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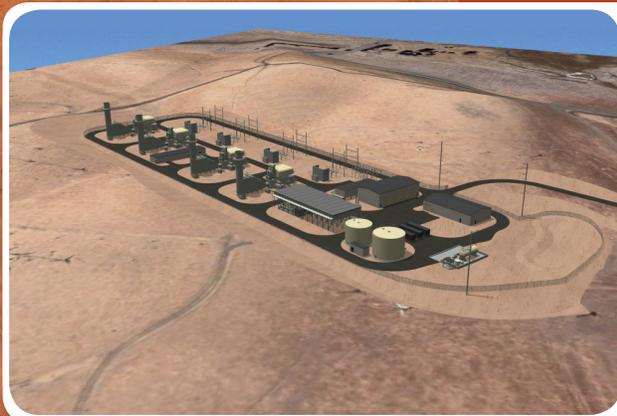
# APPLICATION FOR CERTIFICATION

## AIR QUALITY CONSTRUCTION MITIGATION PLAN



SUBMITTED TO THE  
**California Energy Commission**

FOR THE  
**Mariposa Energy Project**  
(09-AFC-03C)



SUBMITTED BY



**Mariposa Energy, LLC**

TECHNICAL ASSISTANCE BY



**CH2MHILL**

**FEBRUARY 2011**

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*Draft*  
AQ-SC2

**Air Quality  
Construction Mitigation Plan  
for the  
Mariposa Energy Project  
(09-AFC-03C)**

Prepared for  
**Mariposa Energy, LLC**

February 2011

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# Acronyms and Abbreviations

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AQCMM	Air Quality Construction Mitigation Manager
AQCMP	Air Quality Construction Mitigation Plan
BBID	Byron-Bethany Irrigation District
BMPs	best management practices
CEC	California Energy Commission
COC	Condition of Certification
CPM	Compliance Project Manager
hp	horsepower
Mariposa Energy	Mariposa Energy, LLC
MCR	monthly compliance report
MEP	Mariposa Energy Project
SWPPP	Stormwater Pollution Prevention Plan

## SECTION 1

# Introduction

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This report presents the Air Quality Construction Mitigation Plan (AQCMP) for the Mariposa Energy Project (MEP). MEP is a 200-megawatt, natural-gas-fired, simple-cycle generating facility developed and owned by Mariposa Energy, LLC (Mariposa Energy). The AQCMP is being submitted to comply with Condition of Certification (COC) AQ-SC2, as set forth in the California Energy Commission's (CEC) Supplemental Staff Assessment for MEP, dated December 2010. This plan may be amended if Condition AQ-SC2 is different in the Final Commission Decision, expected to be issued in May 2011.

The purpose of the AQCMP is to detail the steps to be taken and the reporting requirements necessary to ensure compliance with COCs AQ-SC3, AQ-SC4, and AQ-SC5. This AQCMP addresses all components of the Project and will be amended if necessary to account for new information or changing conditions.

The following appendixes are provided with this report:

- A CEC Conditions of Certification
- B Equipment Survey Form
- C Resumes of AQCMM and AQCMM Delegate

# Project Overview

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## 2.1 Project Description

MEP will be a nominal 200-megawatt, simple-cycle generating facility consisting of four General Electric Energy LM6000 PC-SPRINT natural-gas-fired combustion turbine generators and associated equipment. The facility will be located in northeastern Alameda County, California, on approximately 10 acres of a 158-acre parcel that consists of non-irrigated grazing land, a former wind-turbine development, and an existing cogeneration power plant. The MEP site is approximately 7 miles northwest of Tracy, 7 miles east of Livermore, 6 miles south of Byron, and approximately 2.5 miles west of the community of Mountain House. Figure 2-1 shows the proposed project location including nearby sensitive receptors and residences.

Temporary construction facilities will include a 9.2-acre worker parking and laydown area immediately east of the MEP site and a 1-acre water supply pipeline parking and laydown area located at the Byron-Bethany Irrigation District (BBID) headquarters facility on Bruns Road. Equipment staging for the construction of the gas line will take place in the 9.2-acre laydown area. The temporary laydown area for the water supply pipeline will be located within an existing maintenance yard at BBID's headquarters. The existing gravel road from Bruns Road provides access to the Byron Cogen Power Plant. A portion of this gravel road will be improved and used during construction and operation of MEP. Improvements include widening the road from approximately 10 feet to about 20 feet, and adding an asphalt layer. Access to the water supply pipeline corridor will be from existing roads including Bruns Road, a portion of the onsite main access road, and a BBID agricultural dirt road.

In addition to the new power plant and associated equipment, MEP includes the following offsite facilities:

- A new 580-foot-long, 8-inch, natural gas pipeline connection with Pacific Gas & Electric's existing high-pressure gas line
- A new 1.8-mile-long, 10-inch water supply pipeline connection with BBID's Canal 45
- An approximately 0.7-mile-long, single-circuit, three-phase, 230-kilovolt transmission line interconnection

Short-term fugitive dust emissions will be generated during installation of the project features identified above. Most of the construction activities are expected to be completed within 10 months of the 14-month construction phase. The remaining construction period will be used for contractor mobilization, turbine commissioning activities, and contractor demobilization. Figure 2-2 shows the project boundaries and location of proposed construction activities.

## 2.2 Project Schedule

A project schedule showing construction activities is presented in Table 2-1. Construction mobilization is expected to start in May 2011, assuming regulatory approvals are obtained prior to this date. Project construction is expected to last approximately 14 months.

TABLE 2-1  
Project Construction Schedule

<b>Event Description</b>	<b>Expected Dates</b>
Anticipated construction start date	May 2011
Start construction of the project boundaries, clearing and grubbing, and sediment/wildlife fence installation.	May 2011
Start construction of laydown, parking, and construction offices	May 2011
Start power plant construction	June 2011
Start transmission line construction	Second Quarter 2011
Start natural gas line construction	Second Quarter 2011
Start water supply pipeline construction	First Quarter 2011
Facility startup and commissioning activities	First Quarter 2012
Commercial operation	Third Quarter 2012

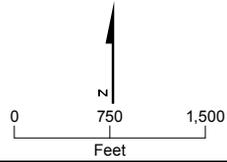




**LEGEND**

-  ACCESS ROAD
-  NATURAL GAS PIPELINE ROUTE
-  TRANSMISSION LINE ROUTE
-  WATER SUPPLY PIPELINE ROUTE
-  CONSTRUCTION LAYDOWN/PARKING AREA
-  WATER SUPPLY PIPELINE LAYDOWN AREA
-  PROJECT SITE

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.



**FIGURE 2-2**  
**PROJECT SITE**  
 MARIPOSA ENERGY PROJECT  
 ALAMEDA COUNTY, CALIFORNIA

## SECTION 3

# Project Participants

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The Air Quality Construction Mitigation Manager (AQCMM) or AQCMM delegate will be responsible for directing and documenting compliance with COCs AQ-SC3, AQ-SC4, and AQ-SC5 (see Sections 4 and 5). A copy of AQ-SC3, AQ-SC4, and AQ-SC5 are included in Appendix A. The AQCMM and AQCMM delegates:

- Shall have full access to all areas of construction on the project site and linear facilities
- Shall have the authority to stop any or all construction activities
- Shall have the authority to direct more intensive dust mitigation measures as required by AQ-SC4 (See Section 5)
- May coordinate the implementation of best management practices (BMPs) for wind erosion control in conjunction with the implementation of the Stormwater Pollution Prevention Plan (SWPPP) and Drainage, Erosion, and Sediment Control Plan
- Will be responsible for the preparation of the air quality portion of the monthly compliance reports (MCR) as outlined in Section 6.

The AQCMM will submit the MCR to the Construction Compliance Manager for submittal to the CEC Compliance Project Manager (CPM).

Mariposa Energy's engineering, procurement, and construction contractor is identified as the General Contractor in Table 3-1. Under direction of the AQCMM, the General Contractor will be responsible for the implementation of the fugitive dust and diesel emission control methods outlined in Section 4. The General Contractor will report potential dust mitigation compliance issues to the AQCMM and the Construction Compliance Manager.

The CEC CPM oversees compliance with the CEC COCs for the project. The CEC CPM is also responsible for processing post-certification changes, documenting and tracking compliance filings, and ensuring that compliance files are maintained and accessible.

The contact information for the AQCMM, the Project Owner, CEC CPM, Construction Compliance Manager, and the General Contractor are included in Table 3-1.

TABLE 3-1  
Mariposa Energy Project Personnel and Contact Information

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**Project Owner**

Mariposa Energy, LLC  
333. S. Grand Avenue  
Los Angeles, CA 90071

**Contact Information**

Chris Curry, Senior Manager – Development  
Phone: (213) 346-2134  
Mobile: (213) 435-3301  
Email: c.curry@dgc.us.com

**General Contractor**

LG Constructors, Inc.  
9189 South Jamaica Street  
Englewood, CO 80112

**Contact Information**

Les Mathine, Senior Project Manager  
Phone: (720) 286-5426  
Mobile: (303) 882-8445  
Email: Les.Mathine@ch2m.com

**Project Owner’s Onsite Construction Manager**

Mariposa Energy, LLC  
333. S. Grand Avenue  
Los Angeles, CA 90071

**Contact Information**

James Spicer, Assistant Director – Eng. & Const.  
Phone: (213) 346-2135  
Mobile: (213) 505-4902  
Email: j.spicer@dgc-us.com

**Project Owner’s Construction Compliance Manager**

Mariposa Energy, LLC  
333. S. Grand Avenue  
Los Angeles, CA 90071

**Contact Information**

Chris Curry, Senior Manager – Development  
Phone: (213) 346-2134  
Mobile: (213) 435-3301  
Email: c.curry@dgc.us.com

**AQCMM**

LG Constructors, Inc.  
9189 South Jamaica Street  
Englewood, CO 80112

**Contact Information**

Brad Allender, Resident Engineer  
Phone: (510) 587-7627  
Mobile: (510) 508-6943  
Email: bradley.allender@ch2m.com

**CEC CPM**

1516 Ninth Street, MS 15  
Sacramento, California 95814

**Contact Information**

Craig Hoffman  
Phone: (916) 654-4781  
Email: choffman@energy.state.ca.us

**BAAQMD General Air Pollution Hotline**

939 Ellis Street  
San Francisco, CA 94109

**Contact Information**

Phone: (800) 334-6367

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# Emission Control Methods

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## 4.1 Fugitive Dust Mitigation Measures

The following fugitive dust mitigation measures will be implemented during project construction in order to comply with COC AQ-SC3:

- a. All unpaved roads and disturbed areas in the project and linear construction sites shall be watered as frequently as necessary to comply with the dust mitigation objectives in Section 5 of this document. The frequency of watering may be either reduced or eliminated during periods of precipitation.
- b. No vehicle shall exceed 15 miles per hour within the construction site.
- c. The construction site entrances shall be posted with visible speed limit signs.
- d. All construction equipment vehicle tires shall be inspected and washed as necessary to be free of dirt prior to entering paved roadways.
- e. Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.
- f. All unpaved exits from the construction site shall be graveled or treated to prevent track-out to public roadways.
- g. All construction vehicles shall enter the construction site through the treated entrance roadways unless an alternative route has been submitted to and approved by the CPM.
- h. Construction areas adjacent to any paved roadway shall be provided with sandbags or other measures as specified in the SWPPP to prevent run-off to roadways.
- i. All paved roads within the construction site shall be swept at least twice daily (or less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris.
- j. At least the first 500 feet of any public roadway exiting from the construction site shall be swept as needed on days when construction activity occurs or on any other day when dirt or run-off from the construction site is visible on the public roadways.
- k. All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered or treated with appropriate dust-suppressant compounds.
- l. All vehicles that are used to transport solid bulk material on public roadways and that have the potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks to provide at least two feet of freeboard.

- m. Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all construction areas that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.

## 4.2 Diesel-fueled Engine Control

The following diesel-fueled engine control measures will be implemented during project construction in order to comply with COC AQ-SC5:

- a. All diesel-fueled engines used in the construction of the facility shall have clearly visible tags, issued by the onsite AQCMM, showing that the engine meets the conditions set forth herein.
- b. All construction diesel engines with a rating of 50 horsepower (hp) or higher shall meet, at a minimum, the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, section 2423(b)(1), unless certified by the onsite AQCMM that such engine is not available for a particular item of equipment. This good faith effort shall be documented with signed written correspondence by the appropriate construction contractors, along with documented correspondence with at least two construction equipment rental firms. In the event that a Tier 3 engine is not available for any offroad equipment larger than 50 hp, that equipment shall be equipped with a Tier 2 engine or an engine that is equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides and diesel particulate matter to no more than Tier 2 levels, unless certified by engine manufacturers or the onsite AQCMM that the use of such devices is not practical for specific engine types. For purposes of this condition, the use of such devices is not practical for the following, as well as other, reasons:
  - 1. There is no available retrofit control device that has been verified by either the California Air Resources Board or U.S. Environmental Protection Agency to control the engine in question to Tier 2 equivalent emission levels and either a Tier 1 engine or the highest level of available control is being used; or
  - 2. The construction equipment is intended to be on site for 5 days or less.
  - 3. The CPM may grant relief from this requirement if the AQCMM can demonstrate a good faith effort to comply with this requirement and that compliance is not possible.
  - 4. Equipment owned by specialty subcontractors may be granted an exemption, for single equipment items on a case-by-case basis, if it can be demonstrated that extreme financial hardship would occur if the specialty subcontractor had to rent replacement equipment, or if it can be demonstrated that a specialized equipment item is not available by rental.

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- c. The use of a retrofit control device may be terminated immediately, provided that the CPM is informed within 10 working days of the termination and the AQCMM demonstrates that one of the following conditions exists:
    - 1. The use of the control device is excessively reducing the normal availability of the construction equipment due to increased downtime for maintenance, and/or reduced power output due to an excessive increase in back pressure.
    - 2. The control device is causing or is reasonably expected to cause significant engine damage.
    - 3. The control device is causing or is reasonably expected to cause a significant risk to workers or the public.
    - 4. Any other seriously detrimental cause which has the approval of the CPM prior to implementation of the termination.
  - d. All heavy earth-moving equipment and heavy duty construction-related trucks with engines meeting the requirements of (b) above shall be properly maintained and the engines tuned to the engine manufacturer's specifications.
  - e. All diesel heavy construction equipment shall not idle for more than 5 minutes, to the extent practical.
  - f. Construction equipment will employ electric motors when feasible.

## SECTION 5

# Fugitive Dust Response Requirements

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The AQCMM or an AQCMM delegate shall monitor all construction activities for visible dust plumes with the potential to be transported off the project site 200 feet beyond the centerline of the construction of linear facilities or within 100 feet upwind of any regularly occupied structures not owned by the Project Owner.

In the event that the mitigation measures outlined in Section 4.1 of this plan are not effective in reducing the offsite visible dust plumes, the following fugitive dust response measures will be implemented during project construction in order to comply with COC AQ-SC4:

Step 1: Within 15 minutes of making such a determination, the AQCMM or delegate shall direct more intensive application of the existing best mitigation methods for reducing wind erosion such as additional watering and/or more frequent street sweeping.

Step 2: If Step 1 specified above fails to result in adequate mitigation within 30 minutes of the original determination, the AQCMM or delegate shall direct implementation of additional methods of dust suppression such as the construction of temporary wind breaks, application of soil stabilizers, application of plastic sheeting or a geotech fabric, and/or temporarily halt construction.

## SECTION 6

# Reporting Requirements

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MCRs will be prepared by the AQ-CMM or AQ-CMM delegate and submitted to the Construction Compliance Manager for transmittal to the CEC CPM. The CPM will also be notified if any of the mitigation measures are not providing a level of protection that is appropriate for the impact that is occurring. The CPM will be notified of recommendations, if any, for alternative mitigation measures.

The first monthly report will be prepared following the start of soil disturbance activities. Subsequent reports will be prepared throughout the construction period. The monthly compliance reports will include the following information to meet the requirements of COC AQ-SC3 (reporting frequency in parentheses):

- Identify wind erosion control techniques employed during the month, for example, installation of wind breaks, daily watering, long-term soil stabilization measures, re-vegetation, or other approved BMPs. (monthly)
- Identify placement of speed limit signage. (first MCR and each month signage changes after the first month)
- Identify the location(s) of haul truck wheel washing stations and gravel ramps, and other “track-out” BMPs within the project site and along the project linears. (first MCR and each month BMP locations change after the first month)
- Identify paved road sweeping activities within the project site and extending 500 feet onto any public roadway. If sweeping activities are suspended due to precipitation, this should also be reported. (monthly)
- Copies of any complaints filed with the Project Owner or the Bay Area Air Quality Management District in relation to project construction. (monthly)

Each monthly compliance report will include the following information to meet the requirements of COC AQ-SC5 (reporting frequency in parentheses):

- A Construction Equipment Survey Form for each off-road diesel engine used on-site with a rating of 50 hp or higher. (monthly)
- For all diesel engines 50 hp or higher that do not meet the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines, documentation from at least two construction equipment rental firms is required to verify that such an engine is not available for that particular piece of equipment (see COC AQ-SC5, a(1-4) and c(1-4)). (monthly)
- A letter from each equipment owner indicating the equipment has been properly maintained. (monthly)

The Construction Equipment Survey Form is included in Appendix B.

**Appendix A**  
**Excerpt from the CEC Conditions of Certification**  
**AQ-SC1 through AQ-SC5**

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# Proposed Conditions of Certification

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## Staff-Recommended Conditions of Certification

Staff proposes the following conditions of certification (identified as the **AQ-SCx** series of conditions) to provide CEQA mitigation for the project.

**AQ-SC1** Air Quality Construction Mitigation Manager (AQCMM): The project owner shall designate and retain an on-site AQCMM who shall be responsible for directing and documenting compliance with conditions **AQ-SC3**, **AQ-SC4** and **AQ-SC5** for the entire project site and linear facility construction. The on-site AQCMM may delegate responsibilities to one or more AQCMM delegates. The AQCMM and AQCMM delegates shall have full access to all areas of construction on the project site and linear facilities, and shall have the authority to stop any or all construction activities as warranted by applicable construction mitigation conditions. The AQCMM and AQCMM delegates may have other responsibilities in addition to those described in this condition. The AQCMM shall not be terminated without written consent of the compliance project manager (CPM).

**Verification:** At least 60 days prior to the start of ground disturbance, the project owner shall submit to the CPM for approval the name, resume, qualifications, and contact information for the on-site AQCMM and all AQCMM delegates. The AQCMM and all delegates must be approved by the CPM before the start of ground disturbance.

**AQ-SC2** Air Quality Construction Mitigation Plan (AQCMP): The project owner shall provide, for approval, an AQCMP that details the steps to be taken and the reporting requirements necessary to ensure compliance with conditions of certification **AQ-SC3**, **AQ-SC4** and **AQ-SC5**.

**Verification:** At least 60 days prior to the start of any ground disturbance, the project owner shall submit the AQCMP to the CPM for approval. The CPM will notify the project owner of any necessary modifications to the plan within 30 days from the date of receipt. The AQCMP must be approved by the CPM before the start of ground disturbance.

**AQ-SC3** Construction Fugitive Dust Control: The AQCMM shall submit documentation to the CPM in each monthly compliance report (MCR) that demonstrates compliance with the following mitigation measures for purposes of preventing all fugitive dust plumes from leaving the project site and linear facility routes. Any deviation from the following mitigation measures shall require prior CPM notification and approval.

- a. All unpaved roads and disturbed areas in the project and linear construction sites shall be watered as frequently as necessary to comply with the dust mitigation objectives of **AQ-SC4**. The frequency of watering may be either reduced or eliminated during periods of precipitation.

- b. No vehicle shall exceed 15 miles per hour within the construction site.
- c. The construction site entrances shall be posted with visible speed limit signs.
- d. All construction equipment vehicle tires shall be inspected and washed as necessary to be free of dirt prior to entering paved roadways.
- e. Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.
- f. All unpaved exits from the construction site shall be graveled or treated to prevent track-out to public roadways.
- g. All construction vehicles shall enter the construction site through the treated entrance roadways unless an alternative route has been submitted to and approved by the CPM.
- h. Construction areas adjacent to any paved roadway shall be provided with sandbags or other measures as specified in the Storm Water Pollution Prevention Plan (SWPPP) to prevent run-off to roadways.
- i. All paved roads within the construction site shall be swept at least twice daily (or less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris.
- j. At least the first 500 feet of any public roadway exiting from the construction site shall be swept as needed on days when construction activity occurs or on any other day when dirt or run-off from the construction site is visible on the public roadways.
- k. All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered or treated with appropriate dust suppressant compounds.
- l. All vehicles that are used to transport solid bulk material on public roadways and that have the potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks to provide at least two feet of freeboard.
- m. Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all construction areas that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.

**Verification:** The project owner shall include in the MCR: (1) a summary of all actions taken to maintain compliance with this condition; (2) copies of any complaints filed with the air district in relation to project construction; and (3) any other documentation deemed necessary by the CPM and AQCMM to verify compliance with this condition. Such information may be provided via electronic format or disk at the project owner's discretion, as approved by the CPM.

**AQ-SC4** Dust Plume Response Requirement: The AQCMM or an AQCMM delegate shall monitor all construction activities for visible dust plumes. Observations of visible dust plumes with the potential to be transported off the project site, 200 feet beyond

the centerline of the construction of linear facilities, or within 100 feet upwind of any regularly occupied structures not owned by the project owner indicate that existing mitigation measures are not providing effective mitigation. The AQCMM or delegate shall then implement the following procedures for additional mitigation measures in the event that such visible dust plumes are observed.

Step 1: Within 15 minutes of making such a determination, the AQCMM or delegate shall direct more intensive application of the existing mitigation methods.

Step 2: If Step 1 specified above fails to result in adequate mitigation within 30 minutes of the original determination, the AQCMM or delegate shall direct implementation of additional methods of dust suppression.

Step 3: If Step 2 specified above fails to result in effective mitigation within one hour of the original determination, the AQCMM or delegate shall direct a temporary shutdown of the activity causing the emissions. The activity shall not restart until the AQCMM or delegate is satisfied that appropriate additional mitigation or other site conditions have changed so that visual dust plumes will not result upon restarting the shutdown source. The project owner may appeal to the CPM any directive from the AQCMM or delegate to shut down an activity, provided that the shutdown shall go into effect within one hour of the original determination, unless overruled by the CPM before that time.

**Verification:** The AQCMP shall include a section detailing how additional mitigation measures will be accomplished within the specified time limits.

**AQ-SC5** Diesel-Fueled Engine Control: The AQCMM shall submit to the CPM, in the MCR, a construction mitigation report that demonstrates compliance with the following mitigation measures for purposes of controlling diesel construction-related emissions. Any deviation from the following mitigation measures shall require prior CPM notification and approval.

- a. All diesel-fueled engines used in the construction of the facility shall have clearly visible tags, issued by the on-site AQCMM, showing that the engine meets the conditions set forth herein.
- b. All construction diesel engines with a rating of 50 hp or higher shall meet, at a minimum, the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, section 2423(b)(1), unless certified by the on-site AQCMM that such engine is not available for a particular item of equipment. This good faith effort shall be documented with signed written correspondence by the appropriate construction contractors, along with documented correspondence with at least two construction equipment rental firms. In the event that a Tier 3 engine is not available for any off-road equipment larger than 50 hp, that equipment shall be equipped with a Tier 2 engine or an engine that is equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides (NO<sub>x</sub>) and diesel particulate matter (DPM) to no more than Tier 2 levels, unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not

practical for specific engine types. For purposes of this condition, the use of such devices is “not practical” for the following, as well as other, reasons:

1. There is no available retrofit control device that has been verified by either the California Air Resources Board or U.S. Environmental Protection Agency to control the engine in question to Tier 2 equivalent emission levels and either a Tier 1 engine or the highest level of available control is being used; or
  2. The construction equipment is intended to be on site for five days or less.
  3. The CPM may grant relief from this requirement if the AQCMM can demonstrate a good faith effort to comply with this requirement and that compliance is not possible.
  4. Equipment owned by specialty subcontractors may be granted an exemption, for single equipment items on a case-by-case basis, if it can be demonstrated that extreme financial hardship would occur if the specialty subcontractor had to rent replacement equipment, or if it can be demonstrated that a specialized equipment item is not available by rental.
- c. The use of a retrofit control device may be terminated immediately, provided that the CPM is informed within 10 working days of the termination and the AQCMM demonstrates that one of the following conditions exists:
1. The use of the control device is excessively reducing the normal availability of the construction equipment due to increased down time for maintenance, and/or reduced power output due to an excessive increase in back pressure.
  2. The control device is causing or is reasonably expected to cause significant engine damage.
  3. The control device is causing or is reasonably expected to cause a significant risk to workers or the public.
  4. Any other seriously detrimental cause which has the approval of the CPM prior to implementation of the termination.
- d. All heavy earth-moving equipment and heavy duty construction-related trucks with engines meeting the requirements of (b) above shall be properly maintained and the engines tuned to the engine manufacturer’s specifications.
- e. All diesel heavy construction equipment shall not idle for more than five minutes, to the extent practical.
- f. Construction equipment will employ electric motors when feasible.

**Verification:** The project owner shall include in the MCR: (1) a summary of all actions taken to maintain compliance with this condition; (2) a list of all heavy equipment used on site during that month, including the owner of that equipment and a letter from each owner indicating that the equipment has been properly maintained; and (3) any other documentation deemed necessary by the CPM and AQCMM to verify compliance with this condition. Such information may be provided via electronic format or disk at the project owner’s discretion, as approved by the CPM.

**Appendix B**  
**Equipment Survey Form**

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**Appendix C**  
**Resumes of AQCMM and AQCMM Delegate**

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This appendix will be provided in a later submittal.