(Adopted July 7, 2017)(Amended December 1, 2017)
(Version 02-18-2021)

PROPOSED AMENDED RULE 1466. CONTROL OF PARTICULATE EMISSIONS FROM SOILS WITH TOXIC AIR CONTAMINANTS

(a) Purpose

The purpose of this rule is to minimize the amount of off-site fugitive dust emissions containing toxic air contaminants by reducing particulate emissions in the ambient air as a result of earth-moving activities, including, dredging, excavating, grading, earth-cutting and filling, loading, unloading, handling, mechanized land clearing, treating, stockpiling, transferring, and removing of soil that contains applicable toxic air contaminants, from sites that meet the applicability requirements of subdivision (b).

(b) Applicability

(1) This rule shall apply to any owner or operator conducting earth-moving activities of soil with applicable toxic air contaminant(s) as defined in paragraph (c)(15) that have been identified as contaminant(s) of concern at a site that has been designated and notified by:

(A) The U.S. Environmental Protection Agency (U.S. EPA) as a Superfund National Priorities List site;

(B) The California Department of Toxic Substances Control (DTSC) as a Brownfield or Cleanup Program site;

(C) The State Water Resources Control Board (State Water Board) or Regional Water Quality Control Board (Regional Water Board) as a Site Cleanup Program site;

(D) A county, local, or state regulatory agency as a Hazardous Material Release site, as defined in California Health and Safety Code Section 25260~~, effective January 1, 2018~~; or

(E) The Executive Officer pursuant to subdivision (i).

(2) This rule shall not apply to:

(A) Earth-moving activities of soil with applicable toxic air contaminant(s) of less than 50 cubic yards; or

(B) Removal of soil for sampling purposes.

(c) Definitions

(1) ADEQUATELY WET ~~is~~ means the condition of being sufficiently mixed or penetrated with water to prevent the release of particulates or visible emissions. The process by which an adequately wet condition is achieved is by using a dispenser or water hose with a nozzle that permits the use of a fine, low-pressure spray or mist.

(2) ADJACENT ATHLETIC AREA ~~is~~ means any outdoor athletic field or park where youth organized sports occur that is in physical contact with, or separated solely by a public roadway or other public right-of-way from, ~~to~~ a ~~school or early education center~~ SCHOOL.

(3) CHEMICAL STABILIZERS means ~~are~~ any non-toxic chemicals that are used to bind soil together to control FUGITIVE DUST emissions~~ dust suppressant~~. ~~The chemical stabilizers shall meet any specifications, criteria, or tests required by any federal, state, or local agency or any applicable law, rule, or regulation. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface and no less than what is specified by the manufacturer.~~

(4) DISTURBED SURFACE AREA means~~is~~ a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for ~~fugitive dust~~ FUGITIVE DUST. This definition excludes those areas which have:

(A) Been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;

(B) Been paved or otherwise covered by a permanent structure; or

(C) Sustained a vegetative ground cover of at least 70 percent of the native cover for a particular area for at least 30 days.

(5) DUST SUPPRESSANTS means~~are~~ water~~,~~ or hygroscopic materials, other than ~~or chemical stabilizers~~ CHEMICAL STABILIZERS that are used as a treatment material to reduce ~~fugitive dust~~ FUGITIVE DUST emissions.

~~(6) EARLY EDUCATION CENTER is any public or private property, used for purposes of education as defined as an Early Learning and Developmental Program by the U.S. Department of Education, but does not include any property in which education is primarily conducted in private homes. Early education center includes any building or structure, playground, athletic field, or other areas of early education center property.~~

(~~7~~6) EARTH-MOVING ACTIVITIES ~~are~~means, for the purpose of this rule, any activity on a site that meets the applicability requirements of subdivision (b) where ~~soil with applicable toxic air contaminant(s)~~ SOIL WITH APPLICABLE TOXIC AIR CONTAMINANT(S) ~~are~~ is being moved or uncovered, ~~shall include~~ including~~, but not be limited to the following~~: dredging, excavating, grading, earth-cutting and filling operations, loading~~, or~~ unloading, handling, mechanized land clearing, ~~and~~ treating, transferring, removing, and adding to or removing from STOCKPILES~~stockpiles~~, and vehicular movement of equipment associated with these activities. EARTH-MOVING ACTIVITIES do not include vehicular movement from: delivery vehicles; passenger vehicles transporting personnel to and from the site, vehicles used for administrative purposes, vehicles transporting personnel for the purposes of soil sampling and conducting ambient PM_{10} monitoring requirements, watering trucks, and equipment used exclusively on a portion(s) of the site where there is no SOIL WITH APPLICABLE TOXIC AIR CONTAMINANT(S).

(~~8~~7) FUGITIVE DUST ~~is~~means, for the purpose of this rule, any solid particulate matter that is in contact with ambient air and has the potential to become airborne, other than solid particulate matter that is emitted from an exhaust stack.

(~~9~~8) JOINT USE AGREEMENT PROPERTY means~~is~~ a shared public facility in which a formal agreement exists between a ~~school or early education center~~ SCHOOL and another government entity setting forth the terms and conditions for shared use.

(~~10~~9) OWNER OR OPERATOR ~~is~~means any firm, business establishment, association, partnership, corporation or individual, whether acting as principal, agent, employee, contractor, or other capacity.

(~~11~~10) PAVED ROAD means~~is~~ a public or private improved street, highway, alley, public way, or easement that is covered by typical roadway materials, but ~~excluding~~ excludes access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county, municipal, or any other governmental or quasi-governmental agencies. Private paved roads are any ~~paved roads~~PAVED ROADS not defined as public.

(~~12~~11) PROPERTY LINE means~~is~~ the boundary of an area where a person has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.

(~~13~~12) SCHOOL ~~is~~ means any public or private education center, including juvenile detention facilities with classrooms~~and education centers serving as the students' place of residence (e.g., boarding schools)~~, used for ~~purposes of~~ the education of more than 12 children at the school in kindergarten ~~or any~~through grade~~s 1 to~~ 12~~,~~ ~~inclusive, but does not include any school in which education is primarily conducted in private homes~~. A SCHOOL also includes an Early Learning and Developmental Program by the U.S. Department of Education or any state or local early learning and development programs such as preschools, Early Head Starts, Head Start, First Five, and Child Development Centers. A school does not include any private school in which education is primarily conducted in private homes. A SCHOOL ~~School~~ includes any building or structure, playground, athletic field, or other area~~s~~ of school property.

(13) SLAG means the by-product material that is separated from metals during smelting or refining of ore.

(14) SOIL ~~is~~means dirt, sand, gravel, clay, SLAG, and aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.

(15) SOIL WITH APPLICABLE TOXIC AIR CONTAMINANT(S) means, for the purpose of this rule, ~~soil~~ SOIL that has been identified by the U.S. EPA, the DTSC, the State Water Board, the Regional Water Board, or a county, local, or state regulatory agency, to contain one or more of the applicable toxic air contaminants ~~as~~ listed in Table I that exceed action levels as specified by the designating agency, or~~, effective January 1, 2018,~~ soil that has been identified by the Executive Officer to contain one or more of the toxic air contaminants listed in Rule 1401 – New Source Review of Toxic Air Contaminants (Table I) or Hazardous Air Pollutants Identified as Toxic Air Contaminants as listed in California Code of Regulations Section 93001, excluding volatile organic compounds regulated under Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil.

(16) STABILIZED SURFACE means~~is~~ any previously ~~disturbed surface area~~ DISTURBED SURFACE AREA or ~~stockpile~~ STOCKPILE, which through the application of CHEMICAL STABILIZERS or ~~dust suppressants~~ DUST SUPPRESSANTS, shows visual or other evidence of surface crusting and is resistant to ~~wind-driven fugitive dust~~ WIND-DRIVEN FUGITIVE DUST, and is demonstrated to be stabilized. Stabilization can be demonstrated by one or more of the applicable test methods contained in the South Coast AQMD *Rule 403 Fugitive*

Dust Implementation Handbook or in Volumes I and II of South Coast AQMD's *Dust Control in the Coachella Valley*.

(17) STOCKPILE means~~is~~ any accumulation of ~~soil~~SOIL, which is not fully enclosed~~,~~ ~~covered, or chemically stabilized,~~ and which attains a height of three feet or more and a total surface area of 150 square feet or more.

(18) TRACK-OUT ~~is~~means, for the purpose of this rule, any ~~soil~~ SOIL that adheres to and agglomerates on the exterior surface of motor vehicles, haul trucks, and equipment (including tires) that has been released onto a ~~paved road~~ PAVED ROAD and that can be removed by a vacuum sweeper under normal operating conditions.

(19) WIND-DRIVEN FUGITIVE DUST means~~is~~ visible emissions from any ~~disturbed surface area~~ DISTURBED SURFACE AREA, which is generated by wind action alone.

~~(20) WIND GUST is the maximum instantaneous wind speed as measured by an anemometer.~~

(d) Monitoring Requirements

(1) When on-site earth-moving activities ~~or vehicular movement~~ occur~~s~~, the owner or operator shall conduct continuous direct-reading near real-time ambient monitoring of PM_{10} concentrations pursuant to paragraph (d)(3).

(2) If the PM_{10} concentration ~~averaged over two hours~~ exceeds 25 micrograms per cubic meter, as measured pursuant to paragraph (d)(3) and as determined pursuant to paragraph (d)(4), the owner or operator shall cease on-site earth-moving activities, apply dust suppressant to fugitive dust sources, or implement other dust control measures as necessary until the PM_{10} concentration is equal to or less than 25 micrograms per cubic meter averaged over 30 minutes.

~~(A) The owner or operator or designating agency may request an alternative PM_{10} limit from the Executive Officer provided the exposure to toxic air contaminants from fugitive dust from earth-moving activities at the proposed PM_{10} concentration level is health protective to the public. The owner or operator or designating agency shall provide the Executive Officer the information specified in subparagraphs (i)(1)(A) through (H) and substantiate its position that an alternative PM_{10} limit is health protective. Use of an alternative PM_{10} limit must be submitted and approved by the Executive Officer as specified in subdivision (j).~~

(3) The owner or operator conducting on-site earth-moving activities shall install PM_{10} monitors and conduct ambient PM_{10} monitoring ~~as follows~~:

(A) In accordance with a U.S. EPA-approved equivalent method for PM_{10} monitoring or using a Rule 1466 Approved PM_{10} Monitor~~an alternative method approved by the Executive Officer. The owner or operator or designating agency shall select an alternative PM_{10} method as specified in Appendix 1. Use of an alternative PM_{10} method must be submitted and approved by the Executive Officer as specified in subdivision (j)~~;

(B) Using a minimum of ~~one~~ two ~~upwind~~ monitors, placing each monitor as close to the property line as feasible, where:

(i) ~~the location of the upwind monitor(s) are~~One or more monitors is in the seasonal prevailing wind direction upwind of the area(s) of on-site earth-moving activity, indicative of background PM_{10} levels, and not generally influenced by fugitive dust sources from the site; and

~~(C)~~ (ii) ~~Using a minimum of one downwind~~ One or more monitors ~~placed~~ is in the seasonal prevailing wind direction downwind of ~~each~~ the area(s) of on-site earth-moving activity ~~and as close to the property line as feasible~~;

(~~D~~C) Using PM_{10} monitors that are identical in: make and model~~;~~, settings~~;~~, ~~calibration;~~ and configuration; ~~and calibration, correction, and correlation factors.~~

(~~E~~D) ~~Operate, maintain, and calibrate~~Using ambient PM_{10} monitors that are operated, maintained, and calibrated in accordance with appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method~~(s)~~ for PM_{10} ~~or the alternative method approved by the Executive Officer,~~ and manufacturer's instructions; ~~and~~

(~~F~~E) On and before December 31, 2021, ~~C~~collect ambient PM_{10} data with a data acquisition system (DAS) that is capable of logging direct-reading near real-time data providing the date, time, and PM_{10} concentration in micrograms per cubic meter every 10 minutes or less~~.~~;

(F) On and after January 1, 2022, collect ambient PM_{10} data with a DAS that is capable of logging direct-reading near real-time data providing the date and time, calibrated to Pacific Standard Time (PST), and PM_{10} concentration in micrograms per cubic meter every one minute or less;

(G) On and after January 1, 2022, operating PM_{10} monitors with the heated sampler inlet on;

(H) On and after January 1, 2022, prior to conducting any on-site earth-moving activities, and weekly thereafter, run intra-instrument precision tests with the PM_{10} monitors in accordance with *Appendix 2 – Procedures to Demonstrate Intra-Instrument Precision*, demonstrateing an intra-instrument precision of no more than ± 2 micrograms per cubic meter or ± 5 percent; and

(I) On and after January 1, 2022, each day prior to conducting on-site earth-moving activities, perform a manual or automatic zero test on each PM_{10} monitor in accordance with manufacturer's instructions.

(4) The owner or operator shall calculate the PM_{10} concentration as a 120-minute rolling average ~~based on the PM_{10} concentration averaged over two hours, starting at the top of each hour~~, where:

(A) The initial average starts at the commencement of on-site earth-moving activities and ends 120 minutes after the commencement of on-site earth-moving activities;

(B) On and before December 31, 2021, the averages subsequent to the initial average specified in subparagraph (d)(4)(A) are to be calculated every 10 minutes and cover the previous 120-minute period;

(C) On and after January 1, 2022, the averages subsequent to the initial average specified in subparagraph (d)(4)(A) are to be calculated every one minute and cover the previous 120-minute period;

(~~A~~D) The PM_{10} concentration is ~~the absolute difference between the upwind and~~calculated by subtracting the results of the downwind monitor(s) from the upwind monitor(s) for the same averaging period;

(i) If the wind direction is in the seasonal prevailing wind direction, then the monitor(s) described pursuant to clause (d)(3)(B)(i) shall be designated as the upwind monitor(s) and the monitor(s) described pursuant to clause (d)(3)(B)(ii) shall be designated as the downwind monitor(s); and

(ii) If there is greater than a ± 90 degree change in wind direction from the seasonal prevailing wind direction, then the monitor(s) described pursuant to clause (d)(3)(B)(i) shall be designated as the downwind

monitor(s) and the monitor(s) described pursuant to clause (d)(3)(B)(ii) shall be designated as the upwind monitor(s);

(~~B~~E) If there is more than one upwind monitor, the upwind result is the ~~two hour~~ average concentration of all upwind monitors for the same rolling averaging period;

(~~C~~F) If there is more than one downwind monitor, the downwind ~~average~~ result is the maximum ~~two hour average~~ concentration of any of the downwind monitors for the same rolling averaging period; ~~and~~

(G) On and before December 31, 2021, when on-site earth-moving activities resume after ceasing pursuant to paragraph (d)(2), the average shall start when on-site earth-moving activities begin and shall end 120 minutes after on-site earth-moving activities begin, and the subsequent averages are to be calculated every 10 minutes and shall cover the previous 120-minute period; and

(H) On and after January 1, 2022, when on-site earth-moving activities resume after ceasing pursuant to paragraph (d)(2), the average shall start when on-site earth-moving activities begin and shall end 120 minutes after on-site earth-moving activities begin, and the subsequent averages are to be calculated every one minute and shall cover the previous 120-minute period.

~~(D) The owner or operator or designating agency may use an alternative calculation methodology if the owner or operator or designating agency provides information to substantiate that all or some the PM_{10} concentration is the result of another source and not attributed to the earth-moving activities of the site. Use of an alternative calculation methodology must be submitted and approved by the Executive Officer as specified in subdivision (j).~~

(5) In the event that a DAS fails to log ambient PM_{10} data pursuant to subparagraph (d)(3)(F) or that data management software integrated with the PM_{10} monitor(s) and DAS(s) fails to calculate PM_{10} concentrations pursuant to subparagraph (d)(4)(C) due to a technical issue beyond the reasonable control of an owner or operator, including, but not limited to, internet connection disruptions and computer malfunctions, the owner or operator shall:

(A) Restore the DAS or data management software to working condition as soon as practicable and no later than 24 hours after the end of the working day; and

(B) Manually record the PM_{10} concentration from the monitor(s) associated with the non-operational DAS once every 10 minutes or less until the DAS is restored or calculate the PM_{10} concentration pursuant to subparagraph (d)(4)(B) until the data management software is restored.

(~~5~~6) When on-site earth-moving activities occur, the owner or operator shall monitor wind direction and speed as specified in U.S. EPA *Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements*.

(7) The Executive Officer may approve a PM_{10} monitor to be added as a Rule 1466 Approved PM_{10} Monitor if the PM_{10} monitor meets the specifications listed in *Appendix 1 – Rule 1466 Approved PM_{10} Monitors*. The request for a PM_{10} monitor to be added as a Rule 1466 Approved PM_{10} Monitor shall:

(A) Be submitted to Rule1466ApprovedMonitors@aqmd.gov;

(B) Include a description of the PM_{10} monitor, any accessories, and all monitor specifications; and

(C) Include documentation demonstrating compliance with each specification listed in *Appendix 1*.

(e) Requirements to Minimize Fugitive Dust Emissions

(1) On and before December 31, 2021, a~~A~~n owner or operator shall not conduct on-site earth-moving activities unless the area is surrounded with fencing that is a minimum of ~~6~~ six feet tall and at least as tall as the height of the tallest stockpile, with a windscreen ~~with~~ that has a porosity of 50 ± 5 percent~~%~~. A section of the perimeter surrounding an on-site earth-moving activity area may be excluded from this requirement if that section:

(A) Has a solid physical barrier, such as a solid wall or other solid feature that minimizes air flow, that is a minimum of six feet tall but at least six inches taller than the height of the tallest stockpile; or

(B) Does not have on-site earth-moving activity occurring within 300 feet from the perimeter of that section.

(2) On and after January 1, 2022, an owner or operator shall not conduct on-site earth-moving activities unless the area is surrounded with fencing that is a minimum of six feet tall but at least six inches taller than the height of the tallest stockpile, with

a mesh windscreen that has a shade value or opacity of 85 ± 5 percent. A section of the perimeter surrounding an on-site earth-moving activity area may be excluded from this requirement if that section meets the conditions as specified in subparagraph (e)(1)(A) or (e)(1)(B).

(~~2~~3) An owner or operator conducting on-site earth-moving activities shall:

(A) Adequately wet to the depth of earth-moving activity and allow time for penetration; and

(B) Adequately wet at frequencies to prevent the generation of visible dust plumes.

(~~3~~4) An owner or operator that is moving vehicles on, within, or off a site ~~where earth-moving activities are occurring~~ shall:

(A) Post signs at all entrances of the site to designate the speed limit as 15 miles per hour;

(B) Stabilize the surface of all vehicular traffic and parking areas by applying gravel, paving, chemical stabilizers pursuant to paragraph (e)(13), or dust suppressant;

(C) Not allow any track-out outside of the property line ~~to extend beyond~~ that is 25 feet or more in cumulative length ~~of the property line~~. Remove any track-out each day using a vacuum equipped with a filter(s) rated by the manufacturer to achieve a 99.97~~%~~ percent ~~capture~~ control efficiency for 0.3 micron particles;

(D) Clean the soil from the exterior of trucks, trailers, and tires prior to the truck leaving the site, without the use of forced air; and

(E) ~~The owner or operator shall u~~Utilize at least one of the following measures ~~listed in clause (e)(3)(E)(i) through (e)(3)(E)(iv)~~ at each vehicle egress from the site to a ~~paved~~ public road:

(i) Install a pad consisting of washed gravel (minimum-size: one inch), maintained in a clean condition, to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long;

(ii) Pave the surface extending at least 100 feet from the property line and at least ~~20~~ 30 feet wide;

(iii) Utilize a wheel shaker/wheel spreading device consisting of raised dividers (rails, pipes, or grates) at least 24 feet long and ~~10~~ 30 feet wide; or

(iv) Install and utilize a wheel washing system to remove soil from tires and vehicle undercarriages.

(~~4~~5) An owner or operator conducting on-site earth-moving activities shall ensure that ~~result in the development of~~ stockpiles ~~of~~ with any soil with applicable toxic air contaminant(s) ~~shall~~ be:

(A) Segregated from non-contaminated stockpiles ~~from stockpiles with applicable toxic air contaminant(s);~~ and

(B) Labelled with "South Coast AQMD Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminant(s) Applicable Soil";

(~~B~~C) Maintained ~~stockpiles~~ to avoid steep sides or faces that exceed the angle of repose;

(~~C~~D) ~~Not create a stockpile that is~~No more than 400 cubic yards of soil; ~~and greater in height than the perimeter fencing and windscreen~~;

(~~D~~E) Maintained to minimize fugitive dust emissions containing toxic air contaminants by applying chemical stabilizers pursuant to paragraph (e)(13) or ~~Apply~~ dust suppressant ~~to stockpiles~~; and

(~~E~~F) ~~At the end of each working day, e~~Either completely chemically stabilized pursuant to paragraph (e)(13) and/or completely covered at all times when earth-moving activities and ambient PM_{10} monitoring are not occurring. If a cover is used, the cover shall be at least ~~with~~ 10 ~~milliliter~~ mil thick plastic sheeting that overlaps a minimum of 24 inches. The plastic sheeting shall be anchored and secured so that no portion of the soil is exposed to the atmosphere and shall be free of any holes or tears.; ~~and~~

~~(F) Daily, inspect stabilized or covered stockpiles. For a stabilized stockpile, such inspections shall include a demonstration of stabilization by one or more of the applicable test methods contained in SCAQMD *Rule 403 Fugitive Dust Implementation Handbook* or Volumes I and II of SCAQMD's *Dust Control in the Coachella Valley*. For a covered stockpile, such inspections shall include a visual inspection of all seams and plastic cover surfaces. Immediately re-stabilize or repair any holes, tears, or any other potential sources of fugitive toxic air contaminant emissions.~~

(~~5~~6) An owner or operator conducting truck loading activities of soil containing applicable toxic air contaminant(s) shall:

(A) Apply dust suppressant to material prior to loading;

(B) Empty the loader bucket slowly so that no visible dust plumes are generated;

(C) Minimize the drop height from the loader bucket;

(D) Maintain at least six inches of space between the soil and the top of the truck bed while transporting within a site; and

(E) Completely ~~tarp~~cover the truck and trailer prior to leaving the site.

(~~6~~7) An owner or operator conducting truck unloading activities of soil containing applicable toxic air contaminant(s) shall:

(A) Apply dust suppressant to material prior to unloading; and

(B) Empty the trailer slowly so that no visible dust plumes are generated.

(~~7~~8) The owner or operator shall immediately remove any spilled soil containing applicable toxic air contaminant(s).

(~~8~~9) The owner or operator shall cease on-site earth-moving activities if the wind speed is greater than 15 miles per hour (mph) averaged over a 15-minute period or the instantaneous wind speed~~s~~ exceeds 25 mph.

(~~9~~10) During on-site earth-moving activities, the owner or operator shall have an on-site dust control supervisor that:

(A) Is employed by or contracted with the owner or operator;

(B) Is located on the site during working hours;

(C) Is in a position to expeditiously employ sufficient dust control measures to ensure compliance with all rule requirements;

(D) Has completed the South Coast AQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class; and

(E) Has the following credentials, if asbestos is an applicable toxic air contaminant:

(i) Successfully completed the Asbestos Abatement Contractor/Supervisor course pursuant to the Asbestos Hazard Emergency Response Act (AHERA), and obtained and maintained accreditation as an AHERA Asbestos Abatement Contractor/Supervisor; and

(ii) Trained on the provisions of 40 CFR Part 61.145, 61.146, 61.147 and 61.152 (Asbestos NESHAP provisions) and Part 763, and ~~have~~ has the means by which to comply with these provisions.

(~~10~~11) ~~If earth-moving activities will not occur for three (3) or more consecutive days,~~ An owner or operator shall at all times when earth-moving activities and ambient PM_{10} monitoring are not occurring, apply a chemical stabilizer pursuant to paragraph (e)(13) to potential sources of fugitive dust ~~diluted to the concentration required to~~

~~maintain a stabilized surface for the period of inactivity;~~ and re-stabilize as necessary.

(12) An owner or operator shall daily, including days when no on-site earth-moving activities are occurring, inspect stabilized or covered stockpiles pursuant to (e)(5)(F) and labeled stockpiles pursuant to subparagraph (e)(5)(B).

(A) For a stabilized stockpile, such inspections shall include a demonstration of stabilization by one or more of the applicable test methods contained in South Coast AQMD *Rule 403 Fugitive Dust Implementation Handbook* or Volumes I and II of South Coast AQMD's *Dust Control in the Coachella Valley*.

(B) For a covered stockpile, such inspections shall include a visual inspection of all seams and plastic cover surfaces.

(13) When utilizing a chemical stabilizer, an owner or operator shall:

(A) Ensure the chemical stabilizer meets any specifications, criteria, or tests required by any federal, state, or local agency or any applicable law, rule, or regulation; and

(B) Unless otherwise indicated, use a sufficient concentration of the chemical stabilizer and an application frequency sufficient to maintain a stabilized surface and no less than what is specified by the manufacturer for the period of inactivity.

(~~11~~14) An owner or operator that is conducting earth-moving activities of soil with applicable toxic air contaminant(s) at a school, ~~early education center,~~ joint use agreement property, ~~or~~ adjacent athletic area, or at a site that is in physical contact with a school, joint use agreement property, or adjacent athletic area shall:

(A) Only conduct earth-moving activities at a school ~~or early education center~~ or at a site that is in physical contact with a school outside of the hours between 7:30 a.m. and 4:30 p.m. on days when the school ~~or early education center~~ is in session;

(B) Not conduct earth-moving activities at a school, ~~early education center,~~ joint use agreement property, ~~or~~ adjacent athletic area, or at a site that is in physical contact with a school, joint use agreement property, or adjacent athletic area if there is a school ~~or early education center~~ sponsored activity or youth organized sports taking place at that site;

(C) Handle excavated soils with applicable toxic air contaminant(s) by:

(i) Immediately placing soil in a leak-tight container whereby any contained solids or liquids are prevented from escaping or spilling out;

(ii) Directly loading soil in trucks, applying chemical stabilizer pursuant to paragraph (e)(13) or dust suppressant, and covering prior to transporting; or

(iii) Stockpiling pursuant to paragraph ~~(e)(4)~~(e)(5), in a fenced area that is not accessible to the general public, and locked when not in use; and

(D) Within five ~~(5)~~ days of its excavation, remove all soil with applicable toxic air contaminant(s) from the site.

~~(12) With the exception of paragraphs (e)(7) and (e)(11), the owner or operator or designating agency may use alternative dust control measures that meet the objective and effectiveness of the dust control measure it is replacing, where the objective and effectiveness of each category of dust control measures is stated in Appendix 2. Use of alternative dust control measures must be submitted and approved by the Executive Officer as specified under subdivision (j).~~

(f) Notification Requirements

(1) ~~At least 72 hours and no more than 30 days prior to conducting any earth-moving activities on any site meeting the applicability requirements of subdivision (b), the~~ The owner or operator shall electronically ~~notify~~ submit an initial notification to the Executive Officer, using a format approved by the Executive Officer, of the intent to conduct any on-site earth-moving activities.

(A) Initial notifications shall be submitted:

(i) At least 72 hours but no more than 30 days prior to conducting any earth-moving activities on any site meeting the applicability requirements of subdivision (b); or

(ii) As soon as the information becomes available but no later than 48 hours after the information becomes available that on-site earth-moving activities of soil with applicable toxic air contaminant(s) are 50 cubic yards or greater.

(B) Initial ~~Notifications~~ notifications shall include the following requirements:

(~~A~~i) Name, address, telephone number, and e-mail address of the owner or operator;

(~~B~~ii) Name, telephone number, and e-mail address of the on-site dust control supervisor;

(~~C~~iii) Project name and, if applicable, the project identification number from the designating agency;

(~~D~~iv) Project location (address and/or coordinates);

(~~E~~v) Identify whether the site is a school, ~~early education center,~~ joint use agreement property, ~~or~~ adjacent athletic area, or is in physical contact with a school, joint use agreement property, or adjacent athletic area;

(~~F~~vi) A map indicating the specific location(s) of each on-site earth-moving activity and the concentrations of the applicable toxic air contaminant(s) and location of PM_{10} monitors;

(~~G~~vii) A description of the on-site earth-moving activities, estimated volume of soil with applicable toxic air contaminant(s), and a schedule that includes the anticipated start and completion dates of on-site earth-moving activities;

(~~H~~viii) Current and/or previous type of operation(s) and use(s) at the site;

(~~I~~ix) Applicable exemption(s); and

(~~J~~x) Whether the notice being provided is a revised notification.

(2) Notification Updates

Initial ~~Notifications~~ notifications pursuant to paragraph (f)(1) shall be updated when any of the following conditions arise:

(A) Earlier Start Date

A change in the start date of ~~any~~ on-site earth-moving ~~activity~~ activities to an earlier date shall be reported to the South Coast AQMD no later than 72 hours before any on-site earth-moving activities begin.

(B) Later Start Date

A delay in the start date of ~~any~~ on-site earth-moving ~~activity~~ activities shall be reported to the South Coast AQMD as soon as the information becomes available, but no later than the original start date.

(C) Change in Exemption Status

Any change(s) in exemption status pursuant to subdivision (k) shall be reported to the South Coast AQMD as soon as the information becomes available, but no later than 48 hours after the information becomes available.

(D) Completion Date

The completion date of on-site earth-moving activities shall be reported to the South Coast AQMD no later than 48 hours after on-site earth-moving activities are completed.

(3) Within 72 hours of an exceedance of the PM_{10} emission limit specified in ~~subdivision~~ paragraph (d)(2), the owner or operator of a site meeting the applicability requirements of subdivision (b) shall electronically ~~notify~~ submit a notification to the Executive Officer, using a format approved by the Executive Officer, of the exceedance and shall include the following information:

(A) Name, address, telephone number, and e-mail address of the owner or operator;

(B) Name, telephone number, and e-mail address of the on-site dust control supervisor;

(C) Project name and, if applicable, the project identification number from the designating agency;

(D) Project location (address and/or coordinates);

(E) PM_{10} monitoring results and wind direction and speed results pursuant to subdivision (d), including result, date and time of exceedance(s), 12 hours before first exceedance, and 12 hours after last exceedance;

(F) On-site ~~Earth~~earth-moving activities occurring at the date and time of exceedance(s); and

(G) Dust control measure(s) taken to mitigate fugitive dust.

(g) Signage Requirements

When conducting on-site earth-moving activities, the owner or operator shall install and maintain project signage.

(1) Unless otherwise approved in writing by the Executive Officer, signage shall:

(A) Be installed at all entrances and at intervals of 1,000 feet or less along the property line or perimeter of the site, with a minimum of one sign along each side;

(B) Be located between ~~6~~ six and ~~8~~ eight feet above grade from the bottom of the sign;

(C) Display lettering at least four inches tall with text contrasting with the sign background; and

(D) Display the following information:

(i) Local or toll-free phone number for the site contact or pre-recorded notification center that is accessible 24 hours a day; and

(ii) Warning statement:

"THIS SITE CONTAINS SOILS THAT CONTAIN THE FOLLOWING CHEMICALS: [LIST APPLICABLE TOXIC AIR CONTAMINANT(S)]
TO REPORT ANY DUST LEAVING THE SITE PLEASE CALL [FACILITY CONTACT] OR THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AT 1-800-CUT-SMOG"

(2) ~~(E)~~If signage pursuant to paragraph (g)(1) exceeds 48 inches by 96 inches, the owner or operator or designating agency ~~must still~~ shall include the warning statement referenced in clause (g)(1)(D)(ii), displaying lettering at least four inches tall with text contrasting with the sign background, but may use 2.5 inch tall lettering to list applicable toxic air contaminant(s). All other signage requirements set forth in paragraph (g)(1) shall remain the same. If signage continues to exceed 48 inches by 96 inches with these parameters, the owner or operator or designating agency may use alternative signage as set forth in paragraph (g)(~~2~~3).

(~~2~~3) The owner or operator or designating agency may use alternative signage approved by the Executive Officer pursuant to subdivision (j). Notwithstanding subdivision (j), the request shall include a visual representation of the alternative sign, including proposed lettering height, and locations and, at a minimum, the alternative signage shall:

(A) Display text contrasting with the sign background; and

(B) Display the following warning statement:

"THIS SITE CONTAINS SOILS THAT CONTAIN THE FOLLOWING CHEMICALS: [LIST APPLICABLE TOXIC AIR CONTAMINANT(S)]
TO REPORT ANY DUST LEAVING THE SITE PLEASE CALL THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AT 1-800-CUT-SMOG"

(4) The owner or operator may be excluded from installing and maintaining project signage pursuant to subparagraph (g)(1)(A) at any entrance(s) or interval(s) along the property line or perimeter of the site that is not visible and not accessible to the public unless the site is a school, joint use agreement property, or adjacent athletic area or the site is in physical contact with a school, joint use agreement property, or adjacent athletic area.

(h) Recordkeeping Requirements

The owner or operator shall maintain records for a period of not less than three years and shall make such records available to the Executive Officer upon request. At a minimum, records shall be maintained daily and shall include:

(1) Inspections of all stabilized or covered stockpiles containing soils with applicable toxic air contaminant(s) and all re-stabilization, covering repair, and label maintenance activities, including dates and times the specific activities were conducted;

(2) Results of wind and PM_{10} monitoring, including: ambient PM_{10} data; rolling average PM_{10} concentrations and calculations; wind direction and speed corresponding to the rolling average PM_{10} concentrations; instrument make and model; settings; calibration; configuration; calibration, correction, and correlation factors; maintenance; operator training; ~~and~~ daily instrument performance check records; intra-instrument precision test results; and all instrument logs for all monitoring instruments;

(3) All instrument maintenance activities, including: zero calibration, cleaning, filter replacement, and performance checks, including dates and times of the specific procedures;

(~~3~~4) On-site ~~Earth~~earth-moving activities conducted and the corresponding volume of soil with applicable toxic air contaminant(s);

(~~4~~5) Names and business addresses of the transporting and receiving facilities, and a copy of the shipping manifest; and

(~~5~~6) Complaints called in, including the name of complainant and contact information, date and time, on-site earth-moving activities occurring at the date and time, complaint, and action taken to mitigate the source of the complaint.

(i) Executive Officer Designated Sites

(1) The Executive Officer may designate a site if the Executive Officer has evidence that the site contains soil with applicable toxic air contaminant(s) as defined in paragraph (c)(15), after consultation with U.S. EPA, DTSC, the State or Regional Water Boards, and/or local, county, or state health and regulatory agencies, and consideration of the following:

(A) Site history, including current and/or previous type(s) of operation(s) and use(s) at the site and regulatory history;

(B) Concentration(s) of applicable toxic air contaminant(s) in the soil;

(C) Background concentration(s) of applicable toxic air contaminant(s);

(D) Volume of soil with applicable toxic air contaminant(s);

(E) Distance to a residence, park, or school;

(F) Meteorological data;

(G) Health risk information or other data provided by the owner or operator, if available; and

(H) Ambient monitoring data and other applicable data, if available.

(2) Prior to making a determination, the Executive Officer will notify the owner or operator in writing that the site may be subject to this rule.

(A) In the event the owner or operator exercises this opportunity to demonstrate that this rule does not apply, the owner or operator shall submit information to the Executive Officer within 14 days of the notification substantiating why the site should be excluded from this rule.

(B) Upon final determination, the Executive Officer will notify the owner or operator in writing if the site is subject to this rule.

(3) During the determination period, the owner or operator shall comply with the provisions of this rule or cease all on-site earth-moving activities until a determination is made.

(j) Alternative Provisions

(1) If requesting an alternative provision pursuant to ~~subparagraphs (d)(2)(A), (d)(3)(A), or (d)(4)(D) or~~ paragraph~~s~~ ~~(e)(12), (g)(2) (k)(3), or (k)(4)~~ (g)(3), the owner or operator or designating agency shall submit the request in writing at least 30 days prior to conducting any earth-moving activities and include all information to the Executive Officer to substantiate its position.

~~(A) The owner or operator or designating agency that elects to request alternative provisions for the PM_{10} limit, PM_{10} monitoring method, signage, or direct loading exemption shall submit the request in writing at least 30 days prior to conducting any earth-moving activities.~~

~~(B) The owner or operator or designating agency that elects to request alternative provisions for the PM_{10} calculation or dust control measures shall submit the request, in writing, prior to an exceedance of the PM_{10} concentration requirements set forth in paragraph (d)(2).~~

(2) The Executive Officer may request additional information from the owner or operator or designating agency.

(3) The owner or operator or designating agency shall submit all requested information within 14 days of the request for additional information.

(4) The Executive Officer will review the request for an alternative provision and will approve or reject the data and notify the owner or operator or designating agency in writing. Approved alternative provisions may not be used retroactively.

(5) Alternative provisions that were approved and notified in writing by the Executive Officer before *[Date of Adoption]* shall be deemed compliant with the requirements of the rule, shall remain in effect only for the period of time and for the specific project for which they were granted, and shall not be renewed or extended.

(k) Exemptions

(1) The owner or operator may be exempt from one or more provisions of this rule provided there is written confirmation that the designating agency under subparagraphs (b)(1)(A) through (b)(1)(D) has consulted with the Executive Officer and has determined that the provision(s) are not needed based on information specified in subparagraphs (i)(1)(A) through (i)(1)(H).

(2) On-site ~~Earth~~earth-moving activities performed within an enclosed system vented to South Coast AQMD permitted air pollution control equipment shall be exempt from all requirements except: subparagraphs ~~(e)(3)(C) through (e)(3)(E)~~ (e)(4)(C) through (e)(4)(E), subparagraphs ~~(e)(5)(D) and (e)(5)(E)~~ (e)(6)(D) and (e)(6)(E), and subdivisions (f), (g), and (h).

(3) Linear trenching for natural gas, power, sewer, and water projects on roadways with soil with applicable toxic air contaminant(s), directly loaded into a truck or bin for transport, shall be exempt from all requirements except: paragraphs ~~(e)(2) through (e)(8)~~(e)(3) through (e)(9), paragraphs ~~(e)(11)~~(e)(13) and (e)(14), and subdivisions (f), (h), and (i). ~~The owner or operator or designating agency may use an alternative to directly load into a truck or bin for transport that meets the objective and effectiveness of directly loading soil, where the objective and effectiveness is stated in Appendix 2. Use of an alternative measure must be submitted and approved by the Executive Officer as specified under subdivision (j).~~

(4) On-site ~~Earth~~earth-moving activities consisting only of excavation activities of soil with applicable toxic air contaminant(s) of less than 500 cubic yards, directly loaded into a truck or bin for transport, shall be exempt from all requirements except: paragraphs ~~(e)(2) through (e)(8)~~ (e)(3) through (e)(9), paragraphs ~~(e)(11)~~(e)(13) and (e)(14), and subdivisions (f), (h), and (i). ~~The owner or operator or designating agency may use an alternative to directly load into a truck or bin for transport that meets the objective and effectiveness of directly loading soil, where the objective and effectiveness is stated in Appendix 2. Use of alternative measure~~

~~must be submitted and approved by the Executive Officer as specified under subdivision (j).~~

(5) ~~Active operations~~ On-site earth-moving activities conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency as declared by an authorized health officer, agricultural commissioner, fire protection officer, or other authorized agency officer shall be exempt from all requirements. The Executive Officer shall be notified electronically no later than 48 hours following such on-site earth-moving activities. Written notification shall include written emergency declaration from the authorized officer.

(6) ~~Active operations~~ On-site earth-moving activities conducted by essential service utilities to provide electricity, natural gas, telephone, water, or sewer during periods of service outages and emergency disruptions shall be exempt from all requirements. The Executive Officer shall be notified electronically no later than 48 hours following such on-site earth-moving activities.

Table I – Applicable Toxic Air Contaminants

CAS Number	Substance
7440-38-2	**arsenic and arsenic compounds (inorganic)**
	including, but not limited to:
	arsenic compounds (inorganic)
7784-42-1	arsine
1332-21-4	Asbestos
7440-43-9	cadmium and cadmium compounds
57-74-9	chlordane*
	dibenzo-p-dioxins (chlorinated)*
1746-01-6	tetrachlorodibenzo-p-dioxin, 2,3,7,8-
40321-76-4	pentachlorodibenzo-p-dioxin, 1,2,3,7,8-
39227-28-6	hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8-
57653-85-7	hexachlorodibenzo-p-dioxin, 1,2,3,6,7,8-
19408-74-3	hexachlorodibenzo-p-dioxin, 1,2,3,7,8,9-
35822-46-9	heptachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8-
3268-87-9	octachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8,9-
41903-57-5	total tetrachlorodibenzo-p-dioxin
36088-22-9	total pentachlorodibenzo-p-dioxin
34465-46-8	total hexachlorodibenzo-p-dioxin
37871-00-4	total heptachlorodibenzo-p-dioxin
72-54-8	dichlorodiphenyldichloroethane*
72-55-9	dichlorodiphenyldichloroethylene*
50-29-3	dichlorodiphenyltrichloroethane*
18540-29-9	**chromium (hexavalent) and chromium compounds**
	including, but not limited to:
10294-40-3	barium chromate

CAS Number	Substance
13765-19-0	calcium chromate
7758-97-6	lead chromate
10588-01-9	sodium dichromate
7789-06-2	strontium chromate
13530-65-9	zinc chromate
7439-92-1	**lead and lead compounds (inorganic, including elemental lead)**
	including, but not limited to:
	lead compounds (inorganic)
301-04-2	lead acetate
7758-97-6	lead chromate
7446-27-7	lead phosphate
1335-32-6	lead subacetate
7439-97-6	**mercury and mercury compounds (inorganic)**
	including, but not limited to:
7487-94-7	mercuric chloride
593-74-8	methyl mercury
7440-02-0	**nickel and nickel compounds**
	including, but not limited to:
373-02-4	nickel acetate
3333-67-3	nickel carbonate
13463-39-3	nickel carbonyl
12054-48-7	nickel hydroxide
1313-99-1	nickel oxide
12035-72-2	nickel subsulfide
1271-28-9	nickelocene
	refinery dust from the pyrometallurgical process
1336-36-3	**polychlorinated biphenyls (PCBs)**
32598-13-3	3,3',4,4'-tetrachlorobiphenyl (PCB 77)
70362-50-4	3,4,4',5-tetrachlorobiphenyl (PCB 81)

CAS Number	Substance
32598-14-4	2,3,3',4,4'-pentachlorobiphenyl (PCB 105)
74472-37-0	2,3,4,4',5-pentachlorobiphenyl (PCB 114)
31508-00-6	2,3',4,4',5-pentachlorobiphenyl (PCB 118)
65510-44-3	2,3',4,4',5'-pentachlorobiphenyl (PCB 123)
57465-28-8	3,3',4,4',5-pentachlorobiphenyl (PCB 126)
38380-08-4	2,3,3',4,4',5-hexachlorobiphenyl (PCB 156)
69782-90-7	2,3,3',4,4',5'-hexachlorobiphenyl (PCB 157)
52663-72-6	2,3',4,4',5,5'-hexachlorobiphenyl (PCB 167)
32774-16-6	3,3',4,4',5,5'-hexachlorobiphenyl (PCB 169)
39635-31-9	2,3,3'4,4',5,5'-heptachlorobiphenyl (PCB 189)
	polycyclic aromatic hydrocarbons (PAHs)*
56-55-3	benzo[a]anthracene
50-32-8	benzo[a]pyrene
205-99-2	benzo[b]fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene
53-70-3	dibenz[a,h]anthracene
193-39-5	indeno[1,2,3-c,d]pyrene

~~* Effective January 1, 2018~~

Appendix 1 – ~~Executive Officer~~ Rule 1466 Approved PM_{10} Monitors

The Executive Officer may approve PM_{10} monitors that meet the following physical and performance requirements.

1. Physical Requirements
   - 1.1. PM_{10} monitors ~~must~~ shall be continuous direct-reading near-real time monitors and shall monitor particulate matter less than 10 microns.
   - 1.2. PM_{10} monitors ~~must~~ shall be equipped with:
     - 1.2.a. Omni-directional heated sampler inlet;
     - 1.2.b. Sample pump with active flow control mechanism and stated flow control accuracy of ±5 percent of factory setpoint;
     - ~~c. Volumetric flow controller;~~
     - 1.2.~~d~~c. Enclosure;~~ and~~
     - 1.2.~~e~~d. Data logger capable of logging each data point with average concentration, time/date, and data point number; and
     - 1.2.e. For any external tubing used to carry sampled air prior to measurement, conductive tubing to minimize particle loss.

2. Performance Requirements
   - 2.1~~3.~~ PM_{10} monitors ~~must~~ shall have the following minimum performance standards:
     - 2.1.a. Range: 0 - 10,000 $\mu g/m^3$;
     - 2.1.b. Accuracy: ±5~~%~~ percent of reading ± precision;
     - 2.1.c. Resolution: 1.0 $\mu g/m^3$; and
     - 2.1.d. Measurement Cycle: User selectable (~~30~~ thirty minute and ~~2~~ two hour).
   - 2.2 Monitors that have a valid *Monitoring Certification Scheme* certification meeting the latest version of the *Monitoring Certification Scheme* (*MCERTS): Performance Standard for Indicative Ambient Particulate Monitors* may be exempt from meeting the performance requirements listed above, but shall meet all stated physical requirements.

3. Quality Assurance/Quality Control Requirements

~~4.~~ In order to ensure the validity of the PM_{10} measurements performed, there ~~must~~ shall be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the owner or operator to adequately supplement QA/QC Plans to include the following critical

features: instrument calibration, instrument maintenance, operator training, and daily instrument performance (span) checks.

~~Appendix 2 – Objectives and Effectiveness of Dust Control Measures Set Forth in Subdivision (e)~~

~~Dust Control Measure~~	~~Objective~~	~~Effectiveness~~
~~(e)(1) Fencing and Windscreen Requirement~~	~~To minimize off-site fugitive dust emissions containing toxic air contaminants, provide a wind break, act as containment, provide security, and limit access to unauthorized persons.~~	~~Any dust control measure that is equally or more effective in minimizing off-site fugitive dust emissions containing toxic air contaminants that may result in exposure to the general public and will limit public access to the site.~~
~~(e)(2) Water Application~~	~~To minimize fugitive dust emissions containing toxic air contaminants from earth-moving activities.~~	~~Any dust control measure that is equally or more effective at preventing the generation of visible dust plumes from earth-moving activities.~~
~~(e)(3) Vehicle Movement~~	~~To minimize fugitive dust emissions containing toxic air contaminants from on-site vehicles and as vehicles are moving off-site.~~	~~Any dust control measure that is equally or more effective at preventing the generation of dust plumes from on-site vehicle movement and any fugitive dust that can be tracked out of the site that can result in exposure to the general public.~~
~~(e)(4) Stockpiles~~	~~To minimize fugitive dust emissions containing toxic air contaminants from stockpiles.~~	~~Any dust control measure that is equally or more effective at minimizing fugitive dust emissions containing toxic air contaminants from stockpiles and that will prevent the generation of dust plumes from stockpiles that can result~~

~~Dust Control Measure~~	~~Objective~~	~~Effectiveness~~
		~~in exposure to the general public.~~
~~(e)(5) Truck Loading~~	~~To minimize fugitive dust emissions containing toxic air contaminants from truck loading and truck movement.~~	~~Any dust control measure that is equally or more effective at preventing a dust plume or fugitive dust occurring during the loading of soils containing toxic air contaminants into trailers and physical containment or other mechanisms to minimize fugitive dust from escaping the trailer during transport.~~
~~(e)(6) Truck Unloading~~	~~To minimize fugitive dust emissions containing toxic air contaminants from truck unloading and truck movement.~~	~~Any dust control measure that is equally or more effective at preventing a dust plume or fugitive dust occurring during the unloading of soils containing toxic air contaminants.~~
~~(e)(8) Earth-Moving Activities at Certain Wind Speeds~~	~~To minimize fugitive dust emissions containing toxic air contaminants from high wind events.~~	~~Any dust control measure that is equally or more effective at preventing a dust plume or fugitive dust occurring during high wind events.~~
~~(e)(9) On-site Dust Control Supervisor~~	~~To require the on-site presence of a person that has specific training to ensure compliance with all rule requirements.~~	~~Any measure that ensures the on-site presence of a person with training covering the same material as that covered by an SCAQMD Fugitive Dust Control Class and appropriate credentials to handle applicable toxic air contaminants and that can~~

~~Dust Control Measure~~	~~Objective~~	~~Effectiveness~~
		~~ensure compliance with all rule requirements.~~
~~(e)(10) Application of Chemical Stabilizer During Periods of Inactivity~~	~~To minimize a dust plume or fugitive dust emissions containing toxic air contaminants from occurring on-site during periods of inactivity.~~	~~Any dust control measure that is equally or more effective at preventing a dust plume or fugitive dust emissions containing toxic air contaminants from occurring on-site during periods of inactivity.~~
~~(k)(3)/(k)(4) Direct Load into a Truck or Bin for Transport~~	~~To minimize a dust plume or fugitive dust emissions containing toxic air contaminants from truck loading and unloading.~~	~~Any dust control measure that is equally or more effective at preventing a dust plume or fugitive dust emissions containing toxic air contaminants from truck loading and unloading.~~

Appendix 2 – Procedures to Demonstrate Intra-Instrument Precision

An owner or operator shall perform the following procedures to demonstrate the intra-instrument precision of all PM_{10} monitors as required in subparagraph (d)(3)(H):

1. Ensure monitors are identical in make and model, settings, and configuration.
2. Ensure monitor inlets are at the same height and located within four meters of each other but no less than one meter apart for the duration of the test.
3. Power on the monitors and turn on the heated sampler inlet. Allow the monitors to warm-up per manufacturer's recommendations or when readings have stabilized.
4. For each monitor, perform a manual zero test by removing any size selective inlet and installing a filter, rated by the manufacturer to achieve a 99.97 percent control efficiency for 0.3 micron particles, on the inlet of the monitor for a minimum of ten minutes.
5. Log the PM_{10} concentration reading every minute and calculate and record the average of the readings of the zero test. The average of the zero test readings shall be noted and used to correct for instrument bias for the readings obtained during the intra-instrument precision test.
6. Remove the filter and install the monitor inlet as required. Operate the monitors simultaneously for a minimum of 30 minutes.
7. Calculate the intra-instrument precision using either of the following equations:
   a. Intra-instrument precision in relative percent (%):

$$P = \frac{S_t}{C_t} \, x \, 100\%$$

where,

P = Intra-instrument precision in relative percent (%),

S_t = Standard deviation of the averaged PM_{10} concentration readings from all tested monitors over the time t of testing duration, and

C_t = Average of the averaged PM_{10} concentration readings from all tested monitors over the time t of testing duration, and

   b. Intra-instrument precision in absolute value (micrograms per cubic meter):

$$P = S_t$$

where,

P = Intra-instrument precision in relative percent (%), and

S_t = Standard deviation of the averaged PM_{10} concentration readings from all tested monitors over the time t of testing duration

8. Record the results.