</sub>samples;
    - f. List of consultants, laboratories, and other groups of individuals responsible for collection, analysis, evaluation and validation of each PM<sub>10</sub> sample; and
    - g. Documentation of any maintenance and calibration actions performed on each PM<sub>10</sub> sampler conducted in accordance with 40 CFR, Part 50, Appendix J.

#### VII. Prohibitions

A. Materials used for chemical/organic stabilization of soils, including petroleum resins, asphaltic emulsions, acrylics, and adhesives shall not violate State Water Quality Control Board standards for use as a soil stabilizer. Materials accepted by CARB and

EPA, and which meet State water quality standards, shall be considered acceptable to the APCO.

- B. Any material prohibited for use as dust suppressant by CARB, EPA, or other applicable law, rule, or regulation is also prohibited.
- C. Use of hygroscopic materials may be prohibited by the APCO in areas lacking sufficient atmospheric moisture of soil for such materials to effectively reduce fugitive dust emissions. The atmospheric moisture of soil is considered to be sufficient if it meets the application specifications of the hygroscopic product manufacturer. Use of such materials may be approved in conjunction with sufficient wetting of the controlled area.
- D. Any use of dust suppressants or gravel pads, and paving materials such as asphalt or concrete for paving, shall comply with all other applicable District Rules.
- E. The use of blower devices or dry rotary brushes/brooms for removal of carryout and trackout on public roads is expressly prohibited. Removal of carryout and trackout from paved public roads does not exempt an owner/operator from obtaining state or local agency permits which may be required for the cleanup of mud and dirt on paved public roads.

**VI.** Compliance Schedule

Any existing large operation becoming subject to this rule with its amendment on September 8, 2004, shall comply with Section V. no later than March 8, 2005.

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Appendix B B-22 Draft 8/11/2014

# Eastern Kern Air Pollution Control District Portion of Searles Valley/Indian Wells Valley Planning Area (18090295)

