



South Coast Air Quality Management District

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SENT VIA E-MAIL:

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601 North Ross Street, 5th Floor
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Draft Supplemental Environmental Impact Report (SEIR) for Proposed Prima Deshecha General Development Plan – Zone 4 Landfill Construction Projects (Proposed Project) (SCH No.: 1999041035)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. Orange County Waste and Recycling is the California Environmental Quality Act (CEQA) Lead Agency for the Proposed Project. The following comments include the CEQA operational air quality analysis, air dispersion modeling, recommended mitigation measures, and South Coast AQMD rules and permit requirements that the Lead Agency should include in the Final SEIR.

The Draft SEIR is the second supplemental CEQA document to the original Final EIR No. 575. The Final EIR No. 575 analyzed the Prima Deshecha Landfill (Landfill) 2001 General Plan Development (GPD), which provided the planning framework for long-term implementation of multiple uses of the Landfill, including solid waste disposal, recreation, and circulation. The Final EIR No. 575 analyzed the total design capacity of the Landfill and assumed a 4,000 tons per day (tpd) of waste would be received¹. The 2001 GPD was subsequently amended. The first supplemental Final EIR No. 597 to the original Final EIR No. 575 included an updated significance conclusion of “significant after mitigation” for air quality impacts associated with the 2001 GPD².

Based on the Draft SEIR, the Proposed Project is the fourth amendment to the Prima Deshecha Landfill 2001 GPD comprising of three components: 1) concurrent operations of Zone 1 and Zone 4 of the Landfill; 2) blasting, excavation, relocation, crushing, and stockpiling of hard rock material in Zone 4; and 3) soil import for linear installation during Zone 4 development phases³. The Proposed Project encompasses Zone 1 and Zone 4 of the existing 1,530-acre Prima Deshecha Landfill located at 32250 Avenida La Pata, San Juan Capistrano, California 92675. The Landfill is a Class III solid waste landfill currently permitted to accept up to 4,000 tpd of soil waste and 350 tpd of digested dewatered biosolids (e.g., wastewater treatment plant sludge). Only municipal solid waste is accepted at the Landfill. No special wastes or liquid wastes other than treated wood waste are accepted at the Landfill. Hazardous materials such as radioactive waste, asbestos, batteries, chemicals, paints, non-autoclaved medical wastes, treated wood, and

¹ Draft SEIR. Chapter 2. Introduction. Pages 2-5 to 2-6.

² *Ibid.* Pages 2-6 to 2-7.

³ Draft SEIR. Chapter 3. Section 3.4 Project Description. Page 3-5.

other substances considered hazardous are not accepted at the Landfill⁴. The Proposed Project would not change the refuse footprint or capacity of the existing Landfill.

Construction is anticipated to begin in 2022 to prepare Zone 4 for landfilling operations in 2024. Zone 1 and Zone 4 would concurrently operate beginning in 2024; however, only one Zone would be active on any given day⁵. Hard rock blasting and relocation would begin in 2023 and last through 2042, with one blast per month estimated to occur⁶. Soil import operations would begin in 2022 and continue throughout Zone 4 construction phases, with the last phase anticipated to be constructed in 2088 or 2089⁷.

Based on a review of the Draft SEIR and supporting technical documents, South Coast AQMD staff has three main comments. A summary of these comments is provided as follows with additional details provided in the attachment.

- a) CEQA Operational Air Quality Analysis – Haul Truck Trips from Soil Import for Linear Installation: The Draft SIER explains that haul truck trips from soil import for linear installation will occur throughout Zone 4 construction, which is anticipated to be completed in 2088 or 2089. In operational air quality analysis year 2058, the Lead Agency did not account for heavy-heavy-duty haul truck (HHDT) trips from soil import activities, which are still likely occurring in 2058. South Coast AQMD staff recommends the Lead Agency revise the operational air quality analysis year 2058 to account for HHDT trip emissions from soil import in the Final SEIR.
- b) Air Dispersion Modeling Parameters: The air dispersion modeling performed in the Draft SEIR did not utilize a uniform Cartesian grid and did not uniformly space receptors along the Cartesian Plant Boundary. To identify the maximum impacted receptors from concurrent operations in Zones 1 and 4 of the Landfill, South Coast AQMD staff recommends that the Lead Agency revise these parameters in the Final SEIR. Additionally, the Lead Agency used a receptor flagpole height of 1.8 meters instead of zero meters. The Lead Agency should provide additional information to justify this modeling parameter in the Final SEIR.
- c) Recommended Mitigation Measures: CEQA requires that the Lead Agency considers all feasible mitigation measures that go beyond what is required by law be utilized to minimize or eliminate any significant adverse air quality impacts. South Coast AQMD staff recommends the Lead Agency include mitigation measures to reduce the Proposed Project's emissions, particularly NOx emissions, over the Proposed Project's lifetime.
- d) South Coast AQMD Rules and Permit Requirements: In the Draft SEIR, the Lead Agency identified South Coast AQMD as the CEQA Responsible Agency because implementation of the Proposed Project requires permits from South Coast AQMD. The

⁴ *Ibid.* Page 3-4.

⁵ *Ibid.*

⁶ *Ibid.*

⁷ *Ibid.*

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Proposed Project may be subject to additional South Coast AQMD rules and permit requirements that should be discussed in the Final SEIR.

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Alina Mullins, Air Quality Specialist, at amullins@aqmd.gov, should you have any questions or wish to discuss the comments.

Sincerely,

Lijin Sun

Lijin Sun

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment

LS:AM

ORC210805-03

Control Number

ATTACHMENT**South Coast AQMD Staff's Summary of Air Quality Analysis and Health Risk Assessment**

In the Air Quality Analysis Section of the Draft SEIR, the Lead Agency quantified the Proposed Project's long-term construction and operational emissions in three analysis years: 2023, 2043, and 2058. The Lead Agency compared both long-term construction and operational emissions to South Coast AQMD's recommended regional operational air quality CEQA significance thresholds. The Lead Agency found that in 2023, NOx emissions would be 119 pounds per day (lbs/day), which would exceed South Coast AQMD's recommend regional air quality operational CEQA significance threshold at 55 lbs/day⁸. When the Lead Agency compared the Proposed Project's 2023 emissions to the emissions reported as part of the Approved Project's Emissions in the Final EIR No. 575 and the Final Supplemental EIR No. 597, the Lead Agency found that the Proposed Project would not result in new or significantly worse air quality impacts for NOx emissions that were not already considered in previous CEQA documents⁹. The Lead Agency incorporated 14 mitigation measures from the Final EIR No. 575 and the Final Supplemental EIR No. 597. These mitigation measures include fugitive dust control measures, odor control measures, and the use of off-road equipment that meets the latest CARB emission standard, when feasible¹⁰. Additionally, the Lead Agency found that the Proposed Project's operational emissions in 2043 and 2058 would be less than significant.

The Lead Agency also quantified the Proposed Project's localized emissions and compared them to the National Ambient Air Quality Standards and California Ambient Air Quality Standards. Based on the analysis, the Lead Agency found that the Proposed Project's localized long-term construction and operational air quality impacts would be less than significant¹¹. Additionally, the Lead Agency conducted a Health Risk Assessment (HRA) for the Proposed Project's long-term construction and operational activities and found they would result in a cancer inhalation risk of 0.6 in one million¹², which would not exceed South Coast AQMD's CEQA significance threshold of 10 in one million for cancer risk¹³.

South Coast AQMD staff's detailed comments on the CEQA air quality impacts analysis and air dispersion modeling are provided as follows.

1. CEQA Operational Air Quality Analysis – Haul Truck Trips from Soil Import for Linear Installation

In the Draft SEIR, the Lead Agency explained that soil import trips made by heavy-heavy-duty trucks (HHDT) would “continue throughout construction of all of the Zone 4 phases during linear installation, with the last Zone 4 development phase [...] anticipated to be constructed in approximately 2088-2089”¹⁴. However, upon review of the technical data files provided by the Lead Agency, it appears that in the third analysis year of 2058, no average daily HHDT trips

⁸ Draft SEIR. Section 4.2 Air Quality. Page 4.2-43.

⁹ *Ibid.* Page 4.2-45 to 4.2-46.

¹⁰ Draft SEIR. Pages 4.2-56 to 4.2-60.

¹¹ *Ibid.* 4.2-46.

¹² *Ibid.* 4.2-49.

¹³ South Coast AQMD's CEQA significance threshold of 10 in one million for cancer risk is based on the most current methodology recommended by the California Office of Environmental Health Hazard assessment.

¹⁴ Draft SEIR. Chapter 3 Project Description. Page 3-6.

from soil import were included in the emission calculations (Table 1)¹⁵. Since soil import trips would still occur until Zone 4 construction completion in 2088, it is reasonably foreseeable that soil import trips made by HHDT would occur in 2058. Therefore, South Coast AQMD staff recommends that the Lead Agency revise the operational air quality analysis year 2058 to include the emissions from HHDT trips associated soil import for linear installation to be compared to South Coast AQMD's regional operational air quality CEQA significance thresholds in the Final SEIR. If the operational air quality analysis year 2058 is not revised to include the emissions from HHDT trips associated soil import for linear installation, the Lead Agency should provide reasons for not including them supported by substantial evidence in the record.

Table 1: South Coast AQMD Staff Screenshot of Construction and Operation Equipment Emissions_OWR2001

Employee Vehicles and Trucks Trip Emissions - Prima Deshecha Landfill GDP Project																	
Vehicle Class	Speed (mph)	Miles per day	Emission Factors (g/mi)					Emission Rates (lbs/day)									
			VOC	CO	NO _x	SO _x	PM ₁₀	PM _{2.5}	VOC	CO	NO _x	SO _x	PM ₁₀	PM _{2.5}			
Soil Import for Liner Install																	
LDV	0	40	20	0.005865	0.579172	0.028433	0.002251	0.001136	0.001044	0.000	0.000	0.000	0.000	0.000	0.000		
MDV	0	15	0.5	0.064272	1.274609	0.076516	0.0057	0.007816	0.007478	0.000	0.000	0.000	0.000	0.000	0.000		
MDV	0	40	20	0.00838	0.15575	0.038239	0.002934	0.003902	0.003733	0.000	0.000	0.000	0.000	0.000	0.000		
MHDT	0	15	0.5	0.019179	0.258712	3.441615	0.014308	0.003619	0.003462	0.000	0.000	0.000	0.000	0.000	0.000		
MHDT	0	40	20	0.005698	0.057651	0.878146	0.007657	0.004458	0.004265	0.000	0.000	0.000	0.000	0.000	0.000		
HHDT	0	15	0.5	0.046633	0.662702	7.914558	0.023242	0.010262	0.009818	0.000	0.000	0.000	0.000	0.000	0.000		
HHDT	0	40	20	0.014122	0.156443	2.023474	0.011478	0.01121	0.010725	0.000	0.000	0.000	0.000	0.000	0.000		
											Subtotal	0.000	0.000	0.000	0.000	0.000	0.000
											Total	0.18	5.60	27.22	0.19	0.13	0.13
											SCAQMD Threshold	55	550	55	150	150	55

Truck Trip Data | Vehicle Emissions 2023 | Vehicle Emissions 2043 | **Vehicle Emissions 2058** | ... | + | : | ← | → | ↻

2. Air Dispersion Modeling Parameters

To analyze the Proposed Project's localized operational air quality and health risk impacts, the Lead Agency performed project-specific air dispersion modeling in the Draft SEIR. South Coast AQMD staff recommends that the Lead Agency revise the modeling parameters based on the following comments.

- a) Upon review of the air dispersion modeling files, the Lead Agency identified 40 discrete receptors and 25 Cartesian Plant Boundary receptors¹⁶. The 40 discrete receptors were placed north of Zone 1 and south of Zones 1 and 4. The 25 Cartesian Plant Boundary receptors were placed along the facility's boundary at spacing distances ranging from 100 meters to greater than 800 meters. The use of discrete receptors and the placement of 25 Cartesian Plant Boundary receptors with a spacing of 100 meters or greater may not have captured the maximum impacted receptors and the peak concentrations from concurrent landfilling operations in Zones 1 and 4. Therefore, South Coast AQMD staff recommends that the Lead Agency revise the air dispersion modeling to use a uniform Cartesian grid with a spacing of 100 meters or less for all distances less than 1,000 feet¹⁷ in the Final SEIR, or provide

¹⁵ Draft SEIR. Technical Data File. "Construction and Operation Equipment Emissions_OWR2001".

¹⁶ Draft SEIR. Technical Data Files. "AERMOD Files".

¹⁷ South Coast AQMD Modeling Guidance for AERMOD. Accessed at: <http://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance#Receptor>.

information to demonstrate that the peak concentrations were identified with the use of discrete receptors and the placement along the fence line boundary.

- b) In the air dispersion model, the Lead Agency used a flagpole receptor height of 1.8 meters with no justification in the Draft SEIR to explain why receptor heights were required¹⁸. When preparing the air dispersion modeling, all receptors should be set to the elevation, so that ground level concentrations are modeled. South Coast AQMD recommends that the Lead Agency revise the air dispersion modeling to account for ground level concentrations with a flagpole receptor height of zero meters. Alternatively, the Lead Agency should provide further justification as substantial evidence for using a flagpole receptor height of 1.8 meters in the Final SEIR.

3. Recommend Mitigation Measures

CEQA requires that the Lead Agency considers mitigation measures to minimize significant adverse impacts (CEQA Guidelines Section 15126.4) and that all feasible mitigation measures that go beyond what is required by law be utilized to minimize or eliminate any significant adverse impacts. South Coast AQMD staff recommends that the Lead Agency consider including the following mitigation measures in the Final SEIR to reduce the Proposed Project's long-term construction and operational NOx emissions, especially in the earlier years during implementation.

- Require that construction equipment equal to or greater than 50 horsepower be electrically powered or alternatively fueled. At a minimum, require the use of construction equipment rated by the United States Environmental Protection Agency as having Tier 4 Final (model year 2008 or newer) emission limits. Include this requirement in applicable bid documents, purchase orders, and contracts. Successful contractor(s) must demonstrate the ability to supply the compliant construction equipment for use prior to any ground disturbing and construction activities. A copy of each unit's certified tier specification or model year specification shall be available upon request at the time of mobilization of each applicable unit of equipment. Require periodic reporting and provision of written construction documents by construction contractor(s) to ensure compliance, and conduct regular inspections to the maximum extent feasible to ensure compliance. In the event that construction equipment cannot meet the Tier 4 Final engine certification, the project representative or contractor must demonstrate through future studies with written findings supported by substantial evidence that is approved by the lead agency before using other technologies/strategies. Alternative applicable strategies may include, but would not be limited to, construction equipment with Tier 4 Interim or reduction in the number and/or horsepower rating of construction equipment and/or limiting the number of construction equipment operating at the same time. All equipment must be tuned and maintained in compliance with the manufacturer's recommended maintenance schedule and specifications. All maintenance records for each equipment and their contractor(s) should be made available for inspection and remain on-site for a period of at least two years from completion of construction.

¹⁸ Draft SEIR. Section 4.2 Air Quality. Page 4.2-49.

- Require the use of zero-emissions (ZE) or near-zero emission (NZE) on-road haul trucks (e.g. material or soil import/export trucks) such as heavy-duty trucks with natural gas engines that meet the CARB's adopted optional NOx emissions standard at 0.02 grams per brake horsepower-hour (g/bhp-hr), if and when feasible. Given the state's clean truck rules and regulations aiming to accelerate the utilization and market penetration of ZE and NZE trucks such as the Advanced Clean Trucks Rule¹⁹ and the Heavy-Duty Low NOx Omnibus Regulation²⁰, ZE and NZE trucks will become increasingly more available to use, especially during the lifetime of the Proposed Project, which begins in 2023 and is anticipated to end in 2088 or 2089. The Lead Agency should require a phase-in schedule to incentive the use of these cleaner operating trucks to reduce any significant adverse air quality impacts. South Coast AQMD staff is available to discuss the availability of current and upcoming truck technologies and incentive programs with the Lead Agency.

At a minimum, require the use of 2010 model year²¹ that meet CARB's 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions or newer, cleaner trucks. Include these truck requirements in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with project construction to document that each truck used meets these emission standards, and make the records available for inspection. The Lead Agency should conduct regular inspections to the maximum extent feasible to ensure compliance.

Additionally, the Lead Agency should include an analysis to evaluate and identify sufficient electricity and supportive infrastructures in the Final SEIR, where appropriate.

- Limit the daily number of trucks allowed at the Proposed Project to levels analyzed in the Final SEIR. If higher daily truck volumes are anticipated to visit the Zone 4 of the Prima Deshecha Landfill, the Lead Agency should commit to re-evaluating the Proposed Project through CEQA prior to allowing higher truck activity levels.

4. South Coast AQMD Rules and Permit Requirements

Since the Proposed Project includes expansion of the existing Landfill operations into Zone 4, implementation of the Proposed Project requires permits from South Coast AQMD. The Draft SEIR identified South Coast AQMD as the CEQA Responsible Agency for the Proposed Project²². The Proposed Project may be required to submit application(s) under South Coast AQMD Rule 1150 – Landfill Excavation Management Plan. Additional timely and complete

¹⁹ CARB. June 25, 2020. *Advanced Clean Trucks Rule*. Accessed at: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>.

²⁰ CARB has recently passed a variety of new regulations that require new, cleaner heavy-duty truck technology to be sold and used in state. For example, on August 27, 2020, CARB approved the Heavy-Duty Low NOx Omnibus Regulation, which will require all trucks to meet the adopted emission standard of 0.05 g/hp-hr starting with engine model year 2024. Accessed at: <https://ww2.arb.ca.gov/rulemaking/2020/hdomnibuslownox>.

²¹ CARB adopted the statewide Truck and Bus Regulation in 2010. The Regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. More information on the CARB's Truck and Bus Regulation is available at:

<https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>.

²² Draft SEIR. Page 3-8.

applications for Permits to Construct and Permits to Operate may be required for the following equipment associated with the Landfill expansion:

- Installations of new and/or modifications to the existing Landfill Gas Collection System.
- Installations of new and/or modifications to the existing Landfill Condensate and Leachate Collection System.
- Installations of new and/or modifications to the existing Landfill Gas Control Systems, such as flare(s), boiler(s), engine(s), turbine(s), and microturbine(s).

In addition to South Coast AQMD Rules 401, 402, 403, 431.1, 431.2, 1150, and 1150.1, Title V Permit revisions, and New Source Performance Standards and Emission Guidelines that were discussed in the Draft SEIR, the Proposed Project will be subject to the requirements of the following South Coast AQMD rules and regulations²³ and should be discussed in the Final SEIR to demonstrate that the Proposed Project will comply with them.

- South Coast AQMD Rule 201 – Permit to Construct
- South Coast AQMD Rule 203 – Permit to Operate
- South Coast AQMD Rule 431.1 – Sulfur Content of Gaseous Fuels
- South Coast AQMD Rule 431.2 – Sulfur Content of Liquid Fuels
- South Coast AQMD Rule 1110.2 – Emissions from Gaseous- and Liquid-fueled Engines
- South Coast AQMD Rule 1401 – New Source Review of Toxic Air Contaminants
- U.S. Code of Federal Regulations (CFR) Title 40 Chapter 60 Subpart OOO – Standards of Performance for Non-metallic Mineral Processing Plants
- 40 CFR Chapter 60 subpart Cf – Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills
 - Including the state plan in 40 CFR Chapter 62 Subpart F (California); and
 - Including the applicable provisions of the federal plan in 40 CFR Chapter 62 Subpart OOO [Federal Plan Requirements (FR) for Municipal Solid Waste Landfills That Commenced Construction On or Before July 17, 2014 and Have Not Been Modified or Reconstructed Since July 17, 2014] referenced within the Subpart (see 86 FR 27756).
- 40 CFR Chapter 63 Subpart AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

South Coast AQMD's Engineering and Permitting staff should be consulted in advance to determine whether any additional South Coast AQMD rules and permits will be required and issued by South Coast AQMD prior to start of the construction or operation of the Proposed Project. Any assumptions used in the Air Quality Analysis in the Final SEIR will be used as the basis for permit conditions and limits for the Proposed Project. Please contact South Coast AQMD's Engineering and Permitting staff at (909) 396-3385. For more general information on permits, please visit South Coast AQMD's webpage at: <http://www.aqmd.gov/home/permits>.

Conclusion

²³ South Coast AQMD. Accessed at: <https://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book>.

Pursuant to California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(b), South Coast AQMD staff requests that the Lead Agency provide South Coast AQMD staff with written responses to all comments contained herein prior to the certification of the Final SEIR. In addition, issues raised in the comments should be addressed in detail giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice (CEQA Guidelines Section 15088(c)). Conclusory statements do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and to the public who are interested in the Proposed Project. Further, if the Lead Agency makes the finding that the recommended additional mitigation measures are not feasible, the Lead Agency should describe the specific reasons supported by substantial evidence for rejecting them in the Final SEIR (CEQA Guidelines Section 15091).