

## DOCKETED

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<b>Project Title:</b>	Palmdale Energy Project (Formerly Palmdale Hybrid Power Plant) - Compliance
<b>TN #:</b>	210639
<b>Document Title:</b>	EPA Region 9 Comments on the Preliminary Determination of Compliance
<b>Description:</b>	EPA Region 9 Comments on Palmdale Energy Project (PEP) Preliminary Determination of Compliance (PDOC) issued by AVAQMD
<b>Filer:</b>	Eric Veerkamp
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

March 7, 2016

Bret Banks, Air Pollution Control Officer  
Antelope Valley Air Quality Management District  
43301 Division Street, Suite 206  
Lancaster, CA 93535-4649

**RE: EPA Region 9 Comments on the Preliminary Determination of Compliance for the Palmdale Energy Project**

Dear Mr. Banks,

Thank you for the opportunity to review the Preliminary Determination of Compliance for the Palmdale Energy Project. Attached, please find the U.S. Environmental Protection Agency, Region 9 (EPA Region 9)'s comments on the proposal. We look forward to working with you and your staff to address our comments, and ensuring this project complies with all requirements under the federal Clean Air Act.

If you need additional information concerning our comments please contact Lisa Beckham in my office at [beckham.lisa@epa.gov](mailto:beckham.lisa@epa.gov) or (415) 972-3811. In addition, please contact Scott Bohning in EPA Region 9's Air Quality Analysis Office to discuss the use of inter-pollutant offsets at [bohning.scott@epa.gov](mailto:bohning.scott@epa.gov) or (415) 947-4127.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gerardo C. Rios".

Gerardo C. Rios  
Chief, Permits Office

**Attachment**

Cc: Nancy Fletcher, California Energy Commission (via email)  
Eric Veerkamp, California Energy Commission (via email)  
Tung Le, California Air Resources Board (via email)  
Chris Collins, AVAQMD (via email)  
Chris Anderson, AVAQMD (via email)

## EPA Comments on the Preliminary Determination of Compliance for the Palmdale Energy Project

### Technical Clarifications

1. **Class I Area Visibility Protection** – Projects subject to the federal nonattainment NSR program as major sources or major modifications to existing major sources are required to be evaluated for visibility protection. See AVAQMD Rule 1302(B)(v) (the local rule is based on 40 CFR 51.307(b) and (c), but may incorrectly reference 40 CFR 51.301(o)). The PDOC for the Palmdale Energy Project (PEP or Project) states that EPA has the ultimate responsibility to review visibility of Class I areas as part of the PSD permit issuance process, which is correct with respect to the pollutants for which the Project triggers PSD review by EPA. We would like to clarify that not all pollutants emitted from the Project at major source thresholds are subject to review under the PSD program. The pollutants emitted by the Project that are subject to the Federal nonattainment NSR program and regulated under the District's nonattainment NSR permit must be evaluated by AVAQMD to ensure compliance with applicable visibility protection requirements. We recommend revising the analysis to reflect this distinction.
2. **Area and Indirect Source Offsets** – The PDOC states that the California State Implementation Plan (SIP)-approved version of Rule 1309 explicitly allows for the use of area and indirect source offsets, and that such offsets will be used for PM<sub>10</sub> offsets. EPA could find no such provision in AVAQMD Rule 1309 as approved into the SIP. This rule was originally adopted by South Coast Air Quality Management District and continued to be used for implementation within Antelope Valley when the district was created, see the December 7, 1995 version of Rule 1309, as approved into the SIP on December 4, 1996. As such, EPA has not approved the use of area and indirect source offsets by sources within AVAQMD for satisfying the nonattainment NSR requirements under the federal CAA; however, we note that AVAQMD is designated at attainment/unclassifiable for the PM<sub>10</sub> National Ambient Air Quality Standard.

### Permit Conditions

3. The proposed permit conditions must require the Project to comply with LAER/BACT<sup>1</sup> at all times.
  - a. Condition 4 for the combustion turbines exempts the Project from complying with the emission limits during malfunctions. AVAQMD may not exempt equipment from complying with LAER/BACT during malfunctions.<sup>2</sup> While the permit also exempts the Project from these emission limits during startup and shutdown, this is acceptable

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<sup>1</sup> The Clean Air Act requires sources subject to nonattainment NSR to comply with the lowest achievable emission rate (LAER). AVAQMD's definition for Best Available Control Technology (BACT) is at least as stringent as LAER.

<sup>2</sup> AVAQMD Rule 430 contains affirmative defense provisions for malfunction events. However, this rule is not approved into the California SIP and cannot be relied upon for compliance with federal CAA requirements. See EPA's recent SIP Call for states with similar provisions in their SIPs at 80 FR 33839 on June 12, 2015.

because the permit contains separate limits for LAER/BACT during startup and shutdown events.

- b. Condition 4 only requires the Project's emissions to comply with pound per hour (lb/hr) limits, and does not include Federally enforceable permit conditions that ensure compliance with the corresponding LAER/BACT determinations, which are in ppmvd, at all times. For example, the permit only requires the Project to meet a NO<sub>x</sub> limit of 18.50 lb/hr limit that corresponds to the emission rate of 2.0 ppmvd when the turbine is at maximum load. The permit does not include the necessary emission limitations to ensure that at any other load, when emissions on a lb/hr-basis would be lower, the Project will comply with LAER/BACT. The permit must be revised to address this deficiency. The following is an example of revised permit condition language that would satisfactorily remedy this deficiency:
    - i. NO<sub>x</sub> as NO<sub>2</sub> – 2.0 ppmvd corrected to 15% O<sub>2</sub> and 18.50 lb/hr, based on a 1-hr average.
4. The proposed permit conditions contain source-wide limits that presumably are intended to ensure that the source does not exceed the emission rates that are being offset by the project. EPA recommends revising the condition to specify that all emissions including startup, shutdown, and malfunction are included in complying with these limits.

#### **Confidential Offset Package**

5. **Inadequate Information Provided About Offset Package.** The PDOC contains very limited information about the proposed offsets package from the Applicant that is being evaluated on the basis for the District's determinations about its adequacy. The PDOC indicates that the offsets package is "confidential" but does not explain the basis for that assertion nor does it make clear whether the District itself has made any determination concerning the confidentiality of the information. Given the lack of information provided to date concerning the offsets and the District's evaluation of their adequacy, EPA Region 9 was not provided sufficient information during this review period for us to conduct a substantive review of the proposed offsets and the District's evaluation for consistency with CAA requirements, nor would the public have information sufficient to do so. In general, NSR permit application information concerning offsets and the permitting agency's analysis of this information should be made available to EPA and to the public at the time of public comment on the proposed permit so that EPA and commenters have sufficient information to enable review and comment on the proposed permit and the District's supporting analysis. The District should explain the basis for not providing the necessary information about the offsets in the PDOC, as well as how it will ensure that information concerning the offset package and the District's analysis of the package will be made available to EPA and the public in order to afford an opportunity for adequate review and comment prior to final permit issuance. We note that Federal regulations

at 40 CFR 2.301 include a broad definition of “emission data,” which is not entitled to confidential treatment under Federal law. See also CAA section 114, 42 USC § 7414.

6. **EPA Cannot Approve the Proposed Offset Package per the District’s Rules** – AVAQMD Rule 1302(C)(5)(b)(iii)(a), while not SIP-approved, indicates that offsets for major sources located in Federal nonattainment areas (in this case, the District is a Federal ozone nonattainment area) are subject to EPA approval during the public comment period on the PDOC. The information provided in the PDOC concerning the offsets and the District’s evaluation of them is not sufficient for EPA to provide a substantive review or the approval of the proposed offsets under this District rule. Nonetheless, as discussed below, we are providing comments on the limited information provided by the AVAQMD.

#### **Comments on Offsets Information Provided in PDOC**

7. AVAQMD’s locally applicable rules vary from the currently federally enforceable rules under the California State Implementation Plan (SIP). For compliance with the nonattainment NSR program, EPA focused its review on the currently applicable federal versions of AVAQMD’s rule. The SIP-approved version of Rule 1309 – Emission Reduction Credits – contains requirements for how ERCs may be used for offsets, including:

“ERCs may be used by the owner to offset emission increases due to new or modified sources of air pollution **and to the extent allowed by federal law.**” (emphasis added)  
Rule 1309(d)

AVAQMD has not demonstrated that the offsets in the confidential offset package are consistent with federal law as (1) there is no demonstration that available ERCs exist and (2) it is not clear that the ERCs are sufficient once surplus-adjusted at the time of use.<sup>3</sup> In order to ensure consistency with Section 173(a) of the CAA, 40 CFR 51.165(a)(3) and AVAQMD Rule 1305(C)(4), whether emission reductions are available for use is based on the allowable emissions at the time the application to construct is filed. As such, AVAQMD must identify available ERCs and evaluate whether the ERCs are sufficient once adjusted to reflect current allowable emissions, and such determination should be made available for EPA and public review and comment. In addition, the SIP-approved ERC equivalency tracking system in the SJVAPCD may create significant legal obstacles to the transfer of ERCs from the SJVAPCD to the AVAQMD.

8. **Inter-pollutant Offsets** –SIP-approved Rule 1309(g) states that all inter-pollutant trading for offsets shall be subject to EPA’s review and approval. EPA is not, at this time, approving the use of inter-pollutant offsets for the Project. EPA considers the analysis needed to determine

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<sup>3</sup> For federal CAA purposes, offsets must be real, surplus, quantifiable, permanent and enforceable. Assuming the ERC’s met the real, quantifiable, permanent and enforceable criteria at the time the certificate was issued, the ERC’s to be used for a particular project must be re-evaluated to ensure they are still surplus.

whether inter-pollutant trading is acceptable to be made on a case-by-case basis, and the conclusions provided in the PDOC are based on a previous project at another location. Please contact Scott Bohning in EPA Region 9's Air Quality Analysis Office to discuss the next steps in providing a technical justification for the use of inter-pollutant offsets.

**Timing for Offsets** – Per CAA section 173, offsets required for purposes of the federal nonattainment NSR program must be federally enforceable before the final nonattainment NSR permit is issued. It is unclear, given the lack of information provided in the PDOC, whether the Applicant's offsets package actually identifies with specificity all necessary offsets. The PDOC states that AVAQMD will require the Applicant to demonstrate that sufficient federally enforceable ERCs can be obtained for the project prior to issuance of the FDOC. As worded, it is not clear that the specific offsets will in fact be federally enforceable at the time of final nonattainment NSR permit issuance. In addition, AVAQMD must make its determination that the source will comply with the Clean Air Act, and the basis for that determination, available for EPA review prior to issuance of the FDOC.

Further, the PDOC states that “[s]ufficient federally enforceable ERCs must be surrendered to the AVAQMD for the equipment before the start of construction of any part of the project for which this equipment is intended to be used.” This approach appears to be inconsistent with AVAQMD Rule 1302(C)(5)(v), which states that the offsets must be obtained prior to the commencement of construction of the new or modified facility. SIP-approved AVAQMD Rule 1309(d) makes clear that an ERC shall qualify as an offset only upon surrender of the Certificate to the District.

- 9. Inter-Basin Offsets** – The PDOC discusses how the South Coast Air Basin (SCAB) and San Joaquin Valley Air Basin (SJVAB) transport ozone (and ozone precursors) to the Mojave Desert Air Basin (MDAB), of which includes the AVAQMD. AVAQMD then relies on this information to determine that there is no technical justification for a distance ratio, other than 1:1, for offsets from the SJVAB. While we generally agree that some ozone transport occurs from the SJVAB, we disagree that AVAQMD has demonstrated that a distance ratio is not justified. AVAQMD's analysis relies on a determination of the collective transport of SCAB and SJVAB, but does not consider the degree of transport specifically from the SJVAB. Without a demonstration that transport specifically from SJVAB contributes to a violation, a distance ratio would be acceptable to account for the actual air quality benefit that would be expected to occur at the proposed source. For example, SJVAPCD, where potentially some of the ERCs will come from, requires a 1.5:1 offset distance ratio for any offsets greater than 15 miles from the stationary source. See SJVAPCD Rule 2201, Section 4.8.