

RULE 1157. PM10 EMISSION REDUCTIONS FROM AGGREGATE AND RELATED OPERATIONS

- (a) Purpose
The purpose of this rule is to reduce PM10 emissions from aggregate and related operations.
- (b) Applicability
This rule applies to all permanent and temporary aggregate and related operations, unless otherwise exempt under subdivision (h).
- (c) Definitions
- (1) AGGREGATE OPERATIONS are defined as operations that produce sand, gravel, crushed stone, and/or quarried rocks.
 - (2) AGGREGATE OR RELATED MATERIAL means material that is produced and/or used by the aggregate and related operations.
 - (3) AGGREGATE TRUCKS mean trucks with open tops, used to transport the products of the aggregate and related operations to other processors, retailers, or end users.
 - (4) BLASTING OPERATIONS are defined as operations that break or displace rock by means of explosives.
 - (5) BUNKER is defined as a three-sided enclosure of which one side may be a windscreen with a maximum porosity of 20%.
 - (6) CARRY-BACK is defined as materials that fall off the underside of the conveyor belt and accumulate on the ground.
 - (7) 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 water agency.
 - (8) CONVEYOR means an above-ground, outdoor conveyor system to move materials from any location, process, or equipment to another in a continuous fashion.
 - (9) DISTURBED SURFACE AREA means a portion of a surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential

for emission of 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 completely 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.
- (10) DUST SUPPRESSANTS are water, hygroscopic materials, or chemical stabilizers used as a treatment material to reduce fugitive dust emissions.
 - (11) ENCLOSED SCREENING EQUIPMENT means screening equipment where the top portion of the equipment is enclosed, except for the area where materials enter the screening equipment.
 - (12) END OF WORK DAY means the end of a working period that may include one or more work shifts, but no later than 8 p.m.
 - (13) EQUIPMENT BREAKDOWN means an unforeseeable impairment of an air pollution control equipment or related operating equipment which causes a violation of any emission limitation or restriction prescribed by this rule or by State law and which: is not the result of neglect or disregard of any air pollution control law, rule, or regulation; is not a recurrent breakdown of the same equipment; and, does not constitute a nuisance as defined in the State of California Health and Safety Code, Section 41700, with the burden of proving the criteria of this section placed upon the person seeking to come under the provisions of this rule.
 - (14) EXISTING FACILITY/OPERATION means a facility or an operation that has begun to operate, or has an application for Permit to Construct that has been deemed complete by the Executive Officer on or before December 3, 2004.
 - (15) FRONT-END LOADER means a wheeled or tractor loader, with a bucket or fork hinged to lifting arms that loads or digs entirely at the front end.
 - (16) FUGITIVE DUST means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of any person.

- (17) GEOTEXTILE means permeable textile, including but not limited to, mesh, net, or even grid that is used in contact with soil or rocks with the purpose of adding stability to the gravel pad.
- (18) HAUL ROAD means an unpaved road that is used by haul trucks to carry materials from the quarry to different locations within the facility.
- (19) HAUL TRUCK means a diesel heavy-duty truck having a minimum capacity of 50 tons and is used to transport aggregates within the facility.
- (20) HIGH WINDS means instantaneous wind speeds exceed 25 miles per hour.
- (21) INFREQUENT MINING OPERATIONS mean operations that have state mine IDs, approved reclamation plans and bonding as required by State Mining and Reclamation Act of 1975, and only operate on an average of 52 days per year over the past three years from December 3, 2004.
- (22) INTERNAL ROADS mean private paved and unpaved roads within the facility's property boundary.
- (23) LOADING means an activity to move materials from any location to a truck.
- (24) MATERIAL SPILLAGE means material inadvertently lost or scattered by spilling.
- (25) MIXER TRUCK means truck that mixes cement and other ingredients in a drum to produce concrete.
- (26) NEW FACILITY/OPERATION means a facility or an operation that has not begun to operate, or does not have an application for Permit to Construct that has been deemed complete by the Executive Officer as of December 3, 2004.
- (27) NON-POROUS WALLS are walls that have zero percent porosity. Non-porous walls include but are not limited to concrete and steel walls.
- (28) OPEN STORAGE PILE is any accumulation of aggregate or related 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 or more square feet.
- (29) OTHER DUST CONTROL METHODS including but not limited to baghouses, filter bags, enclosures, and partial enclosures.
- (30) PAVED ROAD means 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.

- (31) PERMANENT FACILITY/OPERATION means a facility or an operation that is performed at one physical location for more than two years.
- (32) PM10 means particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.
- (33) PRODUCTION WORK SHIFT is an eight hour operating period based on the 24 hour operating schedule.
- (34) RELATED OPERATIONS are defined as operations that use sand, gravel, cement, crushed stone, and/or quarried rocks in their products, or crush miscellaneous base, and inert landfills that handle construction/demolition debris.
- (35) RETURNED PRODUCTS mean left over concrete or asphalt products that were not used at the job sites and were brought back to the facility.
- (36) RUMBLE GRATE is a system where the vehicle is vibrated while traveling over grates with the purpose of removing dust and other debris.
- (37) SCALPING SCREEN means a screen where debris and oversized materials are rejected.
- (38) SENSITIVE RECEPTOR is a school (kindergarten through grade 12), licensed daycare center, hospital, or convalescent home.
- (39) SILO means an elevated storage container, with or without a top, that releases material through the bottom.
- (40) STABILIZED SURFACE means any previously disturbed surface area or open storage pile 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 Rule 403 Implementation Handbook.
- (41) STAGING AREA is a place where aggregate and mixer trucks temporarily queue for their loading or unloading turn.
- (42) TEMPORARY FACILITY/OPERATION means a facility that operates or an operation that is performed at one physical location for two years or less. Temporary facility/operation includes portable facility/operation.

- (43) TRACK-OUT means any 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.
- (44) TRANSFER means an activity to move materials from any location to any location within a facility.
- (45) TRANSFER POINT is a point in a conveying system where the materials are dropped onto a stockpile, equipment, or another conveyor, or where a conveyor belt enters or exits the processing equipment.
- (46) TRUCK TRIMMING AREA means an area where trucks that are exiting a facility/operation are inspected to determine whether the amount and type of loaded material is correct. Any excess material is removed in this area of the facility/operation.
- (47) TRUCK WASHER means a system that is used to wash the entire surface and the tires of a truck.
- (48) TUNNEL FEED is underground belt conveyor system to move the materials from any location to any location within a facility in a continuous fashion.
- (49) TYPICAL ROADWAY MATERIALS means concrete, asphaltic concrete, recycled asphalt, asphalt, or any other material of equivalent performance as determined by the Executive Officer and the U.S. EPA.
- (50) UNLOADING means an activity to release the materials from a truck or a front-end loader to any location located inside the facility.
- (51) UNPAVED ROADS mean any roads, equipment paths, or travel ways that are not covered by typical roadway materials. Public unpaved roads are any unpaved roadway owned by Federal, State, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public. Internal unpaved roads are private unpaved roads within the facility's property boundary.
- (52) WATER IRRIGATION SYSTEM means devices that are mounted above an open storage pile to deliver water to a pile.
- (53) WHEEL WASHER means a system that is capable of washing the entire circumference of each wheel of the vehicle.
- (54) VALIDATED NOTICE OF VIOLATION means a notice of violation issued by a District enforcement officer that has been finally resolved by means of either a settlement with the alleged violator resulting in the

payment of a civil penalty in any amount or a court judgment imposing civil or criminal liability on the alleged violator based on the conduct alleged in the notice of violation.

(d) Requirements

Unless otherwise stated, effective July 1, 2005, aggregate and related operations shall comply with the following requirements:

(1) General Performance Standards

(A) The operator of a facility/operation shall not cause or allow:

(i) a discharge into the atmosphere of, fugitive dust emissions exceeding 20 percent opacity from any activity, equipment, storage pile, or disturbed surface area, based on an average of 12 consecutive readings, using the SCAQMD Opacity Test Method No. 9B; or

(ii) discharges into the atmosphere of, fugitive dust emissions exceeding 50 percent opacity from any activity, equipment, storage pile, or disturbed surface area, based on five individual, consecutive readings, using the SCAQMD Opacity Test Method No. 9B, effective December 3, 2005; or

(iii) any visible fugitive dust plume from exceeding 100 feet in any direction from any activity, equipment, storage pile, or disturbed surface area.

(B) The operator of a facility/operation shall promptly remove any pile of material spillage on any internal paved roads. Alternatively, the operator shall maintain in a stabilized condition the pile of material spillage with dust suppressants and remove it by the end of each day.

(C) The operator of a facility/operation shall maintain in a stabilized condition all other piles of material spillage and carry-back with dust suppressants until removal.

(D) The operator of a facility/operation shall use sufficient dust suppressants or other dust control methods as necessary to meet the performance standards in subparagraph (d)(1)(A).

(E) Where applicable, the operator shall install a gravel pad that:

- (i) Contains one-inch or larger washed gravel maintained to a depth of six inches;
 - (ii) Has a geotextile lining underneath the washed gravel; and
 - (iii) Is flushed with water or is completely replaced, as necessary to comply with the track out threshold set forth in Rule 403.
- (2) **Loading, Unloading, and Transferring**
The operator of an existing permanent or temporary facility/operation shall use dust suppressants or other dust control methods at each emission source during loading, unloading, or transferring activities of materials as necessary to meet the performance standards in subparagraph (d)(1)(A).
- (3) **Conveyor**
The operator of a facility/operation using a conveyor shall apply dust suppressants or other dust control methods at the conveyor including all transfer points where materials are released as necessary to meet the performance standards in subparagraph (d)(1)(A).
- (4) **Crushing Equipment**
The operator of a facility/operation conducting crushing activities of materials shall use baghouses to control PM10 emissions. Alternatively, the operator may apply dust suppressants or other dust control methods at the crusher including all discharge points as necessary to meet the performance standards in subparagraph (d)(1)(A).
- (5) **Screening Equipment**
The operator of a facility/operation conducting outdoor screening activities of materials shall use enclosed screening equipment that is equipped with a baghouse. Alternatively, the operator may apply dust suppressants or other dust control methods at the screening equipment including all discharge points during such activities as necessary to meet the performance standards in subparagraph (d)(1)(A).
- (6) **Storage Piles**
 - (A) The operator of a facility/operation shall maintain in a stabilized condition the entire surface area of the open storage piles of materials, except for areas of the piles that are actively disturbed during the loading and/or unloading activities. Alternatively, the operator may:
 - (i) store materials in a silo or a bunker;

- (ii) maintain at least two feet of freeboard from the highest portion of the piles; and
 - (iii) for the bunker, stabilize the sides of the pile that are not shielded by non-porous walls.
 - (B) At the end of each work day in which loading or unloading activities of materials were performed, the operator of a facility/operation shall re-apply dust suppressants to re-stabilize disturbed areas of the piles.
 - (C) The operator of a facility/operation shall not allow any open storage piles of materials to be greater than eight feet height if such piles are located within 300 feet of off-site occupied buildings or houses. Alternatively, the operator of a facility/operation shall operate a water irrigation system to maintain in a stabilized condition the entire surface of the piles.
- (7) Internal Roads
 - (A) Unpaved Haul Roads
 - (i) The operator of a facility/operation shall apply chemical stabilizers on the internal unpaved haul roads so that the surface is maintained in a stabilized condition.
 - (ii) The operator of a facility/operation shall post signs at the two ends of the internal unpaved haul roads, stating that haul trucks shall use these roads unless traveling to the maintenance areas.
 - (B) Unpaved Non-Haul Roads and Parking and Staging Areas

The operator of a facility/operation shall apply chemical stabilizers on such unpaved roads and parking and staging areas so that the surface is maintained in a stabilized condition, or apply a gravel pad that meets the criteria set forth in subparagraph (d)(1)(E) on the entire unpaved non-haul road and/or the parking and staging areas.
 - (C) Paved Roads
 - (i) The operator of a facility/operation with a minimum of 60 aggregate and/or mixer trucks exiting the facility on any day shall sweep the internal paved roads with a street sweeper by the end of each production work shift.

- (ii) The operator of a facility/operation with less than 60 aggregate and/or mixer trucks exiting the facility on any day shall sweep the internal paved roads with a street sweeper by the end of every other work day. On the days that the roads are not swept, the operator shall apply water as necessary to comply with subparagraph (d)(1)(A) on at least 100 feet of paved roads, or the entire length of paved roads leading to an exit to public paved roads, if such roads are less than 100 feet long.
- (iii) Sweepers that are purchased after December 3, 2004 shall meet the criteria of PM10-efficient Rule 1186-certified sweepers.
- (iv) The operator of a new facility/operation shall use Rule 1186-certified-sweepers to sweep the internal paved roads.

(8) Track-Out

- (A) The operator of a facility/operation and the drivers must take all reasonable steps to ensure that all loads on aggregate trucks are leveled and maintained with at least 6 inches of freeboard, and that the load is stabilized by applying dust suppressants in sufficient quantities so that the performance standards in subparagraph (d)(1)(A) are met, unless the driver tarps or suitably covers the load prior to entering paved public roads or prior to the use of a rumble grate and/or wheel washer.
- (B) The operator of a facility/operation must post signs at the exits of the facility to require all loads to comply with the requirements in subparagraph (d)(8)(A).
- (C) Effective December 3, 2005, the operator of a facility/operation not covered under subparagraph (d)(8)(D) shall install and utilize a rumble grate, a wheel washer, or a truck washer in accordance with the following:
 - (i) The rumble grate, the wheel washer, or the truck washer shall be located no less than 30 feet prior to each exit that is used by aggregate and/or mixer trucks and leading to a paved public road;

- (ii) The operator must ensure that all aggregate and mixer trucks leaving the facility go through the rumble grate, the wheel washer, or the truck washer;
 - (iii) The operator shall post a sign by the rumble grate, the wheel washer, or the truck washer to designate the speed limit to 5 miles per hour for using such control equipment; and
 - (iv) If the internal road from the rumble grate, the wheel washer, or the truck washer to any paved public road is not paved, the operator shall apply a gravel pad that meets the criteria set forth in subparagraph (d)(1)(E) to such roads.
 - (v) An operator is not subject to clause (d)(8)(C)(i) if he can demonstrate to the Executive Officer, by July 1, 2005, that there is not adequate space for 30 feet of roadway and that a rumble grate, a wheel washer, or a truck washer at a shorter distance will be adequate to prevent track out of dust to the public road. The operator of a new, temporary facility/operation shall provide such demonstration to the Executive Officer prior to the beginning of its operation.
- (D) Effective December 3, 2005, the operator of a new permanent facility/operation with land size in excess of 25 acres or with a designed daily throughput of 750 tons, and the operator of an existing permanent facility/operation with a minimum of 60 aggregate and/or mixer trucks exiting the facility on any day shall install and utilize a rumble grate and a wheel washer in accordance to the following:
- (i) The rumble grate and the wheel washer shall be located no less than 30 feet prior to each exit that is used by aggregate and/or mixer trucks and leading to a paved public road. The rumble grate shall be located within 10 feet from the wheel washer.
 - (ii) The operator must ensure that all aggregate and mixer trucks leaving the facility go through the rumble grate first and then, the wheel washer.

- (iii) The operator shall post a sign by the rumble grate to designate the speed limit to 5 miles per hour for traveling over the rumble grate and wheel washer.
 - (iv) The operator shall pave the internal roads from the rumble grate and the wheel washer to the facility exits leading to paved public roads.
 - (v) The operator must ensure that all aggregate and mixer trucks stay on the internal paved roads between the wheel washer and the facility exits leading to paved public roads.
 - (vi) An operator is not subject to clause (d)(8)(D)(i) if he can demonstrate to the Executive Officer, by July 1, 2005, that there is not adequate space for 30 feet of roadway and that a rumble grate and a wheel washer at a shorter distance will be adequate to prevent track out of dust to the public road. The operator of a new, permanent facility/operation shall provide such demonstration to the Executive Officer prior to the beginning of its operation.
- (E) The operator of a facility/operation shall provide the “Fugitive Dust Advisory” information prepared by the District to the aggregate and/or mixer truck company and/or broker at least once each calendar year.
- (9) The operator of a new permanent facility/operation shall comply with all requirements set forth in this rule and apply Best Available Control Technology required by the Executive Officer.
- (10) New and/or modified equipment shall comply with 40 CFR Part 60, Subpart I and/or 40 CFR Part 60, Subpart OOO as appropriate.
- (e) Recordkeeping:
The operator of a facility/operation shall keep the following records on-site for 3 years, or 5 years for Title V facility, and make such records available to the Executive Officer upon request:
- (1) Records of watering and sweeping schedule for internal paved roads;
 - (2) Records of aggregate and/or mixer trucks exiting the facility;
 - (3) Records of “Fugitive Dust Advisory” information distribution;

- (4) Records of new equipment initial start-up and/or existing equipment start-up after a repair to fix an equipment breakdown if seeking exemption pursuant to subparagraphs (h)(1)(B) and/or (h)(1)(C);
 - (5) Records of scheduled maintenance activities if seeking exemption pursuant to subparagraph (h)(1)(A);
 - (6) Records of aggregate materials that meet the descriptions in subparagraphs (h)(2)(A) and (h)(2)(B); and
 - (7) Records of operating days if seeking exemption pursuant to subparagraph (h)(10)(D).
- (f) Test Methods
- The following test methods shall be used to determine compliance with this rule:
- (1) SCAQMD Opacity Test Method No. 9B
 - (2) The Stabilized Surface Test Method included in the SCAQMD Rule 403 Implementation Handbook.
- (g) Additional Requirements Triggered by Recurrent Violation:
- (1) The operator of an existing facility located within 500 meters of off-site occupied buildings or houses or a sensitive receptor, who accrues three or more validated notices of violation for causing or allowing fugitive dust emissions exceeding the opacity limits in clauses (d)(1)(A)(i) as measured by the test methods in (f), or a visible fugitive dust plume exceeding 100 feet in any direction, issued on separate days for violations from the same emission source at the facility in any continuous twelve month period (“recurrent violations”) starting from December 3, 2005 shall, within 30 days of the third notice of violation being validated, submit an emission reduction plan to the Executive Officer that meets the following requirements:
 - (A) The plan must propose additional emission control measures sufficient to remedy the causes of the recurrent violations and prevent future violations; and
 - (B) It must provide for implementation of the specified additional control measures at the earliest practicable date.
 - (2) The Executive Officer shall approve the emission reduction plan within 30 days of receipt of a complete plan if it is determined that implementation will likely remedy the causes of the recurrent violations. The Executive

Officer may impose additional conditions in the plan if it is determined necessary to remedy the causes of the recurrent violations, however, the Executive Officer may not require, as a condition to approving an emission reduction plan under this paragraph, an operator to implement control measures that are economically or technologically infeasible, that do not directly address the cause of the recurrent violations, or that require the operator to take responsibility for the conduct of a third party over whom the operator has no legal control. A disapproval or conditional approval of a plan by the Executive Officer may be appealed to the Hearing Board.

- (3) The Executive Officer shall disapprove any plan that does not demonstrate a substantial likelihood of preventing violations in the future. If a plan is disapproved, the responsible party shall submit a revised plan which cures the defects within 30 days of receipt of notice of disapproval.

(h) Exemptions

- (1) The following activities will be exempt from requirements set forth in subparagraph (d)(1)(A):
 - (A) The first 8 hours of the new equipment initial start-up and the first 2 hours of the equipment start-up after a repair to fix an equipment breakdown or after a maintenance activity scheduled at least 48 hours in advance by the operator of a facility.
 - (B) Blasting operations.
- (2) During high winds, the operator of a facility/operation will be exempt from the requirements in subparagraph (d)(1)(A) if:
 - (A) All activities, including aggregate excavation, production, loading and unloading activities, and material transport, are ceased, except for dust controls as required by District rules; or
 - (B) All excavation and earthmoving operations, except for underwater dredging and the transporting of dredged materials to the surge pile, and aggregate production (but not loading or transport) are ceased, provided:
 - (i) dust controls as required by District rules are applied; and
 - (ii) unpaved roads have had chemical stabilizers applied prior to the wind event, or where unpaved roads have not had

- chemical stabilizers applied, water is applied twice per hour during active operations; and
- (iii) within fifteen (15) minutes of each loading activity, water is applied to un-stabilized areas of open storage piles that will be actively disturbed during loading; or
- (C) The only activities being conducted at ready-mixed concrete or hot mix asphalt facilities are those activities that produce materials for use in construction projects which are being paved or poured during high winds, provided that dust controls as required by District rules are applied.
- (3) Scalping screens will be exempt from the enclosure required in paragraph (d)(5).
 - (4) The operator of a facility/operation is exempt from the use of chemical stabilizers for internal unpaved roads if the use of applicable chemical dust suppressants on those specific unpaved roads violates the rules and/or regulations of the local Water Quality Control Board or other government agency. Alternatively, the operator of a facility/operation may use water, proving that:
 - (A) Water is used in sufficient quantity and frequency on those specific internal unpaved roads so that the surface is maintained in a stabilized condition; and
 - (B) The operator notifies the Executive Officer in writing 30 days prior to the use of water and demonstrates that the use of chemical was not allowed on those specific unpaved roads.
 - (5) Empty haul trucks traveling to and from maintenance areas are exempt from the requirement to use internal unpaved haul roads if they travel on internal unpaved non-haul roads that comply with the requirement in subparagraph (d)(7)(B).
 - (6) The unpaved non-haul roads will be exempt from the requirement in subparagraph (d)(7)(B) if such roads are used less than twice a day, and signs are posted on such roads to restrict speed limit to 15 miles per hour and to restrict traffic to such vehicles only.
 - (7) Carry-back that is generated by the tunnel feed will be exempt from the requirement set forth in subparagraph (d)(1)(C).
 - (8) Truck trimming areas are exempt from the requirement in subparagraph (d)(1)(C).

- (9) Facilities where aggregate trucks are not used to carry aggregate or related materials to and off the facility property are exempt from the requirements in paragraph (d)(8).
- (10) The following are not required to install and operate a wheel washer:
 - (A) Facilities that have their internal roads all paved and with the exception of returned products, their aggregate or related materials metered directly to a ready-mix or hot mix asphalt truck. The facilities may accept returned products and are still qualified for the exemption from a wheel washer. The facilities are instead required to have a rumble grate or a truck washer and comply with subparagraph (d)(8)(C).
 - (B) Facilities with less than 5 acres in land size and handle recycled asphalt and recycled concrete exclusively, provided the facility installs a rumble grate, comply with clauses (d)(8)(C)(i) through (d)(8)(C)(iii), and applies a gravel pad that meets the criteria set forth in subparagraph (d)(1)(E) on the entire unpaved non-haul roads leading to a paved public road.
 - (C) Facilities that pave a minimum of ¼ mile from the rumble grate to the facility exit leading to a paved public road.
 - (D) Facilities that are infrequent mining operations, provided they install a rumble grate and apply a gravel pad that meets the criteria set forth in subparagraph (d)(1)(E) for a distance of no less than 100 feet from the rumble grate to the facility exit leading to a paved public road, and keep records in accordance with paragraph (e)(6). The facility shall inform the District in the case that they operate more than 52 days per year based on the average of a rolling 3 year period after December 3, 2004. In this case, the facility shall comply with the requirements set forth in paragraph (d)(8).
- (11) The operator of a facility/operation is exempt from using the test methods set forth in paragraph (f)(2) for the demonstration of the surface stabilization of open storage piles where 90% of their volume contain materials that are larger than ½ inch product, providing such piles meet the performance standards in subparagraph (d)(1)(A).

(i) Alternative Control Options

In lieu of using dust suppressants, the operator of a facility/operation may submit for approval by the Executive Officer and the U.S. Environmental Protection Agency a plan for achieving equivalent emission reductions through alternative control measures.