Draft Subsequent Environmental Impact Report

AltAir Renewable Fuels Conversion Project

Executive Summary

City Case No. CUP 757

State Clearinghouse #2020069013

December 2021

Prepared by:

City of Paramount

Planning Division

16400 Colorado Avenue

Paramount, CA 90723

Prepared with assistance from:

MRS Environmental, Inc.

1306 Santa Barbara Street

Santa Barbara, CA 93101

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Executive Summary

This Draft Subsequent Environmental Impact Report (SEIR) has been prepared to address the environmental impacts associated with the Renewable Fuels Conversion Project (Project). AltAir has been in partnership with Paramount Petroleum since 2013, when the Paramount Refinery (refinery) began the process of converting portions of their oil refinery into renewable fuels production, under the Original Paramount Petroleum AltAir Renewable Fuels Project (Original Renewable Fuels Project). This SEIR is a subsequent document to the Mitigated Negative Declaration (MND) that was prepared for the Original Renewable Fuels Project adopted December 2013 and revised per an Addendum May 2014. In 2018, World Energy purchased AltAir and the refinery, and AltAir became a wholly owned subsidiary of World Energy. Under World Energy, AltAir proposes to complete the conversion of the refinery to manufacturing only renewable fuels at a higher throughput level than the Original Renewable Fuels Project. The Applicant is asking the City of Paramount (City) for an amendment to Conditional Use Permit (CUP) 757 to proceed with construction and the conversion of the refinery.

The Paramount Refinery resides on a 66-acre parcel zoned M-2 (Heavy Manufacturing), APN 6268-005-013, at 14700 Downey Avenue in the City of Paramount. The City of Paramount is bounded by the cities of South Gate, Downey, Bellflower, Long Beach, Compton, and Lynwood. The refinery is bounded by Lakewood Boulevard, Somerset Boulevard, Downey Avenue, and Contreras Street. Refer to Figure ES-1 for the Project location. The refinery includes refinery processing units, renewable fuel processing units, over 1.7 million barrels of product storage; truck loading and unloading facilities; and railcar loading and unloading facilities.

The Project would also utilize the Lakewood Tank Farm, which is located at 2920 East 56th Street, Lakewood, California, approximately 2.8 miles south of the refinery. The Lakewood Tank Farm is zoned by the City of Lakewood as M-1 (Light Manufacturing). No modifications are proposed for the Lakewood Tank Farm.

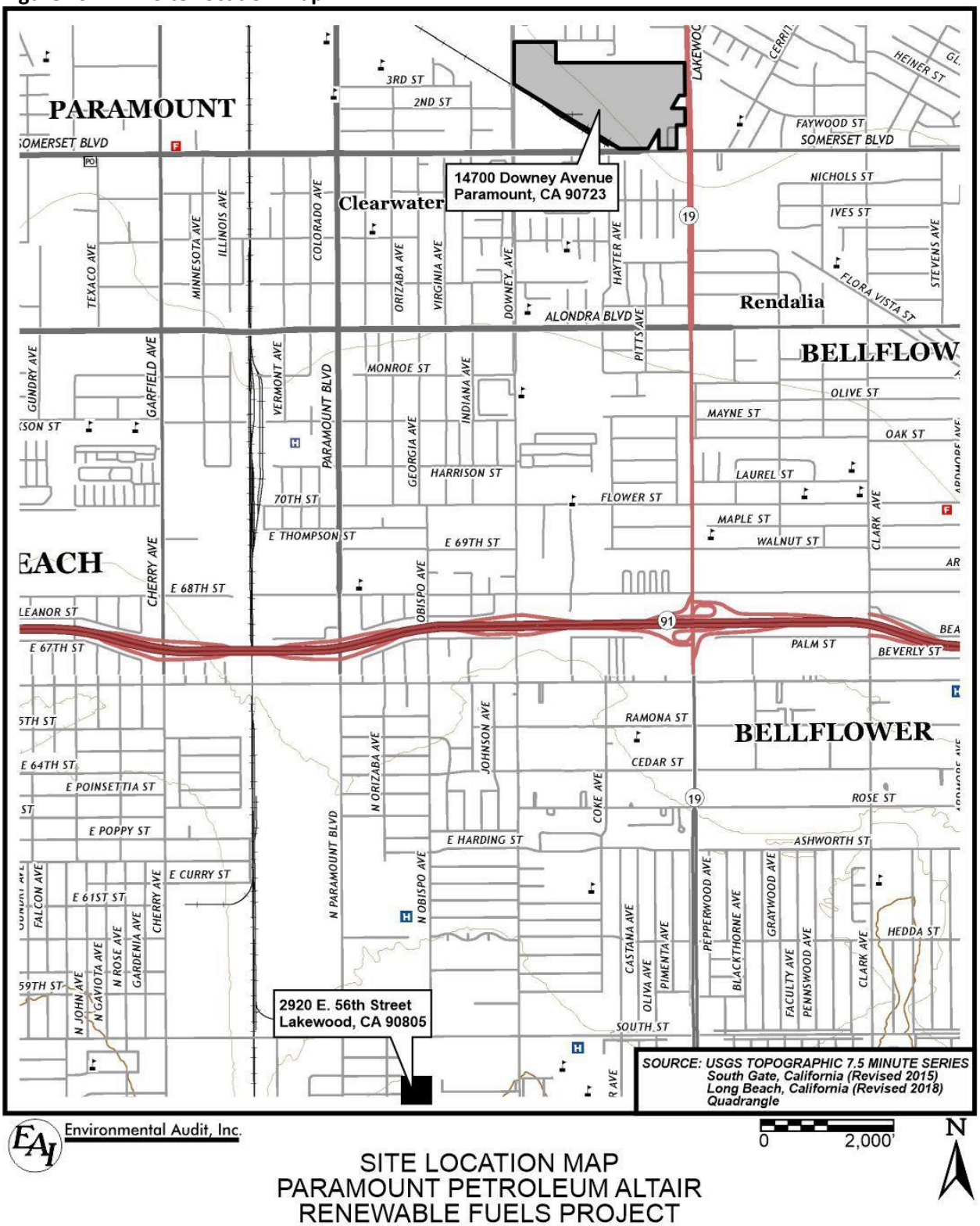
This SEIR is an informational document that is being used by the general public and governmental agencies to review and evaluate the Project. The reader should not rely exclusively on the Executive Summary as the sole basis for judgment of the Project. Specifically, the SEIR should be consulted for information about the environmental effects associated with the Project and potential mitigation measures to address or minimize those effects.

The remainder of the Executive Summary consists of the following sections:

- An introduction, which discusses the regulatory oversight in the preparation of the SEIR and public scoping process, and agency use of the SEIR;
- A brief description of the Project and the Project objectives;
- A discussion of the background environmental setting;
- A brief description of the alternatives evaluated in detail in the SEIR;
- A summary of key impacts of the Project, alternatives, and cumulative impacts; and
- A discussion of the Environmentally Superior Alternative.

Tables ES.4 through ES.6, located at the end of this Executive Summary, summarize the impacts and mitigation measures for the Project. The impacts and mitigation measures for the Project are discussed in detail in Sections 4.1 through 4.11 of this SEIR.

Figure ES-1 Site Location Map



Source: Applicant 2021.

ES.1 Introduction

AltAir filed an application with the City for an amendment to CUP 757 for the Project. The City, as Lead Agency under the California Environmental Quality Act (CEQA), determined that an SEIR would be required as part of the permitting process for the Project. The City's decision to prepare an SEIR is documented in an Initial Study included in Appendix D of this SEIR. The Initial Study, which consists of a checklist of possible effects on a range of environmental topics, found that the Project may have significant environmental impacts related to:

- Aesthetics;
- Air quality;
- Greenhouse gas (GHG) emissions;
- Hazards & risk;
- Hydrology & water quality;
- Land use;
- Noise;
- Transportation;
- Tribal cultural resources; and
- Utilities & service systems.

A detailed analysis associated with an SEIR is needed to further assess potential effects. While these issue areas are the main topics of focus in this SEIR, other issue areas are included in Section 4.12 which provides a discussion of issue areas that were found not to have the potential for significant impacts.

On June 4, 2020, the City, as the Lead Agency, issued a Notice of Preparation (NOP) to inform the general public and agencies that an SEIR would be prepared for the Project and to solicit comments on environmental issues to be addressed in the document. The public scoping comment period closed on July 6, 2020. Comments received in response to the NOP were used to further refine the scope of the analysis and the technical studies in this SEIR. Written comments received in response to the NOP are provided in Appendix D with an indication of specific SEIR sections where topics related to individual comments are addressed.

The City of Paramount is the Lead Agency per CEQA Guidelines Section 15051. In addition, a number of public agencies with discretionary authority over this Project have been identified as Responsible Agencies which may rely on this SEIR, once certified, as part of the deliberative review in deciding whether to approve or disapprove a particular activity. Table 1.3 in Section 1.0, Introduction, provides a listing of these Responsible Agencies and their applicability to the Project. The City, as the CEQA Lead Agency, will act first on the Project before any of the Responsible Agencies act on the Project. City decision-makers (Planning Commission and City Council) will use the SEIR for decision-making regarding the Project. If the Project is approved by all required permitting agencies, the City would be responsible for reviewing and approving all pre-construction compliance plans and ensuring that the Project modifications and operations are conducted in accordance with the CUP conditions.

This Draft SEIR is being circulated for public review for a period of 45 days as required by CEQA. Public agencies and members of the public are invited to provide written comments on the Draft SEIR.

The Draft SEIR (paper copy form) as well as the Final SEIR will be available to the general public for review at these locations:

- City of Paramount Planning Department
- City of Paramount Public Library

CD and paper copies of the Draft SEIR may be obtained (free of charge) at the City of Paramount Planning Department.

The Draft SEIR is also available on the City of Paramount's website at:
http://www.paramountcity.com/government/planning-department/planning-division/environmental-documents

All comments on the Draft SEIR must be received no later than *January 19th, 2022,* and should be directed to:

John Carver, Director of Planning
City of Paramount, Planning Department
16400 Colorado Avenue
Paramount, California 90723
Phone: (562) 220-2048
JCarver@paramountcity.com

Upon completion of the 45-day review period, the City will review and prepare written responses to each comment as required by CEQA and the CEQA Guidelines. A Final SEIR will then be prepared, incorporating all the comments received, along with written responses to received comments.

ES.2 Project Description

This section of the Executive Summary provides a brief description of the Project. A complete description is provided in Section 2.0, Project Description, of this SEIR.

The Project would convert the remainder of the crude oil refinery into a 25,000 barrels per day (BPD) renewable fuels production facility. This conversion would: eliminate the refining of crude oil and support use of renewable jet fuel, diesel, gasoline, and propane.

The Project would make renewable fuels out of a variety of raw materials from technical grade tallows and vegetable oils, to lower grade fats, greases and oils.

The Project modifications would include a new Pretreat Unit, modifications to the existing Renewable Fuels Unit A, a new Renewable Fuels Unit B, a new Hydrogen Generation Unit, a new Hydrogen Recovery Unit, a new Propane Recovery Unit, upgrades to the existing wastewater treatment system, a new Hydrogen Sulfide Recovery Unit, a second Sour Water Stripper, a new flare, modifications to the truck and rail loading/unloading racks, and new pipelines within the refinery. In addition, some existing tanks would be upgraded/repaired and be permitted to handle different products (e.g., non-edible vegetable oils and beef tallow). The Project would also include utilizing two existing 55,000-barrel storage tanks at the Lakewood Tank Farm. The Project would also relocate several buildings on-site and provide temporary buildings for the demolition and construction process.

The Project is expected to require up to 50 railcars per day on two trains and 312 trains per year as well as three barges per month coming into the Port of Los Angeles with associated truck trips to the refinery to supply the Project with feedstock, blend materials and products. Most refinery products (gasoline, diesel, jet fuel and propane) will be transported from the refinery by truck. Renewable jet fuel can be transferred from the Paramount Refinery via existing pipeline to the Lakewood Tank Farm. If transferred by pipeline, the jet fuel would go to the Lakewood Tank Farm, where conventional jet fuel will also be transferred via pipeline from other suppliers to the Lakewood Tank Farm, where it would be blended with renewable jet fuel. The final blended product would be transferred via pipeline to tankage in Carson, California, where it would be delivered via other pipelines to Los Angeles International Airport.

Construction would be phased over a two- to three-year period. Demolition activities include relocation of loading and unloading racks and buildings, and removal of asphalt production facilities to make room for new equipment installation, including the Hydrogen Generation Unit and new equipment required for Unit B and the support units and utilities. Construction activities would overlap some of the demolition and operational activities. Construction activities would occur both during the daytime and during the nighttime.

Construction of the natural gas pipeline is also expected to occur during the time that the Hydrogen Generation Unit is being constructed. Construction of the natural gas pipeline would also occur both during the daytime and during the nighttime. Refer to Section 2.8 for a full discussion of Project construction activities.

ES.3 Objectives of the Project

Pursuant to Section 15124(b) of the CEQA Guidelines, the description of the Project is to contain "a clearly written statement of objectives" that would aid the lead agency in developing a reasonable range of alternatives to evaluate in the SEIR and would aid decision makers in preparing findings and, if necessary, a statement of overriding considerations. The City is the lead CEQA agency responsible for preparing the SEIR. The City decision-makers will consider the SEIR for certification and the Project for approval.

The Project would complete the conversion of the Paramount Refinery to manufacturing only renewable fuels. The Project objectives as provided by the Applicant are summarized as follows:

ES.3.1 Objectives

1. Reduce dependency on fossil fuels (both foreign and domestic);
2. Provide fuels that meet the requirements of CARB's Low Carbon Fuel Standard (Title 17, CCR Sections 95480-95490), which reduces the carbon intensity of transportation fuels in California;
3. Supply fuels that reduce individual truck and airplane emissions;
4. Convert the Paramount Refinery to a 100 percent renewable fuels production facility by eliminating the refining of crude oil at the refinery, while protecting high quality jobs;
5. Repurpose existing refinery equipment, to the extent feasible, to minimize construction activities;
6. Phase construction activities to increase the production of renewable fuels as soon as possible (i.e., modifications to Unit A would commence immediately after receipt of permits prior to completion of construction of other Project elements);
7. Increase the variety of raw materials that can be used to manufacture renewable fuels from technical grade tallows and vegetable oils, to also include lower grade fats, greases and oils;

8. Continue use of renewable fuel gases to operate the refinery's heaters and boilers;
9. Recycle hydrogen sulfide on-site to minimize the purchase and truck transport of new sulfiding agent to the site; and
10. Produce hydrogen on-site for the production of renewable fuels at the refinery.

ES.4 Background and Historic Operations

Environmental review of several projects at the Paramount Refinery have been conducted pursuant to the California Environmental Quality Act (CEQA). Section 1.0, Introduction, provides information on the history of the CEQA processes related to the refinery.

The initial CEQA and permitting efforts for the Original Renewable Fuels Project were approved by the City under CUP 757 and ZV 401, and new and modified air permits were issued by the South Coast Air Quality Management District (South Coast AQMD). The CEQA review for the previously approved project included a Mitigated Negative Declaration for the Paramount Petroleum AltAir Project adopted December 30, 2013 and revised per an Addendum May 14, 2014. Construction of the initial modifications to the refinery to produce renewable fuels occurred between 2014 and 2015, and the refinery began producing renewable fuels in 2016.

The Original Renewable Fuels Project allowed the refinery to convert up to 3,500 BPD of non-edible vegetable oils and beef tallow into renewable fuels, including aviation (jet), diesel, naphtha (gasoline), and fuel gas. The project involved the modification of certain existing refinery equipment, including the addition of new vessels and reactors, while continuing to operate as a crude oil refinery. The current original renewable fuels operation has been in continuous production since January of 2016.

ES.5 Description of Alternatives

Alternatives to the Project were developed per CEQA Guidelines Section 15126.6. Section 5.0, Environmental Analysis and Comparison of Alternatives, provides a complete description of all alternatives considered, including explanation for rejecting potential alternatives for further analysis. The following were the alternatives evaluated and carried forward to the Environmentally Superior Alternative Discussion.

ES.5.1 No Project Alternative

CEQA requires that the No Project Alternative be evaluated along with its impacts as part of the EIR (CEQA Guidelines Section 15126.6(e) (1)). The No Project Alternative would involve not modifying the refinery and most likely continuing with the smaller, Original Renewable Fuels configuration and returning the refinery to a crude oil refinery, with a range of potential impacts depending on how the refinery is operated. No construction would take place and no natural gas pipeline would be built. Hydrogen would continue to be supplied via the existing hydrogen pipeline.

ES.5.2 Relocated Natural Gas Pipeline Route Alternative

The Project will require large amounts of natural gas in order to produce hydrogen. This will require a connection to a natural gas transmission pipeline. This connection generates significant and unavoidable impacts for hazards as a new natural gas pipeline would be installed through residential neighborhoods. There are a number of natural gas transmission pipelines in Los Angeles, as shown in Figure 5-1. None of them are located in close proximity to the Paramount Refinery. The Project proposes a 3.7-mile natural

gas pipeline south from the refinery along Lakewood Blvd. to the natural gas transmission pipeline on Del Amo Blvd. Alternative natural gas pipeline routes are possible which might reduce the severity of the potential impacts by utilizing shorted routes.

ES.5.3 Pipeline Transportation of Refinery Products Alternative

The Project CEQA analysis assumes that most of the refinery products would be transported by truck and rail. The movement of refinery feedstocks and products by primarily truck and rail as proposed under the Project, instead of by pipeline as was the case historically, causes a substantial increase in air emissions and a significant and unavoidable impact in air quality. Although some material, including jet fuels and diesel, may be transported by pipeline, transferring this material movement to pipeline to the maximum extent feasible (limited by pipeline scheduling of the common carrier pipeline and available inventory capacity at either end) under this alternative could reduce the severity of the air quality impact over the Project.

ES.5.4 Other Alternatives Examined

Other alternatives were examined and eliminated from detailed consideration, including:

- Reduced Refinery Production;
- Reduced Hydrogen Plant;
- Relocated Refinery;
- Relocated Hydrogen Plant; and
- Different Hydrogen Generation Methods.

These are discussed in Section 5.0, Alternatives.

ES.6 Impacts of Project, Alternatives, and Cumulative Development

In the Impact Summary Tables (ES.1 through ES.6) in this Executive Summary and throughout this SEIR, the impacts of the Project and alternatives have been classified using the categories Class I, II, III, and IV as described below:

- ***Class I – Significant and Unavoidable***: Significant unavoidable adverse impacts for which the decisionmaker must adopt a statement of Overriding Considerations: these are significant adverse impacts that cannot be effectively avoided or mitigated. No measures could be taken to avoid or reduce these adverse effects to insignificant or negligible levels. Even after application of feasible mitigation measures, the residual impact would be significant;
- ***Class II – Less Than Significant with Mitigation***: Significant environmental impacts that can be feasibly mitigated or avoided for which the decision maker must adopt Findings and recommended mitigation measures: these impacts are potentially similar in significance to those of Class I but can be reduced or avoided by the implementation of feasible mitigation measures. After application of feasible mitigation measures, the residual impact would not be significant;
- ***Class III – Less than Significant***: Adverse impacts found not to be significant for which the decision maker does not have to adopt Findings under CEQA: these impacts do not meet or exceed the

identified thresholds for significance. Generally, no mitigation measures are required for such impacts; and

- ***Class IV – Beneficial***: Impacts beneficial to the environment.

The term "significance" is used in these tables and throughout this SEIR to characterize the magnitude of the projected impact. For the purposes of this SEIR, a significant impact is a substantial or potentially substantial change to resources in the local Project area or the area adjacent to the Project in comparison to the threshold of significance established for the issue area. Within each issue area an analysis of potential impacts compared to the appropriate significance criteria is presented.

The remainder of this section provides a brief discussion of the significant and unavoidable Class I impacts identified for the Project, the alternatives, and cumulative development. A detailed listing of the impacts associated with the Project can be found in the Impact Summary Tables at the end of this section. Sections 4.1 through 4.11 provide a comprehensive discussion of impacts of the Project and discussions of the impacts associated with the cumulative development. Section 5.0, Alternatives, provides an analysis of the impacts of each selected alternative, compares the impacts of each alternative relative to the Project, and identifies the Environmentally Superior Alternative.

ES.6.1 Impacts Associated with the Project

Table ES.1 summarizes the Project impacts and mitigation measures.

Table ES.1 Summary of Project Impacts and Mitigation Measures

Issue Area	Impact	Description	Class*	Mitigation Measures
Aesthetics	A.1	Scenic Vistas	III	
	A.2	Scenic Resources	III	
	A.3	Visual Character/Quality	III	
	A.4	Lighting	II	Light Shielding
Air Quality	**AQ.1**	**Construction**	**I**	Construction Management Program
	AQ.2	**Operations**	**I**	Newer Trucks NOx Reduction Program
	AQ.3	Toxics	III	
	AQ.4	Odors	III	
	AQ.5	Rules and Policies	II	Recordkeeping
Climate Change GHG	GHG.1	GHG Emissions	III	
	GHG.2	Plans	IV	
Hazardous Materials	HM.1	Routine Operations	III	
	HM.2	Upsets	III	
	HM.3	**Pipeline**	**I**	None
	HM.4	Schools	III	
	HM.5	Site Contamination	III	
	HM.6	Airports	III	
	HM.7	Emergency Response	III	
	HM.8	Wildland Fires	III	
Hydrology and Water Quality	WQ.1	Standards	III	
	WQ.2	Groundwater Supplies	III	
	WQ.3	Drainage Patterns	III	
	WQ.4	Pollutants	III	
	WQ.5	Control Plans	III	
Land Use and Planning	LU.1	Create Divisions	III	
	LU.2	Policy Conflict	III	

Table ES.1 Summary of Project Impacts and Mitigation Measures

Issue Area	Impact	Description	Class*	Mitigation Measures
Noise and Vibration	N.1	Pipeline and Refinery Construction *Daytime construction not significant*	II	Daytime limits Noise Monitoring and Management Plan
	N.2	**Operations: Rail Connection** *Refinery operations not significant*	**I**	Noise Assessment Noise Monitoring and Management Plan Railroad Noise Reduction Measures
	N.3	Vibration	III	
	N.4	Airport Noise Conflicts	III	
Transportation and Circulation	T.1	Policy Conflicts	II	Lakewood Blvd. Restriping
	T.2	VMT	III	
	T.3	Traffic Hazards	II	Traffic Management Plan
	T.4	Emergency Access	III	
Tribal Cultural Resources	TC.1	Tribal Resources	II	Monitoring, Procedures
	TC.2	Tribal Resources Specifics	II	Monitoring, Procedures
	TC.3	Human Remains	II	Procedures
Utilities and Service Systems	US.1	New Resource	III	
	US.2	Water Supplies	III	
	US.3	Wastewater	III	
	US.4	Solid Waste	III	
	US.5	Solid Waste Regs	III	
Other	All	Ag, Bio, Energy, Geo, Mineral, Housing, Public Services, Recreation, Wildfire	III	

* Class I = Significant and Unavoidable; Class II = Less than Significant with Mitigation; Class III = Less than Significant; Class IV = Beneficial.

ES.6.1.1 Significant and Unavoidable Class I Impacts

Significant and unavoidable Class I impacts occur in three issue areas: air quality, hazards, and noise. Each of these is discussed below.

Air Quality

- **Impact AQ.1:** The Project would generate emissions during construction that could exceed the South Coast AQMD thresholds.
    - **Mitigation Measure AQ-1a: Construction Management Program.** The Applicant must develop and maintain a Construction Management Program for the Project that shall incorporate the mitigation measures and Best Management Practices AQ-1a-1 through AQ-1a-11 in Section 4.2.4.1.

Impact AQ.1 is generated due to the large numbers of construction equipment and the intensity of the work effort to modify the refinery. The South Coast AQMD has thresholds associated with pollutant emissions for both regional and local impacts. The Project would exceed both regional and localized thresholds even with mitigation of the cleanest construction equipment available.

- **Impact AQ.2:** Operational emissions could exceed the South Coast AQMD thresholds.
    - **Mitigation Measure AQ-2a: Newer Trucks.** The Applicant shall require that all contracts with trucking companies for the use of heavy-duty trucks (as per DOT gross vehicle weight

rating greater than 26,000 lbs) specify the required use of 2017 model year trucks or newer in order to reduce NOx emissions.

- **Mitigation Measure AQ-2b: NOx Reduction Program**. The Applicant shall implement a plan to fund NOx reduction measures in the community both locally and regionally.

Impact AQ.2 is generated due to the large increase in truck and rail transportation required under the Project. Historically, crude oil supplied to the refinery was transported in pipelines, and product produced by the refinery was transported in pipelines. With the Project, the amount of materials transported by truck and rail would substantially increase, thereby exceeding the South Coast AQMD thresholds for regional impacts. The South Coast AQMD thresholds for localized impacts would not be exceeded.

The South Coast AQMD reviewed the administrative draft SEIR prior to issuance and provided comments and corrections to the detailed air quality analysis and modeling.

Hazardous Materials/Risk of Upset

- **Impact HM.3:** The Project transportation of materials by truck, rail, marine barge and pipeline could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
    - No additional requirements beyond regulatory requirements detailed in Section 4.4.2.

Under impact HM.3, the installation of a large natural gas pipeline 3.7 miles in length through heavily populated areas would introduce an additional hazard to the area and would be a significant and unavoidable Class I impact. Hazards associated with marine barge spills to the environment would also be a significant and unavoidable Class I impact.

Hazards at the refinery would be slightly less than the hazards presented by the 2011 crude oil refinery and would therefore be less than significant at the refinery.

Noise and Vibration

- **Impact N.2:** Operation: The Project would result in the generation of an increase in ambient noise levels in the vicinity of the Project rail connection.
    - **Mitigation Measure N-2c: Railroad Noise Reduction Measures.** The Applicant shall work with the railroad operator to ensure that there are limits on delivery times.

Impact N.2 is generated due to Project operation activities that produce an increase in daily and annual train traffic along the connection to the rail mainline located about 1 mile to the west of the refinery site. This increase in rail traffic would result in a substantial noise increase. Noise increases along the rail connection in daily CNEL and average annual CNEL levels would be substantial and potentially significant and unavoidable.

Two significant and unavoidable impacts also are associated with cumulative projects for air quality and transportation. These are discussed in the cumulative section below.

ES.6.1.2 Beneficial Class IV Impacts

The renewable products to be produced by the Project provide a cleaner source of energy by reducing full life-cycle greenhouse gas emissions by over 60 percent relative to fossil fuels. The current Renewable Fuels process produces up to 50 million gallons per year of renewable fuels, equating to a reduction of approximately 365,000 metric tons (MT) carbon dioxide (CO_2). AltAir also supplies jet fuel to United

Airlines, which contributes to a reduction in airlines emissions as well. AltAir's fuels meet all regulatory and commercial specifications without requiring engine modification, while securing a renewable alternative energy source. The Project modifications would continue the Original Renewable Fuels Project started in 2013 to manufacture renewable fuels in compliance with CARB's Low Carbon Fuel Standard (Title 17, California Code of Regulations, Sections 95480-95490), which reduces greenhouse gas emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. This contribution to the goals established by California to reduce GHG emissions would be a beneficial impact. Therefore, impacts for GHG.2 would be beneficial (Class IV).

ES.6.1.3 Environmental Justice

Environmental justice impacts are discussed in Section 4.12 of this SEIR. Due to the significant and unavoidable Class I impacts in air quality, hazards, and noise, and the location of high-density minority and poverty areas near the refinery and along the pipeline route, the Project would disproportionately affect minority and low-income populations at levels exceeding the corresponding median for the area in which the Project is located.

ES.6.2 Impacts Associated with the Alternatives

As discussed in Section ES.4, several alternatives to the Project were evaluated that had the potential to reduce significant impacts. The relative impacts of each of these alternatives to the Project are summarized below.

ES.6.2.1 No Project Alternative

The No Project Alternative either increases or reduces impacts relative to the Project depending on how the refinery is operated under the No Project Alternative. The No Project Alternative would not meet the objectives of the Project to further reduce dependency on fossil fuels (both foreign and domestic), to reduce the carbon intensity of transportation fuels in California, and to reduce individual truck and airplane emissions by providing lower emission fuels. As required by CEQA, this alternative has been retained for consideration in the environmentally superior alternatives discussion below.

ES.6.2.2 Relocated Natural Gas Pipeline Route Alternative

There are potential issues with the acquiring of permits and rights-of-ways to utilize alternative pipeline routes and these are therefore speculative. The Pacific Electric Right-of-Way (ROW) and freight ROW, for example, has plans for use by LA Metro and its availability for the installation of a natural gas pipeline is speculative. However, since this alternative could reduce the severity of the significant and unavoidable Class I hazards impact from a natural gas pipeline due to shorter routes, it was retained for analysis in the environmentally superior discussion below.

ES.6.2.3 Pipeline Transportation of Refinery Products Alternative

Since this alternative could provide reductions in the severity of impacts due to a reduction in truck and rail traffic, and an associated decrease in air emissions, this alternative has been retained for discussion in the environmentally superior alternative below.

ES.6.3 Impacts Associated with the Cumulative Development

Section 15130(a)(1) of the CEQA Guidelines (14 CCR, Div. 6, Ch. 3) states that a "cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together

with other projects causing related impacts." CEQA requires a discussion of the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable" (14 CCR §15130(a)). Section 3.0 of this SEIR provides a list of past, present, and probable future projects that could have cumulative effects with the Project. Table ES.2 provides a summary of the Project's cumulative effects.

Table ES.2 Cumulative Impacts

Issue Area	Proposed Project Cumulative Impacts	Cumulative Impacts Additional Mitigation Measures
Aesthetics	Class III	None
Air Quality	**Class I**	None
Climate Change: GHG	Class III	None
Hazardous Materials	Class II	HM-Cum1: Coordination with LA Metro during construction
Hydrology	Class III	None
Land Use	Class III	None
Noise	**Class I**	None
Transportation	**Class I**	None
Tribal	Class III	None
Utilities	Class III	None
Other	Class III	None

Significant and unavoidable Class I cumulative impacts would be realized in air quality, noise, and transportation.

- ***Air quality*** cumulatively significant and unavoidable Class I impacts could occur because other projects could generate emissions that could contribute to the Projects significant and unavoidable impacts and, by definition, a significant and unavoidable Class I impact in air quality also produces potentially significant and unavoidable Class I cumulative impacts.
- ***Noise*** cumulative significant and unavoidable Class I impacts would occur due to the West Santa Ana Branch Transit Corridor (WSAB) project's production of significant and unavoidable impacts to areas near the refinery. For residences located on the western end of the rail connection, the mitigation sound walls installed by the WSAB project would reduce the noise levels from the Project. However, other areas would not be reduced as much and would therefore remain cumulatively significant and unavoidable.
- ***Transportation*** cumulative impacts would occur because the Port of Los Angeles identified significant and unavoidable Class I transportation impacts along the Highway 710 corridor due to Port projects. This Project would contribute to those significant and unavoidable Class I impacts by adding trucks to and from the Port.

ES.7 Environmentally Superior Alternative

Section 5.0, Alternatives, provides an analysis of the impacts of each selected alternative, compares the impacts of each alternative to the Project, and identifies the Environmentally Superior Alternative. Table ES.3 provides a relative comparison of the Class I, Class II, and Class III impacts of each alternative to the Project by issue area and impact.

Table ES.3 Alternatives Comparison

Issue Area	Proposed Project	No Project	Relocated Natural Gas Pipeline Route	Pipeline Transportation of Refinery Products
Aesthetics	Class II	Class III	Class II	Class II
Air Quality	**Class I**	**Class I** or III	**Class I**	**Class I** ↓
Climate Change and GHG	Class III and IV	Class III	Class III and IV	Class III and IV
Hazardous Materials	**Class I**	**Class I**	**Class I** ↓	**Class I**
Hydrology and Water Quality	Class III	Class III	Class III	Class III
Land Use	Class III	Class III	Class III	Class III
Noise and Vibration	**Class I**	Class III	**Class I**	**Class I**
Transportation	Class II	Class III	Class II	Class II ↓
Tribal Cultural Resources	Class II	Class III	Class II	Class II
Utilities and Service Systems	Class III	Class III	Class III	Class III
Other	Class III	Class III	Class III	Class III

Notes: ↑ = decrease in severity, ↓ = increase in severity

The No Project Alternative would most likely involve the continuation of the Original Renewable Fuels Project at the Paramount Refinery at the level of 3,500 BPD and the return to a crude oil refinery with a potential range of impacts depending on the level of crude oil production. The operational air quality significant and unavoidable impacts would be eliminated if the refinery operates similar to 2011 levels or more recent levels as fewer trips would be required to transport the lower volumes of renewable fuels, or, under the crude oil refinery scenario, more feedstocks and products could be transported by pipeline, thereby reducing air emissions. If the refinery were to operate at higher levels, the air emissions could increase under the No Project Alternative scenario.

The No Project Alternative would eliminate the construction-related air quality impacts associated with the Project's refinery conversion.

The hazards impacts would also be reduced as the natural gas pipeline would not be installed. However, the existing hydrogen pipeline being used to supply hydrogen to the refinery currently may then operate on a long-term basis as the hydrogen generation unit proposed as part of the Project would no longer be installed. This long-term operation of the hydrogen pipeline would be a potentially significant and unavoidable Class I impact. In addition, the operation of the refinery as a crude oil refinery would not realize the beneficial impact associated with the increased production of renewable transportation fuels.

Other issues areas that were identified as less than significant with mitigation (aesthetics, transportation, and tribal cultural resources) would be less than significant. In addition, impacts that were identified as less than significant (climate change, hydrology, land use, utilities, and other issue areas) would continue to be less than significant.

Since the impacts of the No Project Alternative could either increase or reduce impacts of the Project depending on how the refinery is operated, and under the No Project Alternative the beneficial impact associated with GHG emissions would be eliminated, it is not selected as the environmentally superior alternative. In addition, the No Project Alternative would not achieve any of the Project objectives.

The Pipeline Transportation of Refinery Products alternative would require the transportation of products by pipeline to the maximum extent feasible (limited by pipeline scheduling of the common carrier pipeline and available inventory capacity at either end), and would reduce the severity of the impacts of some issue areas, specifically the significant and unavoidable Class I impact associated with air quality during

operations due to the reduction in truck use. In addition, it would reduce the amount of truck traffic coming into and out of the refinery, which was identified as a Class II impact, thereby reducing the severity of the transportation impacts, and would nominally reduce the noise impacts (also Class II) as fewer truck trips would reduce noise levels. The Applicant has indicated that the movement of some products by pipeline would occur as part of the operations, yet the CEQA analysis assumes that most transportation would be by truck in order to be conservative. Therefore, increased transportation by pipeline over the assumptions in the CEQA analysis would be feasible as they already have access to some of these pipeline resources and historically have moved refinery products via these pipelines. At this time, however, it is difficult to quantify the exact extent to which products could be transported by pipeline instead of truck as the markets for renewable fuels are relatively new. As this alternative could provide a reduction in the severity of a significant and unavoidable Class I impact as well as reduce the severity of some Class II impacts, it has been selected as the environmentally preferred alternative.

Table ES.4 Proposed Project Class I Impacts

Impacts That Are Significant and Unavoidable Levels

(Impacts that must be addressed in a "statement of overriding consideration" if the Project is approved in accordance with Sections 15091 and 15093 of the State CEQA Guidelines)

Impact #	Description of Impact	Phase	Mitigation Measures
AIR QUALITY (Section 4.2)			
AQ.1	The Project would generate emissions during construction that could exceed the South Coast AQMD thresholds.	Construction	AQ-1a: Construction Management Program
AQ.2	Operational emissions could exceed the South Coast AQMD thresholds.	Operation	AQ-2a: Newer Trucks AQ-2b: NOx Reduction Program
HAZARDOUS MATERIALS AND RISK OF UPSET (Section 4.4)			
HM.3	The Project transportation of materials by truck, rail, marine barge and pipeline could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Operation	No additional requirements beyond regulatory requirements detailed in Section 4.4.2.
NOISE AND VIBRATION (Section 4.7)			
N.2	Operation: The Project would result in the generation of an increase in ambient noise levels in the vicinity of the Project.	Operation	N-2a: Noise Assessment N-2b: Noise Monitoring and Management Plan N-2c: Railroad Noise Reduction Measures

Table ES.5 Proposed Project Class II Impacts

Impacts That Can Be Mitigated to Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Sections 15091 of the State CEQA Guidelines)

Impact #	Description of Impact	Phase	Mitigation Measure
AESTHETICS AND VISUAL RESOURCES (Section 4.1)			
A.4	The Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Construction or Operation	A-4a: Light Shielding
AIR QUALITY (Section 4.2)			
AQ.5	The Project would not diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s).	Operation	AQ-5a: Recordkeeping
NOISE AND VIBRATION (Section 4.7)			
N.1	Construction: The Project would result in the generation of a substantial temporary increase in ambient noise levels in the vicinity of the Project.	Construction	N-1a: Daytime Limits N-1b: Noise Monitoring and Management Plan
TRANSPORTATION AND CIRCULATION (Section 4.8)			
T.1	Project operations would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	Operation	T-1a: Lakewood Blvd. Restriping
T.3	The Project could substantially increase hazards due to a design feature or incompatible use.	Construction or Operation	T-3a: Traffic Management Plan
TRIBAL CULTURAL RESOURCES (Section 4.9)			
TC.1	The Project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or one that is determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1.	Construction	TC-1a: Retain a Native American Monitor/Consultant TC-1b: Unanticipated Discovery of Tribal Cultural or Archaeological Resources Procedures
TC.2	The Project would not cause a substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5.	Construction	Impact TC.2 requires the implementation of Mitigation Measures TC-1a and TC-1b above.

Table ES.5 Proposed Project Class II Impacts

Impacts That Can Be Mitigated to Less Than Significant Levels

(Impacts that must be addressed in Findings that the mitigation measures would reduce the level of impact to insignificant in accordance with Sections 15091 of the State CEQA Guidelines)

Impact #	Description of Impact	Phase	Mitigation Measure
TC.3	The Project would not disturb any human remains, including those interred outside of dedicated cemeteries.	Construction	TC-3a: Unanticipated Discovery of Human Remains Procedures

Table ES.6 Proposed Project Class III Impacts

Less Than Significant Impacts

Impact #	Description of Impact	Phase	Mitigation Measures
AESTHETICS AND VISUAL RESOURCES (Section 4.1)			
A.1	The Project would not have a substantial adverse effect on a scenic vista.	Construction or Operation	None required.
A.2	The Project would not substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.	Construction or Operation	None required.
A.3	The Project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage points).	Construction or Operation	None required.
AIR QUALITY (Section 4.2)			
AQ.3	Operational toxic emissions could exceed the South Coast AQMD thresholds.	Operation	None required.
AQ.4	Operational emissions could generate odors.	Operation	None required.
CLIMATE CHANGE AND GREENHOUSE GASES (Section 4.3)			
GHG.1	The Project would not generate greenhouse gas emissions, either directly or indirectly, that would have a significant impact on the environment.	Construction or Operation	None required.
GHG.2	The Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Construction or Operation	None required.
HAZARDOUS MATERIALS AND RISK OF UPSET (Section 4.4)			
HM.1	The Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Construction or Operation	None required.
HM.2	The Project refinery would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Construction or Operation	None required.

Table ES.6 Proposed Project Class III Impacts

Less Than Significant Impacts

Impact #	Description of Impact	Phase	Mitigation Measures
HM.4	The Project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Operation	None required.
HM.5	The Project would not create a significant hazard to the public or the environment by being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.	Construction	None required.
HM.6	The Project would not be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport; the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area.	Construction or Operation	None required.
HM.7	The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Construction or Operation	None required.
HM.8	The Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.	Construction or Operation	None required.
HYDROLOGY AND WATER QUALITY (Section 4.5)			
WQ.1	The Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	Construction or Operation	None required.
WQ.2	The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the Basin.	Construction or Operation	None required.
WQ.3	The Project would not substantially alter the existing drainage pattern of the site in a manner which would:	Construction or Operation	None required.

Table ES.6 Proposed Project Class III Impacts

Less Than Significant Impacts

Impact #	Description of Impact	Phase	Mitigation Measures
	result in substantial erosion; substantially increase surface runoff which would result in flooding; create runoff which would exceed the capacity of existing stormwater drainage systems or provide polluted runoff; or impede or redirect flood flows.		
WQ.4	The Project would not risk release of pollutants due to Project inundation in flood hazard, tsunami, or seiche zones.	Construction or Operation	None required.
WQ.5	The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Construction or Operation	None required.
LAND USE AND PLANNING (Section 4.6)			
LU.1	The Project would not physically divide an established community.	Construction or Operation	None required.
LU.2	The Project would not conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect	Construction or Operation	No additional requirements beyond mitigation measures N-1a, N-1b, N-2a, N-2b, and N-2c detailed in Section 4.7
NOISE AND VIBRATION (Section 4.7)			
N.3	The Project could result in the generation of excessive ground-borne vibration or ground-borne noise levels.	Construction or Operation	None required.
N.4	The Project would not result in excessive noise for people residing or working within two miles of a public, or public use, airport.	Construction or Operation	None required.
TRANSPORTATION AND CIRCULATION (Section 4.8)			
T.2	Project operations would increase vehicle miles traveled (VMT).	Construction or Operation	None required.
T.4	The Project would not result in inadequate emergency access.	Construction or Operation	None required.

Table ES.6 Proposed Project Class III Impacts

Less Than Significant Impacts

Impact #	Description of Impact	Phase	Mitigation Measures
UTILITIES AND SERVICE SYSTEMS (Section 4.10)			
US.1	The Project would result in the construction of new or expanded water, wastewater treatment, electric power, and natural gas facilities, the construction of which could cause significant environmental effects. The Project would not result in the construction of expanded stormwater drainage or telecommunications facilities.	Construction or Operation	None required.
US.2	The Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years.	Construction or Operation	None required.
US.3	The Project would result in a determination by the wastewater treatment provider, which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments.	Operation	None required.
US.4	The Project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	Construction or Operation	None required.
US.5	The Project would comply with federal, state, and local management and reduction statues and regulations related to solid waste.	Construction or Operation	None required.