air pollution control district santa barbara county

AUG 2 6 2019

Certified Mail 9171 9690 0935 0222 7129 00 Return Receipt Requested

Otis Dickinson ExxonMobil Production Company W4.2A.471 22777 Springwoods Village Parkway Houston, TX 77389

RE: Approval of 2013 ATEIP for ExxonMobil - SYU Project Air Toxics "Hot Spots" Information and Assessment Act (AB 2588)

Dear Mr. Dickinson:

This letter is for the approval of ExxonMobil's Air Toxics Emission Inventory Plan (ATEIP) for the inventory year 2013. Due to the iterative process of the 2013 ATEIP approval, the Santa Barbara County Air Pollution Control District (District) would like to clarify the version of the approved ATEIP and the approved changes to the ATEIP.

The District conditionally approved ExxonMobil's ATEIP dated December 2013 on August 8, 2014. ExxonMobil submitted a revised ATEIP dated February 2015, but this ATEIP included revisions that were not approved by the District, and therefore it is not the approved version of the ATEIP. All references to the "2013 ATEIP" in this letter refer to the December 2013 submittal of the ATEIP.

In addition to the conditions outlined in the August 8, 2014 approval letter, the District found two errors in the 2013 ATEIP that necessitated correction. Subsequently, in a meeting on May 14, 2019, the District allowed ExxonMobil a one-time allowance to submit requested corrections to errors in an addendum to the 2013 ATEIP. In response to District comments on the first version of the addendum, dated June 28, 2019, ExxonMobil submitted a second version of the addendum, dated July 26, 2019. Because the July 26, 2019 addendum contained changes that were not previously discussed with the District, this addendum is not approved in its entirety. Some changes from the June 28 addendum are approved and some changes from the July 26 addendum are approved. All of the required corrections to the 2013 ATEIP are outlined in the attached list. No further changes will be accepted.

No further action is required from ExxonMobil for the 2013 ATEIP. The District will complete the revised Air Toxics Emission Inventory Report (ATEIR) and Health Risk Assessment (HRA) and provide draft versions to ExxonMobil for review prior to sending to the California Office of Environmental Health Hazard Assessment (OEHHA) for approval.

If you have any questions, please call me at (805) 961-8824 or email me at harrisd@sbcapcd.org.

Sincerely,

David Harris, Division Supervisor Engineering Division

Aeron Arlin Genet, Air Pollution Control Officer

\$ 805.961.8819

- enc: List of Required Corrections to ExxonMobil's 2013 ATEIP
- cc: Facility AB 2588 Project File Engr Chron File Patrice Surmeier, ExxonMobil Production Company Bart Leininger, Ashworth Leininger Group Toxics Group

\\Sbcapcd.org\shares\Toxics\ActiveSourceFiles\SSID01482ExxonSYUProject\Final Approved 2013 ATEIP\Approval of ExxonMobil 2013 ATEIP.docx

List of Required Corrections to ExxonMobil's 2013 ATEIP

- <u>Sodium Hydroxide</u>: Per the District's May 29, 2014 letter and ExxonMobil's Attachment I Response to Stream Sampling Plan Comments dated July 25, 2014, sodium hydroxide emissions must be quantified for the Stretford system based on the 1990 sampling results for the Stretford Outlet stream (SP-10), as reported in Appendix A of ExxonMobil's Las Flores Canyon Facility: AB 2588 Air Toxics Emission Inventory Report for 1993/1994. These two letters are incorporated by reference in the District's August 8, 2014 letter conditionally approving the 2013 ATEIP.
- 2. Drift Fraction: Although this item does not constitute a change to the 2013 ATEIP, it is important to outline the reasoning for accepting the drift fraction stated in the 2013 ATEIP because this value does not match the value referenced in the District's conditional approval letter. Section 4.2.5 of the 2013 ATEIP states that a drift fraction of 0.0002 would be used for the evaporative cooler emission calculations. However, in ExxonMobil's July 25, 2014 letter, they proposed to use a conservative drift fraction of 0.02 for units with no drift eliminators; the District approved this value in the August 8, 2014 conditional approval letter. On July 8, 2019, Patrice Surmeier submitted The Ralph M Parsons Company specifications for the evaporative cooler via email to David Harris, showing that it is equipped with drift eliminators. According to CARB's *Technical Support Document to Proposed Hexavalent Chromium Control Plan*, the default value for evaporative coolers with low-efficiency drift eliminators is 0.0002. Therefore, the District approves the drift fraction of 0.0002 submitted in the 2013 ATEIP.
- 3. <u>Operation Fraction</u>: In Section 4.2.5 of the 2013 ATEIP, the annual emissions calculation (Equation 4-35) for the Stretford system includes a dimensionless operation fraction (i.e., "Hours/yr/8760 hours/yr"). The use of the operation fraction results in annual emissions in units of lb/hr, not lb/yr. The operation fraction must be removed from Equation 4-35 to correct this error.
- 4. <u>Sulfur Loading</u>: The 2013 ATEIP does not include emission calculation methodology for hydrogen sulfide emissions from the sulfur loading at the Las Flores Canyon (LFC) facility. In a letter dated September 18, 2017, ExxonMobil confirmed that 1341.34 long tons of sulfur was loaded at the LFC facility in 2013. To correct this error, the LFC hydrogen sulfide emissions from truck loading must be calculated using the same methodology as the loading emissions at the Pacific Offshore Pipeline Company (POPCO) facility, presented in Section 4.2.2 of the 2013 ATEIP.
- 5. <u>Load Factors</u>: The use of load factors for calculating emissions from the diesel-fired internal combustion engines was not included in Sections 4.1.3 and 4.2.3 of the 2013 ATEIP. However, ExxonMobil submitted documentation for load factors via email from Patrice Surmeier to David Harris on June 28, 2019 as part of the addendum to the 2013 ATEIP. The District accepts this documentation and the use of load factors for annual emission calculations for engines with only hourly usage records, not for engines with fuel usage records.
- 6. <u>Fuel Consumption</u>: The brake-specific fuel consumption (BSFC) values for the diesel-fired internal combustion engines were not included in Sections 4.1.3 and 4.2.3 of the 2013 ATEIP. In the addendum to the 2013 ATEIP submitted on June 28, 2019, ExxonMobil requests that the Tier 0 engine emission calculations use a BSFC of 7,800 Btu/bhp-hr and all other engines use a BSFC of 7,500 Btu/bhp-hr. As this is consistent with the District's *Piston IC Engine Technical Reference Document*, the District accepts this requested change to the 2013 ATEIP.

- 7. <u>Light Towers</u>: The tier ratings of the diesel-fired internal combustion engines, including the light towers, were not specified in Sections 4.1.3 and 4.2.3 of the 2013 ATEIP. In the addendum to the 2013 ATEIP submitted on June 28, 2019, ExxonMobil states that the permit-exempt light tower engines used in 2013 were Tier 2, with diesel PM emission factors of 0.6 g/bhp-hr. The District accepts this requested change to the 2013 ATEIP.
- 8. <u>Tungsten Inert Gas Arc Welding</u>: Section 4.1.12 of the 2013 ATEIP states that shielded metal arc welding (SMAW) and gas metal arc welding (GMAW) occurred in 2013. In the addendum to the 2013 ATEIP submitted on July 26, 2019, ExxonMobil identifies SMAW and tungsten inert gas (TIG) arc welding as the only welding operations that occurred during 2013. This ATEIP addendum also states that 10 pounds of Rod ER70S-6 was used for TIG welding in 2013, with the reasonable worst-case assumption that no more than one pound is used in a single hour. The Harris Products Group's *Technical Specification Sheet*, which contains the chemical composition of the rods, was submitted via email from Patrice Surmeier to David Harris on June 28, 2019. The District accepts the requested changes to the welding emissions for the 2013 ATEIP.
- 9. <u>Aerators</u>: Section 4.2.5 of the 2013 ATEIP implies that emissions should be calculated for the evaporative cooler and both aerators using a flow rate of 330 gallons per minute for each device. In the addendum to the 2013 ATEIP submitted on July 26, 2019, ExxonMobil states that the emissions should be calculated only for the evaporative cooler using a total flow rate of 330 gallons per minute. The District accepts this requested change to the 2013 ATEIP.