AIR POLLUTION CONTROL DISTRICT COUNTY OF SAN DIEGO

PROPOSED NEW RULE 55 – FUGITIVE DUST CONTROL

WORKSHOP REPORT

A workshop notice was mailed or e-mailed to all identified individuals, building industry associations, and government agencies in San Diego County that may be subject to proposed new Rule 55 – Fugitive Dust Control. Notices were also provided to the California Air Resources Board (ARB) and the San Diego Regional Water Quality Control Board.

The workshop was held on March 3, 2009, and was attended by 20 people. Written comments were received after the workshop. The comments and Air Pollution Control District (District) responses are as follows:

1. WORKSHOP COMMENT

How will the rule be enforced?

DISTRICT RESPONSE

With the exception of track-out/carry-out onto public roads, the rule specifies a standard of no visible emissions crossing a property boundary for more than 3 minutes in a 60 minute period. Inspectors responding to a complaint, for example, will determine by direct observation whether this standard is being violated, and if so, take appropriate enforcement action. For track-out/carry-out, the rule requires specific measures to "minimize" track-out/carry-out, and clean-up of the roadway if it occurs. An inspector will determine if these measures are being implemented, and if not, determine appropriate compliance action.

2. WORKSHOP COMMENT

What are the penalties for failing to comply with the rule?

DISTRICT RESPONSE

The amount of a fine will depend on individual circumstances of the violation. Maximum penalties and circumstances to be considered in determining the fine amount are governed by State law (Health and Safety Code Section 42400 et seq.).

3. WORKSHOP COMMENT

Unlike fugitive dust control rules of other California air districts, the proposed rule does not specify a distance of track-out that triggers the clean-up requirement.

DISTRICT RESPONSE

That is correct. The proposed rule specifies that track-out/carry-out must be "minimized" using the applicable specified measures, and removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. By comparison, some other districts further require immediate clean-up of track-out/carry-out when it extends beyond a specified distance.

4. WORKSHOP COMMENT

If a non-compliant street sweeper is used, will the operator, owner, or someone else receive the Notice of Violation?

DISTRICT RESPONSE

The operator, owner, or both could receive a Notice of Violation.

5. WORKSHOP COMMENT

There may be contractors or agencies for which the purchase of compliant street sweepers would be a financial hardship. The District should consider allowing a two-year period for obtaining a compliant street sweeper.

DISTRICT RESPONSE

The District disagrees. The District has surveyed many businesses and cities, and has yet to find one that does not already use compliant street sweepers. Therefore, the District will not be delaying compliance with this provision. It should be noted that the rule does not take effect until 6-months after the date of adoption by the Air Pollution Control Board. In addition, operators/owners may petition for a temporary variance from the District's Hearing Board, if necessary.

6. WORKSHOP COMMENT

Our company constructs many linear projects, spread out over long distances. It would be difficult for us to comply with the provision requiring street sweeping every 24 hours for

Workshop Report Rule 55

continuous operations, without purchasing more street sweeping equipment. Can the rule be written to be flexible on this requirement?

DISTRICT RESPONSE

The requirement, as currently proposed, is considered feasible based on similar and more stringent requirements of other California air districts, and therefore will not be amended. Further, the proposed provision is more lenient than the existing State law requirement to remove materials immediately (California Vehicle Code Section 23113).

7. WORKSHOP COMMENT

The term "visible roadway dust" is ambiguous, since dirt may still be visible after the roadway has been swept.

DISTRICT RESPONSE

The rule's definition of "visible roadway dust" includes the phrase "which can be removed by a vacuum sweeper, or a wet sweeper under normal operating conditions." Therefore, dirt that is still visible after a sweeper has been used under normal operating conditions is not included in the definition and would not trigger a violation. The operator should consider this if he/she chooses another clean-up method, such as sweeping by hand-held appliance.

8. WORKSHOP COMMENT

The track-out/carry-out measures specified in provision (d)(2) may not constitute all possible cleanup methods. This provision should be amended to add "not limited to the following methods".

DISTRICT RESPONSE

The District agrees. The rule will be amended to add language allowing measures that are of equivalent effectiveness to those listed.

9. WORKSHOP COMMENT

Are the requirements for removal of roadway track-out typically specified by public agencies in their contracts with construction contractors?

DISTRICT RESPONSE

Yes, our research suggests this is usually indicated clearly in such contracts.

10. WORKSHOP COMMENT

The rule does not address windy conditions. Can you include a provision to suspend the rule when the wind speed is above 15 mph?

DISTRICT RESPONSE

The District cannot include the requested language. Activities which cause excessive visible dust emissions during windy periods should be mitigated or temporarily suspended to avoid a violation.

11. WORKSHOP COMMENT

The rule applies to "active" operations. However, are disturbed, inactive sites subject to violation during high winds, even if they are not active?

DISTRICT RESPONSE

Yes. The rule was intended to prevent wind-generated dust from both active and inactive disturbed sites. The rule will be amended to clarify that it applies to previously active, but currently inactive sites as well as active sites.

12. WORKSHOP COMMENT

Can the rule be changed to be sensitive to possible future water rationing?

DISTRICT RESPONSE

The rule allows operators/owners to choose the most cost-effective dust prevention measures. If there is an alternative more economical than water, assuming it were rationed, then the operator is free to use it without the need for a specific rule provision.

13. WORKSHOP COMMENT

Will the District be maintaining a list of recommended chemical dust suppressant products?

DISTRICT RESPONSE

The District will not be endorsing or recommending particular chemical dust suppressants. However, there is considerable information on the internet regarding the environmental impacts and effectiveness of different products. Sources include the U.S. Environmental Protection Agency (http://www.epa.gov/esd/cmb/pdf/dust.pdf), and individual states (e.g., Washington: www.ecy.wa.gov/pubs/96433.pdf) and cities (e.g., Albuquerque: www.cabq.gov/airquality/fugitivedustcontrol.html).

14. WRITTEN COMMENT

The rule does not address public dirt roads, off-road recreation, and agricultural operations as sources of fugitive dust. These should be covered by the rule also.

DISTRICT RESPONSE

The District has initially focused on construction/demolition sites to address the largest source of fugitive dust in the region, as well as the largest source of air quality complaints received by the District. The District may consider addressing other sources of fugitive dust in future rule development. Further, all sources of air pollution, including fugitive dust sources identified in the comment, are prohibited from creating a public nuisance, pursuant to existing Rule 51 (Nuisance).

15. WRITTEN COMMENT

In provision (d)(1), Airborne Dust Beyond the Property Line, the 10% opacity threshold is difficult for a layperson to understand and measure.

DISTRICT RESPONSE

The District agrees. The intent of the 10% opacity standard was to regulate visible dust emissions. The rule will be amended to change the standard to "visible dust emissions" since this term is more widely understood.

16. WRITTEN COMMENT

Is it correct that the rule does not apply to mineral industries with APCD permits? If so, this should be clarified by adding the following to the Exemptions section:

(7) Activities such as grading, excavation, loading, transporting, crushing, cutting, planing, shaping or ground breaking that occur at stationary sources which have valid San Diego APCD permits and are subject to applicable fugitive dust rules (Rule 50, Rule 51, site specific dust opacity conditions, etc.).

Workshop Report Rule 55

DISTRICT RESPONSE

Mineral facilities holding a District permit are not subject to this rule, except when a mineral industry facility undertakes a construction project. The rule is clarified by adding an exemption in subsection (b)(7).

17. WRITTEN COMMENT

The rule as written could be construed to apply to military munitions training activity. A few minor changes to provision (c)(4) would remove the ambiguity:

- (1) After the words "preparatory to or", delete the words "related to the" and insert the words "for the purpose of";
- (2) Change the word "alteration" to "altering";
- (3) Change the word "rehabilitation" to "rehabilitating";
- (4) Delete the word "demolition", and insert the words "razing, tearing down, breaking to pieces"; and
- (5) Change the words "improvement of" to "improving".

DISTRICT RESPONSE

The rule will be amended to incorporate the suggested clarifications.

18. ARB COMMENT

A requirement should be added to prevent dust from spilling or being blown out from outbound trucks carrying bulk materials.

DISTRICT RESPONSE

Although the California Vehicle Code (Section 23114) already prohibits spilling aggregate materials onto a roadway, the suggested provision will be added to the rule requirements for track-out/carry-out.

RA:RR:AH:jlm 04/03/09

RULE 55 FUGITIVE DUST CONTROL

(Adopted (date of adoption); Effective (6 months from date of adoption))

(a) APPLICABILITY

Except as provided in Section (b), the provisions of this rule shall apply to any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas. Activities subject to this regulation are also subject to the applicable requirements of Rule 50 (Visible Emissions) and Rule 51 (Nuisance).

(b) **EXEMPTIONS**

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

- (1) Noncommercial construction or demolition activities in support of any structure designed for and used exclusively as a dwelling for not more than four families;
- (2) Emergency operations conducted during and in response to life-threatening situations, or in conjunction with any officially declared disaster or state of emergency;
- (3) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and/or sewer during periods of unplanned service outages and emergency disruptions;
- (4) Any active operation, open storage pile, or <u>inactive</u> disturbed <u>surface</u> area for which the owner/operator can demonstrate that necessary fugitive dust preventive or mitigating actions are in conflict with the California or federal Endangered Species Acts, or a local, state, or federal water quality requirement;
- (5) Explosive blasting operations. However, any other activities capable of generating fugitive dust emissions and performed in conjunction with explosive blasting, such as vehicle transport of materials produced by blasting operations, are not exempt from complying with the provisions of this rule or other applicable rules;
 - (6) Abrasive blasting operations regulated by Rule 71 (Abrasive Blasting)-;
 - (7) Activities subject to an Air Pollution Control District permit to operate;

(8) Permanent unpaved roads.

(c) **DEFINITIONS**

For the purpose of this rule, the following definitions shall apply:

- (1) "Active Operation" means any construction or demolition activity capable of generating fugitive dust. This includes but is not limited to, earth-moving activities, and heavy- and light-duty vehicular movement on disturbed surface areas or on unpaved roads.
- (2) "Bulk Materials" means any material which can emit fugitive dust when stored, disturbed, or handled, and is un-packaged. Bulk material includes, but is not limited to, sand, gravel, soil, aggregate material, and other organic or inorganic particulate matter.
- (3) "Commercial" means work conducted for financial compensation by other than a tenant or property owner.
- (4) "Construction or Demolition Activity" means any on-site activity preparatory to or related to the building, alteration, rehabilitation, demolition or improvement of property means any on-site activity preparatory to or for the purpose of building, altering, rehabilitating, raising, tearing down, breaking into pieces, or improving property, including, but not limited to, the following activities: grading, excavation, loading, transporting, crushing, cutting, planing, shaping or ground breaking.
- (5) "Disturbed Surface Area" means a portion of the earth's surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emissions of fugitive dust. This definition excludes those areas that have:
 - (i) Been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;
 - (ii) Been paved or otherwise covered by a permanent structure; or
 - (iii) Established a vegetative ground cover equivalent to at least 70 percent of the background coverage for nearby undisturbed areas.

- (65) "Dust" means minute solid particles released into the air by natural forces or by mechanical processes including, but not limited to: crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, and sweeping means as defined in Rule 2.
- (76) "Earth-moving Activities" means activities that include, but are not limited to, grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing bulk materials from open storage piles, or soil mulching.
 - (87) "Emergency" means an immediate threat to human health or property.
- (98) "Erosion" means the movement and deposition of land surface materials by water or wind primarily as a result of human activities.
- (9) "Inactive Disturbed Area" means a portion of the earth's surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emissions of fugitive dust. This definition excludes those areas that have:
 - (i) Been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;
 - (ii) Been paved or otherwise covered by a permanent structure; or
 - (iii) Established a ve getative ground cover equivalent to at least 70% percent of the background coverage for nearby undisturbed areas.
- (10) "Open Storage Pile" means any accumulation of bulk material with five percent or greater silt content 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. Silt content level is assumed to be five percent or greater unless a person can show, by sampling and analysis in accordance with ASTM Method C-136 or other equivalent method approved in writing by the California Air Resources Board, that the silt content is less than five percent.
- (11) "Owner/operator" means any person who owns, leases, operates, controls, or supervises any activity subject to this rule or any person who owns, leases, operates, controls, or supervises the site at which any activity subject to this rule occurs, or both.

- (12) "Particulate Matter" means as defined in Rule 2 any finely divided material which exists as a solid or liquid at standard conditions, excluding uncombined water.
- (13) "Paved Road" means an improved street, highway, alley, public way, or easement that is covered by concrete, asphaltic concrete, fresh or recycled asphalt, or rubberized asphalt, excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic.
- (14) "**Permanent Unpaved Road**" means any unsealed or dirt roadway that is not covered by concrete, asphaltic concrete, fresh or recycled asphalt, or rubberized asphalt, and which is designed and intended to remain unsealed and uncovered indefinitely. This definition excludes public or private roads undergoing construction or resurfacing.
- (15) "Person" means as defined in Rule 2 any individual, firm, association, organization, partnership, business trust, corporation, company, contractor, supplier, installer, user or owner, or any state or local government agency or public district and any officer or employee thereof, or the federal government and any officers or employees thereof to the extent authorized by federal law, or any other entity whatsoever which is recognized by law as the subject of rights and duties.
- (16) "Property Line" means the boundaries of an area in which either a person causing the fugitive dust emissions or a person allowing such emissions has the legal control or possession. This may include all or portions of a legal parcel or parcels as defined by the San Diego County Assessor.
- (17) "Public Roadway" means a roadway under the jurisdiction of any federal, State, County, municipal or other governmental or quasi-governmental agencies.
- (1817) "Track-Out/Carry-Out" means any bulk materials that adhere to and agglomerate on the exterior surfaces of motor vehicles and/or equipment (including tires), or are inadvertently carried out, and that fall onto a paved road, creating visible roadway dust.
- (1918) "Visible Dust Emissions" means any solid particulate matter that is visually detectable in the air without the aid of instruments other than corrective lenses.
- (2019) "Visible Roadway Dust" means any sand, soil, dirt, or other solid particulate matter which is visible upon paved public road surfaces and which can be removed by a vacuum sweeper, or a wet sweeper under normal operating conditions.

(d) STANDARDS

- (1) **Airborne Dust Beyond the Property Line:** No person shall engage in construction or demolition activity subject to this rule in a manner that discharges <u>visible dust emissions</u> into the atmosphere beyond the property line <u>dust emissions</u> of 10% opacity or greater for a period or periods aggregating more than 3 minutes in any 60 minute period.
- (2) **Track-Out/Carry-Out:** Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out-shall:
 - (i) be minimized by the use of any of the following or equally effective track-out/carry-out and erosion control measures that apply to the project or operation: track-out grates or gravel beds at each egress point, wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and <u>for outbound transport trucks</u>, <u>using secured tarps or cargo covering</u>, watering, or treating of transported material; and
 - (ii) be removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry-out, only PM10-efficient street sweepers certified to meet the most current South Coast Air Quality Management District Rule 1186 requirements shall be used. The use of blowers for removal of track-out/carry-out is prohibited under any circumstances.