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Governor's Office of Planning & Research

Dec 23 2021

STATE CLEARING HOUSE

December 17, 2021

File Ref: SCH # 2021020289

Joseph Lawlor, Project Planner
Community Development Division
Contra Costa County, Department of Conservation and Development
30 Muir Road, Martinez, CA

VIA ELECTRONIC MAIL ONLY (joseph.lawlor@dcd.cccounty.us)

Subject: Draft Environmental Impact Report for the Martinez Refinery Renewable Fuels Project

Dear Mr. Lawlor:

The California State Lands Commission (Commission) staff has reviewed the subject Draft Environmental Impact Report (Draft EIR) for the Martinez Refinery Renewable Fuels Project (Project), which is being prepared by the Community Development Division of the Department of Conservation and Development of Contra Costa County (County). The County is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Commission is a trustee agency for projects that could directly or indirectly affect State sovereign land and their accompanying Public Trust resources or uses. Additionally, if the Project involves work on State sovereign land, the Commission will act as a responsible agency. The Commission is also a regulatory agency that oversees the Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS).

Commission Jurisdiction and Public Trust Lands and Regulatory Authority

The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6009, subd. (c); 6009.1; 6301; 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust Doctrine. Therefore, the Commission has jurisdiction over present day and historic tidelands on the Site.

Marathon Petroleum Corporation (Marathon) submitted applications in 2021 to amend both Lease No. PRC 3453.1 and Lease No. PRC 3454.1 for the change in use described in the Project. The leases are applicable only for the Avon and Amorco Marine Oil Terminals as they are located on sovereign land under the Commission's jurisdiction. The refinery is not located on sovereign land under the Commission's jurisdiction and is not subject to lease. The comments below are specific to any use of State-owned sovereign land under the jurisdiction of the Commission within the Project area. Commission staff request that the County consider our comments on the Project's Draft EIR to ensure that impacts to State sovereign land are adequately analyzed for the Commission's use of the Final EIR when considering lease amendments for the Avon and Amorco Marine Oil Terminals.

The Commission also has regulatory authority over MOTEMS, which are codified in California Code of Regulations, title 24, California Building Code, Chapter 31F—Marine Oil Terminals (Cal. Code Regs., tit. 24, § 3101F et seq.).

Project Description

Marathon plans to repurpose its Martinez Refinery for production of fuels from renewable sources rather than from crude oil. The Project lists the following objectives:

- Repurpose the Marathon Martinez Refinery to a renewable fuels production facility.
- Eliminate the refining of crude oil at the Martinez Refinery while creating high quality jobs.
- Provide renewable fuels to allow California to achieve significant progress towards meeting its renewable energy goals.
- Produce renewable fuels that significantly reduce the lifecycle generation of greenhouse gas emissions, as well as other criteria pollutants including particulate matter.
- Reduce emissions from mobile sources by providing cleaner burning fuels.
- Repurpose/reuse existing critical infrastructure, to the extent feasible.

The Draft EIR identifies the Reduced Renewable Feedstock Throughput Alternative as the Environmentally Superior Alternative.

The comments below are specific to any use of State-owned sovereign land under the jurisdiction of the Commission within the Project area. Commission staff request that the County consider the following comments on the Project's Draft EIR to ensure that impacts to State sovereign land are adequately analyzed for the Commission's use of the Final EIR when considering amendments to Marathon's leases.

Engineering Review

Please see the attached table.

Environmental Review

General Comments

The Draft EIR relies on the impact analysis and mitigations in both the Tesoro Amorco Marine Oil Terminal Lease Consideration EIR and Tesoro Avon Marine Oil Terminal Lease Consideration EIR, for which the Commission was the CEQA Lead Agency. However, it is not clear which Lead Agency (the County or the Commission) would take responsibility for implementing and enforcing the mitigation measures that are provided in the two lease consideration EIRs, but offered in this EIR as mitigations for this Project's impacts. Please coordinate with Commission staff on this matter so that it can be clarified in the Final EIR.

Biological Resources

Staff recommends that a Worker Awareness Training Program be added to MM BIO-1a to further reduce potential impacts to special-status species due to renovation activity.

Marine Invasive Species

Staff recommends that the Marine Invasive Species Program (MISP) regulatory language be updated with the following:

> MISP was reauthorized and expanded in 2003 with the passage of the Marine Invasive Species Act (MISA; AB 433, Chapter 491, Statutes of 2003) which, among other provisions, directed the Commission to adopt ballast water management regulations for vessels moving coastally between ports on the west coast of the U.S. Since 2003, the MISA has been amended numerous times, most notably to establish California's ballast water discharge performance standards (SB 497, Chapter 292, Statutes of 2006) and to authorize the Commission to adopt and implement biofouling management regulations (AB 740, Chapter 370, Statutes of 2007).
>
> The Commission adopts and amends regulations to implement the MISA (Public Resources Code section 71201.7). The ballast water management regulations for coastal vessels were adopted in 2006 (California Code of Regulations, title 2, section 2280 et seq.); ballast water discharge performance standards were codified in 2007 (California Code of Regulations, title 2, section 2291 et seq.); and the biofouling management regulations (see section 7.1) were adopted and implemented in 2017 (California Code of Regulations, title 2, section 2298.1 et seq.). These regulations were strengthened through the adoption of enforcement regulations in 2017 (California Code Regulations, title 2, section 2299.01 et seq.).
>
> In 2019, the Commission sponsored AB 912 (Chapter 433, Statutes of 2019) which authorizes the Commission to:

- Adopt and enforce the federal ballast water discharge performance standards set forth in section 151.2030(a) of Title 33 of the Code of Federal Regulations
- Delay implementation of the interim and final California ballast water discharge performance standards to 2030 and 2040, respectively, due to a lack of available ballast water treatment technologies to enable vessels to meet the California standards

In 2021, the Commission amended existing regulations (California Code of Regulations, title 2, section 2291 et seq.) to implement the requirements of AB912.

Cultural Resources and Tribal Cultural Resources

Title to Resources Within Commission Jurisdiction: The EIR should state that the title to all archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the state and under the jurisdiction of the Commission (Pub. Resources Code, § 6313). Commission staff requests that the County consult with Staff Attorney Jamie Garrett (Jamie.garrett@slc.ca.gov) should any cultural and/or Tribal Cultural resources on state lands be discovered during construction of the proposed Project.

Staff requests that the following statement be included as a mitigation measure in the final EIR, “The final disposition of archaeological, historical, and paleontological resources recovered on State land under the jurisdiction of the California State Lands Commission must be approved by the Commission.”

Thank you for the opportunity to comment on the Draft EIR for the Project. As a trustee and regulatory agency, Commission staff request that you consider our comments prior to certification of the Final EIR.

Please send copies of future Project-related documents, including electronic copies of the Final EIR, Mitigation Monitoring and Reporting Program, Notice of Determination, CEQA Findings, and Statement of Overriding Considerations when they become available. Please refer questions concerning environmental review to Sarah Mongano, Senior Environmental Scientist, at (916) 574-1889 or sarah.mongano@slc.ca.gov. For questions concerning Commission leasing jurisdiction, please contact Marlene Schroeder, Public Land Management Specialist, at marlene.schroeder@slc.ca.gov or (916) 574-2320. For questions concerning the MOTEMS review, please contact Kendra Oliver, Senior Engineer, at (510) 680-0875, or kendra.oliver@slc.ca.gov. For questions concerning archaeological or historic resources under Commission jurisdiction, please contact Jamie Garrett, Staff Attorney, at jamie.garrett@slc.ca.gov or (916) 574-0398.

Sincerely,

Nicole Dobroski, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
Sarah Mongano (DEPM), Commission
Marlene Schroeder (LMD), Commission
Kendra Oliver (MEPD), Commission
Chris Beckwith (MEPD), Commission
Lina Ceballos (MISP), Commission
Joe Fabel (Legal), Commission

att: table of Marine Environmental Protection Division comments on the Martinez Refinery Renewable Fuels Project Draft EIR

Marine Environmental Protection Division comments on the Martinez Refinery Renewable Fuels Project DEIR:

Reference (Page #s)	Description	Comments
ES-18 to 19 2-14 3.4-4 3.9-16 to 17	**CSLC MEPD JURISDICITIONAL LIMITATIONS** [pgs. ES-18 to 19 and 3.9-16 to 17] ***Mitigation Measure HAZ-1:*** *The permittee shall comply with mitigation measures as outlined in the Operational Safety/Risk of Accident sections of the EIRs for both Amorco and Avon MOTs and as incorporated by reference into the leases as regulatory (lease) conditions. These measures include CSLC-established MOTEMS that have set minimum requirements for preventative maintenance, including periodic inspection of all components related to transfer operations pipelines. The permittee shall comply with those requirements, as well as with the CSLC's operational requirements, including Article 5.5,* titled *Marine Terminal Oil Pipelines (California Code of Regulations, Title 2, Sections 2560-2571). The implementation of the measures, which are discussed in detail in the Avon EIR, are as follows:* • *Installation of a Remote Release Systems* • *Maintaining of a Tension Monitoring Systems* • *Maintaining of an Allision Avoidance Systems* • *Development of a Fire Protection Assessment* • *Participation in the USCG Ports and Waterways Safety Assessment Workshops* • *Response to any Vessel Spills near the Project* --- [pg. 2-14] ***2.4.2.2 Avon Marine Oil Terminal*** ***…*** *Any changes to the MOT must be compliant with Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) regulations.* ***2.4.2.3 Amorco Marine Oil Terminal*** *…* --- [pg. 3.4-4] *Lempert-Keene-Seastrand Oil Spill Prevention and Response Act* *The Lempert-Keene-Seastrand Oil Spill Prevention and Response Act of 1990 covers all aspects of marine oil spill prevention and response in California. Administration of the act is under the authority of a chief deputy director of the CDFW, who is also then responsible for carrying out the CDFW's water pollution enforcement duties. Through the act, California State Lands Commission (CSLC) responsibilities were expanded through the creation of the Marine Environmental Protection Division (formerly the Marine Facilities Division) to oversee the safety of marine terminals and the transfer of crude oil from ships to shore-based facilities. The act also authorizes trustee agencies to seek monetary compensation for injured natural resources.*	(1) The CSLC Marine Environmental Protection Division (MEPD) oversees both engineering and operations regulations at Marine Oil Terminals (MOTs) in California. The engineering regulations are codified in MOTEMS (24CCR§3101F *et* seq. or California Building Code [CBC] Chapter 31F). The operations regulations are codified in Article 5. Marine Terminals Inspection and Monitoring (2CCR§2300 *et seq*), Article 5.3 Marine Terminals Personnel Training and Certification (2CCR§2540 *et seq*), and Article 5.5 Marine Terminals Oil Pipelines (2CCR§2560 *et seq*). (2) The CSLC MEPD regulations apply to MOTs that transfer oil, petroleum products and renewable fuels only and related activities in accordance with the statutory authority granted in the *Lempert-Keene-Seastrand Oil Spill Prevention & Response Act*. Thus, the following shall be considered: (a) Products not regulated under LKS Act (e.g. renewable feedstocks such as soybean oil and tallow) may be detrimental to the environment if spilled. Therefore, MM HAZ-1 should explicitly articulate that the MM will be required for all vessels calling and related operations at the Amorco and Avon MOTs regardless of product type and LKS regulatory status. (b) Similarly, CSLC MOT operations regulations are not enforceable on MOT assets that are converted from petroleum to non-regulated products (e.g. renewable feedstocks such as

Reference (Page #s)	Description	Comments
	----------	soybean oil and tallow). These operations regulations are codified in Article 5 (2CCR§2300 *et seq*), Article 5.3 (2CCR§2540 *et seq*), and Article 5.5 (2CCR§2560 *et seq*). For example, static liquid pressure testing of pipelines is a fundamental spill prevention measure that may not have state regulatory oversight for all pipelines at the post-Project Amorco and Avon MOTs. (c) With regards to the statements *"Any changes to the [Avon] MOT must be compliant with Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) regulations"* (pg. 2-14) and *"the permittee shall comply with those [MOTEMS] requirements, as well as with the CSLC's operational requirements…"* (pg. 3.9-16), it should be noted that both the Avon and Amorco MOTs are subject to MEPD regulatory authority. However, based on the LKS statutory authority, certain changes to the MOT may not be subject to MOTEMS, Article 5.5, or other MEPD regulatory compliance (e.g. renewable feedstock pipelines). (d) The statement that MEPD was created *"to oversee the safety of marine terminals and the transfer of crude oil from ships to shore-based facilities"* (pg. 3.4-4) is incomplete. MEPD adopts and enforces engineering and operations regulations at all California MOTs in order to prevent oil spills and to protect public health, safety and the environment in accordance with LKS (i.e.

Reference (Page #s)	Description	Comments
		not limited to *"safety"* or *"transfer of crude oil"*) (3) The statement *"The implementation of the measures, which are discussed in detail in the Avon EIR…"* (pgs. ES-18 to 19 and 3.9-17) excludes reference to the Amorco EIR.
1-3 to 1-4	***1.5 USE OF THIS EIR BY RESPONSIBLE AGENCIES*** *In addition to land use permit approval by the County, the Project requires permits from other federal, state and local agencies including the United States Army Corps of Engineers, Bay Area Air Quality Management District, San Francisco Bay Conservation and Development Commission, San Francisco Bay Regional Water Quality Control Board and California State Lands Commission…* ***…*** ***State*** • *California State Lands Commission* o *Lease modification to accommodate changes to terminal uses* *…*	(4) While CSLC does not issue building permits, it should be noted that the following are subject to CSLC MEPD engineering review for MOTEMS-compliance and acceptance (as applicable under LKS) per MOTEMS Section 3101F.8.3: 1. *Any audit, inspection, analysis or evaluation of MOTs.* 2. *Any significant change, modification or re-design of a structural, mooring, fire, piping/pipelines, mechanical or electrical system at an MOT are subject to, prior to use or reuse*. 3. *Engineering analysis and design for any new MOT prior to construction.* 4. *Construction inspection team and the construction inspection report(s).*
2-17	***2.5.4.2 Project Modifications at Avon MOT*** *At the Avon MOT, part of the system of pipes and hoses would be reconfigured to keep the finished petroleum products separate from the renewable feedstocks, and to facilitate transmission of the renewable feedstock through receiving pipelines. This renovation work would primarily occur on the Avon MOT's 26 Line pipeline, which extends from offshore on the east side of the paved access road and wharf, to an aboveground pipe rack on the east side of a pedestrian walkway onshore. The 26 Line would be equipped with heat tracing, wrapped in insulation, and then placed in a metal sleeve, the joints of which would be sealed with silicone, all of which is intended to keep the feedstock in a transmissible liquid state. While the offshore work in the 26 Line would occur over water, no in-water work is proposed as part of the Project.* ***2.5.4.3 Project Modifications at Amorco MOT***	(5) For the Avon MOT, since the existing 26 Line pipeline is proposed to transfer renewable feedstock, CSLC MEPD regulatory authority over these modifications and long-term asset would be limited, and it is recommended that supplemental MMs be considered to safeguard the design, construction, testing, inspection, maintenance and operations of these pipeline and hoses. For example, consider requirements for pipe stress analysis during design, routine static liquid pressure testing, etc., or require MEPD regulatory compliance via MMs at the

Reference (Page #s)	Description	Comments
	As part of the Project, modifications are proposed at the Amorco MOT to accommodate the smaller marine vessels (25,000- to 50,000-barrel capacities) expected to dock there. These modifications include a fender that would be mounted at Dolphin A-81, between the existing fenders on Dolphins A-76 and A-77. The new super cone fender, approximately 15 feet long and 7 feet wide, would be attached to the dolphin above the high water line, with the fender panel extending into the water but not into the substrate below. (See Figure 2.10, Typical Super Code Fender.) The Project would also include maintenance activities on Dolphins A-76 and A-77 consisting of repairs to the concrete and five of the pilings.	Amorco and Avon MOTs regardless of product type and LKS regulatory status. (6) For the Amorco MOT, identify the size of *"the smaller marine vessels"* in terms of deadweight tonnage (DWT), etc. and the product types these vessels are anticipated to transfer (i.e. received/offloaded and distributed/loaded). (7) For the Amorco MOT, CSLC MEPD regulatory authority over the fender and pipelines modifications and long-term asset may be limited by jurisdictional authority, and it is recommended that supplemental MMs be considered to safeguard the design, construction, testing, inspection, maintenance and operations of the fender, pipelines, etc. (8) Furthermore, the MOTEMS mooring and berthing analysis and design and TOLs standards may not be regulatorily enforceable for all vessels calling at the Amorco and Avon MOT unless supplementally required via the MMs. Therefore, please specify that MOTEMS-compliant mooring and berthing analysis and design and TOLs standards will be required for all MOT modifications and vessels calling at the Amorco MOT (and Avon MOT) regardless of product type and LKS regulatory status. (9) The full extent of future built modifications to the Amorco and Avon MOTs for Project implementation are unclear. Please elaborate, such as addressing the following: (a) Identify if mechanical or electrical components or systems will be changed as part of the Project, including MM-required systems at the MOTs (i.e. Remote Release Systems, Tension Monitoring Systems,

Reference (Page #s)	Description	Comments
		Allision Avoidance Systems, environmental monitoring systems). (b) Identify if built mitigations resulting from the SPCC will be implemented. (c) Identify if any additional piping/pipelines will be changed as part of the Project, included but not limited to upgrades, modifications and/or re-routing existing piping and ancillary components, piping insulation, or heat trace. (d) Identify if any piping/pipelines at the MOTs will be taken out of service as part of the Project. Note that per MOTEMS Section 3109F.2, Item #12: *"Pipelines that do not have a valid and certified Static Liquid Pressure Test (SLPT) [9.4] shall be marked "OUT OF SERVICE". Out-of-service piping and pipelines shall be purged, gas-freed and physically isolated from sources of oil."*
2-36 to 38 3.3-28	[pg. 2-36] ***2.5.5.1 Refinery*** *… Marine transportation of renewable feedstock and fuels produced at the Refinery would continue to use the Avon and Amorco MOTs in the proposed, modified operations of the Refinery. In addition, the Project would utilize the Stockton Terminal located a 3003 Navy Drive in Stockton, California. The Stockton Terminal is also owned by Marathon.* *Under the proposed Project, the majority of the renewable feedstock is expected to be delivered in smaller barges with capacities of 25,000 to 50,000 barrels per vessel, thus resulting in a higher number of smaller marine vessels (up to approximately 400 vessels per year) calling at the marine terminals. Of these estimated 400 marine vessels per year, or approximately seven per week on average, the Avon MOT would receive about four ships each week and the Amorco MOT would have an estimated three ships per week. Up to six roundtrip barge trips are estimated to transport renewable feedstock and renewable fuel to the Stockton terminal, though the exact location to which feedstock would be transported has not yet been defined. To be conservative, Marathon has assumed Stockton as the furthest*	(10) Currently, there are no MOTs in the Stockton region that are active and regulatorily-approved for operations per the CSLC MEPD records. Therefore, the marine terminal(s) associated with the proposed Stockton Terminal operations and transfer of CSLC-regulated products (e.g. renewable fuels) will be required to physically and operationally upgrade prior to use to satisfy all of the CSLC regulations (i.e. MOTEMS (24CCR§3101F *et seq*), Article 5. Marine Terminals Inspection and Monitoring (2CCR§2300 *et seq*), Article 5.3 Marine Terminals Personnel Training and Certification (2CCR§2540 *et seq*), and Article 5.5 Marine Terminals Oil Pipelines (2CCR§2560 *et seq*)), including compliance with all <u>new</u> MOT

Reference (Page #s)	Description	Comments
	distance out that could be used in order to establish the reasonable worst case transportation by barge/vessel scenario. --- [pgs. 2-37 to 38] ***2.5.5.6 Rail*** *…* *The Project would include transportation of renewable fuels feedstock via rail into third-party terminals in the region because the Refinery is not equipped to unload renewable feedstock from trains. The third-party terminals could be as far away as Stockton, at which point the renewable feedstock would be transferred onto a barge or other marine transport vessel and delivered to the Marathon facility via the Avon Terminal. Other third-party facilities closer to Martinez, at specific locations to be determined subject to contractual agreements, could also be used and could include facilities where railcars could be transported to, unloaded, and the feedstock delivered to Marathon via existing transportation infrastructure. To be conservative, Marathon has assumed Stockton as the furthest distance out that could be used in order to establish the reasonable worst case transportation scenario for analysis.* *…* --- [pg. 3.3-28] ***3.3.3.1 Methodology for Impact Analysis*** *…* *Mobile Sources* *…Barges may be used to transport feedstocks from third party terminals. The specific terminals have not yet been identified. To be conservative shipping distances were based on use of Stockton terminals which would be the farthest location from the Avon and Amorco terminals…*	standards (e.g. *"New"* or *"(N)"* per MOTs, new valve closure times). (11) Define the timeframe (i.e. per week, month or year) associated with the statement *"Up to six roundtrip barge trips are estimated to transport renewable feedstock and renewable fuel to the Stockton terminal, …"* (pg. 2-36). (12) It is recommended that the terminology *"ships"* (pg. 2-36) be updated to vessels, when referring to both tankers and barges.
2-36 to 37	***2.5.5.2 Avon Marine Oil Terminal*** *Under the proposed Project, the use of the Avon MOT would change from a point of distribution to primarily a facility for receiving of renewable feedstocks, and modifications to the MOTs existing system of pipes and hoses would be necessary for this change. The Avon MOT would still be used secondarily for receipt of finished petroleum products, though these petroleum products would not be processed at the Refinery and would instead be distributed to the market using Refinery loading facilities. In total, the Avon MOT would receive an average of 70,000 bpd of renewable feedstocks, gasoline product for distribution, and naphtha for transfer.* ***2.5.5.3 Amorco Marine Oil Terminal*** *During Refinery operations, the Amorco Marine Terminal has been used for receiving approximately 108,000 bpd of crude oil and 5,000 bpd of heavy fuel oil for refining. Under the*	(13) For the Avon MOT, identify the baseline quantity of products transferred.

<table>
<tr><th>Reference (Page #s)</th><th>Description</th><th>Comments</th></tr>
<tr><td></td><td>proposed Project, use of the Amorco MOT would change from a receiving facility to primarily a distribution facility for loading of renewable diesel product for outbound shipments from the Refinery. Product from the Refinery would be distributed from the Amorco MOT at an average rate of 27,000 bpd of renewable fuel, with the balance distributed by pipeline and trucks. It is expected that the actual daily maximum loading would fluctuate dependent on the size of the vessel being loaded, but that throughput across the wharf would remain within permitted levels.</td><td></td></tr>
<tr><td>3-3 to 3-5
3.3-27 to 28</td><td><u>PRODUCT THROUGHPUT AT THE MARATHON REFINERY'S AMORCO & AVON MOTS:</u>
Table 3-1 Historical Throughput for Marathon Refinery
<table><tr><th>Type</th><th>Units</th><th>Year 1 (2015-2016)</th><th>Year 2 (2016-2017)</th><th>Year 3 (2017-2018)</th><th>Year 4 (2018-2019)</th><th>Year 5 (2019-2020)</th></tr><tr><td>Feedstocks</td><td>bpd</td><td>128,340</td><td>137,590</td><td>140,590</td><td>135,287</td><td>61,397</td></tr><tr><td>Products</td><td>bpd</td><td>144,013</td><td>147,013</td><td>151,185</td><td>151,894</td><td>71,858</td></tr></table>Source: Marathon Petroleum Corporation, 2021
Table 3-3 Comparative Throughput and Production for Marathon Refinery, 1-year, 3-year Average, and 5-year Average
<table><tr><th>Type</th><th>Units</th><th>1-year (2019-2020)</th><th>1-year (2018-2019)</th><th>3-year Average (2017-2020)</th><th>5-year Average (2015-2020)</th></tr><tr><td>Feedstocks</td><td>bpd</td><td>61,397</td><td>135,287</td><td>112,425</td><td>120,641</td></tr><tr><td>Products</td><td>bpd</td><td>71,858</td><td>151,894</td><td>124,979</td><td>133,193</td></tr></table>bpd = barrels per day
Source: Marathon Petroleum Corporation, 2021

[pgs. 3.3-27 to 28] 3.3.3.1 Methodology for Impact Analysis …
Mobile Sources
…Marine tankers and barges are also used to transport feedstocks and products to and from the facility. The Avon and Amorco MOTs are used for docking and loading/unloading of materials. Overall, the number of vessel calls at the Amorco MOT is expected to decrease, and the number of vessel calls at the Avon MOT is expected to increase compared to past actual operations. However, this Project does not change the unloading/loading capacities of these two MOTs.…</td><td>(14) Cumulative vessel traffic (i.e. calls/year) at the Amorco and Avon MOTs will increase post-Project (i.e. 143 vessel calls/year [Table 3-4] vs. up to approximately 400 vessel calls/year), and "Overall, the number of vessel calls at the Amorco MOT is expected to decrease, and the number of vessel calls at the Avon MOT is expected to increase compared to past actual operations" (pgs. 3.3-27 to 28). However, it is unclear the extent to which the volume of product throughput at the MOTs (i.e. transferred over water) will change since the Marathon Refinery throughput data (Tables 3-1 and 3-2) is not discretized by mode of transportation and MOT. Please identify the proposed Project product throughput at each MOT (i.e. received/offloaded/ discharged and shipped/loaded) by product type.
(15) Furthermore, it is unclear how environmental impacts are influenced by the proposed changes in vessel sizes/types, vessel calls per year, changes in throughput over the water, etc. (e.g. biological resources due to changes in vessel drafts, propeller vs. tug activities, worst-case oil spill scenarios).</td></tr>
<tr><td>3-3 to 3-5
3.4-34</td><td><u>VESSEL TRAFFIC AT THE MARATHON REFINERY'S AMORCO & AVON MOTS:</u></td><td>(16) Identify why marine vessels were not analyzed by type (i.e. tanker, barge and tugs) in the</td></tr>
</table>

Reference (Page #s)	Description	Comments
	Table 3-2 Annual Vehicle and Vessel Traffic for Marathon Refinery Source: Marathon Petroleum Corporation, 2021 **Table 3-4 Comparative Vehicle and Vessel Traffic for Marathon Refinery, 1-year, 3-year Average, and 5-year Average** *Source*: Marathon Petroleum Corporation, 2021 --- [pg. 3.4-34] ***Impact BIO-6: Increase deposition or erosion of sensitive habitats along the vessel path, including marshlands within and adjacent to the lease area, resulting from the resuspension of sediments by calling vessels. (Less than Significant)*** *…Vessel calls at Avon MOT would increase from 120 per year to 364 per year. Vessel calls at Amorco MOT would decrease from 90 per year to 40 per year…* --- [pg. 3.9-16] ***Impact HAZ-1: Create a hazard to the public or the environment through the routine transport, use, and/or disposal of hazardous materials. (Potentially Significant)*** *…However, there will be a 3- to 4-fold increase in vessel calls for the Project relative to Baseline (e.g., 400 vessels per year versus a baseline average of 143 vessels per year)…*	vessel traffic analysis, including but not limited to consideration of proposed Project changes in vessel traffic types (e.g. an increase in smaller barges). (17) Many agencies track vessel traffic and product throughput at California Marine Oil Terminals (MOTs). It is noted that the vessel traffic data presented in Table 3-2 differs from the CSLC Marine Environmental Protection Division (MEPD) Oil Spill Prevention Database (OSPD) records, where the MEPD records identify fewer vessel calls in each of the 5 years. (18) The statement *"Vessel calls at Avon MOT would increase from 120 per year to 364 per year. Vessel calls at Amorco MOT would decrease from 90 per year to 40 per year"* (pg. 3.4-34) appears to be inconsistent with the baseline data presented in Table 3-4 (i.e. 210 (=120+90) vs. 143 vessels per year) and the 400 vessels per year Project value stated in multiple locations (pg. 3.9-16). Furthermore, it is noted that the vessel traffic values of 120 and 90 per year for the Avon and Amorco MOTs (respectfully) differ from the CSLC Marine Environmental Protection Division (MEPD) Oil Spill Prevention Database (OSPD) records, where the MEPD records identify fewer vessel calls for the 5-year average.

Vessel or Vehicle	Units	Year 1 (2015-2016)	Year 2 (2016-2017)	Year 3 (2017-2018)	Year 4 (2018-2019)	Year 5 (2019-2020)
Truck	Miles Traveled	4,290,831	4,524,176	4,518,547	4,559,507	2,837,991
Train	Miles Traveled	5,604	4,961	5,261	4,820	2,380
Vessel	Calls	116	149	166	161	124

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

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<tr><th>Reference (Page #s)</th><th>Description</th><th>Comments</th></tr>
<tr><td>3-5</td><td>
Table 3-5 Refinery Turnaround Schedule, 2015-2019
<table>
<tr><th>Turnaround Year</th><th>2015</th><th>2016</th><th>2017</th><th>2018</th><th>2019</th></tr>
<tr><td>Equipment Shutdown</td><td>• Crude
• No. 3 HDS
• No. 6 Boiler</td><td>n/a</td><td>• Catalytic Cracker</td><td>• HCK
• No.1 HDA
• LHP C-14
• East Flare
• West Flare
• DCU
• No. 5 Gas
• SRU
• DEA</td><td>• No. 2 Hydrogen Plant
• Acid Plant
• Ammonia Recovery</td></tr>
</table>
Notes:
HDS = hydrodesulfurization unit
HCK = Hydrocracker
HDA = Hydrodearomatization
LHP = Light Hydrocarbon Processing
DCU = Delayed Coker Unit
SRU = Sulfur Recovery Unit
DEA = Diethylamine

Source: Marathon Petroleum Corporation, 2021
</td><td>(19) The Refinery turnaround discussion and schedule (Table 3-5) presented do not address:
(a) the impact of turnarounds on vessel traffic, and
(b) turnarounds which occurred during this 5-year period at the Amorco MOT and Avon MOT (e.g. Tesoro Avon Berth 1A construction and commissioning in 2015-2017) and their impacts on vessel traffic and refinery throughput.</td></tr>
<tr><td>3.4-41</td><td>Impact BIO-8: Cause significant adverse impacts to the San Francisco Bay Estuary and associated biota as a result of spills. (Potentially Significant)
… Biofuel spills may occur from leaks in equipment, pipes, storage tanks and during transfer of biofuel. Biofuels, unlike conventional petroleum-based oils, readily biodegrade under both aerobic and anaerobic conditions (IRTC 2011). The release of a readily degradable biofuel to soil or water results in the rapid consumption of oxygen. This can be detrimental in surface waters where low oxygen levels can adversely affect biological communities.
Biofuel feedstocks – vegetable oils and animal fats – would be transported via barge to the Refinery terminals…</td><td>(20) Since biofuels and renewable fuels are not equivalent (i.e. produced via different processes, chemically differ, blended and used dissimilarly):
(a) Mixed use of these terminologies (i.e. “biofuels” vs. “renewable fuels”, “biodiesel” vs. “renewable diesel”, etc.) should be verified for accuracy.
(b) Regulatory compliance requirements may differ.
(c) Identify all types of biofuels that will be transferred at the Marine Terminal post-Project (i.e. received/offloaded/ discharged and shipped/loaded).</td></tr>
<tr><td>3.4-41
3.10-17 to 18</td><td>Impact BIO-8: Cause significant adverse impacts to the San Francisco Bay Estuary and associated biota as a result of spills. (Potentially Significant)
… Marathon would be required to update the Refinery’s FRP and Spill Prevention, Control, and Countermeasure Plan (SPCC) to demonstrate preparedness to respond to vegetable oil and</td><td>(21) The SPCC Plan should be updated to address all hazards associated with the Project operations at the Amorco and Avon MOTs (i.e. not just “to</td></tr>
</table>

Reference (Page #s)	Description	Comments
	animal fat spills…. --- [pg. 3.10-17 to 18] **Impact HWQ-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. (Potentially Significant.)** *…Terminals at the Project Site are also subject to U.S. EPA regulations that require the preparation of a Spill Prevention, Control, and Countermeasures Plan (SPCC Plan), and regulations from the U.S. EPA and California Department of Fish and Wildlife (CDFW) Office of Spill Prevention and Response (OSPR) for the development and maintenance of oil spill response and contingency plans. Marathon has contingency planning and response measures for oil releases in place, including an existing facility SPCC Plan (Tesoro 2016, revised 2018), Northern California Blanket Oil Spill Response Plan (Tesoro 2017, updated 2020), and SWPPP (2013)…*	*demonstrate preparedness to respond to vegetable oil and animal fat spills"*). (22) Explain why the SPCC Plan is required to be updated for the post-Project phase only and not for other phases of the Project (e.g. during construction and demolition). (23) See MOTEMS Section 3101F.5 for SPCC Plan related design/built and operational/ administrative regulatory requirements.
3.9-5 3.10-18 4-14 6-15	[pg. 3.9-5] ***3.9.1.1 Regulatory and Policy Context*** *…* <u>*California State Lands Commission (CSLC)*</u> *… The CSLC also developed MOT Engineering and Maintenance Standards (MOTEMS) to establish standards for the design, construction and maintenance of marine oil terminal berthing and cargo loading/unloading facilities. MOTEMS is intended to minimize the possibility of accidents at MOTs during extreme weather events, seismic activity and routine operations that could lead to releases of petroleum substances to the environment. Existing facilities are required to retrofit or rebuild as necessary to meet MOTEMS, which the Refinery operators have already done pursuant to recently-renewed leases with CSLC, and the terminal will continue to be subject to compliance with MOTEMS requirements…* --- [pg. 3.10-18] **Impact HWQ-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. (Potentially Significant.)** *…Additionally, the California State Lands Commission (CSLC) has developed the Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS), which are standards that apply to all existing and new marine oil terminals in California and establish minimum engineering, inspection, and maintenance criteria to prevent oil spills and protect public health, safety, and the environment. These standards include conditions for operation which are specified in leases that Tesoro maintains with the CSLC. These lease conditions include the following five requirements (e.g., as mitigation measures [MMs]) designed to minimize the potential for a release during loading/unloading operations at the MOTs:*	(24) MOTEMS (24CCR§3101F et seq) establishes minimum engineering, inspection and maintenance criteria for all MOTs in California, including the design and evaluation (i.e. not just *"design, construction and maintenance"*) of new and existing MOTs. (25) The MOTEMS standards are comprehensive and contain requirements for assessment of the structural, mechanical, and electrical systems, including, but not limited to routine audits and inspections, geotechnical assessments, structural evaluations, seismic analyses, berthing and mooring analyses, fire protection, pipelines, mechanical and electrical equipment, and electrical systems (i.e. not just the *"berthing and cargo loading/unloading facilities"* portions of the MOT). (26) MOTEMS also addresses numerous potentially damage causing events such as earthquake, storm, vessel impact, fire, explosion, and tsunami (i.e. not just *"extreme weather events, seismic activity and routine operations"*).

Reference (Page #s)	Description	Comments
	• *MM OS-1a: Remote Release Systems* • *MM OS-1b: Tension Monitoring Systems* • *MM OS-1c: Allision Avoidance Systems* • *MM OS-4a: USCG Ports and Waterways Safety Assessment* • *MM OS-4b: Spill Response to Vessel Spills* --- [pg. 4-14] ***4.3.9 Hydrology and Water Quality*** *…Accidental releases of feedstocks or product during loading and unloading operations either in transit to or from the facility or at the associated Avon and Amorco MOTs could contaminate the surrounding surface water with floating feedstock or product. The consequences of a spill on water quality would depend on several factors, including the size of the spill, the effectiveness of the response effort, and the resources (biological, water, etc.) affected by the spill. As described in Section 3.10, Hydrology and Water Quality, best management practices, engineering and maintenance standards, and spill prevention, response and control plans are required by various agencies including the U.S. EPA, California Department of Fish and Wildlife and California State Lands Commission to minimize the potential for a reduction in water quality from an accidental release of feedstock or product. However, even with implementation of these best practices and plans, a large spill could still occur and result in impacts on water quality that would be a* ***significant and unavoidable*** *impact of the Project…* --- [pg. 6-15] ***6.3.6.2 Risk of Accidental Spill*** *…Compliance with existing regulations, implementation of the recommended safety measures and implementation of the mitigation measures noted above would reduce the potential impacts associated with a release but would not be expected to eliminate the potential hazard impacts. No feasible mitigation measures were identified to further reduce significant adverse hazard impacts. Therefore, hazards and hazardous material impacts due to accidental discharges from Project operations would remain significant and unavoidable…*	(27) The statement *"…to meet MOTEMS, which the Refinery operators have already done…"* (pg. 3.9-5) are misleading. MOTEMS compliance is a living process such that no MOT, including the Amorco and Avon MOTs, has fully satisfied the MOTEMS compliance requirements. CSLC MEPD continues to work with Marathon to identify deficiencies during routine MOTEMS audits and inspections of the Amorco and Avon MOTs and take appropriate corrective actions. (28) The statement *"These [MOTEMS] standards include conditions for operation which are specified in leases that Tesoro maintains with the CSLC"* (pg. 3.10-18) is inaccurate.
3.9-6	***3.9.1.1 Regulatory and Policy Context …*** ***State …*** <u>*California Accidental Release Prevention Program*</u>	(29) At MOTs, MOTEMS Sections 3104F.5.2 and 3109F.4 requires seismic assessment of existing nonstructural components, nonbuilding structures and building structures and their supports and attachments in accordance with CalARP or ASCE Guidelines.
3.9-10	***3.9.3.1 Methodology for Impact Analysis …***	(30)

Reference (Page #s)	Description	Comments
	The principal modes of product transportation currently utilized for the Project Site are truck, rail and marine vessel as well as pipeline. These transportation modes would continue under the proposed Project, and therefore, transportation of future products is taken into consideration as part of this analysis. As noted in the risk analyses performed as part of the Amorco and Avon EIRs (CLSC 2014 and CLSC 2015) which formed the basis for the respective EIRs, the subject leases considered San Francisco Bay vessel traffic data and probabilities of upset conditions for vessels independent of vessel size or cargo volumes based on data maintained by CSLC and other authorities. Based on the analyses performed in these EIRs and the leases granted by CSLC per these EIRs, the probabilities derived from data maintained by CSLC should remain valid as the basis for the existing lease conditions. As such, the terms of the leases under which the MOTs operate represent existing regulatory conditions for the Renewable Fuels Project EIR…	
2-1 to 2 3.10-16	**PROJECT SCHEDULE** [pg. 2-1 to 2-2] ***2.1 REFINERY HISTORY AND PROPOSED PROJECT SUMMARY …*** *…Construction of the proposed Project would begin as soon as all necessary permits are received, with a target date of 2022. Marathon anticipates that operations under the proposed Project would begin in 2022 with an estimated production of 23,000 bpd, ramping up to full production of 48,000 bpd expected to be achieved by the end of 2023.* --- [pg. 3.3-24] ***3.3.3.1 Methodology for Impact Analysis …*** *On-Site Construction* *…Factors were selected for each equipment category, based on an average expected horsepower for each equipment category, with operation during the anticipated construction period from 2022 to 2024…* --- [pg. 3.6-6] ***3.6.3.1 Methodology for Impact Analysis …*** ***Construction*** *The Project would be constructed in a single phase with overlapping development activities. Construction could commence in 2021, pending Project approval and EIR certification, with full buildout and operation of the Project anticipated by 2023.* --- [pg. 3.10-16] ***Impact HWQ-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. (Potentially Significant.)***	(31) The Project schedule appears unclear due to inconsistencies. Please address the following: (a) Construction anticipated to commence in 2021 (e.g. pg. 3.6-6) or 2022 (e.g. pg. 2-2)? (b) Anticipated construction period of 2 or 3 years (i.e. starting in 2021 or 2022 and full buildout in 2023 or 2024)? (c) Does construction need to be completed to attain *"full buildout and operation of the Project"* (pg. 3.6-6) or *"reaching full capacity of 48,000 bpd fresh feed processing"* (pg. 3.10-16)?

Reference (Page #s)	Description	Comments
	Once authorizations are received, the operation of the proposed Project would phase in over a period of 3 years, starting in 2022 with estimated average processing of 17,000 barrels per day (bpd) of fresh feed (short-term maximum 23,000 bpd) and reaching full capacity of 48,000 bpd fresh feed processing by the end of 2023… --- [pg. 3.14-8] ***Impact TRAN-2: Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). (Less than Significant)*** *…Construction of the proposed Project is estimated to continue for 22 months, after which ongoing maintenance could be performed by permanent Refinery maintenance staff…* --- [pg. 5-4] ***5.2.2 Alternative 2: Reduced Renewable Feedstock Throughput*** *…As noted in Section 2.5.2 of the Project Description, the proponent anticipates phasing in the Project over two years, with an interim throughput of 23,000 bpd…*	
	MANAGEMENT OF CHANGE (MOC) FOR THE REFINERY AND MOTS MODIFICATIONS	(32) Please address the Management of Change (MOC) procedures that would be undertaken at the refinery and MOTs to shift from processing petroleum to renewable products. For the Amorco and Avon MOTs, a Management of Change process is also required whenever physical changes are made to the built MOT that significantly impact operations (ref. MOTEMS § 3101F.7).