

## APPENDIX C. Recommended Construction Mitigation Measures

The following mitigation measures are provided as general guidance for the types of measures that could potentially be proposed for land use projects. Please note that these measures may or may not be applicable to any specific project. This appendix is intended to be utilized as a “menu” of potential measures.

1. Maintain all construction equipment properly according to manufacturer's specifications.
2. Fuel all off-road and portable diesel powered equipment with CARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).
3. Comply with the State off-Road Regulation by using diesel construction equipment meeting CARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines.
4. Comply with the State On-Road Regulation by using on-road heavy-duty trucks that meet the CARB's Tier 3 standard for on-road heavy-duty diesel engines.
5. All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the 5 minute idling limit.
6. Diesel idling within 1,000 feet of sensitive receptors is not permitted.
7. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors.
8. Use Electrified equipment when feasible.
9. Substitute gasoline-powered in place of diesel-powered equipment, where feasible.
10. Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.
11. Require contractors to repower equipment with the cleanest engines available.
12. Require construction equipment use installed California Verified Diesel Emission Control Strategies. These strategies are listed at:  
<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>
13. Require the contractor to prepare a dust control plan when the disturbed area is more than one (1) acre.
14. Reduce the amount of the disturbed area where possible.
15. Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency is required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible.
16. All dirt stock-pile areas should be sprayed daily as needed.
17. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible, with building pads laid as soon as possible after grading unless seeding or soil binders are used.

18. All fugitive dust mitigation measures shall be shown on grading and building plans.

19. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.

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**The followings are samples of construction mitigation measures used in the project's environmental documents. Please note that mitigation measure language may be different than those listed here based on any agreement between the local jurisdictions, project developers, and the District.**

1. 1a. Prior to the 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 begin the construction prior to receiving District approval of the Construction Emission / Dust Control Plan, and delivering that approval to the local jurisdiction.

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 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 the 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. The following link shall be used to calculate compliance with this condition and shall be submitted to the District as described above: [Construction Emissions Mitigation](#).

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 the 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 if it is 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. 📄 (pdf)
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 are not recommended within 1,000 feet of any sensitive receptor.

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