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Air Quality Management District
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Mr. Jim Earhart
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City of Banning
176 E. Lincoln Street
Banning, CA 92220

Draft Environmental Impact Report (Draft EIR) for the Proposed Liberty XXIII Renewable Energy Power Plant Project

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD would also like to thank the lead agency for the additional time to submit comments. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final Environmental Impact Report.

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 Environmental Impact Report. The SCAQMD staff would be happy to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Gordon Mize, Air Quality Specialist – CEQA Section, at (909) 396-3302, if you have any questions regarding these comments.

Sincerely,

Steve Smith
Program Supervisor – CEQA Section
Planning, Rule Development & Area Sources

Attachment

SS:GM

RVC080611-04
Control Number

Applicable Federal and SCAQMD Rules and Regulations

1. As a reminder, In addition to the rules mentioned in the Section D.2 Air Quality, the SCAQMD staff recommends that compliance with the following Rules and Regulations be addressed in the Final EIR:

    - Rule 212 - Standards for Approving Permits and Issuing Public Notice
    - Rule 218 - Continuous Emission Monitoring
    - Rule 218.1 - Continuous Emission Monitoring Performance Specifications
    - Rule 407 - Liquid and Gaseous Air Contaminants
    - Rule 408 - Circumvention
    - Rule 429 - Startup and Shutdown Exemption Provisions for Oxides of Nitrogen
    - Rule 430 - Breakdown Provisions
    - Rule 461 - Gasoline Transfer and Dispensing
    - Rule 1146 - Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators and Process Heaters
    - Rule 1401 - New Source Review of Toxic Air Contaminants
    - Rule 1401.1 - Requirements for New and Relocated Facilities Near Schools
    - Rule 1404 - Hexavalent Chromium Emissions from Cooling Towers
    - Rule 1470 - Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines; and
    - Applicable Federal NSPS and NESHAP regulations.

Air Quality Analysis

2. Review of the fugitive dust mitigation measures indicates that the lead agency may have used inappropriately high fugitive dust control efficiencies for watering the site. The lead agency uses a control efficiency of 80 percent but does not provide a source for such a high control efficiency. Normally, control efficiency much greater than 61 percent is difficult to achieve. In addition, the lead agency adds an additional 15 percent control efficiency for speed control, resulting in a total control efficiency of 95 percent. The lead agency, however, did not specifically calculate fugitive dust emissions from vehicles traveling over unpaved roads. Further, the 15 percent control efficiency should only have been applied to fugitive dust emissions from vehicles traveling over unpaved roads, not to the total fugitive dust emissions from the site. Therefore, fugitive dust emission reductions appear to be over-estimated.

Construction Mitigation Measures

3. Although project-specific construction air quality impacts from the proposed project are currently not estimated to exceed any established daily significance thresholds, SCAQMD staff recommends that the lead agency consider the following change to the mitigation measures listed on pages B-16 and B-17 to further reduce construction air quality impacts from NOx and PM10 (fugitive dust):

    Recommended Change:

- Water or chemical dust suppressant would be applied according to manufacturer specifications to disturbed areas and storage piles.

Operational Emissions

4. In the project description and Appendix B. Operations Emissions Estimate, there are discrepancies between the maximum number of truck and vehicle trips used to deliver biosolids, biomass fuels and employee vehicle trips which would imply that the subsequent operational emission estimates for those on-road vehicle sources are substantially underestimated. The operational emission estimates should therefore be recalculated and revised in the Final EIR.

   - **Employee Trips:** In Table D.2-18. (Project and Project Displaced Transportation Trips) on page D.2-24 and in Appendix B, Operational Emissions Estimate, the lead agency lists 20 daily employee round-trips. On page B-18 of the project description, the lead agency states that the project will use a labor force of 24 employees at full power output. This would increase the number of employee commute round-trips to 24. The worker trip estimates for operational emissions should therefore be revised and updated in the Final EIR.

   - **Biosolids Trips:** In Table D.2-18. (Project and Project Displaced Transportation Trips) on page D.2-24 and in Appendix B. Operational Emissions Estimate, the lead agency lists 75 daily biosolids fuel delivery trips. According to the information provided by the lead agency on page B-11, the facility would generate approximately 94 biosolids truck trips per day [(2,250 tons per day)/(24 tons per trip) = 93.75 trips per day]. This would increase the biosolids one-way truck trips to 188. The worker trip estimates for operational emissions should therefore be revised and updated in the Final EIR.

   - **Biomass Trips:** In Table D.2-18. (Project and Project Displaced Transportation Trips) on page D.2-24 and in Appendix B, Operational Emissions Estimate, the lead agency lists 30 daily biomass fuel delivery trips. According to the lead agency, the proposed project would generate 63 truck trips per day based on the information provided on page B-12 in the project description. This would increase the biomass one-way trip truck delivery trips to 126. The worker trip estimates for operational emissions should therefore be revised and updated in the Final EIR.

5. SCAQMD staff strongly disagrees with the displaced truck trip methodology used by the lead agency that incorrectly suggests that the proposed project will reduce emissions. The proposed project will not eliminate truck trips that would otherwise haul biosolids and biomass to other locations because of increasing population growth and the associated future increases in the amount of waste materials generated locally. Further, there is no analysis that other truck trips would be eliminated to support such an assumption. The only way the lead agency can take credit for the displaced truck trips is to prohibit them through some legally binding agreement. The SCAQMD has always advocated that a project analyzed in a CEQA document take responsibility for all of the emissions generated by the proposed project. It is likely that eliminating the inappropriate credit for displaced truck trip emissions would result in

significant operational emissions for NOx, CO, VOC, PM10 and PM2.5. As a result, mitigation measures would be required.

6. On page B-5 of the project description chapter, the lead agency states that biosolids reception units will be enclosed to eliminate odors. However, there is no similar biomass reception enclosure requirement. Because green wastes may have already started the composting process during transport, which could generate substantial odors, SCAQMD staff recommends that the biomass reception area be enclosed.

7. On page B-7 of the Draft EIR, under "Biosolids," there is insufficient information to determine whether or not the odor venting and combustion system for the biosolid reception units and biosolid storage silos is adequate to control odors from the biosolids or whether or not that receiving system would adequately control biosolid odors generated by the transfer of the material from trucks to the biosolid reception units. Please provide more information in the Final EIR regarding how the project proponent is planning to control odors in the biosolids reception units and silos.

8. With regard to the discussion of biomass on page B-11 of the Draft EIR, SCAQMD Rule 1133.1-Chipping and Grinding Activities, requires that curbside green waste be chipped or ground or used on-site or removed from the site within three calendar days of receipt and, if the curbside green waste is chipped or ground, the resulting material must be removed or used on-site within three calendar days. However, the last requirement may not apply if the moisture content is less than 30 percent measured in accordance with requirements of the rule. "Use on-site" does not include mixing with other green waste for storage.

9. Even if the project complies with SCAQMD Rule 1133.1, the Draft EIR on page B-12 implies that as much as 30,000 tons of biomass (green waste) may be stored for up to 40 days in open windrows. There is not adequate discussion about protection from added moisture content from rain, or how fugitive odors would be controlled from such a large amount of green waste material undergoing such a long storage period. AQMD experience is that even fresh green waste odors at transfer stations can travel up to and more than one-half mile, the identified distance to the closest residential receptor. Composting, or a partial enclosure or full enclosure of green waste, or a combination of techniques may be necessary to mitigate or control green waste odors.

10. On page B-14 in the project description chapter, the lead agency identifies a number of measures to reduce emissions from fuel delivery trucks. SCAQMD recommends that the seventh bullet point item be modified as follows. "Routes would be designated to achieve the most fuel efficient routes practical and to direct trucks away from the residential areas and other sensitive receptors to the maximum extent feasible;

11. According to the lead agency (on pages D.2-11, D.2.-27 and D.11-1), the nearest sensitive receptors (residences) are located over one-half mile west of the proposed facility. Because of the distance between the proposed project and nearest sensitive receptor, the localized air quality analysis for construction and air toxics analysis were concluded to be less than significant. However, according to the lead agency on page B-1 of the project description chapter, the area where the proposed project would be located is zoned for industrial and residential rural (very low

density). This means that in the future, residential projects could be located adjacent to the proposed facility. To prevent such incompatible land uses in the future, SCAQMD recommends that the lead agency impose a 1,000-foot buffer zone around the facility that would prohibit siting sensitive receptors within the buffer zone or change the zoning in the 1,000-foot buffer zone to preclude residential development.

12. Because the facility will be handling potentially odorous materials such as biosolids and biomass, SCAQMD staff recommends that the lead agency require the project proponent to develop a protocol for handling odor complaints. The protocol could include, for example, requirements to: conduct odor surveys of the surrounding communities when odor complaints are received, keep a log of the characteristics of any odor encountered during the survey, identify the source of the odor, etc. In addition to the protocol, SCAQMD staff recommends that the lead agency require the project proponent to install a sign on the perimeter near the main entrance indicating a contact person and the phone number to call with complaints.

13. As noted in the California Integrated Waste Management Board letter dated July 18, 2008, an Odor Impact Minimization Plan is required of any facility or operation that handles or processes compostable material. More information can be found at http://www.ciwmb.ca.gov/regulations/Title14/ch31.htm#article3 or refer to 14CCR Section 17863.4. The SCAQMD also recommends that an Odor Impact Minimization Plan should be completed and included in the Mitigation Reporting or Monitoring Program and/or the Report of Facility Information.

14. On page B-11, the lead agency states that the project proponent would use a vibrating screen grinder, trommel screen, etc., to process biomass materials. It is unclear whether or not these equipment would be operated using diesel engines or electricity from power lines. If using diesel engines, emissions from these engines should be calculated and added to Tables D.2-17 and D.2-20.

Health Risk Assessment

12. The standard regulatory default dispersion options were used for ISCST3 in HARP and the SCAQMD Banning meteorological data set was used. If SCAQMD meteorological data sets are used, the calms processing should be bypassed. The Final HRA should contain an ISCST3 run in HARP where the calms processing routine is bypassed.

13. Property boundary receptors were not included in the ISCST3 run completed in HARP. It is recommended that property boundary receptors be included in the HRA in the Final EIR.

14. The flow rates used in the HRA do not match the flow rates for the same sources in the criteria pollutant air dispersion modeling. The lead agency needs to explain this apparent discrepancy in the flow rates or they should be made consistent in the Final EIR.

15. The air toxic emissions presented in the Public Health section of the Draft EIR in Table D.11-4 do not match the toxic emissions in Appendix B – Operations Emission Estimate of the Draft EIR. Since the criteria pollutant and toxic emissions are estimated together based on the same

assumptions and parameters in Appendix B, and the toxic emissions modeled in the HRA are different, it appears that there is inconsistency between the scenario modeled in the HRA and the scenario modeled for the criteria pollutant concentrations. This inconsistency should be explained or corrected in the Final HRA and EIR.

16. Supporting documentation for the HRA was not included in the Draft EA. It is not clear how the toxic emissions were developed. Supporting documentation should be prepared and provided to the public and commenting agencies if requested with the Final EIR. SCAQMD staff, therefore, requests that the supporting documentation be provided to the SCAQMD with the Final HRA and EIR.

17. Only the modeling results for the highest impacted sensitive receptor is presented in the Draft EA (see Tables D-11.9 through D-11.11. The maximum exposed individual worker (MEIW) should also be presented.

18. A map showing concentration isopleths was not included in the Draft EA. A map showing the concentration isopleths and the maximum exposed individual resident (MEIR) or sensitive receptor and MEIW is useful for reviewing the HRA and to support conclusions reached in the analysis.

19. The highest health risks presented in the Draft EIR are not the highest concentrations estimated by HARP. Since valid receptors were not identified in the Draft EIR, SCAQMD staff could not identify whether or not the concentrations reported in the Draft EIR are correct. The Final EA should identify valid receptors by UTM coordinate so that concentrations reported in the Final EA can be identified in the HARP output file.

20. Only the Draft EIR was provided to SCAQMD for review. In order to SCAQMD staff to review the HRA, the lead agency should provide to SCAQMD staff the files required by ARB to document HRAs prepared with HARP. A list of these files can be found on ARBs website at http://www.arb.ca.gov/toxics/harp/harpdt.htm. These electronic files and any related documentation should be provided to the SCAQMD at the beginning of any public comment period for proposed projects with HRAs prepared with HARP.

Criteria Pollutant Air Dispersion Modeling

21. The documentation provided in the Draft EIR was not sufficient to recreate or review the criteria pollutant air dispersion modeling. It is unclear from the Draft EIR how emissions were assigned to sources, so it was unclear if the criteria pollutant emissions were correctly modeled. In addition, the sources of emissions (e.g., construction emissions in Table 4-7 and 4-8) are not referenced. The Final EIR should detail how emissions were assigned to sources and include reference sources.

22. Based on conversations with the air dispersion modeling consultant used by the lead agency, the emissions calculated and presented in Appendix B of the Draft EIR are more recent than the calculated emissions used in the air dispersion model. The Final EIR should include concentrations estimated by the air dispersion modeling for the most current emissions.

SCAQMD Permits to Construct and Operate

23. The Draft EIR states that the combustion process could combust about 1800 tons of biosolids per day and/or 750 tons of biomass per day, resulting in 300 tons per day of fly ash collected in the control train. While conventional emissions controls for NOx (NSCR and SCR), and Acid Gases/PM (lime injection/scrubbing and baghouse) are proposed, the SCAQMD staff could not discern what roles the proposed cooling tower and biofilter have in also controlling emissions. In the Final EIR, please describe the purpose of the cooling tower and biofilter relative to pollution control.

24. In the applications for permits to construct and operate, the permit applicant will be required to fully document the operational emission estimates as well as allow the Executive Officer of the SCAQMD to conclude that the plant will meet applicable requirements including BACT and offsetting.