

CHAPTER 5

REDUCTION OF FUGITIVE DUST

- **SUGGESTED GOAL, OBJECTIVES AND POLICIES/STRATEGIES**

REDUCTION OF FUGITIVE DUST

Fugitive dust is a generic term used to describe 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. Fugitive dust can vary in size and composition, depending on the location, wind direction, time of the day, and the time of season for its source. The AQMD includes two air basins that exceed State and federal ambient air quality standards for PM₁₀ (fine particulate matter less than 10 microns in diameter). Studies indicate that approximately one-third of the South Coast basin's ambient PM₁₀ concentrations and over ninety percent of Coachella Valley's ambient PM₁₀ levels are a result of fugitive dust.

AQMD regulates fugitive dust via several district rules. For example, Rule 403 (Fugitive Dust) requirements are applicable to the South Coast Air District and to the Coachella Valley portion of the Salton Sea Air Basin. The purpose of Rule 403 is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources. Rule 403 requires implementation of control measures to prevent, reduce, or mitigate fugitive dust emissions and includes a performance standard that prohibits visible emissions from crossing any property line. Under Rule 403, large operations (projects greater than 50 acres and/or more than 5,000 cubic yards of daily earth-movement) are required to notify the AQMD of the project location and implement Table 2, and, if necessary Table 3, control measures and maintain recordkeeping. Rule 403 can be viewed or downloaded at: <http://www.aqmd.gov/rules/reg/reg04/r403.pdf> Forms for large operation submittals can be viewed or downloaded at: http://www.aqmd.gov/comply/Forms/403N_8_2004.doc.

Rule 403 requires all projects and activities in the South Coast Air Basin to control dust generation, with specified control measures for large operations of 50 acres or more. In spite of these basin-wide requirements, ground disturbances, geological conditions, or meteorological conditions may result in dust generation that constitutes a chronic public nuisance, or would prevent attainment of federal PM₁₀ standards. These limited areas may warrant additional dust control efforts on the part of local governments. A local dust control policy that requires preparation and approval of a dust control plan for all projects seeking a grading permit in such limited areas may be needed to supplement current Rule 403 requirements. Local governments may also choose to apply specific control measures crafted to address their chronic public nuisance dust problems or PM₁₀ exceedances.

Coachella Valley (Palm Springs area) local governments have adopted dust control ordinances that require approval of a dust control plan prior to local government issuance of grading permits. The Coachella Valley's response to its elevated levels of PM₁₀ illustrates how local dust control plans can work to address areas with elevated

particulate levels. AQMD and Coachella Valley local government staff have developed a guidance handbook to assist persons preparing and reviewing dust control plans. A copy of the model dust control ordinance for Coachella Valley is provided in Appendix D. AQMD Rule 403.1 (Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources) is a companion regulation to Rule 403 that is only applicable to fugitive dust sources in the Coachella Valley. Rule 403.1 establishes special requirements for Coachella Valley fugitive dust sources under high-wind conditions and requires AQMD approval of dust control plans for sources not subject to local government ordinances (e.g., school districts). AQMD compliance staff ensures compliance with Rules 403 and 403.1 to complement the fugitive dust control programs developed by local Coachella Valley governments. Rule 403.1 can be viewed or downloaded at: <http://www.aqmd.gov/rules/reg/reg04/r403-1.pdf>.

SUGGESTED GOAL, OBJECTIVES AND POLICIES/STRATEGIES

Goal 4 Achieve ambient levels of particulate matter that meet state and federal clean air standards

Objective 4.1 Reduce the amount of fugitive dust that is re-entrained into the atmosphere from unpaved areas, parking lots and construction sites

Suggested Policies/Strategies Related to Controlling Fugitive Dust Emissions:*

AQ 4.1.1 Where fugitive dust is causing a chronic public nuisance or the air quality is in exceedance of the PM₁₀ standards consider adopting a dust control policy that requires preparation and approval of a dust control plan. Please contact AQMD for the most recent local PM₁₀ air quality information.

AQ 4.1.2 Adopt by ordinance, a regulation, after considering small business impacts that controls the use of leaf blowers in areas with sensitive receptors.

AQ 4.1.3 Encourage vegetative thinning or mowing for weed abatement activities to minimize wind-blown dust.

AQ 4.1.4 Identify and create a control plan for areas within the jurisdiction that are prone to wind erosion of soil and take measures to prevent illegal off-highway vehicle (OHV) use.

AQ 4.1.5 Require conditions in a zoning or conditional use permit to require fugitive dust controls and compliance mechanisms for stationary sources (landfills, composting facilities, aggregate facilities, etc.).

-
- AQ 4.1.6** Ensure compliance with California Vehicle Code section 23113 provisions intended to prevent deposition and rapid removal of material from any highway or street.
- AQ 4.1.7** Adopt incentives, regulations, and/or procedures to reduce paved road dust emissions through targeted street sweeping of roads subject to high traffic levels and silt loadings.
- AQ 4.1.8** Pave currently unpaved roads and parking lots or establish and enforce 15 mile per hour speed limits on low-use unpaved roads as permitted under California Vehicle Code section 22365.
- AQ 4.1.9** Adopt incentives or procedures to limit dust from agricultural lands and operations.
- AQ 4.1.10** Consider the suspension of all grading operations, not including dust control actions, at construction projects when the source represents a public nuisance or potential safety hazard due to reduced visibility on streets surrounding the project.
- AQ 4.1.11** Cooperate with local, regional, state and federal jurisdictions to better control fugitive dust from stationary, mobile and area sources.
- AQ 4.1.12** Collaborate with the transportation agencies, utilities, railroads, etc., to minimize fugitive dust during construction and maintenance activities.
- AQ 4.1.13** Encourage, and support stricter state and federal legislation for vehicles that spill debris on roadways.
- AQ 4.1.14** Ensure that vehicles do not transport aggregate or similar material upon a highway unless the material is stabilized or covered, in accordance with state law and AQMD regulations.
- AQ 4.1.15** Encourage vegetation or chemical stabilization for disturbed land for phased construction projects.

*Potential funding for these policies has been identified in Appendix E.