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, excavating, grading, handling, treating, stockpiling, transferring, and removing 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 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 any outdoor athletic field or park where youth organized sports occur that is in physical contact or separated solely by a public roadway or other public right-of-way to a school or early education center.
- (3) CHEMICAL STABILIZERS are any non-toxic chemical 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 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. 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 are water, hygroscopic materials, or chemical stabilizers used as a treatment material to reduce 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) EARTH-MOVING ACTIVITIES are, 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) are being moved or uncovered, and shall include, but not be limited to the following: excavating, grading, earth cutting and filling operations, loading or unloading, and adding to or removing from stockpiles.
- (8) FUGITIVE DUST is, 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) JOINT USE AGREEMENT PROPERTY is a shared public facility in which a formal agreement exists between a school or early education center and another government entity setting forth the terms and conditions for shared use.
- (10) OWNER OR OPERATOR is any firm, business establishment, association, partnership, corporation or individual, whether acting as principal, agent, employee, contractor, or other capacity.
- (11) PAVED ROAD is a public or private improved street, highway, alley, public way, or easement that is covered by typical roadway materials, but excluding 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 not defined as public.
- (12) PROPERTY LINE 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 subtenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- (13) SCHOOL is any public or private education center, including juvenile detention facilities 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 in kindergarten or any grades 1 to 12, inclusive, but does not include any school in which education is primarily conducted in private homes. School includes any building or structure, playground, athletic field, or other areas of school property.
- (14) SOIL is dirt, sand, gravel, clay, 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 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 is any previously disturbed surface area or stockpile, which through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to 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 SCAQMD *Rule 403 Fugitive Dust Implementation Handbook* or in Volumes I and II of SCAQMD's *Dust Control in the Coachella Valley*.
- (17) STOCKPILE is any accumulation of 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 any 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.
- (19) WIND-DRIVEN FUGITIVE DUST is visible emissions from any 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 earth-moving activities or vehicular movement occurs, the owner or operator shall conduct continuous direct-reading near real-time ambient monitoring of PM₁₀ concentrations pursuant to paragraph (d)(3).
- (2) If the PM₁₀ 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 earth-moving activities, apply dust suppressant to fugitive dust sources, or implement other dust control measures as necessary until the PM₁₀ 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 PM₁₀ limit from the Executive Officer provided the exposure to toxic air contaminants from fugitive dust from earth-moving activities at the proposed PM₁₀ 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 PM₁₀ limit is health protective.

Use of an alternative PM₁₀ limit must be submitted and approved by the Executive Officer as specified in subdivision (j).

- (3) The owner or operator conducting earth-moving activities shall install and conduct ambient PM₁₀ monitoring as follows:
 - (A) In accordance with a U.S. EPA-approved equivalent method for PM₁₀ monitoring or an alternative method approved by the Executive Officer. The owner or operator or designating agency shall select an alternative PM₁₀ method as specified in Appendix 1. Use of an alternative PM₁₀ method must be submitted and approved by the Executive Officer as specified in subdivision (j);
 - (B) Using a minimum of one upwind monitor where the location of the upwind monitor(s) are indicative of background PM₁₀ levels and not generally influenced by fugitive dust sources from the site;
 - (C) Using a minimum of one downwind monitor placed in the seasonal prevailing wind direction downwind of each area of earth-moving activity and as close to the property line as feasible;
 - (D) Using PM₁₀ monitors that are identical in make and model; settings; calibration; configuration; and calibration, correction, and correlation factors.
 - (E) Operate, maintain, and calibrate ambient PM₁₀ monitors in accordance with appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM₁₀ or the alternative method approved by the Executive Officer, and manufacturer's instructions; and
 - (F) Collect ambient PM₁₀ data with a data acquisition system that is capable of logging direct-reading near real-time data providing the date, time, and PM₁₀ concentration in micrograms per cubic meter every 10 minutes or less.
- (4) The owner or operator shall calculate the PM₁₀ concentration based on the PM₁₀ concentration averaged over two hours, starting at the top of each hour, where:
 - (A) The PM₁₀ concentration is the absolute difference between the upwind and downwind monitors;
 - (B) If there is more than one upwind monitor, the upwind result is the two hour average of all upwind monitors;
 - (C) If there is more than one downwind monitor, the downwind average is the maximum two hour average concentration of any of the downwind monitors; and

- (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 PM₁₀ 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) When 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*.
- (e) Requirements to Minimize Fugitive Dust Emissions
 - (1) An owner or operator shall not conduct earth-moving activities unless the area is surrounded with fencing that is a minimum of 6 feet tall and at least as tall as the height of the tallest stockpile, with a windscreen with a porosity of $50 \pm 5\%$.
 - (2) An owner or operator conducting 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) An owner or operator that is moving vehicles on, within, or off a site where earthmoving 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, or dust suppressant;
 - (C) Not allow track-out to extend beyond 25 feet 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% capture 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; and
 - (E) The owner or operator shall utilize at least one of the 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 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 feet wide; or
- (iv) Install and utilize a wheel washing system to remove soil from tires and vehicle undercarriages.
- (4) An owner or operator conducting earth-moving activities that result in the development of stockpiles of any soil with applicable toxic air contaminant(s) shall:
 - (A) Segregate non-contaminated stockpiles from stockpiles with applicable toxic air contaminant(s) and label with "SCAQMD Rule 1466 Control of Particulate Emissions from Soils with Toxic Air Contaminant(s) Applicable Soil";
 - (B) Maintain stockpiles to avoid steep sides or faces that exceed the angle of repose;
 - (C) Not create a stockpile that is more than 400 cubic yards of soil and greater in height than the perimeter fencing and windscreen;
 - (D) Apply dust suppressant to stockpiles;
 - (E) At the end of each working day, either chemically stabilize and/or completely cover with 10 millimeter 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
 - (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) 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 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 the truck and trailer prior to leaving the site.
- (6) 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 dust plumes are generated.
- (7) The owner or operator shall immediately remove any spilled soil containing applicable toxic air contaminant(s).
- (8) The owner or operator shall cease earth-moving activities if the wind speed is greater than 15 miles per hour (mph) averaged over a 15-minute period or instantaneous wind speeds exceed 25 mph.
- (9) During 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 SCAQMD 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 the means by which to comply with these provisions.
- (10) If earth-moving activities will not occur for three (3) or more consecutive days, apply a chemical stabilizer to potential sources of fugitive dust diluted to the concentration required to maintain a stabilized surface for the period of inactivity; re-stabilize as necessary.

- (11) 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 shall:
 - (A) Only conduct earth-moving activities at a school or early education center 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 if there is a school or early education center sponsored activity or youth organized sports 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 dust suppressant, and covering prior to transporting; or
 - (iii) Stockpiling pursuant to paragraph (e)(4), 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 owner or operator shall electronically notify the Executive Officer, using a format approved by the Executive Officer, of the intent to conduct any earth-moving activities. Notifications shall include the following requirements:
 - (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) Identify whether the site is a school, early education center, joint use agreement property, or adjacent athletic area;
- (F) A map indicating the specific location(s) of each earth-moving activity and the concentrations of the applicable toxic air contaminant(s) and location of PM₁₀ monitors;
- (G) A description of the 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 earth-moving activities;
- (H) Current and/or previous type of operation(s) and use(s) at the site;
- (I) Applicable exemption(s); and
- (J) Whether the notice is a revised notification.
- (2) Notification Updates

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 earth-moving activity to an earlier date shall be reported to the SCAQMD no later than 72 hours before any earth-moving activities begin.

- (B) Later Start Date
 - A delay in the start date of any earth-moving activity shall be reported to the SCAQMD 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 SCAQMD as soon as the information becomes available, but no later than 48 hours after the information becomes available.
- Within 72 hours of an exceedance of the PM₁₀ emission limit specified in subdivision (d), the owner or operator of a site meeting the applicability requirements of subdivision (b) shall electronically notify 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) PM₁₀ monitoring results, including result, date and time of exceedance(s), 12 hours before first exceedance, and 12 hours after last exceedance;
- (F) 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 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 along each side;
 - (B) Be located between 6 and 8 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"

(E) If signage pursuant to paragraph (g)(1) exceeds 48 inches by 96 inches, the owner or operator or designating agency must still include the warning statement referenced in (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 contaminants. 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).

- (2) 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"

(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) Inspection of all covered stockpiles containing soils with applicable toxic air contaminant(s);
- (2) Results of wind and PM₁₀ monitoring, including: instrument make and model; settings; calibration; configuration; calibration, correction, and correlation factors; maintenance; operator training; and daily instrument performance check records for all monitoring instruments;
- (3) Earth-moving activities conducted and the corresponding volume of soil with applicable toxic air contaminant;
- (4) Names and business addresses of the transporting and receiving facilities, and a copy of the shipping manifest; and
- (5) Complaints called in, including the name of complainant and contact information, date and time, 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 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 paragraphs (e)(12), (g)(2), (k)(3), or (k)(4) the owner or operator or designating agency shall submit all information to the Executive Officer to substantiate its positon.
 - (A) The owner or operator or designating agency that elects to request alternative provisions for the PM₁₀ limit, PM₁₀ 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 PM₁₀ calculation or dust control measures shall submit the request, in writing, prior to an exceedance of the PM₁₀ 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.

(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 (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 (H).
- (2) Earth-moving activities performed within an enclosed system vented to SCAQMD permitted air pollution control equipment shall be exempt from all requirements except: subparagraphs (e)(3)(C) through (e)(3)(E), subparagraphs (e)(5)(D) and (e)(5)(E), and subdivisions (f), (g), and (h).
- 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), paragraph (e)(11), 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) 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), paragraph (e)(11), 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 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 earth-moving activities. Written notification shall include written emergency declaration from the authorized officer.
- (6) Active operations 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 earthmoving 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*	

CAS Number	Substance	
	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	
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	

CAS Number	Substance	
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	
70362-50-4	3,4,4',5-tetrachlorobiphenyl	
32598-14-4	2,3,3',4,4'-pentachlorobiphenyl	
74472-37-0	2,3,4,4',5-pentachlorobiphenyl	
31508-00-6	2,3',4,4',5-pentachlorobiphenyl	
65510-44-3	2,3',4,4',5'-pentachlorobiphenyl	
57465-28-8	3,3',4,4',5-pentachlorobiphenyl	
38380-08-4	2,3,3',4,4',5-hexachlorobiphenyl	
69782-90-7	2,3,3',4,4',5'-hexachlorobiphenyl	
52663-72-6	2,3',4,4',5,5'-hexachlorobiphenyl	
32774-16-6	3,3',4,4',5,5'-hexachlorobiphenyl	
39635-31-9	2,3,3'4,4',5,5'-heptachlorobiphenyl	

CAS Number	Substance	
	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 Approved PM₁₀ Monitors

The Executive Officer may approve PM₁₀ monitors that meeting the following requirements.

- 1. PM₁₀ monitors must be continuous direct-reading near-real time monitors and shall monitor particulate matter less than 10 microns.
- 2. PM₁₀ monitors must be equipped with:
 - a. Omni-directional heated sampler inlet;
 - b. Sample pump;
 - c. Volumetric flow controller;
 - d. Enclosure; and
 - e. Data logger capable of logging each data point with average concentration, time/date, and data point number.
- 3. PM₁₀ monitors must have the following minimum performance standards:
 - a. Range: $0 10{,}000 \,\mu\text{g/m}^3$
 - b. Accuracy: $\pm 5\%$ of reading \pm precision
 - c. Resolution: 1.0 μg/m³
 - d. Measurement Cycle: User selectable (30 minute and 2 hour)
- 4. In order to ensure the validity of the PM₁₀ measurements performed, there must 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.

<u>Appendix 2 – Objectives and Effectiveness of Dust Control Measures Set-Forth in Subdivision (e)</u>

Dust Control Measure	Objective	Effectiveness
(e)(1) Fencing and	To minimize off-site fugitive	Any dust control measure that
Windscreen Requirement	dust emissions containing	is equally or more effective in
	toxic air contaminants,	minimizing off-site fugitive
	provide a wind break, act as	dust emissions containing
	containment, provide	toxic air contaminants that
	security, and limit access to	may result in exposure to the
	unauthorized persons.	general public and will limit
		public access to the site.
(e)(2) Water Application	To minimize fugitive dust	Any dust control measure that
	emissions containing toxic air	is equally or more effective at
	contaminants from earth-	preventing the generation of
	moving activities.	visible dust plumes from
		earth-moving activities.
(e)(3) Vehicle Movement	To minimize fugitive dust	Any dust control measure that
	emissions containing toxic air	is equally or more effective at
	contaminants from on-site	preventing the generation of
	vehicles and as vehicles are	dust plumes from on-site
	moving off-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	Any dust control measure that
	emissions containing toxic air	is equally or more effective at
	contaminants from stockpiles.	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	Any dust control measure that
	emissions containing toxic air	is equally or more effective at
	contaminants from truck	preventing a dust plume or
	loading and truck movement.	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	Any dust control measure that
	emissions containing toxic air	is equally or more effective at
	contaminants from truck	preventing a dust plume or
	unloading and truck	fugitive dust occurring during
	movement.	the unloading of soils
		containing toxic air
		contaminants.
(e)(8) Earth-Moving	To minimize fugitive dust	Any dust control measure that
Activities at Certain Wind	emissions containing toxic air	is equally or more effective at
Speeds	contaminants from high wind	preventing a dust plume or
	events.	fugitive dust occurring during
		high wind events.
(e)(9) On-site Dust Control	To require the on-site	Any measure that ensures the
Supervisor	presence of a person that has	on-site presence of a person
	specific training to ensure	with training covering the
	compliance with all rule	same material as that covered
	requirements.	by an SCAQMD Fugitive
		Dust Control Class and
		appropriate credentials to
		handle applicable toxic air
		contaminants and that can

Rule 1466 (cont.)

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