apcd air pollution control district
SANTA BARBARA COUNTY

March 10, 2025
Via Email
Read Receipt Requested

Philip Brown
Pacific Coast Energy Company LP
1555 Orcutt Hill Road
Orcutt, CA 93455

Re: Conditional Approval of 2024 Air Toxics Emission Inventory Plan for Orcutt Hill and Casmalia Oil Fields – Air Toxics "Hot Spots" Information and Assessment Act (AB 2588)

Dear Philip Brown:

The Santa Barbara County Air Pollution Control District (District) has reviewed your revised Air Toxics Emission Inventory Plan (ATEIP) for inventory year 2024 dated February 2025. Based on our review of this plan, the District *conditionally approves* the revised ATEIP subject to changes noted in the attachment to this letter.

As noted in comment no. 1 of the attachment, a source test plan must be submitted by April 9, 2025. Please submit a final ATEIP, response letter and Air Toxics Emission Inventory Report (ATEIR) by September 6, 2025. The response letter should include a response to each Conditional Approval item in the attachment. In addition, for ease of review, please submit a Track Changes version of the final ATEIP that shows all changes from the revised submittal dated February 2025. See Section 3 of the District's *Guidelines for Preparing Air Toxics Emission Inventory Plans and Reports* (https://www.ourair.org/wp-content/uploads/Guidelines-for-Preparing-ATEIPs-and-ATEIRs-in-Santa-Barbara-County.pdf) for a complete list of requirements for the ATEIR. Electronic copies of the final ATEIP, ATEIR and response letter should be sent via email to MountainC@sbcapcd.org.

If you have any questions or require additional information, please contact me at (805) 979-8314 or MountainC@sbcapcd.org.

Sincerely,

Charlotte Mountain
Engineering Division

cc: Orcutt Hill and Casmalia Oil Fields Project File
Orcutt Hill and Casmalia Oil Fields Toxics File
M. Strange, M. F. Strange & Associates, Inc.
J. Mitchell, Yorke Engineering, LLC
Toxics Group
Engr Chron File

Attachment: ATEIP Conditional Approval Items

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Orcutt Hill and Casmalia Oil Fields 2024 ATEIP Conditional Approval Items

1. Source Testing: The ATEIP selected source testing as the emission quantification method for the 4-stroke rich burn engines, which must be completed prior to the ATEIR submittal. Source testing can significantly extend the timeline for completing the AB 2588 process, which may result in the Office of Environmental Health Hazard Assessment rejecting the results of the HRA. For that reason, please submit the source test plan for the 4-stroke rich burn engines as soon as possible, but no later than 30 days from the date of this letter.

2. SO_2 Emissions: Thank you for adding the SO_2 emission calculation methodology for the gaseous fuel combustion sources to the revised ATEIP. Section 3.2.2 of the revised ATEIP indicates that diesel particulate matter (DPM) is the only pollutant to be included for the diesel combustion sources, referencing Section 2.5 of the District's *Approved TAC Emission Factors*. This section states that speciated pollutants from Tier 3 and Tier 4 engines are not required. However, SO_2 is not a speciated pollutant; it is a separate criteria pollutant that also has health risk data (i.e., an acute Reference Exposure Level or REL). Furthermore, Section 2.1 of the document states that SO_2 emissions are required to be included in HRAs and references diesel fueled combustion sources. For this reason, add the SO_2 emission calculation methodology for liquid fuels shown in equations 3 and 4 of the District's *Approved TAC Emission Factors* to Section 3.2.2 of the ATEIP. Note that the annual SO_2 emissions must be quantified for inventory purposes, but will not affect the HRA results because SO_2 only has an acute REL. The hourly SO_2 emissions from diesel engines must be quantified and included in the HRA.

3. Missing Equipment: The following engines are listed in Appendix B-2 as not operational in 2024; however, the CVR submitted for the stationary source shows that these engines did operate in 2024. Updated Appendix B-2 accordingly, and add these engines to the *Source Parameters* table.

District Device ID	BSFC (Btu/bhp-hr)
4322	11000
4390	11000
4391	10500
4392	10500
4396	11000
4412	11000
4418	10500
4419	10500
4427	11000
4430	11000
8779	11000
8780	11000
8781	11000
101252	10500
4381	10500
4383	10500
4398	10500
4399	11000
4403	10500

4. FUGCE98C and FUGCE99 Emission Rates: Source IDs FUGCE98C and FUGCE99 have emission rates of 0.5 g/s entered in column Q of the *Source Parameters* table. However, according to Appendix E-13, these sources will not be grouped (i.e., there will be one source group containing just FUGCE98C and one source group containing just FUGCE99). For this reason, revise the emission rates to 1 g/s for each of these sources.

5. Duplicate Source Groups: The sources in the table below are listed under multiple group names in Appendix E-13. Delete the duplicate source groups.

Source ID(s)	Group Names in Appendix E-13
FUGKVB142	3080 and 3081
FUGKVB110	3205 and 3206
RI1, RI2	3556 and 3557
FUGKVB106, FUGKVB107, FUGKVB108, and FUGKVB109	2929 and 2930
FUGKVB93, FUGKVB94, FUGKVB95, FUGKVB97, FUGKVB96 and FUGKVB98	2937 and 2938
EL1, EL2, EL6, ELA_5, ELA_7, ELA_10, ELA_11, ELA_12, and ELA_14	2942 and 2943
FUGCLP8	105074 and 105075
FUGCLP5	112500, 112501, 112812, 112813, 112814, 113146, 386204
FUGCLP7	112828, 112829, 112830
FUGCLP4	113149 and 113150
MU1 and MU2	2868 and 2869

6. Orcutt Hill Compressor Plant Fugitives: The response to comment no. 12 in Yorke Engineering's February 17, 2025 letter indicates that footnotes should have been added to Appendix B-9g and B-9l listing all Device IDs associated with Source ID FUGCLP1. However, these footnotes were not included in the revised ATEIP. Add the footnotes or otherwise clarify that all of the following Device IDs are included in Source ID FUGCLP1: 107239, 107238, 107237, 386811, 101237, 112695, 111655, 112694, 108775, 108773, and 112696.

7. BLD_42 Height: The response to comment no. 28 in Yorke Engineering's February 17, 2025 letter indicates that the height of BLD_42 should be 7.32 m. However, the *Building Parameters* table shows a height of 4.88 m for this building. Update the building height.

8. Incorrect Source Locations: The response to comment no. 35 in Yorke Engineering's February 17, 2025 letter indicates that the locations of Source IDs CLMG12, CLMG62 and CLMG65 should have been revised. However, the submitted UTM coordinates for these sources in the *Source Parameters* table are unchanged from the original ATEIP dated September 2024. These sources do not appear to be in the correct locations, as they are not located on well pads. Update the UTM coordinates for Source IDs CLMG12, CLMG62 and CLMG65.

9. Careaga Wells and Cellars: The UTM coordinates of Careaga well 26X-31 and its corresponding cellar were changed from the original ATEIP dated September 2024 (see the table below), and Careaga well 5B-31 and its cellar were added (Source IDs CR5B31 and CLCRB531). In the revised ATEIP dated February 2025, these two wells and cellars have the same UTM coordinates. Correct the locations of these sources as necessary.

ATEIP Date	Well Source ID	Well Cellar Source ID	UTME (m)	UTMN (m)
September 2024	CR26X_31	CLCR2631	737842.68	3855129.86
February 2025	CR26X31	CLCR26X	740045.051	3855789.002

10. Arellanes Well Cellars: The sources representing the Arellanes 4H cellar (Source ID CLAR4H) and Arellanes 7 cellar (Source ID CLAR7) are in the same location: UTME 726716.87 m, UTMN 3860768.01 m. Furthermore, two of the cellars on the Arellanes Lease have been mislabeled: the cellar identified as Arellanes 103 (Source ID CLAR103) is co-located with well 4H (Source ID AR4H), and the cellar identified as Arellanes 82 (Source ID CLAR82) is co-located with well 103 (Source ID AR103). Additionally, well 82 (Source ID AR82) is missing a well cellar. Correct the source descriptions, delete one of the identical cellars (Source IDs CLAR4H and CLAR7), and add a cellar at well 82.

11. Multipathway Parameters: Column E of the *HARP 2 Options* table indicates that site-specific fractions will be used in the final HRA for the following multipathway parameters: fraction of human diet from each type of contaminated vegetable, fraction of human diet from contaminated chicken, and fraction of human diet from contaminated eggs. The District will work with PCEC to conduct surveys if a significant risk is created as a result of selecting the default chosen fractions shown in column D of the *HARP 2 Options* table for these multipathway parameters. Please note that these site-specific values would be considered part of a Tier 2 HRA. As discussed in Section 4.1 of the District's *Modeling Guidelines for Health Risk Assessments* (Form-15i), the Office of Environmental Health Hazard Assessment (OEHHA) developed a tiered approach for HRAs to accommodate consideration of site-specific data that may be more appropriate for a given facility than the default values. The Tier 1 HRA is the first step and is the simplest point estimate approach for estimating exposure to facility emissions. A Tier 1 HRA is always required in Santa Barbara County. The defaults provided in the District's HRA Guidelines and in HARP 2 are for a Tier 1 HRA.

    Tier 2 allows use of site-specific point estimates of exposure variates as long as these estimates can be justified. The risk assessor must supply the data and methods used for the site-specific estimates, and the site-specific estimates must be reproducible and approved by the District. At the facility's option, a Tier 2 risk assessment can be submitted in addition to the Tier 1 HRA. The HRA must include a Tier 1 HRA, and the HRA report must present all results of the Tier 1 HRA. The parameters and results of the Tier 2 HRA must be presented in separate, clearly titled sections, tables, and text. Please note that Tier 2 options cannot be used for sensitive receptors.

12. Worker Adjustment Factor: There is a typographical error in Section 6.2 of the revised ATEIP. The definition of $D_{residential}$ underneath the equation in this section should be 7 day/week, not 5 day/week.

13. Chronic Non-Cancer Risk: There is a typographical error in Section 6.3 of the revised ATEIP. The second paragraph states that the chronic HI will not be calculated for residential receptors; instead, this section should state that the *8-hour* chronic HI will not be calculated for residential receptors.