

# Sacramento Metropolitan Air Quality Management District (the District) Construction Air Quality Mitigation Plan Protocol

## PLANNING PHASE

### **WHEN?**

When the air quality analysis demonstrates that a proposed project's construction emissions may exceed the District's 85 pounds per day NO<sub>x</sub> threshold of significance, CEQA requires "all feasible mitigation" to be applied.

### **WHAT? Feasible Mitigation On-Site Construction Mitigation**

The District's standard on-site construction mitigation helps developers establish compliance with the "all feasible mitigation" requirement. The standard construction mitigation language, below, is added to the environmental document and becomes part of the approval of the project:

#### *Category 1: Reducing NO<sub>x</sub> emissions from off-road diesel powered equipment*

The project shall provide a plan for approval by [DERA, City of x, SMAQMD, etc] 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 20 percent NO<sub>x</sub> reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction; and

The project representative shall submit [to DERA, City of x, SMAQMD, etc.] a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.

**and:**

#### *Category 2: Controlling visible emissions from off-road diesel powered equipment*

The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and [DERA, City of x, SMAQMD, etc.] shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supercede other SMAQMD or state rules or regulations.

### **Off-Site Construction Mitigation Fee**

If the projected construction related emissions for a project are not reduced to the District's threshold of significance (85 pounds/day of NO<sub>x</sub>) by the application of the standard on-site construction mitigation, then an off-site construction mitigation fee should be applied. This fee is used by the District to purchase off-site emissions reductions. This is done primarily through the

District's Heavy Duty Incentive Program through which select owners of heavy duty equipment in Sacramento County can repower or retrofit their old engines with cleaner engines or technologies.

## **PROCESS**

The jurisdiction adds the standard on-site construction mitigation language into the environmental document, project approval conditions, and in the Mitigation Monitoring and Reporting Program (MMRP) for the project.

The jurisdiction (or the agent for the jurisdiction) calculates the off-site mitigation fee and includes it, if applicable, in the environmental document, project approval conditions, and in the MMRP. The District has developed a fee calculation spreadsheet which is available for use by municipalities and agents. The fee calculation takes into account the excess construction emissions, the number of days those emissions are emitted, the cost to reduce emissions, and the administrative cost for the District to run the mitigation program. The current acceptable cost to reduce one ton of emissions is \$16,000 (based on the cost effectiveness formula established in California's Carl Moyer Incentive Program).

## **TIMING NOTES**

The fee calculation needs to be performed prior to the publication of the EIR or MND. This way, the fee can be included in the environmental document as a specific mitigation. Payment of that fee should be required to be remitted to the District before the issuance of a grading permit or approval of improvement plans.

## **CONSTRUCTION PHASE**

### **WHEN?**

Prior to mobilizing equipment to begin construction activities, the project proponent and/or construction company must contact the District and provide the equipment list for District review.

### **WHY?**

To insure the equipment complies with the standard on-site construction mitigation requirements.

## **PROCESS**

The proponent sends in a list of their off-road mobile construction equipment (>50 horsepower and used more than 40 hours on the job) to the District. The proponent may use the model equipment list which can be downloaded at <http://www.airquality.org/ceqa/index.shtml#construction>. Through the use of the spreadsheet and the construction mitigation calculator (also on the website), the District and proponent can determine if the proposed equipment fleet will result in the 20% reduction in NOx and 45% reduction in particulate emissions. If the equipment fleet does not meet the reduction requirements, the District will work with the proponent to develop an equipment fleet that will meet the reduction requirements. The District will then endorse the list and send a letter of endorsement to the proponent and to the jurisdiction (the endorsement letter along with the equipment list and construction mitigation calculator run is called the Construction Mitigation Plan).

## **TIMING NOTES**

The review and endorsement process must be completed prior to the jurisdiction issuing a grading permit or approving improvement plans. The jurisdiction can put a hold on any site work until proof of District endorsement is provided or can stop work if at any time the contractor is out of compliance.