

**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) ~~Effective 30 days from adoption date, t~~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)(315) that have been identified as contaminant(s) of concern at a site that has been designated and notified by ~~the~~:
- (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 Board (Regional Water Board) as a Site Cleanup Program site; ~~or~~
  - (D) A county, local, or state regulatory agency as a Hazardous Material Release site pursuant to Health and Safety Code, Section 25260, effective January 1, 2018; or
  - (~~D~~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) APPLICABLE TOXIC AIR CONTAMINANTS, for the purpose of this rule, include arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls.~~
- (43) 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.
- (54) 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.
- (65) DUST SUPPRESSANTS are water, hygroscopic materials, or chemical stabilizers used as a treatment material to reduce fugitive dust emissions.
- (76) 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.
- (87) 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.

- (98) 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.
- (109) 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.
- (110) OWNER OR OPERATOR is any firm, business establishment, association, partnership, corporation or individual, whether acting as principal, agent, employee, contractor, or other capacity.
- (121) 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.
- (1312) 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 sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- (1413) 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.
- (1514) SOIL is dirt, sand, gravel, clay, and aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.
- (1615) 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 ~~or the Executive Officer~~ to contain one or more of the applicable toxic air contaminants as ~~defined in paragraph (e)(3)~~ 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.

- (~~17~~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*.
- (~~18~~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.
- (~~19~~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.
- (~~20~~19) WIND-DRIVEN FUGITIVE DUST is visible emissions from any disturbed surface area, which is generated by wind action alone.
- (~~21~~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 PM<sub>10</sub> concentrations pursuant to paragraph (d)(3).
- (2) If the PM<sub>10</sub> 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 PM<sub>10</sub> 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<sub>10</sub> limit from the Executive Officer provided the exposure to toxic air contaminants from fugitive dust from earth-moving activities at the proposed PM<sub>10</sub> concentration level is health protective to the public. The

owner or operator or designating agency shall provide to the Executive Officer the information specified in subparagraphs (i)(1)(A) through (G)(H) and substantiate its position that an alternative PM<sub>10</sub> limit is health protective. Use of an alternative PM<sub>10</sub> 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 PM<sub>10</sub> monitoring as follows:
  - (A) In accordance with a U.S. EPA-approved equivalent method for PM<sub>10</sub> monitoring or an alternative method approved by the Executive Officer. The owner or operator or designating agency shall select an alternative PM<sub>10</sub> method as specified in Appendix 1. Use of an alternative PM<sub>10</sub> 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 PM<sub>10</sub> 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) Operate, maintain, and calibrate ambient PM<sub>10</sub> monitors in accordance with appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM<sub>10</sub> or the alternative method approved by the Executive Officer, and manufacturer's instructions; and
  - (E) Collect ambient PM<sub>10</sub> data with a data acquisition system that is capable of logging direct-reading near real-time data providing the date, time, and PM<sub>10</sub> concentration in micrograms per cubic meter every 10 minutes or less.
- (4) The owner or operator shall calculate the PM<sub>10</sub> concentration based on the PM<sub>10</sub> concentration averaged over two hours, starting at the top of each hour, where:
  - (A) The PM<sub>10</sub> 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 PM<sub>10</sub> 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) The 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 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, or dust suppressant;
    - (C) Not allow track-out to extend beyond 25 feet ~~of the property line~~in cumulative length from the point of origin from an active operation. 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*. 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 freeboard~~ 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 PM<sub>10</sub> 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; and
- (I) Whether the notice is a revised notification.

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(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.

- (23) Within 72 hours of an exceedance of the PM<sub>10</sub> 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/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<sub>10</sub> 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”
- (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 and proposed locations and at a minimum, the alternative signage shall:
  - (A) Display lettering at least four inches tall with 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 PM<sub>10</sub> monitoring, including calibration, 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;
- (~~B~~C) Background concentration(s) of applicable toxic air contaminant(s);
- (~~C~~D) Volume of soil with applicable toxic air contaminant(s);
- (~~D~~E) Distance to a residence, park, or school;
- (~~E~~F) Meteorological data;
- (~~F~~G) Health risk information or other data provided by the owner or operator, if available; and
- (~~G~~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) or (g)(2), the owner or operator or designating agency shall submit 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<sub>10</sub> limit, PM<sub>10</sub> monitoring method, or signage 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<sub>10</sub> calculation or dust control measures shall submit the request, in writing, prior to an exceedance of the PM<sub>10</sub> 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 (ED) 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 (GH).
- (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).
  - (3) Linear trenching for 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).
  - (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).
  - (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 earth-moving activities.

**Table I – Applicable Toxic Air Contaminants**

<b><u>CAS Number</u></b>	<b><u>Substance</u></b>
<u>7440-38-2</u>	<b><u>arsenic and arsenic compounds (inorganic)</u></b> <u>including, but not limited to:</u> <u>arsenic compounds (inorganic)</u>

<u>CAS Number</u>	<u>Substance</u>
<u>7784-42-1</u>	<u>arsine</u>
<u>1332-21-4</u>	<u>asbestos</u>
<u>7440-43-9</u>	<u>cadmium and cadmium compounds</u>
<u>57-74-9</u>	<u>Chlorodane*</u>
-	<b><u>dibenzo-p-dioxins (chlorinated)*</u></b>
<u>1746-01-6</u>	<u>tetrachlorodibenzo-p-dioxin, 2,3,7,8-</u>
<u>40321-76-4</u>	<u>pentachlorodibenzo-p-dioxin, 1,2,3,7,8-</u>
<u>39227-28-6</u>	<u>hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8-</u>
<u>57653-85-7</u>	<u>hexachlorodibenzo-p-dioxin, 1,2,3,6,7,8-</u>
<u>19408-74-3</u>	<u>hexachlorodibenzo-p-dioxin, 1,2,3,7,8,9-</u>
<u>35822-46-9</u>	<u>heptachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8-</u>
<u>3268-87-9</u>	<u>octachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8,9-</u>
<u>41903-57-5</u>	<u>total tetrachlorodibenzo-p-dioxin</u>
<u>36088-22-9</u>	<u>total pentachlorodibenzo-p-dioxin</u>
<u>34465-46-8</u>	<u>total hexachlorodibenzo-p-dioxin</u>
<u>37871-00-4</u>	<u>total heptachlorodibenzo-p-dioxin</u>
<u>72-54-8</u>	<u>dichlorodiphenyldichloroethane*</u>
<u>72-55-9</u>	<u>dichlorodiphenyldichloroethylene*</u>
<u>50-29-3</u>	<u>dichlorodiphenyltrichloroethane*</u>
<u>18540-29-9</u>	<b><u>chromium (hexavalent) and chromium compounds</u></b>
	<u>including, but not limited to:</u>
<u>10294-40-3</u>	<u>barium chromate</u>
<u>13765-19-0</u>	<u>calcium chromate</u>
<u>7758-97-6</u>	<u>lead chromate</u>

<u>CAS Number</u>	<u>Substance</u>
<u>10588-01-9</u>	<u>sodium dichromate</u>
<u>7789-06-2</u>	<u>strontium chromate</u>
<u>13530-65-9</u>	<u>zinc chromate</u>
<u>7439-92-1</u>	<b><u>lead and lead compounds (inorganic, including elemental lead)</u></b>
	<u>including, but not limited to:</u>
	<u>lead compounds (inorganic)</u>
<u>301-04-2</u>	<u>lead acetate</u>
<u>7758-97-6</u>	<u>lead chromate</u>
<u>7446-27-7</u>	<u>lead phosphate</u>
<u>1335-32-6</u>	<u>lead subacetate</u>
<u>7439-97-6</u>	<b><u>mercury and mercury compounds (inorganic)</u></b>
	<u>including, but not limited to:</u>
<u>7487-94-7</u>	<u>mercuric chloride</u>
<u>593-74-8</u>	<u>methyl mercury</u>
<u>7440-02-0</u>	<b><u>nickel and nickel compound</u></b>
	<u>including, but not limited to:</u>
<u>373-02-4</u>	<u>nickel acetate</u>
<u>3333-67-3</u>	<u>nickel carbonate</u>
<u>13463-39-3</u>	<u>nickel carbonyl</u>
<u>12054-48-7</u>	<u>nickel hydroxide</u>
<u>1313-99-1</u>	<u>nickel oxide</u>
<u>12035-72-2</u>	<u>nickel subsulfide</u>
<u>1271-28-9</u>	<u>nickelocene</u>
	<u>refinery dust from the pyrometallurgical process</u>
<u>1336-36-3</u>	<b><u>polychlorinated biphenyls (PCBs)</u></b>
<u>32598-13-3</u>	<u>3,3',4,4' tetrachlorobiphenyl</u>
<u>70362-50-4</u>	<u>3,4,4',5 tetrachlorobiphenyl</u>
<u>32598-14-4</u>	<u>2,3,3',4,4' pentachlorobiphenyl</u>
<u>74472-37-0</u>	<u>2,3,4,4',5 pentachlorobiphenyl</u>



<u>CAS Number</u>	<u>Substance</u>
<u>31508-00-6</u>	<u>2,3',4,4',5 pentachlorobiphenyl</u>
<u>65510-44-3</u>	<u>2',3,4,4',5 pentachlorobiphenyl</u>
<u>57465-28-8</u>	<u>3,3',4,4',5 pentachlorobiphenyl</u>
<u>38380-08-4</u>	<u>2,3,3',4,4',5 hexachlorobiphenyl</u>
<u>69782-90-7</u>	<u>2,3,3',4,4',5' hexachlorobiphenyl</u>
<u>52663-72-6</u>	<u>2,3',4,4',5,5' hexachlorobiphenyl</u>
<u>32774-16-6</u>	<u>3,3',4,4',5,5' hexachlorobiphenyl</u>
<u>39635-31-9</u>	<u>2,3,3'4,4',5,5' heptachlorobiphenyl</u>
-	<b><u>polycyclic aromatic hydrocarbons (PAHs)*</u></b>
<u>56-55-3</u>	<u>benzo[a]anthracene</u>
<u>50-32-8</u>	<u>benzo[a]pyrene</u>
<u>205-99-2</u>	<u>benzo[b]fluoranthene</u>
<u>207-08-9</u>	<u>benzo[k]fluoranthene</u>
<u>218-01-9</u>	<u>chrysene</u>
<u>53-70-3</u>	<u>dibenz[a,h]anthracene</u>
<u>193-39-5</u>	<u>indeno[1,2,3-c,d]pyrene</u>

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\* Effective January 1, 2018

**Appendix 1 – Executive Officer Approved PM<sub>10</sub> Monitors**

The Executive Officer may approve PM<sub>10</sub> monitors that meeting the following requirements.

1. PM<sub>10</sub> monitors must be continuous direct-reading near-real time monitors and shall monitor particulate matter less than 10 microns.
2. PM<sub>10</sub> monitors must be equipped with:
  - a. Omni-directional heated sampler inlet with water trap;
  - 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. PM<sub>10</sub> monitors must have the following minimum performance standards:
  - a. Range: 0 - 10,000  $\mu\text{g}/\text{m}^3$
  - b. Accuracy:  $\pm 5\%$  of reading  $\pm$  precision
  - c. Resolution: ~~0.1~~1.0  $\mu\text{g}/\text{m}^3$
  - d. Measurement Cycle: User selectable (30 minute and 2 hour)
4. In order to ensure the validity of the PM<sub>10</sub> 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.

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

<b>Dust Control Measure</b>	<b>Objective</b>	<b>Effectiveness</b>
(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 <u>handle</u> 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.