

# Placer County Air Pollution Control District Fugitive Dust Controls and Construction Equipment Emission Controls

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## F.1 Rule 228—Fugitive Dust

Placer County Air Pollution Control District's (PCAPCD's) Rule 228, Fugitive Dust, is applicable to the entirety of Placer County and addresses fugitive dust generated by construction and grading activities and by other land use practices including recreational activities. Commercial agricultural operations are exempt from this rule. Any dust problems created by commercial agricultural operations, as defined by Placer County ordinances, will be addressed in cooperation with the Placer County Agricultural Commissioner and, when necessary, under State and District nuisance regulations.

For areas to be disturbed of any size, Rule 228, Fugitive Dust, Section 400 establishes standards to be met by activities generating fugitive dust. Minimum dust control requirements, summarized below, are to be initiated at the start and maintained throughout the duration of construction (Placer County Air Pollution Control District n.d.).

401.1 – Unpaved areas subject to vehicle traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered. In geographic ultramafic rock units, or when naturally occurring asbestos, ultramafic rock, or serpentine is to be disturbed, the cover material shall contain less than 0.25% asbestos as determined using the bulk sampling method for asbestos in Section 502.

401.2 – The speed of any vehicles and equipment traveling across unpaved areas must be no more than 15 miles per hour unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust exceeding Ringelmann 2 or visible emissions from crossing the project boundary line.

401.3 – Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile.

401.4 – Prior to any ground disturbance, including grading, excavating, and land clearing, sufficient water must be applied to the area to be disturbed to prevent emitting dust exceeding Ringelmann 2 and to minimize visible emissions from crossing the boundary line.

401.5 – Construction vehicles leaving the site must be cleaned to prevent dust, silt, mud, and dirt from being released or tracked offsite.

401.6 – When wind speeds are high enough to result in dust emissions crossing the boundary line, despite the application of dust mitigation measures, grading and earthmoving operations shall be suspended.

401.7 – No trucks are allowed to transport excavated material offsite unless the trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments, and loads are either;

401.7.1 Covered with tarps; or

401.7.2 Wetted and loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than six inches from the top and that no point of the load extends above the top of the cargo compartment.

402 – A person shall take actions such as surface stabilization, establishment of a vegetative cover, or paving, to minimize wind-driven dust from inactive disturbed surface areas.

In addition, Rule 228 requires that all projects must minimize and clean-up the track-out of bulk material or other debris onto public paved roadways. For one acre and less disturbed surface area in areas that are not “Most Likely” to contain naturally-occurring asbestos (NOA) according to the NOA Hazard maps on the District’s website, and where NOA has not been found, only these minimum dust measures must be met (i.e., no Dust Control Plan is required).

For projects where greater than 1 acre of the site’s surface will be disturbed, a Dust Control Plan (DCP) must be submitted to the District for approval prior to the start of earth-disturbing activities if this requirement has been established as a Condition of Approval of a discretionary permit.

## F.2 Standard Mitigation Measures for Construction Equipment

PCAPCD also requires all construction projects within its jurisdiction to implement the following PCAPCD standard mitigation measures for construction equipment (Placer County Air Pollution Control District 2017).

1. 1a. Prior to approval of Grading or Improvement Plans, (whichever occurs first), on project sites greater than one acre, the applicant shall submit a Construction Emission/Dust Control Plan to the Placer County Air Pollution Control District. If the District does not respond within twenty (20) days of the plan being accepted as complete, the plan shall be considered approved. The applicant shall provide written evidence, provided by the District, to the local jurisdiction (city or county) that the plan has been submitted to the District. It is the responsibility of the applicant to deliver the approved plan to the local jurisdiction. The applicant shall not break ground prior to receiving District approval, of the Construction Emission/Dust Control Plan, and delivering that approval to the local jurisdiction issuing the permit.
- 1b. Include the following standard note on the Grading Plan or Improvement Plans, or as an attached form: The prime contractor shall submit to the District a comprehensive inventory (e.g., make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower or greater) that will be used in aggregate of 40 or more hours for the construction project. If any new equipment is added after submission of the inventory, the prime contractor shall contact the District prior to the new equipment being utilized. At least three business days prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the District with the anticipated construction timeline including start date, name, and phone number of the property owner, project manager, and on-site foreman.
- 1c. Prior to approval of Grading or Improvement Plans, whichever occurs first, the applicant shall provide a written calculation to the District for approval demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average of 20% of NO<sub>x</sub> and 45% of DPM reduction as compared to CARB statewide fleet average emissions. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
2. Include the following standard note on the Improvement/Grading Plan, or as an attached form: During construction the contractor shall utilize existing power sources (e.g., power poles) or

- clean fuel (e.g., gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators.
3. Include the following standard note on the Improvement/Grading Plan, or as an attached form: During construction, the contractor shall minimize idling time to a maximum of 5 minutes for all diesel powered equipment.
  4. Prior to the approval of grading or improvement plans, the applicant shall retain a qualified geologist or geotechnical engineer to conduct additional geologic evaluations of the project site to determine the presence or absence of naturally-occurring asbestos onsite. These evaluations shall include the project site and each offsite parcel where infrastructure construction or installation would occur. These evaluations shall be completed and submitted to the District prior to issuance of any grading and/or improvement plans.
  5. If naturally-occurring asbestos is located onsite, the following measures shall be implemented prior to the approval of a grading/improvement plans:
    - a. The applicant shall prepare an Asbestos Dust Mitigation Plan pursuant to CCR Title 17 Section 93105 (“Asbestos Airborne Toxic Control Measures for Construction, Grading, Quarrying, and Surface Mining Operations”) and obtain approval by the Placer County APCD. The Plan shall include all measures required by the State of California and the Placer County APCD.
    - b. If asbestos is found in concentrations greater than 5 percent, the material shall not be used as surfacing material as stated in state regulation CCR Title 17 Section 93106 (“Asbestos Airborne Toxic Control Measure-Asbestos Containing Serpentine”). The material with naturally-occurring asbestos can be reused at the site for sub-grade material covered by other non-asbestos-containing material
    - c. Each subsequent individual lot developer shall prepare an Asbestos Dust Mitigation Plan when the construction area is equal to or greater than one acre.
    - d. The project developer and each subsequent lot seller must disclose the presence of this environmental hazard during any subsequent real estate transaction processes. The disclosure must include a copy of the CARB pamphlet entitled “Asbestos-Containing Rock and Soil –What California Homeowners and Renters Need to Know,” or other similar fact sheet.
  6. Signs shall be posted in the designated queuing areas of the construction site to remind off-road equipment operators that idling is limited to a maximum of 5 minutes.
  7. Idling of construction related equipment and construction related vehicles is not recommended within 1,000 feet of any sensitive receptor.

If the estimated ozone precursor emissions from the actual fleet for a given construction phase are expected to exceed the PCAPCD threshold of significance after the standard mitigation measures are factored into the estimation, additional diesel emission control strategies may be recommended to further reduce these impacts. The control strategies should include the following but are not limited to (Placer County Air Pollution Control District 2017):

- Further reducing emissions by expanding the use of Tier 3 and Tier 4 off-road and 2010 on-road compliant engines;
- Repowering equipment with the cleanest engines available; and
- Installing California Verified Diesel Emission Control Strategies.

## F.3 References Cited

Placer County Air Pollution Control District. 2017. *CEQA Air Quality Handbook, Appendix C*. Available: <http://www.placerair.org/~media/apc/documents/planning/land%20use%20and%20ceqa/ceqahandbook/appendixc2017ceqahandbook.pdf?la=en>. Accessed: May 29, 2018.

Placer County Air Pollution Control District. n.d. *Fugitive Dust Control Requirements Fact Sheet*. Available: <http://www.placerair.org/~media/apc/documents/dustcontrol/fugitivedustrequirementsfactsheet.pdf?la=en>. Accessed: May 29, 2018.