

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 offsite 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 soils that contain these toxic air contaminants from sites that meet the applicability requirements of subdivision (b).

(b) Applicability

This rule shall apply to any owner or operator conducting earth-moving activities of soils that contain one or more of the following toxic air contaminants as a contaminant of concern: arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and/or polychlorinated biphenyls at a site that has been designated by the:

- (1) U.S. Environmental Protection Agency (U.S. EPA) as a Superfund National Priorities List site;
- (2) Department of Toxic Substances Control (DTSC) as a Brownfield or Cleanup Program site;
- (3) State Water Resources Control Board (State Water Board) or Regional Water Quality Board (Regional Water Board) as a Site Cleanup Program site; or
- (4) Executive Officer as a site containing soil contaminated with cadmium, hexavalent chromium, lead, mercury, nickel, and/or polychlorinated biphenyls in concentrations above the Office of Environmental Health Hazard Assessment's California Human Health Screening Level, arsenic in concentrations above 12 ppm, and/or asbestos in concentrations above 2,500 ppm, where the Executive Officer has notified the owner or operator that earth-moving activities are subject to the provisions of this rule.

(c) Definitions

- (1) ADEQUATELY WET is the condition of being sufficiently mixed or penetrated with amended 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) **APPLICABLE TOXIC AIR CONTAMINANTS** include arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls.
- (3) **BULK MATERIAL** is sand, gravel, soil, aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.
- (4) **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.
- (5) **CONTRACTOR** is any person who has a contractual arrangement to conduct a service for another person.
- (6) **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.
- (7) **DUST SUPPRESSANTS** are water, hygroscopic materials, or chemical stabilizers used as a treatment material to reduce fugitive dust emissions.
- (8) **EARTH-MOVING ACTIVITIES** are, for the purpose of this rule, any activity on a site that meets the applicability requirements of subdivision (b) where soils with applicable toxic air contaminants 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.
- (9) **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.

- (10) NEAR REAL-TIME is the time delay introduced, by automated data processing or network transmission, between the occurrence of an event and the use of the processed data, such as for display or feedback and control purposes.
- (11) OWNER OR OPERATOR is any firm, business establishment, association, partnership, corporation or individual, whether acting as principal, agent, employee, contractor or other capacity.
- (12) 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.
- (13) 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.
- (14) SOILS WITH APPLICABLE TOXIC AIR CONTAMINANT means, for the purpose of this rule, soils that have been identified by U.S. EPA, DTSC, State Water Board, Regional Water Board, or the Executive Officer to contain one or more of the following toxic air contaminants: arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, or polychlorinated biphenyls.
- (15) 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*.
- (16) STOCKPILE is any accumulation of bulk material, 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.
- (17) TRACK-OUT is any bulk material 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 and can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.

- (18) WIND-DRIVEN FUGITIVE DUST is visible emissions from any disturbed surface area, which is generated by wind action alone.
 - (19) WIND GUST is the maximum instantaneous wind speed as measured by an anemometer.
- (d) Monitoring Requirements
- (1) When earth-moving activities occur, the owner or operator shall conduct continuous near real-time ambient monitoring of PM₁₀ concentrations pursuant to paragraph (d)(3).
 - (2) If the hourly average PM₁₀ concentration 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:
 - (A) Cease earth-moving activities until the hourly average PM₁₀ concentration is equal to or less than 25 micrograms per cubic meter; and
 - (B) Apply a 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.
 - (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 any other method approved by the Executive Officer;
 - (B) Using a minimum of one upwind and one downwind monitor where:
 - (i) The location of the upwind monitor(s) are indicative of background PM₁₀ levels and not generally influenced by fugitive dust sources from the site; and
 - (ii) The location of the downwind monitor(s) are placed in the predominant wind direction downwind of any earth-moving activity.
 - (C) Place downwind monitor(s) as close to the property line as feasible;
 - (D) Operate, maintain, and calibrate ambient PM₁₀ monitors in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM₁₀, or any other method approved by the Executive Officer; and

- (E) Collect ambient PM₁₀ with a data acquisition system that is capable of logging 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 hourly average PM₁₀ concentration, starting at the top of each hour, where:
 - (A) The PM₁₀ concentration is the difference between the hourly average of the upwind and downwind monitors;
 - (B) If there is more than one upwind monitor, the upwind hourly average is the hourly average of all upwind monitors;
 - (C) If there is more than one downwind monitor, the downwind hourly average is the maximum hourly average concentration of any of the downwind monitors; and
 - (D) The owner or operator may use a different calculation methodology approved by the Executive Officer if the owner or operator has demonstrated that the PM₁₀ concentration is the result of another source.
 - (5) When earth-moving activities occur, the owner or operator shall monitor wind direction and speed as specified in *SCAQMD Rule 403 Fugitive Dust Implementation Handbook*.
- (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%.
 - (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 to 15 miles per hour;
 - (B) Stabilize the surface of all vehicular traffic and parking areas by applying gravel, paving, chemical stabilizer, or water;
 - (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 bulk materials 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, pipe, or grates) at least 24 feet long and 10 feet wide; or
 - (iv) Install and utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages.
- (4) An owner or operator conducting earth-moving activities that result in the development of stockpiles of any soils with applicable toxic air contaminants shall:
- (A) Segregate contaminated stockpiles from non-contaminated stockpiles and label contaminated stockpiles “SCAQMD Rule 1466 Contaminated Soil” and list the applicable toxic air contaminants;
 - (B) Maintain contaminated 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 or greater in height than the perimeter fencing and windscreen;
 - (D) Apply dust suppressant to contaminated soil in stockpiles;
 - (E) At the end of each working day, either chemically stabilize and/or completely cover with 10 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 contaminated soil is exposed to the atmosphere; and
 - (F) Daily, inspect stabilized or covered contaminated 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 soils containing applicable toxic air contaminants 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 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 soils containing applicable toxic air contaminants 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 contaminants.
- (8) The owner or operator shall cease earth-moving activities if the wind speed is greater than 25 miles per hour (mph) averaged over a 15-minute period or instantaneous wind speeds exceed 15 mph.
- (9) During earth-moving activities, the owner or operator shall have an onsite 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 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 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 water to potential sources of fugitive dust with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months.
 - (11) An owner or operator that is conducting earth-moving activities on a site that is a school or early education center shall:
 - (A) Not conduct earth-moving activities when school is in session or during a school sponsored activity; and
 - (B) Handle excavated soil with applicable toxic air contaminants 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) Using alternative storage methods with prior written approval by the Executive Officer.
 - (12) The owner or operator may use any other dust control measures approved by the Executive Officer in lieu of some or all of the dust control measures specified above.
- (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, and telephone number of the owner or operator;
 - (B) Name and telephone number of the onsite 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 or early education center;
 - (F) A map indicating the specific location(s) of each earth-moving activity and the concentrations of the applicable toxic air contaminant(s);
 - (G) A description of the earth-moving activities 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.
- (2) 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, and telephone number of the owner/operator;
 - (B) Name and telephone number of the onsite 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. Unless otherwise approved in writing by the Executive Officer, signage shall be:
- (1) 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;
 - (2) Located between 6 and 8 feet above grade from the bottom of the sign;
 - (3) On one inch AC grade laminated plywood;
 - (4) Measure at least 48 inches wide by 48 inches tall;
 - (5) Display lettering at least four inches tall with text contrasting with the sign background;
 - (6) Display the following information:
 - (A) Local or toll-free phone number for the facility contact or pre-recorded notification center that is accessible 24 hours a day;

(B) Warning statement:

“THIS SITE CONTAINS SOILS THAT CONTAIN THE FOLLOWING
CHEMICALS: [LIST SOIL TACS]
TO REPORT ANY DUST PLEASE CALL [FACILITY CONTACT] OR
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 contaminants;
- (2) Results of wind and PM₁₀ monitoring, including calibration 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 transporter and receiving facility, 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) Exemptions

The provisions of this rule shall not apply to the following:

- (1) Earth-moving activities of soils with applicable toxic air contaminants of less than 50 cubic yards;
- (2) Removal of soil for sampling purposes;
- (3) 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. The Executive Officer shall be notified in writing no later than 48 hours following such earth-moving activities. Written notification shall include written emergency declaration from the authorized officer;

- (4) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water, or sewer during periods of service outages and emergency disruptions; and
- (5) Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.