



South Coast  
Air Quality Management District  
21865 Copley Drive, Diamond Bar, CA 91765-4182  
(909) 396-2000 • www.aqmd.gov

E-mailed: December 10, 2010  
jadams@cityofwhittier.org

December 10, 2010

Mr. Jeff Adams  
Planning Division  
13230 Penn Street  
Whittier, CA 90602

**Review of the Draft Environmental Impact Report (Draft EIR)  
for the Whittier Main Oilfield Development Project**

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document, including with an extended review period. The following comments are intended to provide guidance to the lead agency and should be incorporated into the final Environmental Impact Report (EIR) as appropriate.

Based on a review of the draft EIR the AQMD staff is concerned that the lead agency may have underestimated air quality impacts from the proposed project. Specifically, the lead agency failed to account for an increase in diesel truck and vapor emissions during facility or pipeline malfunctions. Also, AQMD staff is concerned that project emissions associated with disturbing contaminated soil at the project site are not included in the health risk assessment. In addition to the potential underestimation of air quality impacts, the lead agency has not provided sufficient mitigation to reduce the air quality impacts, health risks, and greenhouse gases associated with the project's emissions.

Pursuant to Public Resources Code Section 21092.5, please provide the AQMD with written responses to all comments contained herein prior to the adoption of the final EIR. Further, staff is available to work with the lead agency to address these issues and any other questions that may arise. Please contact Dan Garcia, Air Quality Specialist CEQA Section, at (909) 396-3304, if you have any questions regarding the enclosed comments.

Sincerely,

A handwritten signature in black ink that reads "Ian V. MacMillan".

Ian MacMillan  
Program Supervisor, CEQA Inter-Governmental Review  
Planning, Rule Development & Area Sources

Attachment

IM:DG  
LAC101006-02  
Control Number

### Construction and Test Drilling Mitigation Measures

1. Given that the lead agency's construction air quality analysis demonstrates significant air quality impacts from NOx, PM10 and PM2.5 emissions the AQMD staff recommends that the lead agency provide additional mitigation pursuant to CEQA Guidelines §15370. Specifically, AQMD staff recommends that the lead agency minimize or eliminate significant adverse air quality impacts by adding the mitigation measures provided below.
  - Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow,
  - Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site,
  - Reroute construction trucks away from congested streets or sensitive receptor areas,
  - Appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM10 generation,
  - Improve traffic flow by signal synchronization, and ensure that all vehicles and equipment will be properly tuned and maintained according to manufacturers' specifications,
  - Require the use of electricity from power poles rather than temporary diesel or gasoline power generators, and
  - Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks, soil.

Further, AQMD staff recommends that the lead agency revise Mitigation Measure AQ-1d as follows:

- All off-road diesel construction equipment shall be electrified. In the event that the use of electric off-road equipment is not feasible the operator shall ensure that any diesel powered off-road equipment meets EPA Tier 3 certified or higher better engines, or utilize other CARB-verified emission control technologies to achieve the same level of emission reduction emission standards according to the following:
  - ✓ Project Start to December 31, 2014: All offroad diesel-powered construction equipment greater than 50 hp shall meet Tier 3 offroad emissions standards. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
  - ✓ Post-January 1, 2015: All offroad diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall

achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

Also, the lead agency should consider encouraging construction contractors to apply for SCAQMD "SOON" funds. Incentives could be provided for those construction contractors who apply for SCAQMD "SOON" funds. The "SOON" program accelerates clean up of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website: <http://www.aqmd.gov/tao/Implementation/SOONProgram.htm>

#### Operational Emissions Calculations

2. In chapter 2.0 (Project Description) of the draft EIR the lead agency describes the operational activities for crude oil production from the proposed project. The lead agency indicates that the crude oil produced at the project site will be transferred to the ConocoPhillips Refinery in Wilmington by an underground pipeline. Further, the lead agency states that when the crude oil pipeline is not functioning the operator will transfer the crude oil to the ConocoPhillips Refinery in Wilmington by diesel truck, however, the emissions associated with diesel truck trips to the refinery during pipeline malfunctions or breakdowns were not included in the peak daily operational emissions impacts or the Health Risk Assessment (HRA). Therefore, AQMD staff recommends that the lead agency revise the air quality analysis and HRA to include these emissions prior to certifying the Final EIR.

#### Emissions Information

3. Upon review of the air quality data files provided in the draft EIR it appears that the lead agency quantified the project's air quality impacts based on a set of assumed emission factors for equipment that will be used to operate and construct the proposed project. For example, the lead agency assumes that the gas plant flare will emit 7.0 pounds of VOC per million standard cubic feet of natural gas (lbs/MMSCF) throughput and the wash tank will emit 0.024 pounds of VOC per kilo-gallon of crude oil (lbs/k-gal). However, the lead agency does not specify the source of the emissions factors used to calculate the project's air quality impacts. Therefore, AQMD staff recommends that the lead agency provided technical information (e.g., technical data sheets and equipment specification lists) to substantiate the emissions data used to calculate the project's air quality impacts.

#### Vapor emissions during truck loading

4. The lead agency indicates that during the test drilling phase of the proposed project and during breakdown of the crude oil pipeline (discussed in comment #2) the facility operator will transport the crude oil produced at the project site by diesel trucks.

However, it does not appear that the lead agency accounted for any potential vapors displaced during crude oil truck loading operations. Therefore, AQMD staff recommends that the lead agency revise the AQA and HRA to include emissions from potential vapors emitted at the truck loading facility.

Operational Mitigation Measures:

5. Given that the lead agency's operational air quality analysis demonstrates significant air quality impacts from NOx, PM10 and PM2.5 emissions the AQMD staff recommends that the lead agency provide additional mitigation pursuant to CEQA Guidelines §15370. Specifically, AQMD staff recommends that the lead agency minimize or eliminate significant adverse air quality impacts by adding the mitigation measures provided below.

- Restrict truck traffic on sensitive routes,
- Improve traffic flow by signal synchronization,
- Enforce truck parking restrictions,
- Develop park and ride programs,
- Prohibit truck idling in excess of five minutes, on- and off-site,
- Electrify service equipment facility,
- Electrify auxiliary power units,
- Use "clean" street sweepers during operations,
- Pave road and road shoulders,
- Provide onsite services to minimize truck traffic in or near residential areas, including, but not limited to, the following services: meal or cafeteria service, automated teller machines,
- Provide vapor recovery equipment for crude oil truck loading activities, and
- Restrict the operation to the use of 2010 and newer diesel haul trucks (e.g., crude oil transfer trucks and material delivery trucks).

Further, AQMD staff recommends that the lead agency revise Mitigation Measure AQ-2b as follows:

- All drilling engines shall be electric. In the event that the use of electric drilling engines is not feasible the operator shall ensure that any diesel powered drilling engines meet EPA Tier 3 emissions levels or higher utilize other CARB verified emission control technologies to achieve the same level of emission reductions according to the following:
  - ✓ Project Start to December 31, 2014: All offroad diesel-powered drilling equipment greater than 50 hp shall meet Tier 3 offroad emissions standards. In addition, all equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

- ✓ Post-January 1, 2015: All offroad diesel-powered drilling equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

#### Greenhouse Gas Mitigation Measures

6. Mitigation measure AQ-4 requires the project proponent to implement a program to quantify and reduce GHG emissions. However this program does not contain any performance standards, emission targets, or feasibility standards. Without these components, the mitigation measure does not have any enforceable mechanism to actually reduce GHG emissions from this project. As the 14,728 metric tons of CO<sub>2</sub>e per year from the operation of this project are considered a significant impact, the lead agency must ensure that enforceable measures are in place to reduce GHG emissions.

#### Applicable AQMD Rules and Regulations

7. As a reminder, in addition to the rules mentioned in Section 4.1 (Air Quality) of the Draft EIR, the AQMD staff recommends that compliance with Rule 1166-Volatile Organic Compound Emissions from Decontamination of Soil be addressed in the Final EIR.

#### Health Risk Assessment

8. AQMD staff found several instances of Health Risk Assessment (HRA) methods in the Draft EIR that did not coincide with standard AQMD methodology. These include:
  - Truck travel onsite was modeled as four point sources instead of a series of volume sources.
  - Onsite idling of diesel equipment and trucks did not appear to be included in the emission calculations used for the HRA.
  - Some sensitive receptors were not evaluated in the HRA, including the Ranger residence, the baseball park south of Colima road, and the trail locations located closest to the eastern well site.
  - The diesel exhaust emissions calculated in the worksheets appears to differ from the exhaust emissions used in the HARP modeling analysis.

AQMD staff requests that the lead agency revisit these procedures and revise the HRA as necessary in the Final EIR.