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Review of the Draft Environmental Impact Report (Draft EIR) for the Hyperion Treatment Plant Digester Gas Utilization Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document both as a commenting agency and a responsible agency. We also appreciate the lead agency's allowing our agency extra time to provide these comments. The following comments are intended to provide guidance to the lead agency and should be incorporated into the Final Environmental Impact Report (Final EIR) as appropriate.

The project description and environmental analyses provided in the Draft EIR appear to present inconsistent information related to the proposed project. As a result, SCAQMD staff requests that the lead agency clearly identify the proposed project in the Final EIR (e.g., provide an explicit equipment list). Based on a review of the Draft EIR, the proposed project exceeds the SCAQMD's CEQA regional operational emissions threshold for VOC, NOX, and PM10 and the localized CEQA operational emissions threshold for PM2.5 and PM10. SCAQMD staff is particularly concerned that the modeling results indicate that this project on its own will exceed state and federal ambient air quality standards for PM10 and PM2.5, respectively. These exceedances are modeled to occur without considering background concentrations. It is exceedingly rare for individual projects to potentially cause our basin to be in non-attainment. We recommend that the lead agency work with our staff to ensure that the modeling analysis accurately reflects potential air quality impacts, and most importantly mitigates any significant impacts to the maximum extent feasible.

Further, the Draft EIR demonstrates significant greenhouse gas (GHG) emissions during operation of the proposed project. However, the lead agency does not provide any mitigation measures to reduce the project's significant operational emissions and provides limited GHG mitigation measures. Therefore, the SCAQMD staff recommends that the lead agency provide additional mitigation in the Final EIR pursuant to CEQA Guidelines Section 15126.4 to addresses these concerns. Further, the SCAQMD staff

recommends that the lead agency revise the project's GHG emissions analysis to account for all GHG emissions generated by the project, including biogenic emissions. Details regarding these comments are attached to this letter.

Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD 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,

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

Attachment

IM:DG

LAC130612-01
Control Number

Project Description

1. Based on a recent review of permit applications submitted to SCAQMD and the localized emissions analysis provided in the Draft EIR it is difficult to correlate not appear that the project description accurately reflects all equipment proposed for the project. For example, the air quality emissions modeling included two thermal oxidizers (one back-up device) in the project for VOC control, however, this control device is not identified in Table 2-2 (Proposed Project Equipment) of the project description. In addition, five diesel generators are included in the modeling analysis, however only two engines are described in the project description. Lastly, it is not clear from reading the Draft EIR how the existing equipment will be utilized in the future if the project is carried out.

   Therefore, SCAQMD staff recommends that the lead agency revise the project description to more fully reflect all equipment that will operate if the proposed project is built. Also, the lead agency should either revise Figure 2-3 (Process Flow Diagram) of the Draft EIR or provide a new flow chart that includes all equipment (existing and new) as well as emission sources from the proposed project.

Modeling Analysis

2. As stated in the Draft EIR, the proposed project will exceed the annual PM10 threshold of 1.0 $\mu g/m^3$ and the 24-hour PM10 threshold of 2.5 $\mu g/m^3$. From the modeling files provided to SCAQMD staff, it appears that the annual exceedance is driven primarily by the new turbines exhausting through the main stack, whereas the 24-hour scenario only modeled the flares. Table 3-8 of the Draft EIR indicates that the incremental increase in 24-hour PM10 concentration is 11.9 $\mu g/m^3$. While this impact is above the SCAQMD threshold of 2.5 $\mu g/m^3$, what is noteworthy is that Table 3-13 in the Air Quality Appendix indicates that the flares on their own will yield a total concentration of 58 $\mu g/m^3$, without considering background concentrations. This level of pollution on its own will exceed the state's health-based ambient air quality standard of 50 $\mu g/m^3$. Further, if modeled PM2.5 concentrations indeed are equivalent to PM10 concentrations as indicated in the Draft EIR, then the PM2.5 level will also equal 58 $\mu g/m^3$, which is greater than the federal standard of 35 $\mu g/m^3$.

   Although flaring of this intensity may be a rare event, the high results from the annual modeling of turbine emissions indicate that this exceedance may be a more regular occurrence. We note that it is exceedingly rare for an individual project to exceed the ambient air quality standards on its own during operations, without even considering background concentrations. Given the severity of this significant impact, the lead agency must evaluate additional mitigation to reduce the intensity and potential frequency of these impacts.

3. The modeled short term impacts evaluated a scenario where all combusted digas would be emitted through the 3 flares located south of the main exhaust stack where the turbines will be located. Although this approach may work for determining total emissions, the different stack parameters from the main exhaust stack (size, flow rate, temperature, location, etc.) may yield different impacts. All short term averaging period scenarios (including for the HRA and criteria pollutant analyses) should also

evaluate the impacts of peak operations of the turbines and their exhaust through the main stack.

4. Although SCAQMD has not yet listed the new federal 1-hour NO2 standard as a CEQA threshold, we recommend that the lead agency include this health-based standard more explicitly in Table 3-8. This standard should be presented the same as the other pollutants, rather than as a footnote. Further, from the modeling files, the highest concentration utilizing the federal 1-hour averaging period is 79.57 $\mu g/m^3$, or approximately 42 ppb. When added to the 3-year, 98th percentile background value of 65 ppb, the resulting concentration is 107 ppb. This value is higher than the federal ambient air quality standard of 100 ppb. This discrepancy should be addressed in the Final EIR, and if NO2 impacts are found to exceed the federal air quality standards, mitigation should be implemented to reduce the concentration below the standard.

5. Table 3-8 of the Draft EIR indicates that the maximum 1-hour NO2 concentration is 30.8 $\mu g/m^3$, while Table 3-13 of the Air Quality Appendix lists the maximum concentration as 79.6 $\mu g/m^3$ (apparently the federal standard average instead of the state standard average). However, the model files provided to SCAQMD staff indicate that the maximum 1-hour NO2 concentration is 130.5 $\mu g/m^3$. Further, the background concentration in Table 3-8 is listed as 207 $\mu g/m^3$, whereas the 3 year average (2009-2011) background reported by SCAQMD monitors is 158.8 $\mu g/m^3$. These discrepancies with the federal and state 1-hour concentrations and background concentrations should be addressed in the Final EIR. If impacts are found to exceed federal or state standards, then mitigation should be added to reduce these impacts to a less than significant level.

6. The Final EIR should ensure that the modeling analysis is consistent with the final permit application materials provided to SCAQMD. If the permit is not complete at that stage, the CEQA analysis should ensure that it presents a scenario that is either equivalent to, or more conservative (e.g., higher impacts) than the final permit conditions.

7. It is not clear how the hourly toxic emission rates used in the HARP model were derived. Annual and daily toxic emission rates calculations are presented in files provided to SCAQMD staff, however it appears that the hourly toxics calculations are not included. These calculations should be provided with the Final EIR.

8. The meteorological file utilized in the CEQA modeling analysis only includes 3 years of data. Updated meteorological files are available on SCAQMD's website[1] that includes 5 years of data. This updated meteorological data should be used in the final CEQA modeling to ensure consistency with any modeling conducted for permitting.

Operational Mitigation Measures

9. Given that the lead agency's operational air quality analysis demonstrates significant regional air quality impacts from NOx, VOC and PM10 and localized air quality

[1] http://www.aqmd.gov/smog/metdata/AERMOD.html

impacts from PM10 and PM2.5 emissions the SCAQMD staff recommends that the lead agency provide additional mitigation measures pursuant to CEQA Guidelines Section 15126.4. Specifically, the staff recommends that the lead agency minimize or eliminate significant adverse air quality impacts by adding the mitigation measures provided below.

On-site Equipment (process and operational emissions)

a) Consider additional controls on the main stack to reduce normal operational emissions.
b) Identify measures to minimize the possibility of large flaring events that yield significant short term impacts.
c) Require both on-site emergency black start diesel generators to meet Tier 4 emissions standards. If the lead agency determines that Tier 4 emissions standards are infeasible for the said equipment then the lead agency shall, at a minimum, require diesel particulate filters on both diesel-fueled emergency generators.
d) Require the use of electric or alternative fueled vehicles for maintenance activities including field vehicles, and forklifts.

Transportation Mitigation Measures

e) Provide sufficient electric vehicle (EV) Charging Stations to offset emissions generated by new employee trips.
f) Implement a rideshare program for employees.
g) Require the use of 2010 and newer diesel haul trucks (e.g., goods/materials delivery trucks) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the lead agency shall use trucks that meet EPA 2007 model year NOx emissions requirements.

Energy and Other

h) Maximize use of solar energy including solar panels; installing the maximum possible number of solar energy arrays on the building roofs and/or on the project site to generate solar energy for the facility.
i) Require all lighting fixtures, including signage, to be energy efficient. Where feasible use solar powered lighting.
j) Use light colored paving and roofing materials.
k) Require use of water-based or low VOC cleaning products at the project site.

<u>Cumulative Air Quality Emissions Analysis</u>

10. The proposed project is located within one mile of the Los Angeles International Airport and the NRG Energy Facility, both of which have recently undergone environmental review and approval (LAX Specific Plan Project and the El Segundo Energy Center Project, respectively). However, the emissions from these projects are not considered in the potential cumulative health risk impacts for the proposed project. Further, the emissions from the El Segundo Energy Center Project are not considered in the cumulative air quality significance determination. Therefore, SCAQMD staff recommends that the lead agency include all projected emissions and criteria pollutant concentrations from these projects in the cumulative air quality analysis and health risk assessment for the Final EIR.

Greenhouse Gas Emissions Analysis

11. The project's annual GHG emissions reported in Table 3.19 of the Draft EIR appear to account for existing/baseline operational emissions activity associated with off-site power generation (i.e., at the Scattergood Power Generation Facility) that utilizes digester gas from the project site (i.e., Hyperion Treatment Plant Site). Based on discussion provided in the Draft EIR it appears that the lead agency assumed that the proposed project will replace/transfer existing power generation (using digester gas from the project site) occurring at the Scattergood Power Generation Facility. As a result, the lead agency subtracts the emissions from this existing/baseline activity from the project's emissions. However, the lead agency does not provide substantial evidence demonstrating that the transfer of power generation to the project site will not be replaced to maintain existing power generation capacity at the Scattergood Power Generation Facility. As a result, the proposed project may result in an increase of overall power generation (globally) that has not been accounted for in the GHG emissions analysis. If the existing/baseline emissions are subtracted from project emissions, then a robust description is needed to justify the assumption that the existing/baseline emissions will not be continued elsewhere in the future. Therefore, the lead agency should provide sufficient technical information in the Final EIR to demonstrate that it is appropriate to assume that all existing/baseline emissions activity will cease in the future.

    Further, the lead agency provided two GHG emissions values for the proposed project including the project's GHG non-biogenic and biogenic emissions values. The lead agency ultimately limited the project's GHG impacts to non-biogenic emissions; however, the SCAQMD staff recommends that the lead agency revise its determination in the Final EIR to account for the said biogenic emissions identified in Table 3-19 of the DEIR. The SCAQMD's adopted GHG threshold (10,000 $MTCO_2e$/yr.) for industrial projects does not exclude biogenic emissions from the project's GHG significance determination.