Martinez Refinery Renewable Fuels Project
(County File CDLP20-02046)

CONTRA COSTA COUNTY DEPARTMENT OF CONSERVATION AND DEVELOPMENT

JOSEPH W. LAWLOR JR, AICP, PROJECT PLANNER

CONTACT: JOSEPH.LAWLOR@DCD.CCCOUNTY.US, 925-655-2872

Today's Presentation

PROJECT BACKGROUND

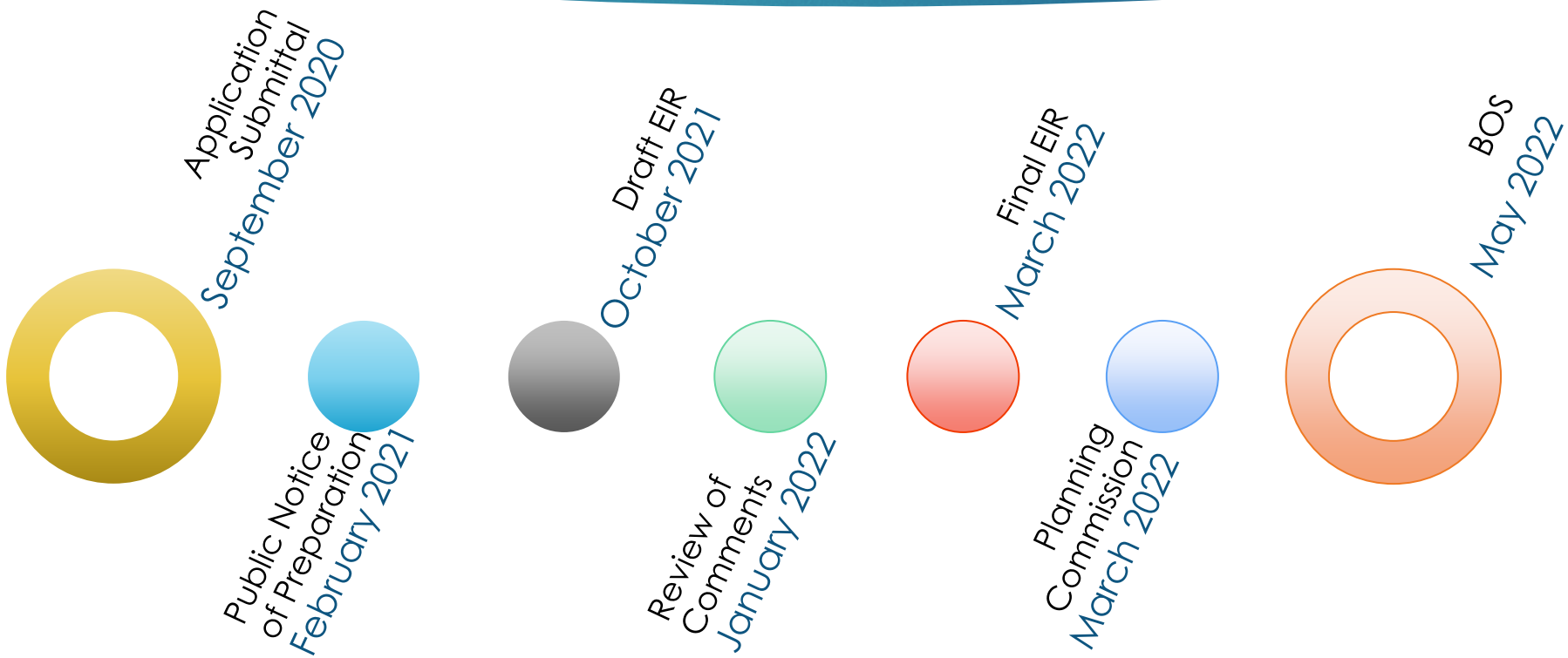
PROJECT OVERVIEW

ENVIRONMENTAL IMPACT REPORT

APPEAL OVERVIEW

Background

Review Timeline



Submittal

Tesoro Refining & Marketing Company LLC, an indirect, wholly owned subsidiary of Marathon Petroleum Corporation ("Marathon")

Applied for a Land Use Permit on September 16, 2020

Notice of Preparation

The County Distributed a CEQA Notice of Preparation of an Environmental Impact Report on February 17, 2021.

The County held a Public Scoping Meeting on March 15, 2021.

Draft Environmental Impact Report

Preparation of the DEIR from February through October 2021 (9 Months)

Draft EIR was Released on October 18, 2021 For a 60-Day Public Review

Comment Review for FEIR

From December 2021 to March 2022 Individual Comments Were Reviewed and Responded To

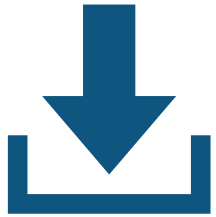
Final EIR and Planning Commission

The Final EIR, including the response to all comments, was completed and presented to the Planning Commission for Certification on March 23, 2022

Final EIR and Planning Commission

After the close of the hearing, the Planning Commission voted 6-0 to certify the Project environmental impact report and approve the land use permit application

Final EIR and Planning Commission

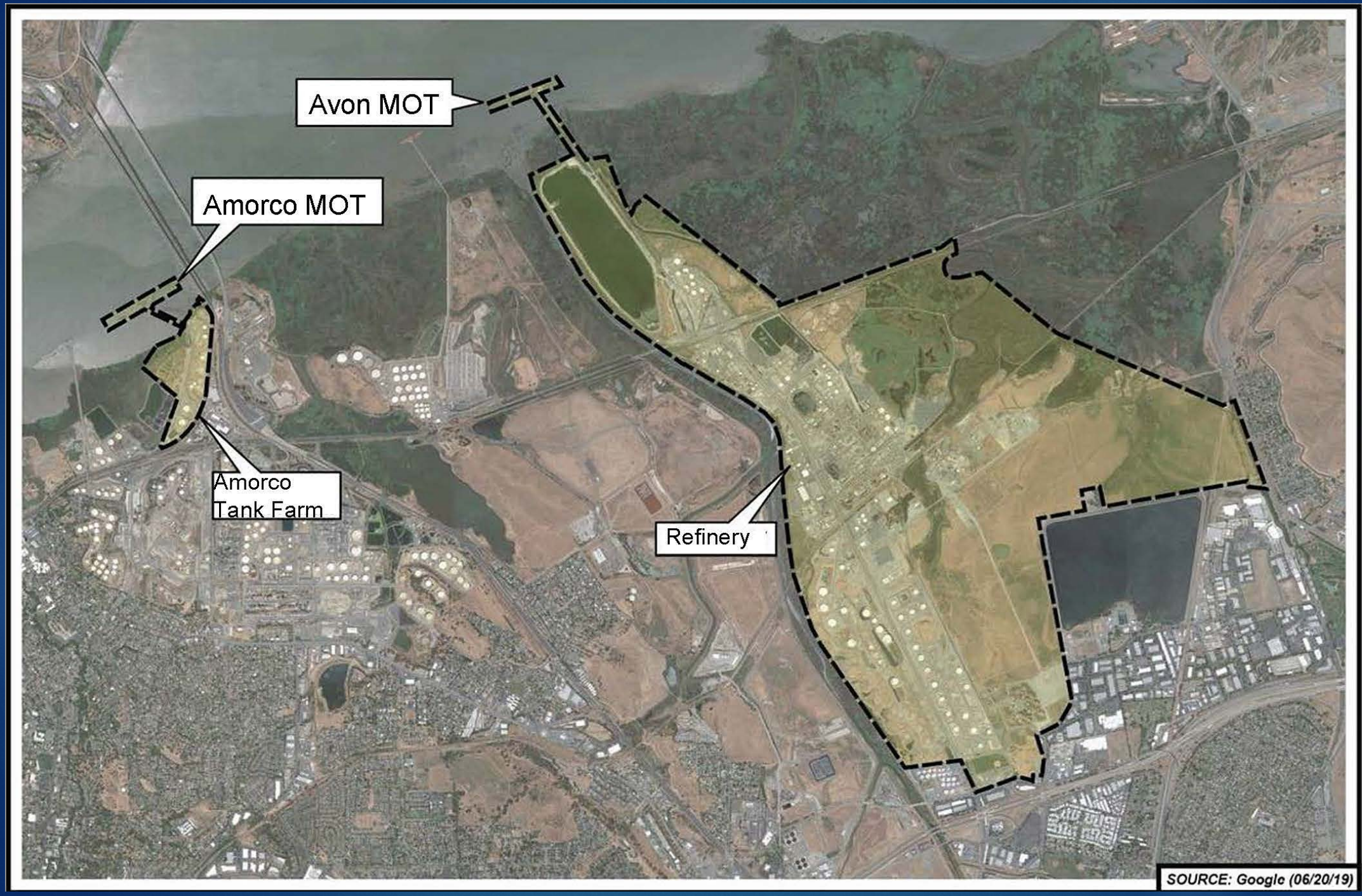


An appeal of the Planning Commission's decision was submitted on March 28, 2022

Project Overview

Project Site

Location	150 Solano Way, Pacheco, CA
Site	2,000-acre site 1,130 Acres Developed Refining Operations 870 Acres Undeveloped Marshlands and Grasslands
General Plan and Zoning	Heavy Industry (HI), Water (WA), and Open Space (OS) Heavy Industrial District (H-I), Light Industrial District (L-I), and Railroad Corridor (-X) Combining District


Avon MOT
Amorco MOT
Amorco
Tank Farm
Refinery
SOURCE: Google (06/20/19)

Martinez Refinery Renewable Fuels Project

Modifications and repurposing of the existing refinery facility to production of fuels from renewable sources including rendered fats, soybean and corn oil and other cooking or vegetable oils.

Proposed Modifications

Avon Marine Terminal

- Pipes and Hoses Reconfigured to Separate Petroleum and Renewable feedstocks

- Pipelines heated and insulated to transmit renewable feedstock

Proposed Modifications

Amorco Marine Terminal

- Modified Fender to Allow Smaller Vessels
- Maintenance and Repairs to Concrete and Five Pilings
- Changed from Receiving to Distributing

Proposed Modifications

Pipelines

- Added Insulation Heat Tracing to Ensure Product Stays Fluid

Proposed Modifications

Utilities

- New Pretreatment Unit and Stage 1 Wastewater Treatment Unit

Proposed Modifications

Phase 1 Refining Unit Modifications

- No. 3 Hydrodesulfurization Unit Revamp
- Hydrocracker 2nd Stage Unit Revamp
- No. 5 Gas Plant Revamp

Proposed Modifications

Refining Unit Modifications Cont.

- New Thermal Oxidizer for Sour Water Stripper
- Hydrocracker 1st Stage Unit
- No. 2 Hydrodesulfurization Unit

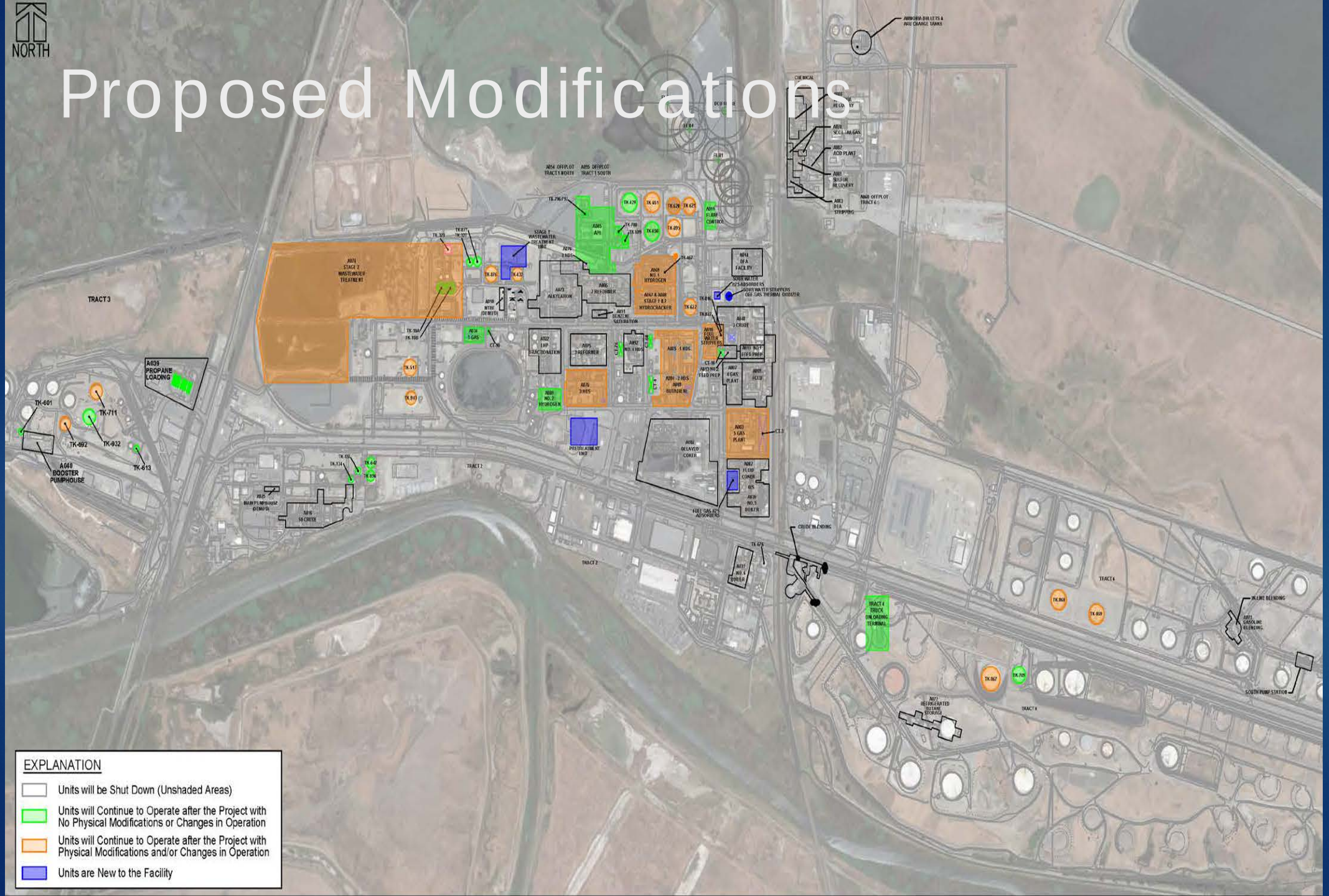
Proposed Modifications

Tanks

- Up to 29 Tanks Repurposed for Project

- 15 of the 29 Tanks Upgraded for Renewable Feedstocks

Proposed Modifications



Project Operations

Feedstock Throughput

- Previously161,000 bpd Petroleum Feedstocks
- 23,000 bpd Renewable Feedstocks (Phase 1)
- 48,000 bpd Renewable Feedstocks (Phase 2)

Project Operations

Transportation by Truck, Rail, Vessel and Pipeline

	Pre-Project		Post-Project
Truck:	205 Daily	→	180 Daily
Railcars:	13 Daily	→	63 Daily
Vessels:	3 Weekly	→	7 Weekly

Project Operations

Emissions Change Criteria Pollutants

Criteria Pollutants Daily Emissions Change lbs./day Pre- to Post-Project

Source	NOx		SO2		CO		POC		PM10		PM2.5	
On-Site Stationary Sources	-1783.52	-27.93%	-1390.40	-30.90%	-3354.26	-48.34%	-6944.86	-66.44%	-1212.46	-70.15%	-1173.07	-74.79%
Employee Vehicles	-1.94	-0.03%	-0.11	0.00%	-17.74	-0.26%	-0.48	0.00%	-10.70	-0.62%	-1.71	-0.11%
Trucks	5.10	0.08%	0.07	0.00%	-4.73	-0.07%	-0.26	0.00%	-0.03	0.00%	0.09	0.01%
Rail	-2.03	-0.03%	0.00	0.00%	-0.64	-0.01%	-0.06	0.00%	-0.05	0.00%	-0.04	0.00%
Vessels	-1,342.55	-21.03%	-2,197.27	-48.83%	-25.33	-0.37%	-83.48	-0.80%	-150.15	-8.69%	-55.80	-3.56%
Off-Site Stationary Sources	52.94	0.83%	16.90	0.38%	10.57	0.15%	4.28	0.04%	1.81	0.10%	1.81	0.12%
Total	**-3,072.00**	**-48%**	**-3,570.82**	**-79%**	**-3,392.12**	**-49%**	**-7,024.85**	**-67%**	**-1,371.58**	**-79%**	**-1,228.73**	**-78%**

Project Operations

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Employee Vehicles	-1.94	-0.03%	-0.11	0.00%	-17.74	-0.26%	-0.48	0.00%	-10.70	-0.62%	-1.71	-0.11%
Trucks	5.10	0.08%	0.07	0.00%	-4.73	-0.07%	-0.26	0.00%	-0.03	0.00%	0.09	0.01%
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Project Operations

Emission Change Greenhouse Gases

GHG Emission Change MT/Year Pre- to Post-Project

Source	CO_2 (MT)		CH_4 (MT)		N_2O (MT)		Total CO_2e	
On-Site Stationary Sources	**-1178230**	**-61.11%**	**-56.78**	**-62.94%**	**-9.45**	**-57.23%**	**-1182352**	**-61.10%**
Employee Vehicles	-1,387	**-0.07%**	-0.01	**-0.01%**	-0.13	**-0.79%**	-1,427	**-0.07%**
Trucks	8,852	**0.46%**	0.01	**0.01%**	1.39	**8.42%**	9,285	**0.48%**
Rail	3,402	**0.18%**	0.27	**0.30%**	0.08	**0.48%**	3,434	**0.18%**
Vessels	-21,233	**-1.10%**	-0.25	**-0.28%**	-1.46	**-8.84%**	-21,692	**-1.12%**
Off-Site Stationary Sources	**303918**	**15.76%**	**2.43**	**2.69%**	**0.24**	**1.45%**	**304044**	**15.71%**
Total	**-884,677**	**-46%**	**-54.33**	**-60%**	**-9.32**	**-56%**	**-888,707**	**-46%**

Project Operations

Emission Change Greenhouse Gases

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Project Context

Low Carbon Fuel Standard (LCFS)

The LCFS is designed to encourage the use of cleaner low-carbon transportation fuels in California, encourage the production of those fuels, and therefore, reduce GHG emissions.

The LCFS standards are expressed in terms of the "carbon intensity" (CI) of gasoline and diesel fuel and their respective substitutes.

Project Context

CARB is currently receiving public input on potential amendments to the LCFS.

2022 Scoping Plan update will evaluate how to achieve carbon neutrality by mid-century and the types and role of low carbon fuels needed in the future.

Future rulemaking could potentially take effect in 2024 upon approval of the 2022 Scoping Plan Update in late 2022.

Environmental Impact Report

CEQA Environmental Impact Report

CEQA OVERVIEW

PROJECT DESCRIPTION

PROJECT BASELINE

IMPACTS

ALTERNATIVES

California Environmental Quality Act Overview

Preparation of an EIR:

Scoping – Solicitation of Agencies and Interested Parties

Draft EIR – Project Description, Impact Analysis, Alternatives

Comments – 60-day Comment Period for Public Review of DEIR

FEIR – Response to Comments and Necessary Revisions

Project Description – Project Objectives

Marathon Identified 6 Project Objectives

Project Description – Project Objectives

1. Repurpose the Marathon Martinez Refinery to a renewable fuels production facility.

Project Description – Project Objectives

2. Eliminate the refining of crude oil at the Martinez Refinery while creating high quality jobs.

Project Description – Project Objectives

3. Provide renewable fuels to allow California to achieve significant progress towards meeting its renewable energy goals.

Project Description – Project Objectives

4. Produce renewable fuels that significantly reduce the lifecycle generation of greenhouse gas emissions, as well as other criteria pollutants including particulate matter.

Project Description – Project Objectives

5. Reduce emissions from mobile sources by providing cleaner burning fuels.

Project Description – Project Objectives

6. Repurpose/reuse existing critical infrastructure, to the extent feasible.

Baseline

"An EIR must include a **description of the physical environmental conditions in the vicinity of the project**. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to provide an understanding of the significant effects of the proposed project and its alternatives. The purpose of this requirement is **to give the public and decision makers the most accurate and understandable picture practically possible** of the project's likely near-term and long-term impacts"

Baseline

5-year Period for Baseline presents the variation in production at the Refinery (2016 to 2020). Captures turnaround schedule and market fluctuations.

Baseline is used for comparison in Environmental Impacts Analysis.

Primary factors for baseline selection were representativeness and conservativeness.

Baseline

Table 3-4 Comparative Vehicle and Vessel Traffic for Marathon Refinery, 1-year, 3-year Average, and 5-year Average

Vessel or Vehicle	Units	1-year (2019-2020)	1-year (2018-2019)	3-year Average (2017-2020)	5-year Average (2015-2020)
Truck	**Miles Traveled**	2,837,991	4,559,507	3,972,015	4,146,210
Train	**Miles Traveled**	2,380	4,820	4,154	4,605
Vessel	**Calls**	124	161	150	143

Source: Marathon Petroleum Corporation, 2021

Baseline

Table 3.3-7: Comparison of Average Annual Emissions, 1 year, 3 years and 5 years

Pollutant	Unit	1-year Average (2019-2020)	1-year Average (2018-2019)	3-year Average (2017-2019)	5-year Average (2015-2020)
NO_X	Ton	586.55	794.79	720.77	749.97
SO_2	Ton	565.68	722.03	672.12	679.66
CO	Ton	446.38	805.62	717.50	670.89
POC/ Hydrocarbons	Ton	192.62	234.93	225.74	196.69
PM_{10}	Ton	223.01	364.15	262.54	269.55
$PM_{2.5}$	Ton	201.91	338.75	229.36	242.42
CO_2	Metric Ton	1,151,267.22	2,279,796.34	1,875,119.45	1,925,745.20
N_2O	Metric Ton	10.38	18.26	15.58	16.16

Source: Marathon Petroleum Corporation, 2021

Environmental Impacts Analysis

Impact Summary – Mitigated Significant Impacts

Construction-related Air Emissions

Odor

Marine and Avian Biological Resources (non-spill related)

Cultural resources

Seismicity

Hazards

Tribal Cultural Resources

Environmental Impacts Analysis

Impact Summary – Six Significant and Unavoidable Impacts

Air Quality (2)

Biological Resources (2)

Hazards and Hazardous Materials (1)

Water Quality (1)

Alternatives

"No Project" Alternative

Compare the impacts of approving the proposed project with the impacts of not approving the proposed project.

Under the No Project scenario, the proposed Renewable Fuels Project would not proceed. Instead, Refinery operations would resume.

Alternatives

Reduced Renewable Feedstock Throughput Alternative

Conversion of the Refinery from a crude oil processing facility to a facility for the refining of renewable feedstock at a reduced capacity of 23,000 bpd maximum.

Alternatives

Green Hydrogen Alternative

“Green” hydrogen would be used in the renewable fuels refining process instead of steam methane reforming technology.

Alternatives

Environmentally Superior Alternative

The Reduced Renewable Feedstock Throughput Alternative would not result in any impacts that would be greater than the proposed Project, and in many cases would result in reduced impacts.

However, would generate fewer jobs and result in a lower volume of renewable fuels to support the State's low-carbon fuel goals, and would not achieve Project objectives as well as the proposed Project.

Appeal

Appeal Filed

Joint Appeal Filed On March 28, 2022, Asian Pacific Environmental Network, Biofuel Watch, Center for Biological Diversity, Communities for a Better Environment, Richmond City Councilmembers Claudia Jimenez, Eduardo Martinez and Gayle McLaughlin, Friends of the Earth, Interfaith Climate Action Network of Contra Costa County, Natural Resources Defense Council, Rodeo Citizens Association, San Francisco Baykeeper, The Climate Center, Sunflower Alliance, and 350 Contra Costa County

Major Appeal Points

The Appeal presents five general issues:

- Adequacy of Disclosure of Information and Mitigation for Significant Impacts;
- Adequacy of Response to Public Comments;
- Findings Concerning Choice of Alternatives and Throughput Volumes;
- Introduction of “New” Information; and
- Accuracy of the Statement of Overriding Considerations

Adequacy of Disclosure of Information and Mitigation for Significant Impacts

The following issues are addressed within the first appeal point:

- (a) Project description
- (b) Baseline
- (c) Operational upsets
- (d) Food system oil consumption
- (e) Odor mitigation plan
- (f) Cumulative impacts
- (g) California climate pathways
- (h) Transportation risk impacts

Adequacy of Response to Public Comments

The Appeal then presents three specific topics as inadequately addressed in FEIR:

- Process Hazards (Response I(c))
- Cumulative Impacts (Response I(e))
- California's climate paths (Response I(g))

Findings

The Appeal questions the adequacy of the findings and throughput analysis:

- Findings for Alternatives
- Project Throughput Limits

Introduction of “New” Information

Appeal states that the identification of “HEFA” is new information

Accuracy of the Statement of Overriding Considerations

Appeal states that certain impacts are inadequately addressed in the Statement of Overriding Considerations:

- Safety; and
- Land Use Issues

Staff Recommendation

1. OPEN the public hearing.

2. CERTIFY that the Environmental Impact Report (EIR).

3. CERTIFY the EIR prepared for the Martinez Refinery Renewable Fuels Project.

4. ADOPT the CEQA findings for the Project.

5. ADOPT the Mitigation Monitoring and Reporting Program for the Project.

6. ADOPT the statement of overriding considerations for the Project.

7. DIRECT the Department of Conservation and Development to file a CEQA Notice of Determination with the County Clerk.

8. SPECIFY that the Department of Conservation and Development, located at 30 Muir Road, Martinez, CA, is the custodian of the documents and other material which constitute the record of proceedings upon which the decision of the Board of Supervisors is based.

9. DENY the appeal of NRDC et. al.

10. APPROVE the Martinez Refinery Renewable Fuels Project. (Permit No. CDLP20-02046).

11. APPROVE the findings in support of the Project.

12. APPROVE the Project conditions of approval.

13. APPROVE the attached Community Benefits Agreement.

CONCLUSION

Proposed Martinez Refinery Renewable Fuels Project:

- Is consistent with the General Plan and the Heavy Industrial zoning designation.
- Environmental impacts would be mitigated to less-than-significant levels or overriding considerations exist.
- Preserves the health, safety, and general welfare of the public.
- Benefits include providing jobs, improving air quality, reducing the amount of hazardous materials in the area, reduction in greenhouse gas emissions, and decrease energy (electricity and natural gas) demand at the facility.

Questions?