South Coast
Air Quality Management District
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Draft Environmental Impact Report (Draft EIR) for the Proposed Los Cerritos Wetlands Restoration and Oil Consolidation Project (SCH No. 2016041083)

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final EIR.

SCAQMD Staff's Summary of Project Description

The Lead Agency proposes to consolidate and relocate existing oil operations on four sites totaling 195 acres (Proposed Project). The existing oil operations at the 150-acre Synergy Oil Fields and the 33-acre City Property will continue and be phased out over a 40-year period[1]. Up to 50 new oil wells will be constructed on the seven-acre Pumpkin Patch and the five-acre Los Cerritos Wetland Authority (LCWA) site[2]. In addition, the LCWA site will include construction of up to four natural gas turbines with a heat recovery steam generator for cogeneration. The northern portion of the Synergy Oil Field will be restored to a natural wetland area with a 169-foot public access trail. Furthermore, the Proposed Project would include the construction of a 5,200-square-foot office and a 9,725-square-foot warehouse. It is anticipated that construction of the Proposed Project would begin in year 2018 with majority of the non-oil facilities constructed by year 2022, while drilling, plugging, and abandonment of oil wells would occur over a period of eight to 12 years. The Proposed Project is generally bordered by the Los Cerritos Channel to the north, beyond which are residential uses; the AES Power Plant site to the east; the San Gabriel River to the south and southwest, beyond which are undeveloped areas; and the commercial development and Alamitos Bay to the west[3].

SCAQMD Staff's Summary of Air Quality and Health Risk Assessment (HRA) Analyses

In the Air Quality Section, the Lead Agency quantified the Proposed Project's construction and operational emissions and compared those emissions to SCAQMD's regional and localized air quality CEQA significance thresholds. The Lead Agency found that the Proposed Project would cause significant and unavoidable regional air quality impacts for NOx emissions during construction even with mitigation measures, while the Proposed Project's localized construction activities and operation would result in less than significant impacts after mitigation[4]. Additionally, the Lead Agency performed a HRA and found that the mitigated Maximum Exposed Individual Resident would be 7.5 in one million[5], which is below SCAQMD's CEQA significance threshold of 10 in one million for cancer risk.

[1] Draft EIR. Section 2, Project Description. Page 2-6.
[2] *Ibid*. Page 2-54.
[3] *Ibid*. Executive Summary. Page ES-3.
[4] *Ibid*. Chapter 3.2, Air Quality. Page 3.2-30 through 39.
[5] *Ibid*, Page 3.2-38.

General Comments

On March 3, 2017, the SCAQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP), which was later approved by the California Air Resources Board of Directors on March 23rd. The 2016 AQMP[6] is a regional blueprint for achieving air quality standards and healthful air in the South Coast Air Basin (Basin). Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional perspective on air quality and lays out the challenges facing the Basin. The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NOx) emissions in 2023 and an additional 55 percent NOx reduction beyond 2031 levels for ozone attainment.

SCAQMD staff has concerns about the air quality and health risk analyses in the Draft EIR, which have likely led to an under-estimation of the Proposed Project's impacts. First, impacts from overlapping construction and operation were not analyzed. Second, the HRA modeling performed for the Proposed Project utilized parameters which are not consistent with SCAQMD's recommended methodology. Details are included in the attachment. The Proposed Project plays a role in contributing to Basin-wide NOx emissions. As described above, achieving NOx emission reductions in a timely manner is critical to attaining the National Ambient Air Quality Standard (NAAQS) for ozone before the 2023 and 2031 deadlines. SCAQMD is committed to attaining the ozone NAAQS as expeditiously as practicable. To further reduce NOx emissions during construction, the attachment includes a discussion of recommended changes to the existing mitigation measures for air quality and a new mitigation measure which the Lead Agency should implement. Finally, since permits from SCAQMD would be required for implementing the Proposed Project, SCAQMD should be identified as a Responsible Agency in the Final EIR.

Pursuant to the California Public Resources Code Section 21092.5 and CEQA Guidelines Section 15088, the Lead Agency is required to provide SCAQMD staff with written proposed responses to all comments contained herein prior to the certification of the Final EIR. SCAQMD staff is available to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Jack Cheng, Air Quality Specialist, CEQA IGR, at (909) 396-2448, if you have any questions regarding the enclosed comments.

Sincerely,

Lijin Sun

Lijin Sun, J.D.
Program Supervisor, CEQA IGR
Planning, Rule Development & Area Sources

Attachment
JW/LS/RR:JA:MH:JT:JC:GM
LAC170727-01
Control Number

[6] SCAQMD. March 3, 2017. *2016 Air Quality Management Plan*. Accessed at: http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan.

ATTACHMENT

Air Quality and Health Risk Assessment (HRA) Analyses

1. In the Air Quality Section, the Lead Agency quantified the Proposed Project's regional construction and operational[7] emissions and compared them to SCAQMD's regional air quality CEQA significance thresholds for construction and operation, respectively. Based on a review of the project description described above, SCAQMD staff found that the Proposed Project's construction activities would overlap with oil operations from new wells. In the case of overlapping construction and operation activities, SCAQMD staff recommends adding the construction and operational peak daily emissions in pounds per day and comparing those emissions to SCAQMD's air quality CEQA significance thresholds for operation[8] to determine the level of significance.

2. The Lead Agency estimated the PM emissions and health risks from the proposed four turbines based on the emission estimates of 0.004 lb/MMBtu (high heat value or HHV) for PM10 and PM2.5. According to the e-mail from Solar Turbines to the Lead Agency on November 8, 2016[9], the standard PM10 and PM2.5 warranty level for the proposed turbines is 0.015 lb/MMBtu (HHV), and the 0.004 lb/MMBtu (HHV) level is not guaranteed. Therefore, SCAQMD staff recommends that the Lead Agency use the higher 0.0015 lb/MMBtu emission rate to ensure that emissions and health risks from the turbines are not underestimated.

3. The Proposed Project would include a number of construction and operational activities at four sites with some temporary activities occurring simultaneously and other activities occurring over the course of several years[10]. Information on project activities was separately discussed by site and by year in Section 2, *Project Description*, of the Draft EIR[11]. For example, project activities on Synergy Oil Field Site were discussed by year 1, year 2, year 3, year 4, year 24, and year 44 (see Table 1). However, in the Air Quality Section, mitigated regional construction emissions from VOC and NOx were calculated by construction phases for all four sites (see Table 2 and Table 3), and the Proposed Project's operational emissions were calculated based on a 20-year interval (see Table 4). To be consistent with the project description, SCAQMD staff recommends that the Lead Agency calculate the Proposed Project's construction and operational emissions by site and by year in the Final EIR.

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[7] Draft EIR. Section 3.2. Construction: Unmitigated Regional Construction Emissions, Table 3.2-6 (VOC, NOx, CO, SOx, PM10 and PM2.5), Page 3.2-24; Mitigated Regional Construction VOC, Table 3.2-7, Page 3.2-25; and Mitigated Regional Construction NOx, Table 3.2-8, Page 3.2-26. Mitigated Regional Operational Emissions; Tables: 3.2-12, First 40 Years; Table 3.2-13, 20 to 40 Years; and Table 3.2-14, After 40 Years. Page 3.2-29.

[8] SCAQMD. *Air Quality Significance Thresholds*. Accessed at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2.

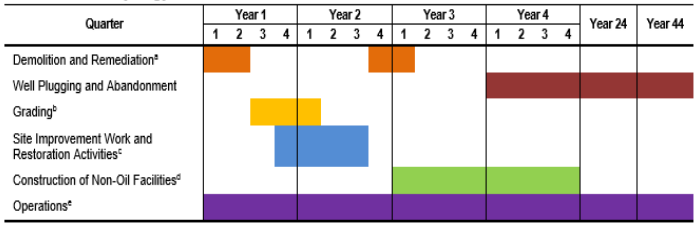
[9] Draft EIR. Appendix B, *Air Quality and Greenhouse Gas Emissions*. June 2017. Page 341.

[10] *Ibid*. Section 2. Page 2-25.

[11] *Ibid*.

Table 1: Copy of Table 2-2 Synergy Oil Field Site Activities

Table 2-2 Synergy Oil Field Site Activities



a. Remove tank farm #1 and pipelines, remediating as needed; Remove tank farm #2 after LCWA tanks are operating.
b. Install berm and sheetpile wall (restoration area); elevate building pad for visitors center; grade public access trail
c. Complete plant installation; install sidewalks, bicycle trails, and fencing along site perimeter; improve parking area and public access trail; revegetate previously disturbed areas
d. Relocate existing Bixby Ranch office building and repurpose for use as visitor center; complete public access trail
e. Reduce future oil production potential by 75% at receipt of building permits; conduct well workover operations; reduce existing wells by 50% at 20 years and the balance at 40 years

Table 2: Copy of Table 3.2-7 Mitigated Regional Construction VOC Emissions

Table 3.2-7 Mitigated Regional Construction VOC Emissions

Construction Phase	VOC (pounds per day)	Percent Reduction from Unmitigated Emissions
1. Demolition/Site Prep	3.5	47%
2. Well Cellars	4.9	32%
3. Process Equipment	5.5	29%
4. Tank Construction	7.7	71%
5. Off-Site Construction	7.7	0%
6. Office/Warehouse	24.4	67%
7. Wetlands Restoration	1.6	82%
8. Turbine Commissioning	12.3	0%
Phases 1–8 Combined	**67.6**	**55%**
Landfill Excavation	3.7	18%
Phases 1–9 Combined	**71.3**	**54%**
SCAQMD Threshold	*75*	
Exceeds Threshold?	No	

SOURCE: Greve & Associates, 2017.

Table 3: Copy of Table 3.2-8 Mitigated Regional Construction NOx Emissions

Table 3.2-7 Mitigated Regional Construction VOC Emissions

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Phases 1–9 Combined	**71.3**	**54%**
SCAQMD Threshold	*75*	
Exceeds Threshold?	No	

SOURCE: Greve & Associates, 2017.

Table 4: Copies of Table 3.2-12, Table 3.2-13, and Table 3.2-14

Table 3.2-12 Mitigated Regional Operational Emissions—First 20 Years

Site	Maximum Daily Emissions (lbs/day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Pumpkin Patch	4.3	6.5	17.7	0.0	0.9	0.4
Visitors Center	1.3	2.7	10.8	0.0	1.9	0.5
LCWA Site	7.8	5.6	14.6	0.0	0.3	0.2
Turbines at LCWA	54.2	78.0	94.9	14.7	25.0	25.0
Total Project Emissions	**67.6**	**92.8**	**138.0**	**14.7**	**28.1**	**26.1**
Phase out of 75% of Existing	28.0	42.9	17.9	0.1	2.3	1.3
Net Daily Regional Emissions	**39.6**	**49.9**	**120.1**	**14.6**	**25.8**	**24.8**
SCAQMD Significance Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Significant Impact?	No	No	No	No	No	No

SOURCE: Greve & Associates, 2017.

Table 3.2-13 Mitigated Regional Operational Emissions—20 to 40 Years

Site	Maximum Daily Emissions (lbs/day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Pumpkin Patch	4.3	6.5	17.7	0.0	0.9	0.4
Visitors Center	1.3	2.7	10.8	0.0	1.9	0.5
LCWA Site	7.8	5.6	14.6	0.0	0.3	0.2
Turbines at LCWA	54.2	78.0	94.9	14.7	25.0	25.0
Total Project Emissions	**67.6**	**92.8**	**138.0**	**14.7**	**28.1**	**26.1**
Phase out of 87.5% of Existing	32.6	47.1	20.3	0.1	2.5	1.5
Net Daily Regional Emissions	**35.0**	**45.7**	**117.7**	**14.6**	**25.6**	**24.6**
SCAQMD Significance Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Significant Impact?	No	No	No	No	No	No

SOURCE: Greve & Associates, 2017.

Table 3.2-14 Mitigated Regional Operational Emissions—After 40 Years

Site	Maximum Daily Emissions (lbs/day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Pumpkin Patch	4.3	6.5	17.7	0.0	0.9	0.4
Visitors Center	1.3	2.7	10.8	0.0	1.9	0.5
LCWA Site	7.8	5.6	14.6	0.0	0.3	0.2
Turbines at LCWA	54.2	78.0	94.9	14.7	25.0	25.0
Total Project Emissions	**67.6**	**92.8**	**138.0**	**14.7**	**28.1**	**26.2**
Complete Phase Out of Existing Operations	37.2	51.4	22.6	0.1	27	1.6
Net Daily Regional Emissions	**30.4**	**41.4**	**115.4**	**14.6**	**1.1**	**24.6**
SCAQMD Significance Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Significant Impact?	No	No	No	No	No	No

SOURCE: Greve & Associates, 2017.

Meteorological Data and HRA Modeling Parameters

4. For the HRA analysis, 2015-2016 meteorological data from the Los Alamitos Army Airfield (KSLI) was used for air dispersion modeling[12]. The U.S. EPA recommends five years of meteorological data, or at least one year of site-specific data for the purposes of air dispersion modeling. Consecutive years from the most recent, readily available five-year period are preferred[13]. Therefore, SCAQMD staff recommends that the Lead Agency update the modeling and HRA with the latest five years of available data. Alternatively, SCAQMD staff has prepared AERMOD-ready meteorological data which could be used by the Lead Agency in the air quality analysis. The meteorological data is available for download at SCAQMD's website[14].

5. The Lead Agency used the "Rural" option in AERMOD. Based on a review of aerial photographs, SCAQMD staff found that 50 percent or more of the area within a three-kilometer radius are industrial, commercial, and residential development[15]. Therefore, SCAQMD staff recommends that the Lead Agency use the "Urban" rather than the "Rural" option.

6. The HRA analysis used a 200-meter spacing receptor grid and placed seven discrete receptors around the 195-acre Proposed Project. The receptor grid and seven discrete receptors may not have identified potential peak concentration locations near residential uses that are located north of the Proposed Project. SCAQMD staff recommends that the Lead Agency use a 100-meter spacing receptor grid and place additional discrete receptors at the residential property boundaries to ensure potential maximum concentrations are identified[16].

Recommended Changes to the Existing Mitigation Measure (MM) AQ-1 and MM AQ-2

7. CEQA requires that all feasible mitigation measures go beyond what is required by law to minimize any significant impacts. SCAQMD staff recommends the following revisions to the existing MM AQ-1 and MM AQ-2 that the Lead Agency should include in the Final EIR. Additional information on potential mitigation measures as guidance to the Lead Agency is available on the SCAQMD CEQA Air Quality Handbook website[17].

   MM AQ-1: Construction Period Use of Low-VOC Paints. The proposed project shall use SCAQMD Rule 1113 compliant paints with a VOC content of ~~75~~50 grams per liter or less[18].

   MM AQ-2: Construction NOx Reduction Measures.

   - Require all off-road diesel-powered construction equipment greater than 50 hp (e.g., excavators, graders, dozers, scrappers, tractors, loaders, etc.) to comply with EPA-Certified Tier IV emission controls ~~where commercially available~~. Documentation of all off-road diesel equipment used for this project, including Tier IV certification, ~~or lack of commercial availability if applicable,~~ shall be maintained and made available by the contractor to the City for inspection upon request. In

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[12] *Ibid*. Appendix B. Page 664.
[13] United States Environmental Protection Agency. February 2000. *Meteorological Monitoring Guidance for Regulatory Modeling Applications*. Page 6-30. Accessed at: https://www3.epa.gov/scram001/guidance/met/mmgrma.pdf. See also 40 CFR Ch. I (7-1-11 Edition). *Appendix W to Part 51 – Guideline on Air Quality Models*. Available at: https://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol2/pdf/CFR-2011-title40-vol2-part51-appW.pdf.
[14] SCAQMD. *Meteorological Data for AERMOD*. Accessed at: http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/data-for-aermod.
[15] United States Environmental Project Agency. 2015. *Section 5.0 Project Site Characteristics*. Accessed at: https://www.epa.gov/sites/production/files/2015-08/documents/beld-section5.pdf.
[16] SCAQMD Modeling Guidance for AERMOD. http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/modeling-guidance.
[17] *Ibid*. *Air Quality Analysis Handbook*. Accessed at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.
[18] SCAQMD Rule 1113 – Architectural Coatings. Pages 1113-13 to 16. Accessed at: http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf.

addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by CARB such as certified Level 3 Diesel Particulate Filter or equivalent. A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

- In the event that all off-road diesel-powered construction equipment greater than 50 hp cannot meet EPA-Certified Tier IV emission controls, the contractor must demonstrate with written findings supported by substantial evidence that is approved by the Lead Agency before using other equal or more effective construction NOx reduction measures. Alternative measures may include, but would not be limited to, including the use of Tier IV engines in the mix of engines, reducing the number and/or hp rating of construction equipment, limiting the number of individual construction phases occurring simultaneously, and/or limiting the number of daily construction hours.

- Require the use of 2010 model year or newer diesel haul trucks (e.g., material delivery trucks and soil import/export) for hauling activities. In the event that 2010 model year or newer diesel haul trucks cannot be obtained, provide documentation as information becomes available and use trucks that meet EPA 2007 model year NOx emissions requirements, at a minimum. Additionally, consider other measures such as incentives, phase-in schedules for clean trucks, etc. during the construction period.

- Enforce five-minute idling limits for both on-road trucks and off-road equipment.

- Eliminate the use of all portable generators. Require the use of electricity from power poles rather than temporary diesel or gasoline power generators.

- Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow.

- Provide dedicated turn lanes for movement of construction trucks and equipment on and off site.

- Reroute construction trucks away from congested streets or sensitive receptor areas.

Recommended New Mitigation Measure AQ-4: Technology Review

8. The Proposed Project would be implemented over the course of 40 years. There are opportunities to deploy the lowest emission technologies possible. This deployment should include those technologies that are "capable of being accomplished in a successful manner within a reasonable period of time" (California Public Resources Code Section 21061.1), such as zero and near-zero emission technologies that are expected to be available in the life of the Proposed Project. As such, for a phased project where there will be an overlap between construction and operation such as this Proposed Project, SCAQMD staff recommends that the Lead Agency assess equipment availability, equipment fleet mixtures, and best available emissions control devices every two years. To ensure that the biennial technology review is enforceable during the 40-year period, SCAQMD staff recommends that the Lead Agency require the contractors' agreements and development agreements to include the biennial technology review. When a new emission control technology is found feasible and would substantially reduce NOx emissions, but the Lead Agency declines to implement such technology, a subsequent EIR shall be prepared (CEQA Guidelines Section 15162(a)(3)(C)).

MM AQ-4: Technology Review. To promote new emission control technologies, every two years following the Project approval date, the Lead Agency shall conduct a review of new air quality technological advancements. These technologies would be evaluated based on operational feasibility, technical feasibility, and cost effectiveness and financial feasibility for application. If a technology is determined to be feasible in terms of financial, technical, and operational feasibility, the Lead Agency

shall implement such technology, subject to the requirements as set forth in the CEQA Guidelines Section 15162(a)(3)(C).

Permits

9. The Proposed Project would include decommissioning of or modifications to the existing SCAQMD permitted equipment, and construction of new equipment including, but may not be limited to, natural gas turbines, oil and gas wells, oil gas water separators, storage tanks, gas treatment equipment, vapor recovery systems, flares, internal combustion engines, boilers, carbon absorbers, and waste water treatment. Therefore, SCAQMD should be identified as a Responsible Agency for the Proposed Project in the Final EIR. When existing SCAQMD permitted equipment are inactivated, SCAQMD Billing Services should be notified at (909) 396-2900. Other permitting questions can be directed to SCAQMD Permitting and Engineering staff at (909) 396-2676. For general information on permits, please visit SCAQMD's webpage, at: http://www.aqmd.gov/home/permits.

Compliance with SCAQMD Rules and Regulations

10. In addition to the SCAQMD rules and regulations discussed in the Draft EIR, the Final EIR should discuss how the Lead Agency will comply with the following rules and regulations:
    1) Rule 403(e) – Additional Requirements for Large Operations (50-acre sites or more of disturbed surface area; or daily earth-moving operations of 3,850 cubic yards or more on three days in any year) in the South Coast Air Basin[19]. The requirements may include, but are not limited to, Large Operation Notification (Form 403 N), appropriate signage, additional dust control measures, and employment of a dust control supervisor that has successfully completed the Dust Control in the South Coast Air Basin training class[20].
    2) Rule 1149 – Storage Tank and Pipeline Cleaning and Degassing.
    3) Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants.

[19] Draft EIR. Section 2. Pages 2-3 through 2-5. The Proposed Project consists of four separate sites and is a large operation: 1) Page 2-6: the northern 76.52-acre portion of the 150-acre Synergy Oil Field Site; 2) Page 2-43: 4,030 cubic yards of soil during grading on the 30-acre City Property site; 3) Page 2-50: 21,000 cubic yards for grading on the 7-acre Pumpkin Patch site; and 4) Page 2-59: 7,969 cubic yards of grading on the 5-acre LCWA site.

[20] SCAQMD. Rule 403. Last amended June 3, 2005. Accessed at: http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf?sfvrsn=4. SCAQMD Compliance and Enforcement staff's contact information for Rule 403(e) Large Operations is (909) 396-2608 or by e-mail at dustcontrol@aqmd.gov.