

DRAFT ENGINEERING EVALUATION

Tesoro Refining & Marketing Company LLC
150 Solano Way, Martinez, CA 94553
Plant Nos. 14628, 14629, 21200
Application No. 30768

This document is the Air District’s Engineering Evaluation Report for the Tesoro Refining and Marketing Company LLC application for an Authority to Construct for its Martinez Refinery Renewable Fuels Project, Application No. 30768. It describes how the proposed project satisfies Air District regulatory requirements for the issuance of an Authority to Construct, and it proposes permit conditions (in Appendix J) to ensure compliance.

1.0 - Background

Tesoro Refining & Marketing Company LLC, an indirect, wholly-owned subsidiary of Marathon Petroleum Corporation (herein referenced as “Marathon”), has applied for an Authority to Construct/Permit to Operate/Certificate of Exemption for 105 sources, as identified in [Table 1](#). These sources are part of Marathon’s proposed Martinez Refinery Renewable Fuels Project. The proposed project will convert the existing Martinez Refinery from its current production of fossil fuels (i.e., conventional diesel fuel, gasoline, distillates, propane, and various by-products) to the production of renewable fuels, including renewable diesel, renewable propane, and renewable naphtha. The Martinez Refinery has a crude oil capacity of 161,000 barrels per day (bpd). After the completion of the project, the facility will have a maximum processing capacity of 67,000 bpd and 17,520,000 barrels per consecutive 12 month period (annual average of 48,000 bpd) of renewable feedstocks. In addition, Martinez Refinery will continue its operations to receive, store, and distribute finished petroleum products. As a result of the project, the facility’s Source Industrial Classification Code will change from 2911 (Petroleum Refining) to 2869 (Industrial Organic Chemicals, Not Elsewhere Classified).

Table 1 – Sources Covered By Application No. 30768

Source/ Abatement No.*	Source/Abatement Description	Requested Determination	Requested Permit Action
S-115	Bulk Plant (truck/rail); Caustic waste; 4 Loading Arms	Alter	Authority to Construct/ Permit to Operate
S-126	LPG Truck Loading Rack; 16 Loading Arms	Exempt	Certificate of Exemption
S-127	LPG Tank Car Loading Rack; 10 Loading Arms	Exempt	Certificate of Exemption
S-323	Tank A-323, Slop Oil, A14 Vapor Recovery; 924,000 gallons	Alter	Authority to Construct/ Permit to Operate
S-517	Tank A-517, Renewable Feedstock (Clean); 3,154,000 gallons	Exempt	Certificate of Exemption
S-598	Tank A-598, Renewable Naphtha; 478,000 gallons	Modify	Authority to Construct/ Permit to Operate
S-601	Tank A-601, Recovered Oil, Gas Oil; 714,000 gallons	Alter	Authority to Construct/ Permit to Operate
S-613	Tank A-613, Vapor Storage Tank, A14 Vapor Recovery; 420,000 gallons	Alter	Authority to Construct/ Permit to Operate
S-620	Tank A-620, Renewable Feedstock (Raw); 3,360,000 gallons	Exempt	Certificate of Exemption
S-621	Tank A-621, Intermediate HDO Product; 3,360,000 gallons	Modify	Authority to Construct/ Permit to Operate
S-622	Tank A-622, R100 Renewable Diesel Storage Tank; 3,360,000 gallons	Exempt	Certificate of Exemption
S-648	Tank A-648, Renewable Propane Tank; 42,000 gallons	Exempt	Certificate of Exemption
S-649	Tank A-649, Renewable Propane Tank; 45,000 gallons	Exempt	Certificate of Exemption

Source/ Abatement No.*	Source/Abatement Description	Requested Determination	Requested Permit Action
S-650	Tank A-650, Sour Waste Water; 5,502,000 gallons	Alter	Authority to Construct/ Permit to Operate
S-651	Tank A-651, Oil/Water Mixture, Sour Waste Water; 5,502,000 gallons	Modify	Authority to Construct/ Permit to Operate
S-652	Tank A-652, Renewable Naphtha; 512,000 gallons	Modify	Authority to Construct/ Permit to Operate
S-656	Tank A-846, Foul Water Stripper Charge Tank, Sour Waste Water, A-12 Vapor Recovery, A-14 Vapor Recovery; 126,000 gallons	Alter	Authority to Construct/ Permit to Operate
S-658	Tank A-847, Foul Water Stripper Charge Tank, Sour Waste Water, A-12 Vapor Recovery, A-14 Vapor Recovery; 126,000 gallons	Alter	Authority to Construct/ Permit to Operate
S-666	Tank A-666, Renewable Propane Tank; 45,000 gallons	Exempt	Certificate of Exemption
S-667	Tank A-667, Renewable Propane Tank; 45,000 gallons	Exempt	Certificate of Exemption
S-668	Tank A-668, Renewable Propane Tank; 45,000 gallons	Exempt	Certificate of Exemption
S-669	Tank A-669, Renewable Propane Tank; 42,000 gallons	Exempt	Certificate of Exemption
S-670	Tank A-670, Renewable Propane Tank; 45,000 gallons	Exempt	Certificate of Exemption
S-692	Tank A-692, Gasoline, Renewable Naphtha Storage Tank; 2,352,000 gallons	Alter	Authority to Construct/ Permit to Operate
S-695	Tank A-695, Renewable Naphtha; 1,071,000 gallons	Modify	Authority to Construct/ Permit to Operate
S-699	Tank A-699, API Separator Recovered Oil, A-14 Vapor Recovery; 777,000 gallons	Alter	Authority to Construct/ Permit to Operate
S-700	Tank A-700, API Separator Sludge; 84,000 gallons	Alter	Authority to Construct/ Permit to Operate
S-819	API Oil-Water, Separator/Dissolved Nitrogen Flotation System, Abated by A-39 Thermal Oxidizer or A-14 Vapor Recovery; 436,677 bbl/day, 43,800,348 bbl/year	Alter	Authority to Construct/ Permit to Operate
S-830	Wastewater Surge Ponds; 319,476 bbl/day, 35,522,066 bbl/year	Alter	Authority to Construct/ Permit to Operate
S-831	Bio-Oxidation Pond, Open pond; 319,476 bbl/day, 35,522,066 bbl/year	Alter	Authority to Construct/ Permit to Operate
S-842	Wastewater Treatment Plant Clarifiers, filters, and granular activated carbon; 319,476 bbl/day, 35,522,066 bbl/year	Alter	Authority to Construct/ Permit to Operate
S-846	Diesel HDO Unit No. 3 (formerly No. 3 HDS Unit) Cooling Tower; 6,500 gallons/min	Alter	Authority to Construct/ Permit to Operate
S-850	Diesel HDO Unit No. 3 (formerly No. 3 HDS Unit); 23,000 bbl/day	Alter	Authority to Construct/ Permit to Operate
S-854	East Air Flare	Alter	Authority to Construct/ Permit to Operate
S-873	Tank A-895, Renewable Feedstock (Raw); 4,074,000 gallons	Exempt	Certificate of Exemption
S-919	No. 2 HDS Depent Reboiler (F19); 65 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate
S-920	No. 2 HDS Charge Heater (F20); 63 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate
S-928	HDN Reactor A Heater (F28); 20 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate

Source/ Abatement No.*	Source/Abatement Description	Requested Determination	Requested Permit Action
S-929	HDN Reactor B Heater (F29); 20 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate
S-930	HDN Reactor C Heater (F30); 20 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate
S-931	Hydrocracker Reactor 1 Heater (F31) ; 20 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate
S-932	Hydrocracker Reactor 2 Heater (F32); 20 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate
S-933	Hydrocracker Reactor 3 Heater (F33); 20 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate
S-934	Hydrocracker Stabilizer Reboiler (F34); 135 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate
S-937	Hydrogen Plant Heater (F37); 743 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate
S-944	North Steam Flare	Alter	Authority to Construct/ Permit to Operate
S-945	South Steam Flare	Alter	Authority to Construct/ Permit to Operate
S-973	No. 3 HDS Recycle Gas Heater (F55), Abated by A-31 SCR; 110 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate
S-976	No. 5 Gas Plant Cooling Tower; 64,500 gallons/min	Alter	Authority to Construct/ Permit to Operate
S-978	Foul Water Stripper Cooling Tower; 5,200 gallons/min	Alter	Authority to Construct/ Permit to Operate
S-980	Diesel HDO Unit No. 1 and Diesel Isomerization Unit (formerly Hydrocracker) Cooling Tower; 14,028 gallons/min	Alter	Authority to Construct/ Permit to Operate
S-982	Diesel HDO Unit No. 2 (formerly No. 2 HDS) Cooling Tower; 18,000 gallons/min	Alter	Authority to Construct/ Permit to Operate
S-985	No. 1 Gas Plant Cooling Tower; 5,500 gallons/min	Alter	Authority to Construct/ Permit to Operate
S-992	Emergency Flare	Alter	Authority to Construct/ Permit to Operate
S-1002	Propane Dryers (formerly No. 1 HDS Unit); 6,000 bbl/day	Alter	Authority to Construct/ Permit to Operate
S-1003	Diesel HDO Unit No. 2 (formerly No. 2 HDS Unit); 20,000 bbl/day	Modify	Authority to Construct/ Permit to Operate
S-1005	No. 1 Hydrogen Plant; 93 MMscf/day, 31,025 MMscf/year	Alter	Authority to Construct/ Permit to Operate
S-1007	Diesel Isomerization Unit (formerly 2nd Stage Hydrocracker Unit); 58,000 bbl/day	Alter	Authority to Construct/ Permit to Operate
S-1008	Diesel HDO Unit No. 1 (formerly 1st Stage Hydrocracker Unit); 24,000 bbl/day	Modify	Authority to Construct/ Permit to Operate
S-1012	West Air Flare	Alter	Authority to Construct/ Permit to Operate
S-1025	Bulk Plant; Bottom Loading Facilities, A-14 Vapor Recovery; 20 Loading Arms	Alter	Authority to Construct/ Permit to Operate
S-1026	DNF Effluent Air Stripper, Abated by A-39 Thermal Oxidizer; 4,000 cfm	Alter	Authority to Construct/ Permit to Operate

Source/ Abatement No.*	Source/Abatement Description	Requested Determination	Requested Permit Action
S-1463	Tank A-867, Renewable Feedstock; 10,080,000 gallons	Exempt	Certificate of Exemption
S-1464	Tank A-868, Diesel, R100 Renewable Diesel Storage Tank; 4,200,000 gallons	Alter	Authority to Construct/ Permit to Operate
S-1465	Tank A-869, Diesel, R100 Renewable Diesel Storage Tank; 4,200,000 gallons	Alter	Authority to Construct/ Permit to Operate
S-1468	Tank A-877, Spent Sulfidic Caustic; 1,008,000 gallons	Exempt	Certificate of Exemption
S-1511	Hot Oil Heater #1 (F78), Abated by A-1511 SCR; 230 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate
S-1512	Hot Oil Heater #2 (F79), Abated by A-1512 SCR; 230 MMBtu/hr	Alter	Authority to Construct/ Permit to Operate
S-1517	Coker Flare	Alter	Authority to Construct/ Permit to Operate
S-1526	No. 5 Gas Plant, Abated by A2001 H2S Adsorption Vessels; 40 MMscf/day	Alter	Authority to Construct/ Permit to Operate
S-1554	Tank A-943, Renewable Feedstock (Clean); 2,761,000 gallons	Exempt	Certificate of Exemption
S-1560	Avon Wharf Berth No. 1A, Marine Bulk Plant with A1560 Vapor Recovery System; 15 Loading Arms	Alter	Authority to Construct/ Permit to Operate
S-1564	Tank A-938 Avon Wharf Recovered Oil Tank, Berth 1A; 3,800 gallons	Alter	Authority to Construct/ Permit to Operate
S-1600	Foul Water Strippers; 1,400 gpm, Abated by A2002 H2S Adsorption Vessels (140 dscfm) and A2000 Sour Water Stripper Thermal Oxidizer (1.91 MMBtu/hr)	Alter	Authority to Construct/ Permit to Operate
S-2001	Stage 1 Wastewater Treatment Unit; 600 gallon/minute (Max Daily), 450 gallons/minute (Annual Average)	New	Authority to Construct/ Permit to Operate
S-2002	Tank TK-1048, Antifoam Tank; 1,000 gallons	Exempt	Certificate of Exemption
S-2003	DAF Unit; 600 gallon/minute (Max Daily), 450 gallons/minute (Annual Average)	New	Authority to Construct/ Permit to Operate
S-2004	Tank TK-845, Sodium Hypochlorite Tank; 1,861 gallons	Exempt	Certificate of Exemption
S-2005	Tank MTK-10162, Demulsifier Tank; 1,800 gallons	Exempt	Certificate of Exemption
S-2006	Tank TK-958, Fresh Caustic Storage Tank; 7,715 barrels	Exempt	Certificate of Exemption
S-2007	Tank A-905, R99 Renewable Diesel Storage Tank; 131,000 barrels	Exempt	Certificate of Exemption
S-2008	Tank A-933, R99 Renewable Diesel Storage Tank; 131,000 barrels	Exempt	Certificate of Exemption
S-2009	Renewable Feedstock Unloading Rack; 8 Loading Arms	Exempt	Certificate of Exemption
S-2010	Tank A-876, Stage 1 WWTP, Equalization Tank (formerly S-1496); 600 gallon/minute (Max Daily), 450 gallons/minute (Annual Average)	New	Authority to Construct/ Permit to Operate
S-2011	Tank A-981, Fossil Diesel Storage Tank; 190 barrels	Exempt	Certificate of Exemption
S-2012	Tank A-961, Fossil Diesel Storage Tank; 190 barrels	Exempt	Certificate of Exemption
S-2013	Tank A-432, Moving Bed Biofilm Reactor (formerly S-432); 600 gallon/minute (Max Daily), 450 gallons/minute (Annual Average)	New	Authority to Construct/ Permit to Operate
S-2014	Sodium Sulfide Tank No. 1; 8,700 gallons	Exempt	Certificate of Exemption
S-2015	Sodium Sulfide Tank No. 2; 8,700 gallons	Exempt	Certificate of Exemption
S-2016	Neutralization Tank T-796, FRT; 23,600 gallons	Exempt	Certificate of Exemption

Source/ Abatement No.*	Source/Abatement Description	Requested Determination	Requested Permit Action
S-2017	Neutralization Tank T-797, FRT; 23,600 gallons	Exempt	Certificate of Exemption
S-2018	Tank TK-1036, Sulfuric Acid Tank; 2,100 gallons	Exempt	Certificate of Exemption
S-2019	Tank TK-10193, Coagulant Tank; 8,700 gallons	Exempt	Certificate of Exemption
S-2022	Tank TK-10198, Urea Storage Tank; 8,700 gallons	Exempt	Certificate of Exemption
S-2023	Tank TK-1044, Polymer Storage Tank; 1,000 gallons	New	Authority to Construct/ Permit to Operate
S-2024	Tank TK-1035, Phosphoric Acid Tank; 3,000 gallons	Exempt	Certificate of Exemption
S-2025	Pretreatment Unit; 48,000 bbl/day	New	Authority to Construct/ Permit to Operate
S-2026	Tank NV-406, Weak Acid Tank Storage Tank; 74,850 gallons	Exempt	Certificate of Exemption
S-2028	Tank A-932, FRT, R99 Renewable Diesel Storage Tank; 96,000 barrels	Exempt	Certificate of Exemption
A-2000	Sour Water Stripper Off-Gas Thermal Oxidizer, Zeeco; 3-Stage Low NOx; 1.91 MMBtu/hr	New	Authority to Construct/ Permit to Operate
A-2001	H2S Adsorption Vessels #1 (No. 5 Gas Plant); 28,000 scfm	New	Authority to Construct/ Permit to Operate
A-2002	H2S Adsorption Vessels #2 (Sour Water Stripper); 140 dscfm	New	Authority to Construct/ Permit to Operate
S-55 (Plant #14629)	Amorco Terminal; 21 Loading Arms	Exempt	Certificate of Exemption
S-19 (Plant #21200)	B19 Tank (from Plant #14629), Renewable Diesel Storage Tank; 2,604,000 gallons	Alter	Authority to Construct/ Permit to Operate
S-21 (Plant #21200)	Tank B-21 (from Plant #14629), Renewable Diesel Storage Tank; 2,604,000 gallons	Alter	Authority to Construct/ Permit to Operate

*Source and abatement device numbers are associated with Plant #14628, unless otherwise specified.

Project & Process Overview

The proposed project consists primarily of a change in production processes rather than a change in facilities (i.e., construction), as it will mostly use existing refining equipment and transportation facilities. The major change will be the elimination of crude oil processing and the use of renewable feedstocks to manufacture renewable fuels. The renewable feedstocks are expected to include biological-based oils (e.g., soybean oil and corn oil), rendered fats, and other miscellaneous renewable feedstocks including, but not limited to, used cooking oils, other vegetable oils, and alternative biologically derived feedstocks. However, palm oil will not be used.

Many existing sources will be repurposed and new sources such as the pretreatment unit, wastewater treatment equipment, and a sour water stripper thermal oxidizer will be added to the process to accommodate the renewable feedstocks. In addition, various existing refinery units will be shut down as part of this project. Detailed description and changes for various sources and processes are discussed below. See [Figure 1](#) for a block flow diagram of Marathon Martinez renewable fuels process.

Feedstock Receiving

The primary feedstock will be tallow and vegetable oils. Marathon is proposing to receive renewable feedstocks as well as finished petroleum products at the Avon Wharf Berth No. 1A (S-1560). Recovered Oil Tank (S-1564) will continue to be used to recover material from Avon Wharf within permitted limits (Permit Condition #26408). Finished petroleum products will not be processed at the facility and will be distributed locally. In addition, Marathon is also proposing to receive renewable feedstocks via pipeline and by rail at a new Renewable Feedstock Unloading Rack (S-2009), which is exempt per Regulation 2-1-123.3.6.

Electrical heat tracing and insulation will be added to the dedicated pipeline for renewable feedstocks to make sure the materials flow through the pipeline to the facility.

S-1560 is subject to throughput limits, loading emissions limit, and cargo carrier emissions limit specified in Permit Condition #26406. The proposed project will not exceed existing limits.

Feedstock Storage

Existing storage tanks S-517, S-620, S-873, S-1463, and S-1554 will be repurposed to store renewable feedstocks. Changes include adding odor management best practices (carbon canisters and nitrogen blanket) and electric heaters. New panel mixers will be installed on tank side walls and an epoxy coating will be applied to the floors, walls, roof, and internals. Vertical pipe burp tubes will also be installed to the inner tank sidewall from 2’ above the tank floor to 5’ below the roof. The pipe is open ended on both ends and clips will be welded to the inner wall of the tank to bolt on the burp tubes.

S-517, S-620, and S-873 are exempt sources and will continue to be exempt per Regulation 2-1-123.3.6. S-1463 and S-1554 are permitted sources, but Marathon will surrender its permit and S-1463 and S-1554 will be exempt per Regulation 2-1-123.3.6, storage of vegetable oils and tallow.

Pretreatment Unit

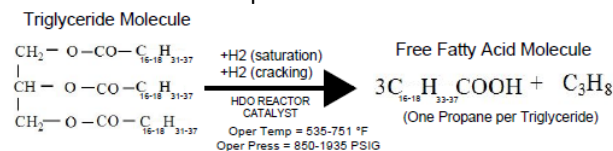
The installation and construction of the Pretreatment Unit (S-2025) will allow for the removal of impurities and solids from the renewable feedstocks before processing in the hydrodeoxygenation (HDO) units. The pretreatment targets metals and inorganic elements (e.g., phosphorus) to meet product specifications and protect reactor catalysts in the HDO units. The Pretreatment Unit removes raw feed contaminants using a once-through water wash with weak (citrus) acid injection, which leaves them in the water phase. Weak Acid Tank (S-2026) is exempt from permitting per Regulation 2-1-123.2 since it contains less than 1% by weight organic compounds. Wastewater from the Pretreatment Unit will be processed at a new Stage 1 Wastewater Treatment Plant before treatment at the existing Stage 2 Wastewater Treatment Plant. The removed metals and phosphorus will end up in waste products (sludge) and properly disposed. See [Wastewater Treatment Plant](#) section for more details.

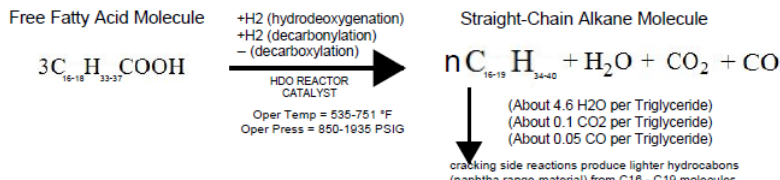
The existing Delayed Coker Heater #1 (F78) abated by a Selective Catalytic Reduction (SCR) System (S-1511/A-1511) will be reconfigured to function as a hot oil heater for the Pretreatment Unit. Delayed Coker Heater #2 (F79) abated by an SCR System (S-1512/A-1512) will serve as a backup and will function in the same manner when operated. Hot oil acts as a heat transfer medium in the same manner that steam does in other areas of the facility (i.e., transferring heat from the hot oil to process streams via heat exchange and re-heating at S-1511/S1512). The firing rate will remain within the permitted design conditions and there will be no changes to metallurgy. Sources will not be relocated and will remain in place as originally permitted.

Hydrodeoxygenation (HDO) Process

Existing No. 2 and No. 3 Hydrodesulfurization (S-1003 and S-850) and Hydrocracker 1st Stage (S-1008) units will be physically retrofitted with new equipment and a different reactor catalyst blend to operate as HDO units, the principal process in creating renewable diesel. The HDO units will be capable of processing a combined maximum of 67,000 bpd of renewable feedstocks into intermediate products. A new sulfiding agent supply vessel and metering pumps will be constructed to serve the HDO units. The sulfiding agent will be continually injected to sulfide the HDO catalysts in the aforementioned units to keep reactivity.

The hydrodeoxygenation process consists of two steps shown below:





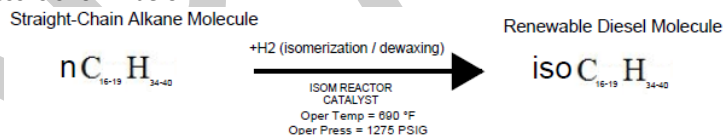
In the first step, the triglyceride molecule reacts with hydrogen to form free fatty acid molecule and propane. In the second step, hydrodeoxygenation and decarbonylation take place to convert free fatty acid molecule to straight-chain alkane molecule and light hydrocarbons (naphtha). The HDO processes are expected to produce ammonia (NH₃) from organo-nitrogen compounds in the feedstocks undergoing a denitrification reaction, which converts nitrogen to ammonia, and hydrogen sulfide (H₂S) from catalyst sulfiding agent decomposition. Process offgas, propane, and naphtha from the HDO units will be further processed at the No. 5 Gas Plant (S-1526) to produce renewable propane and renewable naphtha. An existing storage tank (S-621) will be repurposed to store intermediate HDO product from the HDO units.

Existing process heaters (S-919, S-928, S-929, S-930, and S-973) permitted to fire natural gas and 100# refinery fuel gas will undergo a change in method of operation to fire natural gas and fuel gas for the HDO units. Marathon is proposing physical changes to existing process heater (S-920) to replace components in the radiant and convection section, but no change to its firing rate. The properties of the fuel gas will change from the production of renewable fuels, but the fuel gas combusted in the heaters will have a similar or lower heat content on a volumetric basis (Btu/scf) and less sulfur due to changes in facility operations. See Appendix A for more detail on the Marathon Martinez fuel gas system and fuel gas properties. Marathon will provide fuel gas analysis to demonstrate that firing fuel gas is similar to refinery fuel gas per Permit Condition #27583, Parts 8 and 16.

Isomerization Process

The three reactors in the Hydrocracker 2nd Stage Unit (S-1007) will be converted to the Diesel Isomerization Unit for isomerization (dewaxing, which improves renewable diesel's cold weather properties). The Diesel Isomerization Unit will ultimately accept stripped product from each of the three HDO units via S-621.

The isomerization process is shown below:



The isomerization process takes the straight-chain alkane molecule from the HDO units and forms renewable diesel molecule.

Existing process heaters (S-931, S-932, S-933, and S-934) permitted to fire natural gas and 100# refinery fuel gas will undergo a change in method of operation to fire natural gas and fuel gas for the Diesel Isomerization Unit.

Renewable Diesel Storage

After undergoing isomerization, the renewable diesel product from the isomerization reactor will be fed to the existing stabilizer for flash point control and then pumped into existing storage tanks (S-1464 and S-1465) as pure renewable diesel fuel designated as R100. The facility will blend 99% renewable diesel fuel with 1% fossil diesel fuel, designated as R99, and will be stored in existing exempt storage tanks A-905, A-932, A-933 per Regulation 2-1-123.3.2, which will be exempt sources S-2007, S-2028, and S-2008, respectively.

Fossil Diesel will be received via truck into existing storage tanks TK-981 and TK-961, which will be exempt sources S-2011 and S-2012, respectively, per Regulation 2-1-123.3.2, storage of organic liquids with an initial boiling point greater than 302F and exceeds storage temperature by at least 180°F.

In cases where off-specification diesel is detected meaning a deviation in one or more diesel specifications (sulfur content, aromatics, and flash point), the product will either be sent to (1) existing storage tank S-622 to be reprocessed in the HDO units, (2) existing storage tank S-621 to be reprocessed in the Diesel Isomerization Unit, or (3) proceed with the normal flow and blend with new diesel product for slight deviations. The occurrence off-specification diesel is intended to be low in probability.

No. 5 Gas Plant

The existing No. 5 Gas Plant (S-1526) will be repurposed to process recovered gases and light hydrocarbon liquids from the three HDO units (S-850, S-1003, S-1008) and Diesel Isomerization Unit (S-1007). The No. 5 Gas Plant will also produce renewable fuels, including renewable naphtha (up to 3,000 bpd), renewable propane (up to 6,000 bpd), and treated fuel gas. The treated fuel gas will be combusted in facility process heaters or fed to the No. 1 Hydrogen Plant (S-1005) as feedstock. See Appendix A for detailed changes to Marathon's refinery fuel gas system. The No. 1 HDS Unit (S-1002) will be shut down, but the existing propane dryers will be repurposed for renewable propane. There are no fired heaters associated with the propane dryers, which instead utilize a steam regeneration heater.

Changes to the No. 5 Gas Plant absorber deethanizer and depropanizer are required to achieve product recovery. Marathon is proposing to install two new reciprocating compressors with electric drivers to serve as off-gas compressors. The new reciprocating compressors handle molecular weight fluctuations associated with flare gas recovery (FGR) service and will be designed for the full FGR observed capacity. The new machines will be supplied with supporting lube oil skid and cylinder coolant skid. New H₂S adsorption vessels (A-2001) will be installed to remove H₂S from the recovered fuel gas prior to being routed to the fuel gas system and combusted in boilers and process heaters.

Renewable Propane and Renewable Naphtha Storage

Products from the No. 5 Gas Plant will be stored in existing storage tanks. Existing gasoline storage tank (S-692) will be repurposed to store renewable naphtha; however, Marathon would like to maintain its permit to store gasoline. Existing liquefied propane gas (LPG) storage tanks S-598, S-652, and S-695 are currently exempt from permitting per Regulation 2-1-123.3.1 and will repurposed to store renewable naphtha. S-598, S-652, and S-695 will be permitted as modified sources.

Existing liquefied propane gas (LPG) storage tanks S-648, S-649, S-666 through S-670 are currently exempt from permitting per Regulation 2-1-123.3.1 and will repurposed to store renewable propane. These tanks will continue to meet exemption requirements per Regulation 2-1-123.3.1, storage or loading of liquified gases.

Finished Product Loading and Distribution

Renewable propane will be transported to local markets via existing LPG Truck Loading Rack (S-126) and to broader markets via existing LPG Tank Car Loading Rack (S-127). S-126 and S-127 are exempt sources and will continue to meet exemption requirements per Regulation 2-1-123.3.1, storage or loading of liquified gases.

Renewable naphtha will be transported via marine vessels at the Avon Wharf (S-1560). Renewable diesel will be transported via marine vessels at S-1560 and Amorco Wharf Terminal (Plant #14629, S-55), and via trucks at the Bulk Plant Loading Rack (S-1025).

Stage 1 Wastewater Treatment Plant

The Pretreatment Unit (S-2025) produces a wastewater stream that will require partial pretreatment in new wastewater treatment equipment (Stage 1 Wastewater Treatment) upstream of the existing wastewater treatment facility (Stage 2 Wastewater Treatment). See [Figure 2](#) for the Martinez Refinery Wastewater Treatment block flow diagram.

The raw wastewater will flow to an existing storage tank (S-1496) prior to entering the wastewater treatment processes. S-1496 will be repurposed to function as an equalization tank. Since the existing source will no longer operate as a storage tank and instead operate as a wastewater processing unit, this is considered a new source.

The Air District will archive S-1496 and assign a new source number for the equalization tank (S-2010). Physical modifications include installing a floating suction skimmer, an epoxy coating, and a jet mixing system. The equalization tank jet mixing system mixes wastewater via the jet mixing pump(s) and internal nozzle header to provide blending of wastewater received throughout the day and to keep suspended solids in suspension. In the event that free oil carries over into the equalization tank, the jet mixing pumps can be turned off to allow free oil to separate and be skimmed out of the tank.

The wastewater will be processed in the new dissolved air flotation (DAF) unit (S-2003), which clarifies wastewater by removing suspended solids and oils. The DAF residuals will be transferred to an existing storage tank (S-323) and combined with the solids/oils from the API oil-water separator and dissolved nitrogen floatation (S-819). The DAF effluent will undergo aerobic biological treatment in the moving bed biofilm reactor (MBBR).

Existing storage tank (S-432) will be repurposed to function as a MBBR in the new Stage 1 Wastewater Treatment Plant and it will be disconnected from A-14 Vapor Recovery. Since the existing source will no longer operate as a storage tank and instead operate as a wastewater processing unit, this is considered a new source. The Air District will archive S-432 and assign a new source number for the MBBR (S-2013). The MBBR is an aerobic biological treatment unit that is similar to a conventional activated sludge system, except that the biofilm is affixed to a moving surface compared to suspended in the water. The unit operates with an attached growth biological reactor that includes porous, corrugated plastic media. The plastic media provides surface area for attached growth bacteria to grow and develop into a biofilm. The growth and respiration of these bacterial colonies includes the consumption of organics in the wastewater, therefore removing biochemical oxygen demand (BOD). Oxygen for the bacterial colonies and mixing of the tank is provided by blowers via a distribution header in the bottom of the tank. Screens are provided on the discharge lines to retain media in the tank.

Chemical additives stored in new storage tanks (S-2002, S-2006, S-2018, S-2019, S-2022, S-2023, S-2024) will be used to support operations of the DAF and MBBR. These new storage tanks are exempt per Regulation 2-1-103, less than 10 pounds per day, etc., or Regulation 2-1-123.2, storing materials less than 1% by weight organic compounds. S-2023 is used to store polymer, which contains more than 1% (by weight) organic compounds; therefore, S-2023 does not meet any exemption and will be permitted as a new source.

Stage 2 Wastewater Treatment Plant

The existing wastewater treatment will now be referred to as the Stage 2 Wastewater Treatment Plant. The existing wastewater treatment equipment will operate in a similar manner after the project, but the wastewater composition and flow rates will reflect the wastewater that is generated from the operating units. Cooling tower blowdown, boiler blowdown, oily sewers, and centrifuge centrate streams will be treated in the existing API oil-water separator and dissolved nitrogen floatation (S-819) units. These units will receive significantly less flow than during refinery operations due to the shutdown of the crude oil desalter and other refinery process units. The sanitary waste and wastewater streams from the sour water stripper (S-1600) will be neutralized prior to joining with the existing DNF Effluent Channel Air Stripper (S-1026) effluent. The MBBR effluent stream from S-2013 will combine with S-1026 effluent and will be processed in the existing wastewater surge ponds (S-830), bio-oxidation pond (S-831), clarifiers and filters (S-842), and coke runoff storage pond prior to discharge at the outfall. The proposed project includes the installation of additional aeration capacity and piping modifications to better distribute the aeration and wastewater within the wastewater surge ponds (S-830).

Sour Water Stripper

The existing sour water charge tanks (S-656 and S-658) will process sour water streams from the operating process units. Existing sour water storage tank (S-650) will be used, and existing oil/water storage tank (S-651) will be repurposed to store sour water for this process.

The sour water from the charge tanks goes to the three foul water strippers used to remove H₂S and NH₃. Marathon's existing foul water strippers were never given an Air District source number; therefore, S-1600 will be

created for the foul water strippers. After the implementation of this project, Marathon will shut down one and only operate two foul water strippers.

During petroleum refining operations, H₂S and NH₃ are processed at the Ammonia Recovery Unit (S-851), Sulfur Recovery Unit (S-1401), and Sulfuric Acid Plant (S-1411). Marathon will shut down S-851, S-1401, and S-1411. Marathon is proposing to install new equipment including new H₂S absorption vessels (A-2002) to remove H₂S from recovered sour water stripper off-gas, and an advanced three-stage, low nitrogen oxides (NO_x), 1.91 MMBtu/hr thermal oxidizer (A-2000) to control emissions from the sour water stripper off-gases.

Hydrogen Plants

Hydrogen is used in the HDO reaction to convert renewable feedstocks to renewable diesel in the HDO units (S-850, S-1003, S-1008) and in the isomerization reaction in the diesel isomerization unit (S-1007) to improve final renewable diesel's cold fluid properties.

The existing No. 1 Hydrogen Plant (S-1005) and No. 2 Hydrogen Plant (Plant #10295, S-1030 and S-1031), a support facility operated by Air Products & Chemicals, Inc. and permitted separately, will continue to operate in a manner similar to historical operations. Marathon is not proposing any changes to the existing hydrogen plants.

Cooling Towers

Marathon has 13 permitted cooling towers at the facility, in which seven (7) will be shut down as part of this project. The remaining seven (6) cooling towers will serve the repurposed process units and will continue to operate. Related heat exchange systems will be repurposed, including metallurgy upgrades, to serve the operating process units.

Marathon is proposing to revise the grandfathered limit for Foul Water Stripper Cooling Tower (S-978) from 4,100 to 5,200 gallons per minute (gpm). Marathon has provided information that the original pumps were not modified and has achieved 5,200 gpm in the past. Therefore, the grandfathered limit will be revised as part of this application.

Flares

The existing flare system that will be kept online includes the main flare header (North, South, East, West, Emergency, and Coker). Existing equipment will continue to be connected while the new Pretreatment Unit will be connected to this flare header. The facility plans to retain the permits for Butane Tank Safety Flare (S-943), and shut down the 50 Unit Flare (S-1524) and Ammonia Plant Flare (S-1013).

There will be no increase in flare capacity requirements or in actual flaring rates compared to historical operations as a petroleum refinery. The overall facility flaring will decrease due to the shutdown of multiple process units.

Implementation Schedule

Marathon is planning to implement the proposed project in four phases:

	Systems/Units in Operation	Processing Capacity (bpd)	
		Annual Average	Maximum
Phase 1*	S-850 (Diesel HDO Unit No. 3) S-1007 (Diesel Isomerization Unit) Associated downstream units Stage 2 Wastewater Treatment	20,000	23,000
Phase 2	S-2025 (Pretreatment Unit) Stage 1 Wastewater Treatment	20,000	23,000
Phase 3	S-1003 (Diesel HDO Unit No. 2) or S-1008 (Diesel HDO Unit No. 1)	38,000	43,000 or 47,000**
Phase 4	S-1003 (Diesel HDO Unit No. 2) and S-1008 (Diesel HDO Unit No. 1)	48,000	67,000***

*Marathon will process corn and soybean oil, which do not require pretreatment. Tallow will require pretreatment before processing in the HDO Units.

**43,000 bpd is the maximum daily processing capacity when S-850 and S-1003 are in operation. 47,000 bpd is the maximum daily processing capacity when S-850 and S-1008 are in operation.

*** 67,000 bpd is the maximum daily processing capacity when S-850, S-1003, and S-1008 are all in operation.

Due to many sources shutting down as part of this project, Marathon has submitted a separate permit application (Application No. 30806) to revise the bubble condition (Permit Condition #8077) and Alternative NO_x Compliance Plan (Permit Condition #18372).

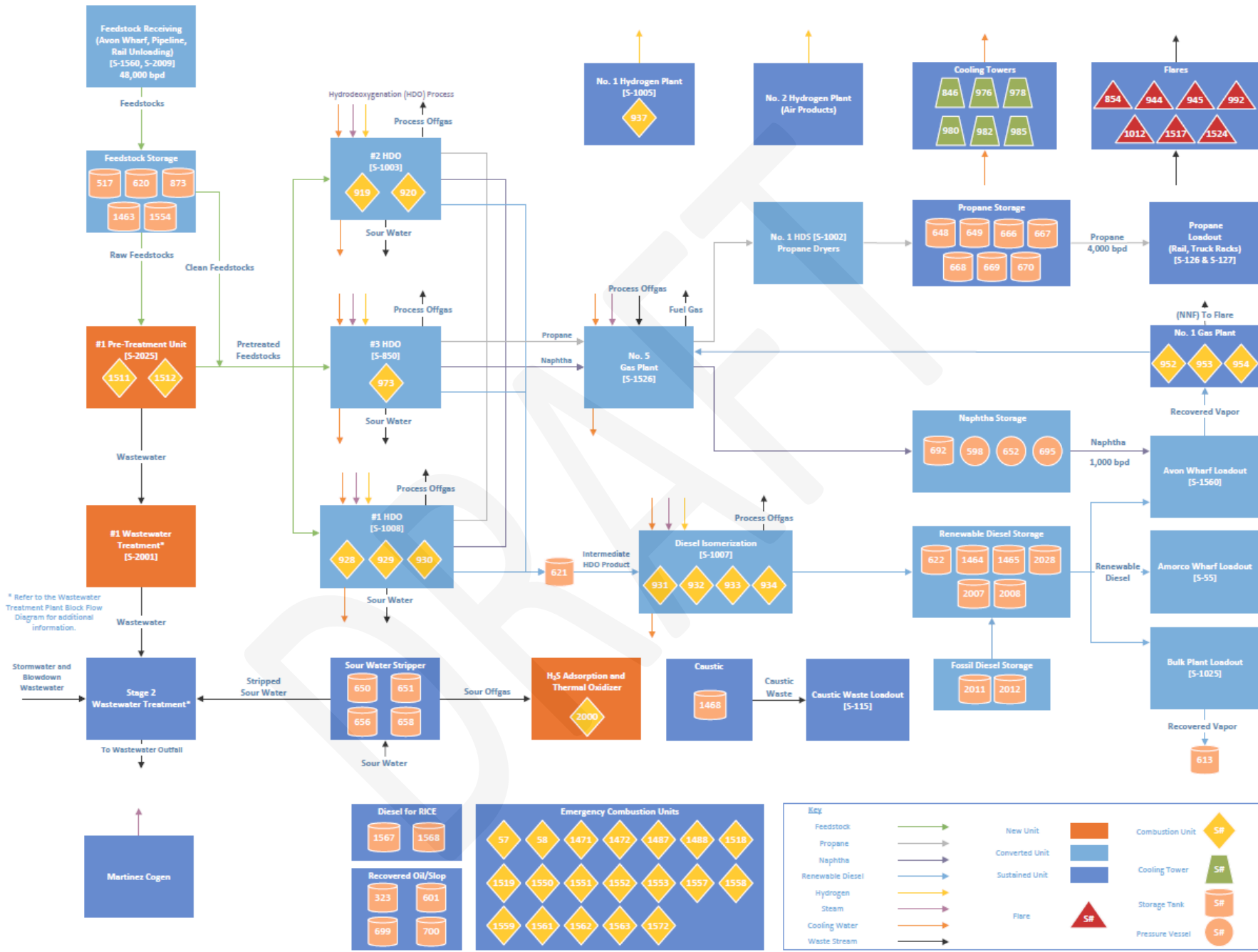


Figure 1 – Martinez Refinery Renewable Fuels Block Flow Diagram

2.0 Emissions Calculation

2.1 - Feedstock Receiving

Marathon is proposing to receive feedstocks as well as finished petroleum products at The Avon Wharf Berth No. 1A (S-1560) and receive feedstocks via pipeline or by rail at a new Renewable Feedstock Unloading Rack (S-2009). No finished petroleum products will be unloaded at S-2009.

Source S-2009 (Renewable Feedstock Unloading Rack)

There are no emissions associated with S-2009 as unloading emissions are attributed to feedstock storage tanks and fugitive emissions. As shown in Appendix D, Table D-3.15, fugitive emissions from S-2009 are estimated to be 0.163 tons of POC per year. Emissions from feedstock storage tanks are shown in [Table 2.2.1](#). The emissions for each storage tank, including fugitive emissions, are less than 5 tons/year; therefore, S-2009 meets the requirements of Regulation 2-1-319. In addition, there are no toxic air contaminants associated with renewable feedstocks. Therefore, S-2009 is exempt from permitting per Regulation 2-1-123.3.6 for storage and loading of vegetable oils, tallow, etc. Because the unloading rack (S-2009) and the storage tanks are exempt from permitting, the fugitive component emissions from dedicated lines to transfer exclusively exempt renewable feedstock to the storage tanks are also exempt as part of the loading equipment and not included in the total component count for the Renewable Fuels Project as described in [Section 2.13](#).

Source S-1560 (Avon Wharf Berth 1A)

Marathon is proposing to receive feedstocks as well as finished petroleum products at Avon Wharf Berth No. 1A (S-1560). Finished petroleum product will not be processed at the facility and will be distributed locally. S-1560 is currently permitted to transfer 30,000,000 barrels of product in any consecutive 12-month period (Permit Condition #26406, Part 1) and primarily used for product loading and export.

Marathon is proposing to increase the facility's receiving capacity to receive an average of 70,000 bpd of renewable feedstocks and gasoline products. Emissions from product unloading are attributed to storage tanks holding the product; therefore, there is no increase in daily emissions at S-1560 as a result of an increase in receiving capacity. Daily max transfers will not exceed permitted levels. Marathon would like to maintain its permitted transfer throughput of 30,000,000 barrels per year. Although Marathon is not planning to distribute renewable diesel at S-1560, Marathon would like to maintain the flexibility of loading renewable diesel in the future. Permit conditions limiting the maximum daily and consecutive 12 month loading of renewable naphtha will be added as part of the project.

Loading operations are currently abated by Marine Vapor Recovery System (A-1560) for gasoline loading. A-1560 collects the loading emissions, provides enrichment gas, if necessary, to ensure the gases are below the explosion limit, and discharges the enriched marine loading emissions into the A-14 vapor recovery system. A-1560 will continue to abate S-1560 when loading regulated organic materials.

The potential to emit for S-1560 consists of marine cargo carrier emissions and product loading emissions, established in Application No. 27990. After the implementation of this project, Marathon will only load renewable naphtha and renewable diesel at S-1560. Post-project emissions are shown in Appendices E and G. As shown in Table D-3.4 of Appendix D, there will be no change in fugitive component counts nor any replacements of components; therefore, there will be no change in fugitive emissions. Marathon will continue to comply with emission limits for marine cargo carriers established in Permit Condition #26406, Parts 2 and 4.

Table 2.1.1 – Pre-Project and Post-Project Annual Emissions for S-1560

		POC (tons/year)	SO ₂ (tons/year)	NO _x (tons/year)	CO (tons/year)	PM ₁₀ (tons/year)	PM _{2.5} (tons/year)	Reference
Pre-Project	Marine Cargo Carrier	10.743	9.372	188.825	34.425	4.157	4.157	Permit Condition #26406, Part 2
	Material Loading	20.000	0.000	0.000	0.000	0.000	0.000	Permit Condition #26406, Part 4
	Total Emissions	30.743	9.372	188.825	34.425	4.157	4.157	-
Post-Project	Marine Cargo Carrier	6.890	2.310	83.910	34.360	2.850	2.730	Appendix G
	Material Loading	11.729	0.000	0.000	0.000	0.000	0.000	Appendix E
	Total Emissions	18.619	2.310	83.910	34.360	2.850	2.730	-

Table 2.1.2 – Pre-Project and Post-Project Toxic Air Contaminant Emissions for S-1560

TAC	Permitted Loading Emissions ¹		Post-Project Loading Emissions ²		Emission Change		Regulation 2-5 Trigger Level		Exceedance
	(lbs/year)	(lbs/hour)	(lbs/year)	(lbs/hour)	(lbs/year)	(lbs/hour)	(lbs/year)	(lbs/hour)	(Yes/No)
Toluene	6.9E+02	9.4E-02	6.8E+02	9.4E-02	-7.6E+00	-2.7E-02	1.2E+04	8.2E+01	No
Ethylbenzene	3.8E+01	5.2E-03	4.2E+01	3.3E-02	4.3E+00	2.8E-02	3.3E+01	None	Yes
Xylene	3.9E+03	9.3E-01	1.9E+02	9.3E-01	-3.7E+03	-8.8E-01	2.7E+04	4.9E+01	No
Benzene	1.0E+02	1.4E-02	1.1E+02	3.0E-02	2.0E+00	1.5E-02	2.9E+00	6.0E-02	Yes
Naphthalene	4.8E+01	1.2E-02	7.0E-01	1.2E-02	-4.7E+01	0.0E+00	2.4E+00	None	No
n-Hexane	9.8E+01	1.3E-02	2.5E+02	9.9E-01	1.6E+02	9.8E-01	2.7E+05	None	No

¹Maximum TAC Emissions established in Application No. 27790 from gasoline and diesel loading.

²Maximum TAC Emissions calculated based on weight fractions from material safety data sheet of renewable naphtha and gasoline.

Post-project loading emissions represent the worst-case as renewable diesel is not considered to contain any TAC's.

As shown above, there are increases in toxic air contaminant (TAC) emissions above Regulation 2, Rule 5 trigger levels as a result of this project; therefore, S-1560 is a modified source per Regulation 2-5 and is included in the HRA. Based on the results of the HRA, S-1560 is an altered source per Regulation 2-2 (per Regulation 2-1-234.1.3).

2.2 Feedstock Storage

Renewable feedstocks will be stored in existing storage tanks S-517, S-620, S-873, S-1463, and S-1554.

Table 2.2.1 – Feedstock Storage Tank Emissions (Appendix C, Table C-1)

Source No.	Description	Pre-Project		Post-Project	
		POC Emissions (lbs/day)	POC Emissions (tons/year)	POC Emissions (lbs/day)	POC Emissions (tons/year)
517 [Exempt]	Tank A-517, FRT, Renewable Feedstock	2,443.0	13.299	119.4	1.572
620 [Exempt]	Tank A-620, FRT, Renewable Feedstock	1,009.9	2.226	157.6	1.578
873 [Exempt]	Tank A-895, FRT, Renewable Feedstock	609.7	2.317	143.2	1.797
1463 [Exempt]	Tank A-867, EFRT, Renewable Feedstock	22.6	8.268	17.9	1.554
1554 [Exempt]	Tank A-943, FRT, Renewable Feedstock (clean)	3.8	0.193	3.7	0.087

Per Appendix C, Table C-4, emissions of TACs do not exceed the trigger levels outlined in Regulation 2, Rule 5, Table 2-5-1.

S-517, S-620, and S-873 are currently exempt from permitting and will meet new exemption requirements pursuant to Regulation 2-1-123.3.6. S-1463 and S-1554 are currently permitted, but Marathon will surrender its permits. S-1463 and S-1554 will meet exemption requirements pursuant to Regulation 2-1-123.3.6. S-1463 will no longer be permitted to store gas oil, which is a non-exempt material.

2.3 Pretreatment Unit

The only potential emissions from the Pretreatment Unit (S-2025) are the fugitive volatile organic compound (VOC) emissions from equipment leaks. Fugitive TAC emissions are estimated based on speciation data from sampling of wastewater pilot system. Criteria pollutant emissions are presented in Appendix D, Table D-2, and TAC emissions are presented in Appendix D, Tables D-4.1 and D-4.2.

Table 2.3.1 – POC Emissions for S-2025 (Appendix D, Table D-2)

Source No.	Source Description	Throughput		POC Emissions (lbs)		
		Max Daily (bbl/day)	Max Annual (bbl/year)	Hourly	Daily	Annual
S-2025	Pretreatment Unit	48,000	17,520,000	4.4E-01	10.6	3,881

Delayed Coker Heaters #1 and #2 (S-1511 and S-1512) will be reconfigured to function as a hot oil heater for the Pretreatment Unit. S-1511 and S-1512 are currently permitted to fire natural gas and refinery fuel gas as backup, with a firm limit of 2,014,800 MMBtu in any consecutive 12-month period (Permit Condition #23129, Part 14) for each heater. Marathon will continue to operate within permitted limits and natural gas as the primary fuel. As such, there is no change to the potential to emit established in Application No. 21744. Therefore, S-1511 and S-1512 are altered sources. See Appendix B for process heaters emissions calculation.

2.4 Hydrodeoxygenation (HDO) Units

Emissions from HDO Units (S-850, S-1003, and S-1008) are all fugitive precursor organic compounds (POC) from equipment leaks. TAC emissions are estimated using stream composition analysis based on streams going in and coming out of each process unit as shown in [Figure 1](#) while dedicated non-VOC streams are represented at 0%. Stream composition for HDO units is estimated based on 50% feedstock, 1% process off gas, 1% sour water, 16% propane, 16% naphtha, and 16% diesel. Permit Condition #27583, Part 13 has been imposed to conduct sampling and testing to determine the level of air toxics in feed and product streams for S-850, S-1003, and S-1008.

S-850, S-1003 and S-1008 have firm limits of 70 kbbbl/day (Permit Condition #8077, Part B6B), 40 kbbbl/day (Permit Condition #8350, Part B1), and 37 kbbbl/day (Permit Condition #8077, Part C1), respectively. New Permit Condition #27584, Part 1, has been imposed for a combined maximum throughput of 67,000 bbl/day and/or 17,520,000 barrels in any consecutive 12 month period, and Parts 2-4 for individual maximum processing rates of each HDO unit as specified below. New and replaced fugitive components associated with these sources are included in the total component count for the Renewable Fuels Project and addressed in [Section 2.13](#).

Per Appendix D, Tables D-4.3 and D-4.4, emissions of TACs do not exceed the trigger levels outlined in Regulation 2, Rule 5, Table 2-5-1. Changes to S-850 do not result in an increase in POC emissions. However, since there is an increase in emissions of at least one or more TAC, emissions of TACs are included in the HRA. Based on the results of the HRA, S-850 is an altered source per Regulation 2-2. S-1003 and S-1008 are modified sources and emissions of TAC are included in the health risk assessment (HRA).

Table 2.4.1 – POC Fugitive Emissions Increase/Decrease for S-850, S-1003, and S-1008 (Appendix D, Table D-2)

Source No.	Source Description	Throughput			POC Emissions Increase/Decrease (lbs)		
		Max Daily (bbl/day)	Max Annual (bbl/year)	Max Annual (Combined)	Hourly	Daily	Annual
S-850	Diesel HDO Unit No. 3 (formerly No. 3 HDS Unit)	23,000	7,300,000	17,520,000 barrels in any consecutive 12-month period	(4.2E-01)	(10.0)	(3,642)
S-1003	Diesel HDO Unit No. 2 (formerly No. 2 HDS Unit)	20,000	6,570,000		3.9E-02	0.9	339
S-1008	Diesel HDO Unit No. 1 (formerly Hydrocracker Unit [Hydrocracker 1 st Stage])	24,000	7,300,000		8.8E-02	2.1	768

Marathon is proposing to repurpose existing storage tank S-621 to store intermediate HDO product from the HDO units. The physical changes will include adding a scraping system to the seals. The scrapers reduce the likelihood that stored material clings to the walls and prevents mechanical issues for the tank seal. S-621 is currently an exempt source. S-621 will no longer meet exempt status and will be permitted as a modified source. As shown below, S-621 will not trigger BACT but its emissions increase will be subject to offsets. New and replaced fugitive components associated with this source are included in the total component count for the Renewable Fuels Project and addressed in [Section 2.13](#).

Table 2.4.2 – Storage Tank Emissions for S-621 (Appendix C, Table C-1)

Source No.	Description	Pre-Project		Post-Project	
		POC Emissions (lbs/day)	POC Emissions (tons/year)	POC Emissions (lbs/day)	POC Emissions (tons/year)
621	Tank A-621, EFRT, Intermediate HDO Product	0	0	8.1	1.019

2.5 Diesel Isomerization Unit

Emissions from the Diesel Isomerization Unit (S-1007) are all fugitive precursor organic compounds from equipment leaks. TAC emissions are estimated using stream composition analysis based on streams going in and coming out of each process unit as shown in [Figure 1](#) while non-VOC streams are represented at 0%. Stream composition for S-1007 is estimated based on 50% intermediate HDO product, 49% renewable diesel, and 1% process offgas. Permit Condition #27583, Part 13 has been imposed to conduct sampling and testing to determine the level of air toxics in feed and product streams for S-1007. Prior to the issuance of the permit to operate, sampling and testing results will be used to verify process stream speciation. In addition, the health risk assessment conducted for the issuance of the authority to construct for the Renewable Fuels Project has identified benzene as the risk driver. If sampling and testing results exceed any of the emission rates and/or identify any new toxic air contaminants not previously evaluated as part of the issuance of the authority to construct, the health risk assessment will be updated for the Renewable Fuels Project prior to the issuance of the permit to operate.

Marathon proposes to increase the daily and annual permitted capacities from 37K bbl/day (Permit Condition #8077, Part C1) to 48K bbl/day, and from 12,775K bbl/yr to 17,520K bbl/yr. New Permit Condition #27584, Part 6, has been imposed for a maximum throughput of 58,000 bbl/day and/or 48,000 bbl/day, based on a rolling 365 day

average. Since the proposed diesel isomerization processing operations require comparatively less energy demands compared to the existing operations, physical changes to the existing heaters (S 931, S-932, S-933, and S-934) associated with S-1007 are not necessary to achieve the proposed increased processing rates and these sources will remain in compliance with existing limits and conditions. See Appendix B for process heaters emissions calculation.

Table 2.5.1 – POC Fugitive Emissions Increase/Decrease for S-1007 (Appendix D, Table D-2)

Source No.	Source Description	Throughput		POC Emissions Increase/Decrease (lbs)		
		Max Daily	Max Annual	Hourly	Daily	Annual
S-1007	Diesel Isomerization Unit (formerly 2 nd Stage Hydrocracker Unit)	58,000 bbl/day	48,000 bbl/day, based on a rolling 365 day average and/or 17,520,000 bbl per any consecutive 12 month period	(3.6E-01)	(8.6)	(3,143)

Per Appendix D, Tables D-4.3 and D-4.4, emissions of TAC do not exceed the trigger levels outlined in Regulation 2, Rule 5, Table 2-5-1. Changes to S-1007 do not result in an increase in emissions; therefore, S-1007 is an altered source. New and replaced fugitive components associated with these sources are included in the total component count for the Renewable Fuels Project and addressed in [Section 2.13](#).

2.6 No. 5 Gas Plant and Propane Dryers

Emissions from the No. 5 Gas Plant (S-1526) are all fugitive precursor organic compounds from equipment leaks. TAC emissions are estimated using stream composition analysis based on streams going in and coming out of each process unit as shown in the block flow diagram while non-VOC streams are represented at 0%. Stream composition for S-1526 is estimated based on 49% propane, 49% naphtha, 1% process offgas, and 1% fuel gas. Permit Condition #27583, Part 13 has been imposed to conduct sampling and testing to determine the level of air toxics in feed and product streams for S-1526. If the sampling and testing indicates any increases in toxic air contaminant emissions above those used within the HRA for the project, the HRA will be re-run in order to determine compliance with Regulation 2-5.

S-1526 has a grandfathered limit of 3.46 MMscf/hr. As described in Appendix A, the facility is expecting to reduce processing rates from 40-60 MMSCFD to at most 40 MMSCFD to produce 9,000 barrels of renewable propane and renewable naphtha per calendar day combined and/or 1,825,000 barrels of renewable propane and renewable naphtha in any consecutive twelve month period (Permit Condition 27585, Part 1).

Table 2.6.1 – POC Fugitive Emissions Increase/Decrease for S-1526 (Appendix D, Table D-2)

Source No.	Source Description	Throughput		POC Emissions Increase/Decrease (lbs)		
		Max Daily (bbl/day)	Max Annual (bbl/year)	Hourly	Daily	Annual
S-1526	No. 5 Gas Plant	9,000	1,825,000	(1.3E+00)	(31.4)	(11,470)

Per Appendix D, Tables D-4.3 and D-4.4, emissions of TACs do not exceed the trigger levels outlined in Regulation 2, Rule 5, Table 2-5-1. However, since there is an increase in emissions of at least one or more TAC, emissions of TACs are included in the HRA. Changes to S-1526 do not result in an increase in POC emissions and based on the results of the HRA, S-1526 is an altered source per Regulation 2-2. New and replaced fugitive components associated with these sources are included in the total component count for the Renewable Fuels Project and addressed in [Section 2.13](#).

Emissions from the Propane Dryers, formerly No. 1 HDS Unit (S-1002), are all fugitive precursor organic compounds from equipment leaks. There are no fired heaters associated with the propane dryers, which instead utilize a steam regeneration heater. Therefore, there are no emissions from the combustion. TAC emissions are estimated using propane. New and replaced fugitive components associated with these sources are included in the total component count for the Renewable Fuels Project and addressed in [Section 2.13](#).

Table 2.6.2 – POC Fugitive Emissions Increase/Decrease for S-1002 (Appendix D, Table D-2)

Source No.	Source Description	Throughput		POC Emissions Increase/Decrease (lbs)		
		Max Daily (bbl/day)	Max Annual (bbl/year)	Hourly	Daily	Annual
S-1002	Propane Dryers (Formerly No. 1 HDS Unit)	6,000	1,460,000	(1.5E+00)	(36.0)	(13,140)

Per Appendix D, Tables D-4.3 and D-4.4, emissions of TACs do not exceed the trigger levels outlined in Regulation 2, Rule 5, Table 2-5-1. Changes to S-1002 do not result in an increase in emissions; therefore, S-1002 is an altered source.

2.7 Renewable Fuels Storage

Table 2.7.1 – Renewable Diesel Storage Tank Emissions (Appendix C, Table C-1)

Source No.	Description	Pre-Project		Post-Project	
		POC Emissions (lbs/day)	POC Emissions (tons/year)	POC Emissions (lbs/day)	POC Emissions (tons/year)
622** [Exempt]	Tank A-622, FRT, R100 Renewable Diesel Storage Tank	0	0	203.2	2.362
1464*	Tank A-868, EFRT, Diesel, R100 Renewable Diesel Storage Tank	9.8	0.461	5.1	0.353
1465*	Tank A-869, EFRT, Diesel, R100 Renewable Diesel Storage Tank	9.8	0.461	5.1	0.353
2007** [Exempt]	Tank A-905, FRT, R99 Renewable Diesel Storage Tank	0	0	181.7	2.331
2008** [Exempt]	Tank A-933, FRT, R99 Renewable Diesel Storage Tank	0	0	283.0	2.622
2011** [Exempt]	Tank A-981, Fossil Diesel Storage Tank	0	0	6.0	0.010
2012** [Exempt]	Tank A-961, Fossil Diesel Storage Tank	0	0	6.0	0.010
2028** [Exempt]	Tank A-932, FRT, R99 Renewable Diesel Storage Tank	0	0	181.7	1.739
B19 (Plant #21200)	B19 Tank, EFRT, R99 Renewable Diesel Storage Tank	43.7	6.281	16.0	0.643
B21 (Plant #21200)	B21 Tank, EFRT, R99 Renewable Diesel Storage Tank	31.2	6.281	16.0	0.643

* Throughput and/or emission limits for altered sources are based on pre-project levels. Future applications will need to be reviewed per Regulation 2-1-234.1.2 to determine the PTE in the current configuration.

** These are existing exempt tanks (some without source numbers). For conservatism, pre-project emissions are assumed to be zero and post-project emissions are used to evaluate for compliance with exemption requirement of Regulation 2-1-319.

S-622 is currently exempt and will continue to meet the exemption requirements pursuant to Regulation 2-1-123.3.2.

S-1464 and S-1465 are currently permitted to store Jet A, Diesel, or Kerosene, and has firm limits of 10,000,000 bbl/year (420,000,000 gallons/year) (Permit Condition #17477, Parts D1 and E1). Marathon is proposing to repurpose S-1464 and S-1465 to store renewable diesel and maintain the ability to store petroleum diesel. Changes does not result in an emission increase; therefore, S-1464 and S-1465 are altered sources.

S-2007, S-2008, S-2011, S-2012, and S-2028 are existing exempt storage tanks without Air District source numbers. Source numbers will be assigned, and tanks will continue to meet the exemption requirements pursuant to Regulation 2-1-123.3.2.

S-19 and S-21 (permitted under Plant #21200), designated as B19 and B21, respectively, are existing storage tanks permitted to store crude oil. Marathon is proposing to repurpose S-19 and S-21 to store renewable diesel only as the facility will no longer receive and store crude oil. Marathon is proposing an annual throughput of 14,016,000 barrels per any consecutive 12 month period of renewable diesel for each source. Changes do not result in an emission increase; therefore, B19 and B21 are altered sources.

Table 2.7.2 – Renewable Propane Storage Tank Emissions (Appendix C, Table C-1)

Source No.	Description	Pre-Project		Post-Project	
		POC Emissions (lbs/day)	POC Emissions (tons/year)	POC Emissions (lbs/day)	POC Emissions (tons/year)
648 [Exempt]	Tank A-648, Pressurized, Renewable Propane Tank	0	0	0	0
649 [Exempt]	Tank A-649, Pressurized, Renewable Propane Tank	0	0	0	0
666 [Exempt]	Tank A-666, Pressurized, Renewable Propane Tank	0	0	0	0
667 [Exempt]	Tank A-667, Pressurized, Renewable Propane Tank	0	0	0	0
668 [Exempt]	Tank A-668, Pressurized, Renewable Propane Tank	0	0	0	0
669 [Exempt]	Tank A-669, Pressurized, Renewable Propane Tank	0	0	0	0
670 [Exempt]	Tank A-670, Pressurized, Renewable Propane Tank	0	0	0	0

Per AP-42, Chapter 7, high-pressure tanks are considered closed systems, with virtually no emissions while fugitive losses from high-pressure tanks are estimated as equipment leaks. Emissions from equipment leaks are expected to be minimal and these tanks are monitored under the Fugitives Program. There are no direct emissions from these pressurized tanks. The sources above are currently exempt from permitting and will continue to meet the exemption requirements pursuant to Regulation 2-1-123.3.1.

S-598, S-652, and S-695 are spherical high-pressure storage tanks. Per AP-42, Chapter 7, high-pressure tanks are considered closed systems, with virtually no emissions while fugitive losses from high-pressure tanks are estimated as equipment leaks. Emissions from equipment leaks are expected to be minimal and these tanks are monitored under the Fugitives Program. There are no direct emissions from these pressurized tanks.

Table 2.7.3 – Renewable Naphtha Storage Tank Emissions (Appendix C, Table C-1)

Source No.	Description	Pre-Project		Post-Project	
		POC Emissions (lbs/day)	POC Emissions (tons/year)	POC Emissions (lbs/day)	POC Emissions (tons/year)
598	Tank A-598, Pressurized, Renewable Naphtha Storage Tank	0	0	0	0
652	Tank A-652, Pressurized, Renewable Naphtha Storage Tank	0	0	0	0
692*	Tank A-692, EFRT, Gasoline, Renewable Naphtha Storage Tank	33.9	1.613	25.1	1.517
695	Tank A-695, Pressurized, Renewable Naphtha Storage Tank	0	0	0	0

*Throughput and/or emission limits for grandfathered sources are based on pre-project levels. Future applications will need to be reviewed per Regulation 2-1-234.1.2 to determine the PTE in the current configuration.

Marathon is proposing to repurpose gasoline storage tanks S-692 to store renewable naphtha, but retain the ability to store gasoline. S-692 is a grandfathered source with the highest 12-month historical throughput of 2,650,447 bbl/year (October 2019) and highest 24-hour historical throughput of 54,882 bpd (November 6, 2019). Marathon is proposing a maximum throughput of 365,000 bbl/year of renewable naphtha based on an average production of 1,000 bbl/day.

Per Appendix C, Table C-4, emissions of TAC do not exceed the trigger levels outlined in Regulation 2, Rule 5, Table 2-5-1. However, since there is an increase of at least one or more TAC, emissions of TACs are included in the HRA. Changes to S-692 do not result in an emission increase and based on the results of the HRA, S-692 is not a new/modified source per Regulation 2-2. However, it will have enforceable throughput limits.

2.8 Finished Product Loading and Distribution

Renewable Propane (S-126 and S-127 Truck and Railcar Loading Rack)

Renewable propane will be distributed via existing LPG Truck Loading Rack (S-126) and LPG Tank Car Loading Rack (S-127). LPG loading racks operate under pressure and emissions are negligible. S-126 and S-127 are exempt sources and will continue to meet exemption requirements per Regulation 2-1-123.3.1. The railcar mobile emissions associated with S-126 and S-127 are not included in the source PTE for an exempt source. However, the railcar combustion emissions are included in Appendix G from Pages 48 to 56 for information only.

Renewable Diesel (S-1025 – Truck Loading Rack)

Renewable diesel will be distributed primarily by trucks at Bulk Plant Loadout (S-1025) and potentially by ships at the Amorco Wharf (Plant #14629, S-55). Bladder tank (S-613) will continue to store recovered vapor material from the S-1025 Bulk Plant Truck Bottom Loading Rack. The tank does not emit to the atmosphere because the tank operates under pressure.

S-1025 has throughput limits of 64,457 barrels per day and 18,615,000 barrels per any consecutive 12 month period (Permit Condition #21849, Part 9) with an emission limit of 0.04 lbs of POC per 1000 gallons of material loaded (Permit Condition #21849, Part 11).

Table 2.8.1 – Loading Emissions for S-1025 (Appendix E, Table E-1)

Material	Pre-Project Emissions*		Post-Project Emissions	
	Daily (lbs/day)	Annual (tons/year)	Daily (lbs/day)	Annual (tons/year)
Gasoline	108.3	15.637	21.0	3.833
Petroleum Diesel	-	-	0.1	0.015
Renewable Diesel	-	-	0.1	0.015
Total	108.3	15.637	21.1	3.843

*Throughput and/or emission limits for altered sources are based on pre-project levels. Future applications will need to be reviewed per Regulation 2-1-234.1.2 to determine the PTE in the current configuration.

In Application No. 10668, the number of trucks was not quantified as it is limited by the daily and annual throughputs. Since the daily and annual throughputs are expected to decrease, the number of trucks is expected to decrease as well. Therefore, fugitive dust emissions are expected to decrease.

There are no TACs for renewable diesel and emissions of TAC for loading gasoline are expected to decrease due to a decrease in loading capacity of gasoline. Overall, loading emissions are expected to decrease, TACs are expected to decrease, and no change in fugitive component leaks (Appendix D, Table D-2); therefore, S-1025 is an altered source.

Renewable Diesel (Plant #14629, S-55 – Amorco Wharf Terminal)

The Amorco Wharf Terminal is permitted to unload 70,080,000 bbl of material per any 12 consecutive months (Permit Condition #22455, Part 8).

Marathon is proposing a change in the method of operation from unloading crude oil to loading renewable diesel, i.e., converting from receiving to distribution uses. The physical structure will largely be unchanged, except work to change the flow direction of the existing crude receiving pipeline. The Amorco Wharf Terminal is expected to distribute an average 27,000 bpd of renewable fuel (with the margin distributed by pipeline and trucks), although daily maximum loading will fluctuate significantly based on the size of the vessel being loaded. Marathon is proposing a maximum daily loading rate of 124,800 bpd based on maximum pumping capacity (5,200 bbl/hour x 24 hours).

Marathon is proposing to relinquish its existing permit of unloading capabilities and obtain a Certificate of Exemption for its new loading operation. Renewable diesel loading is exempt from permitting per Regulation 2-1-123.3.2. As shown in Table E-1 of Appendix E, the potential to emit is less than 5 tons per year and Amorco Terminal meets the exemption requirements per Regulation 2-1-123.3.2. The marine vessel mobile emissions associated with S-55 are not included in the source PTE for an exempt source. However, the detailed marine vessel mobile emissions are presented in Appendix G for information only. Permit Condition #22455 has been revised to keep track of the renewable diesel vapor pressure to ensure the Amorco Wharf Terminal will meet exemption requirements at all times.

2.9 Wastewater Treatment Plant

The emissions from the wastewater treatment plant are estimated based on design information (flow rates, composition, equipment configuration, and equipment dimensions) and modeled using Toxchem wastewater treatment air emission estimation software. Toxchem modelling results are shown in Appendix F and summarized below. Maximum post-project’s daily emissions are estimated based on a daily maximum flowrate of 600 gpm and results are presented in Appendix F-4. Post-project’s annual emissions are estimated based on the design flowrate of 450 gpm and results are presented in Appendix F-5.

2.9.1 Stage 1 Wastewater Treatment (New)

Table 2.9.1 – Potential to Emit for Stage 1 Wastewater Treatment Plant Sources (Appendix F, Table F-1)

Source No.	Description	Pre-Project		Post-Project	
		POC Emissions (lbs/day)	POC Emissions (lbs/year)	POC Emissions (lbs/day)	POC Emissions (lbs/year)
Existing Sources					
2010	Tank A-876, FRT, Stage 1 WWTP, Equalization Tank (formerly S-1496)	0	0	7.3	2,675
2013	Tank A-432, Open-Top, Moving Bed Biofilm Reactor (formerly S-432)	0	0	85.5	26,105
New Sources					
2003	DAF Unit	0	0	0.3	122

Source S-2010 (Equalization Tank)

Since S-1496 will no longer operate as a storage tank, a new source number is assigned as a new wastewater treatment processing unit/source (S-2010).

As shown in [Table 2.9.1](#) (for criteria pollutants) and Table F-8 of Appendix F (for TACs), best available control technology (BACT) is not triggered and emissions of TAC exceed at least one trigger level contained in Regulation 2, Rule 5, Table 2-5-1. Since S-2010 is a new source and exceeds at least one trigger level, emissions of TAC are included in the HRA.

Source S-2003 (DAF Unit)

S-2003 is a new dissolved air floatation (DAF) unit. As shown [Table 2.9.1](#) (for criteria Pollutants) and Table F-8 of Appendix F (for TACs), best available control technology (BACT) is not triggered and emissions of TAC do not exceed the trigger levels outlined in Regulation 2, Rule 5, Table 2-5-1. Since S-2003 is a new source, emissions of TAC are included in the HRA.

Source S-2013 (Tank A-432, Open-Top, Moving Bed Biofilm Reactor (MBBR))

S-432 is currently used to store petroleum products and Marathon is proposing to repurpose S-432 to a MBBR for wastewater treatment. Since S-432 will no longer operate as a storage tank, a new source number is assigned as a new wastewater processing unit/source (S-2013).

As shown in [Table 2.9.1](#) (for criteria pollutants), best available control technology (BACT) is triggered and emissions of TAC exceed at least one trigger level contained in Regulation 2, Rule 5, Table 2-5-1. Since S-2013 is a new source and exceeds at least one trigger level, emissions of TAC are included in the HRA.

S-2001 (Stage 1 Wastewater Treatment Unit – Fugitive Components)

In addition to the sources above, new fugitive components will be installed at the Stage 1 Wastewater Treatment resulting in fugitive VOC emissions from equipment leaks. Fugitive TAC emissions are estimated based on speciation data from sampling of wastewater pilot system. Permit Condition #27583, Part 14, has been imposed to conduct sampling and testing of wastewater stream speciation upon startup. Criteria pollutant emissions are presented in Appendix D, Table D-2, and TAC emissions are presented in Appendix D, Tables D-4.1 and D-4.2. New and replaced fugitive components associated with the wastewater treatment unit are included in the total component count for the Renewable Fuels Project and addressed in [Section 2.13](#).

Table 2.9.2 – POC Emissions for S-2001 (Appendix D, Table D-2)

Source No.	Source Description	POC Emissions (lbs)		
		Hourly	Daily	Annual
S-2001	Stage 1 Wastewater Treatment Unit	4.4E-01	10.5	3,847

2.9.2 Stage 2 Wastewater Treatment (Existing)

Table 2.9.3 – Potential to Emit for Stage 2 Wastewater Treatment Plant Sources (Appendix F, Table F-1)

Source No.	Description	Pre-Project		Post-Project	
		POC Emissions (lbs/day)	POC Emissions (lbs/year)	POC Emissions (lbs/day)	POC Emissions (lbs/year)
Existing Sources*					
819	API Oil-Water, Separator/Dissolved Nitrogen Flotation System, Abated by A-39 Thermal Oxidizer or A-14 Vapor Recovery	1.9E-02	6	1.9E-02	6
830	Wastewater Surge Ponds	46.1	5,428	43.4	4,769
831	Bio-Oxidation Pond Open Pond	4.2	144	3.3	122
842	Wastewater Treatment Plant Clarifiers, filters, and granular activated carbon	0.6	13	3.9E-01	10
1026	DNF Effluent Air Stripper, Abated by A-39 Thermal Oxidizer	10.7	1,660	4.8	1,257
Plant #21432 (S-1)	3 rd Party Three-Phase Centrifuge	1.9E-02	6	1.9E-02	6
Plant #21432 (S-19)	3 rd Party Two-Phase Centrifuge	0.1	40	3.6E-09	1E-06
New Sources [Exempt per Regulation 2-1-123.2]					
2016	Neutralization Tank T-796	0.0	0	5.8	2,115
2017	Neutralization Tank T-797	0.0	0	5.8	2,115

*Throughput and/or emission limits for grandfathered and altered sources are based on pre-project levels. Future applications will need to be reviewed per Regulation 2-1-234.1.2 to determine the PTE in the current configuration.

Source S-819 (API Oil-Water Separator/Dissolved Nitrogen Flotation System)

Source S-819, which consists of the API Oil-Water Separator and Dissolved Nitrogen Flotation System, is a grandfathered source and abated by A-39 (Thermal Oxidizer) or A-14 (Vapor Recovery System) as a backup. The potential to emit is evaluated based on the highest 12-month and daily operating rates (material throughputs) and the potential to emit after the project is based on operational design. The highest 12-month and daily operating rates have been adjusted downward based on maximum post-project operations and imposed in Permit Condition #27587. These limits correspond to the grandfathered source PTEs for each source. As indicated above, future applications will need to be reviewed per Regulation 2-1-234.1.2.

As shown in [Table 2.9.3](#) (for criteria pollutants) and Table F-8 of Appendix F (for TACs), changes to S-819 do not result in an increase in POC emissions. However, since there is an increase in emissions of at least one or more TAC, emissions of TAC are included in the HRA. Based on the results of the HRA, S-819 is an altered source per Regulation 2-2.

Source S-1026 (DNF Effluent Air Stripper)

Source S-1026, abated by A-39 (Thermal Oxidizer), is a new source review (NSR) source permitted under Application 4990. As shown in [Table 2.9.3](#) (for criteria pollutants) and Table F-8 of Appendix F (for TACs), changes to S-1026 do not result in an increase in emission; therefore, S-1026 is an altered source.

Sources S-830, S-831, S-842 (Wastewater Surge Ponds, Bio-Oxidation Pond Open Pond, Wastewater Treatment Plant Clarifiers, filters, and granular activated carbon)

S-830, S-831, and S-842 are grandfathered sources, so the potential to emit is evaluated based on the highest 12-month and daily operating rates and the potential to emit after the project is based on operational design. The highest 12-month and daily operating rates have been adjusted downward based on maximum post-project operations and imposed in Permit Condition #27587. These limits correspond to the grandfathered source PTEs for each source. As indicated above, future applications will need to be reviewed per Regulation 2-1-234.1.2.

As shown in [Table 2.9.3](#) (for criteria pollutants) and Table F-8 of Appendix F (for TACs), changes to S-830, S-831, and S-842 do not result in an increase in emission; therefore, S-830, S-831, and S-842 are an altered source.

Sources S-2016 and S-2017 (Neutralization Tanks)

There are two existing neutralization tanks in the wastewater treatment process that are exempt from permitting per Regulation 2-1-123.2 since the materials contain less than 1% by weight organic compounds and do not have Air District source numbers. New source numbers are assigned. Emissions from S-2016 and S-2017 are estimated as one source in the Toxchem model. Both tanks operate simultaneously in parallel; therefore, emissions are assumed to be evenly distributed as shown in [Table 2.9.3](#). Emissions of TAC exceed the chronic trigger level for benzene contained in Regulation 2, Rule 5, Table 2-5-1. As presented in Section 4.0, the results from the HRA indicate that the project complies with the Regulation 2-5-302 project risk requirements and TBACT is not triggered. Each source has a PTE less than 5 tons/year and meets the exemption requirement of Regulation 2-1-123.2. In addition, Regulation 2-1-319 is not triggered.

S-699/S-700 (Tank A-699 – API Separator Recovered Oil, Tank A-700 – API Separator Sludge)

S-699 and S-700 are grandfathered sources, so the potential to emit is evaluated based on the highest 12-month and daily operating rates (material throughputs) and the potential to emit after the project is based on maximum physical and operational design. S-699 has highest 12-month historical throughput of 522,234 bbl/year (May 2019). S-700 has highest 12-month historical throughput of 1,166,667 bbl/year (December 2017). These tanks will continue to store recovered oil/slop materials, but with comparatively lower flow rates. These sources are categorized as storage tanks, so emissions are calculated based on AP-42, Chapter 7.

Table 2.9.4 – Recovered Oil/Slop Material Storage Tank Emissions for S-699/S-700 (Appendix C, Table C-1)

Source No.*	Description	Pre-Project		Post-Project	
		POC Emissions (lbs/day)	POC Emissions (tons/year)	POC Emissions (lbs/day)	POC Emissions (tons/year)
699	Tank A-699, White, API Separator Recovered Oil, A-14 Vapor Recovery	0.9	0.014	0.9	0.010
700	Tank 2-A-700, Light grey, API Separator Sludge	28.8	0.119	28.8	0.016

*Throughput and/or emission limits for grandfathered sources are based on pre-project levels. Future applications will need to be reviewed per Regulation 2-1-234.1.2 to determine the PTE in the current configuration.

As shown above, changes to S-699 and S-700 do not result in an increase in emission; therefore, S-699 and S-700 are altered sources.

S-323 (Tank A-323 – Recovered Oils and Residuals)

S-323 is a fixed roof tank, abated by A-14 Vapor Recovery, and permitted to store alkylate gasoline-blending stock with a throughput limit of 2,000,000 barrels per year of material with a Reid vapor pressure not to exceed 9 psia (true vapor pressure not greater than 7.6 psia at 70°F) (Permit Condition #13605, Parts 1 and 2). S-323 has a POC emission limit of 1,922.79 pounds per year (Permit Condition #13605, Part 2b). Marathon is proposing to repurpose S-323 without any physical changes to store recovered oils and residuals from the wastewater treatment system.

Table 2.9.5 – Recovered Oil/Slop Material Storage Tank Emissions for S-323 (Appendix C, Table C-1)

Source No.*	Description	Pre-Project		Post-Project	
		POC Emissions (lbs/day)	POC Emissions (tons/year)	POC Emissions (lbs/day)	POC Emissions (tons/year)
323	Tank A-323, FRT, Slop Oil, A-14 Vapor Recovery	30.4	0.961	30.4	0.100

*Throughput and/or emission limits for altered sources are based on pre-project levels. Future applications will need to be reviewed per Regulation 2-1-234.1.2 to determine the PTE in the current configuration.

There is no increase in criteria pollutant emissions and no increase in TAC emissions ; therefore, S-323 is an altered source.

2.10 Sour Water Strippers

Table 2.10.1 – Associated Sour Water Stripper Storage Tank Emissions (Appendix C, Table C-1)

Source No.	Description	Pre-Project		Post-Project	
		POC Emissions (lbs/day)	POC Emissions (tons/year)	POC Emissions (lbs/day)	POC Emissions (tons/year)
650*	Tank A-650, EFRT, Sour Waste Water	5.9	0.031	5.9	0.017
651	Tank A-651, EFRT, Oil/Water Mixture	2.0	0.059	2.0	0.207
656*	Tank A-846, FRT, Foul Water Stripper Charge Tank, Sour Waste Water, A-12 Vapor Recovery, A-14 Vapor Recovery	0.4	0.007	0.4	0.007
658*	Tank A-847, FRT, Foul Water Stripper Charge Tank, Sour Waste Water, A-12 Vapor Recovery, A-14 Vapor Recovery	0.4	0.007	0.4	0.007

*Throughput and/or emission limits for grandfathered are based on pre-project levels. Future applications will need to be reviewed per Regulation 2-1-234.1.2 to determine the PTE in the current configuration.

S-650 is a grandfathered source with the highest 12-month historical throughput of 743,831 bbl/year (July 2020) and highest 24-hour historical throughput of 81,751 bpd (October 10, 2019) storing sour water with a diesel layer

to prevent odors from the tank. The tank will continue to store sour water streams, but with lower flow rates. As shown in [Table 2.10.1](#), this change does not result in an increase in emissions; therefore, S-650 is an altered source.

S-651 is a grandfathered source with the highest 12-month historical throughput of 1,650,954 bbl/year (April 2020) and highest 24-hour historical throughput of 26,731 bpd (August 24, 2019) storing sour water with a diesel layer to prevent odors from the tank. As shown in [Table 2.10.1](#), S-651 results in an increase in emissions; therefore, S-651 is a modified source. Pre-project emissions are based on a 3-year average (1,298,071 bbl/year) and post-project emissions are based on 5,631,429 bbl/year. Emissions of TACs are included in the HRA. BACT is not triggered.

S-656 and S-658 are grandfathered sources operating in series with the highest 12-month historical throughput of 13,706,224 bbl/year (May 2017) and highest 24-hour historical throughput of 47,870 bpd (May 17, 2017). Note that this highest throughput represents the gross throughput. In general, storage tank calculations are estimated using annual net throughput, i.e., annual sum of the increases in liquid level. Per AP-42, Chapter 7, the use of gross throughput will significantly overstate emissions, which is a conservative estimate. These tanks will continue to be abated by vapor recovery and operate at similar levels. As shown in [Table 2.10.1](#), these changes do not result in an increase in emissions; therefore, S-656 and S-658 are altered sources.

Foul water strippers (S-1600) have no discrete emission points. Emissions from S-1600 are all fugitive precursor organic compounds from equipment leaks. Emissions are expected to decrease due to shutting down one of the three foul water strippers. New and replaced fugitive components associated with these sources are included in the total component count for the Renewable Fuels Project and addressed in [Section 2.13](#).

Table 2.10.2 – POC Fugitive Emissions Increase/Decrease for S-1600 (Appendix D, Table D-2)

Source No.	Source Description	POC Emissions Increase/Decrease (lbs)		
		Hourly	Daily	Annual
S-1600	Foul Water Strippers, Abated by A-2002 H ₂ S Adsorption Vessels and A-2000 Sour Water Stripper Thermal Oxidizer	(1.5E-01)	(3.5)	(1,296)

Per Appendix D, Tables D-4.3 and D-4.4, emissions of TACs do not exceed the trigger levels outlined in Regulation 2, Rule 5, Table 2-5-1. Changes to S-1600 do not result in an increase in POC and TAC emissions; therefore, S-1600 is an altered source. Since the proposed project involves a new thermal oxidizer (A-2000), emissions of TACs for S-1600 and A-2000 are included in the HRA.

As described in the background section, H₂S absorption vessels (A-2002) will be installed to remove H₂S from recovered sour water stripper off-gas, and an advanced three-stage, low NO_x, 1.91 MMBtu/hour thermal oxidizer (A-2000) to control emissions from the sour water stripper off-gases. Emissions from natural gas-fired thermal oxidizer are summarized below.

Table 2.10.3 – Primary and Secondary Emissions for S-1600 (Process and Combustion of Natural Gas at A-2000)

Pollutant	Emission Factor ^{1, 2}	Unit of Measurement	Daily Emissions (lbs/day)	Annual Emissions (lbs/year)	Annual Emissions (tons/year)
POC	5.39E-03	lbs/MMBtu	0.2	90	0.045
NO _x	1.97E-01	lbs/MMBtu	9.0	3,303	1.651
CO	3.00E-02	lbs/MMBtu	1.4	502	0.251
SO ₂	2.04E-01	lbs/MMBtu	9.4	3,416	1.708
PM ₁₀	7.45E-03	lbs/MMBtu	0.3	125	0.062
PM _{2.5}	7.45E-03	lbs/MMBtu	0.3	125	0.062
SAM	Note 3	n/a	7.9E-04	6.9	0.003
H ₂ S	Note 3	n/a	0	0	0
NH ₃	Note 3	n/a	1.1E-01	963.6	0.482
CO ₂	1.18E+02	lbs/MMBtu	5,392.9	1,968,424	984.212
CH ₄	2.25E-03	lbs/MMBtu	0.1	38	0.019
N ₂ O	2.16E-03	lbs/MMBtu	0.1	36	0.018

Notes:

¹POC, SO₂, PM₁₀, PM_{2.5}, CO₂, CH₄, and N₂O are based on AP-42, Table 1-4.2, "Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion." SO₂ emission factor has been converted based on PG&E sulfur content of 10,000 grains/MMscf.

²NO_x and CO are based on vendor estimates.

³Sulfuric acid mist (SAM), hydrogen sulfide (H₂S), and ammonia (NH₃) are based on vendor estimates.

2.11 Flares

There will be no increase in flare capacity requirements, and actual flaring rates are not expected to increase compared to historical operations as a petroleum refinery. In fact, flaring at the facility is expected to be reduced due to the shutdown of large process units, such as the Delayed Coker Unit (S-1510), Fluid Catalytic Cracking Unit (S-802), No. 4 Gas Plant (S-955 through S-960), and Alkylation Unit (S-1009). Ammonia Plant Flare (S-1013) and 50 Unit Flare (S-1524) will be shut down as part of this project. East Air Flare (S-854), Emergency Flare (S-992), and Coker Flare (S-1517) have firm limits and the facility will continue to operate within these limits. North Steam Flare (S-944), South Steam Flare (S-945), and West Air Flare (S-1012) have grandfathered limits listed in the Title V permit and will continue to operate within these limits.

2.12 Miscellaneous Equipment

As shown below, the potential to emit for existing spent caustic storage tank (S-1468) and new fresh caustic storage tank (S-2006) are less than 5 tons/year and will meet exemption requirements pursuant to Regulation 2-1-123.2 since the materials will contain less than 1% by weight organics. In addition, emissions of TACs from caustic storage tanks are evaluated in Appendix C and summarized in Table C-5 of Appendix C. Emissions of sodium hydroxide (NaOH) and hydrogen sulfide (H₂S) do not exceed the trigger levels contained in Regulation 2, Rule 5, Table 2-5-1. Therefore, S-1468 and S-2006 are exempt sources.

Table 2.12.1 – Caustic Storage Tank Emissions (Appendix C, Table C-1)

Source No.	Description	Pre-Project		Post-Project	
		POC Emissions (lbs/day)	POC Emissions (tons/year)	POC Emissions (lbs/day)	POC Emissions (tons/year)
1468 [Exempt]	Tank A-877, FRT, Spent Sulfidic Caustic, A-14 Vapor Recovery	0.3	0.001	0.3	0.001
2006 [Exempt]	Tank TK-958, Fresh Caustic Storage Tank	0	0	0	0

Spent caustic waste loading operation via railcars (S-115) will continue to operate in a similar manner with a much lower throughput. The estimated potential spent caustic waste is 4,380 bbl/year compared to a 12-month historical high of 84,621 bbl/year (May 2020). As such, S-115 is an altered source.

2.13 New and Replaced Components for the Renewable Fuels Project

As discussed in [Section 5.0](#), Best Available Control Technology (BACT), BACT is triggered for fugitive components. All new, modified, and replaced flanges, connectors, valves, pumps, compressors, and others will comply with 100 ppm leak rate threshold and comply with BACT requirements. The potential to emit from new and replaced components for the Renewable Fuels Project presented below is based on estimated component counts. Permit Condition #27596, Part 12, has been imposed for the facility to submit a final component count and POC emissions estimate using the approved methods within these conditions to the Air District.

Table 2.13.1 – POC Fugitive Emissions from Renewable Fuels Project (Appendix D, Table D-5)

Component Type	New/Replaced Component Counts	Emissions (lbs)		
		Hourly	Daily	Annual
Valves:				
Gas / Vapor	1,283	2.0E-01	4.8	1,754
Light Liquid	879	1.4E-01	3.3	1,202
Heavy Liquid	1,026	1.6E-01	3.8	1,403
Equipment:				
Connectors	5,078	5.1E-01	12.2	4,449
Flanges	4,569	1.2E+00	28.3	10,322
PSV's	28	2.9E-02	0.7	254
Compressors	10	3.7E-03	0.1	32
Pumps (Light Liquids)	21	4.1E-02	1.0	361
Pumps (Heavy Liquids)	29	5.7E-02	1.4	498
Process Drains	86	3.2E-02	0.8	278
Total	13,009	2.3E+00	56.3	20,552

3.0 Cumulative Increase

Per Regulation 2-2-607, the cumulative increase in emissions associated with an authority to construct and/or permit to operate for a source shall be calculated as the project emissions increase minus contemporaneous onsite emission reduction credits.

Table 3.1 – Summary of Cumulative Increase

Source No.	Source Category	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	POC
		(tons/year)	(tons/year)	(tons/year)	(tons/year)	(tons/year)	(tons/year)
S-621	Storage Tank	-	-	-	-	-	1.019
S-651	Wastewater	-	-	-	-	-	0.143
S-1003	Fugitive	-	-	-	-	-	Included in New/Replaced Components
S-1008	Fugitive	-	-	-	-	-	
S-2001	Fugitive	-	-	-	-	-	
S-2003	Wastewater	-	-	-	-	-	0.061
S-2010	Wastewater	-	-	-	-	-	1.339
S-2013	Wastewater	-	-	-	-	-	13.052
S-2023	Storage Tank	-	-	-	-	-	0.019
S-2025	Fugitive	-	-	-	-	-	Included in New/Replaced Components
A-2000	Combustion	0.062	0.062	1.651	0.251	1.708	0.045
New/Replaced Components	Fugitive	-	-	-	-	-	10.276
Project Emissions Increase		0.062	0.062	1.651	0.251	1.708	25.954
Contemporaneous Onsite Emission Reduction Credits (Permanent Shutdown Sources¹)							
S-432	Storage Tank	-	-	-	-	-	-2.078
S-1496	Storage Tank	-	-	-	-	-	-0.377
S-590	Fugitive	-	-	-	-	-	-0.058
S-802	Fugitive	-	-	-	-	-	-0.060
S-815	Fugitive	-	-	-	-	-	-0.031
S-816	Fugitive	-	-	-	-	-	-0.018
S-817	Fugitive	-	-	-	-	-	-0.239
S-825	Fugitive	-	-	-	-	-	-0.049
S-901	Fugitive	-	-	-	-	-	-0.009
S-904	Fugitive	-	-	-	-	-	-0.018
S-955 thru 960	Fugitive	-	-	-	-	-	-0.698
S-1001	Fugitive	-	-	-	-	-	-0.391
S-1009	Fugitive	-	-	-	-	-	-0.556
S-1013	Fugitive	-	-	-	-	-	-0.040
S-1020	Fugitive	-	-	-	-	-	-0.402
S-1401	Fugitive	-	-	-	-	-	-0.019
S-1411	Fugitive	-	-	-	-	-	-0.009
A-1402	Fugitive	-	-	-	-	-	-0.002
S-975	Cooling Tower	-	-	-	-	-	-3.463

S-977	Cooling Tower	-	-	-	-	-	-0.189
S-979	Cooling Tower	-	-	-	-	-	-0.885
S-983	Cooling Tower	-	-	-	-	-	-3.620
S-987	Cooling Tower	-	-	-	-	-	-0.466
S-988	Cooling Tower	-	-	-	-	-	-0.353
S-904	Combustion	-0.372	-0.372	-3.722	-0.202	-1.117	-0.124
S-908	Combustion	-0.171	-0.171	-1.711	-0.093	-0.513	-0.057
S-912	Combustion	-0.094	-0.094	-0.940	-0.051	-0.282	-0.031
S-950	Combustion	-0.287	-0.287	-2.872	-0.156	-0.862	-0.096
S-971	Combustion	-0.179	-0.179	-1.786	-0.097	-0.536	-0.060
S-972	Combustion	-0.028	-0.028	-0.279	-0.015	-0.084	-0.009
Contemporaneous Onsite Emission Reduction Credits (Removed Components)							
S-1600	Fugitive	-	-	-	-	-	-0.061
S-850	Fugitive	-	-	-	-	-	-0.091
S-1002	Fugitive	-	-	-	-	-	-0.310
S-1003	Fugitive	-	-	-	-	-	-0.106
S-1007	Fugitive	-	-	-	-	-	-0.210
S-1008	Fugitive	-	-	-	-	-	-0.024
S-1526	Fugitive	-	-	-	-	-	-0.553
S-1510	Fugitive	-	-	-	-	-	-0.289
Contemporaneous Onsite Emission Reduction Credits		-1.131	-1.131	-11.310	-0.614	-3.394	-16.051
Contemporaneous Onsite Emission Reduction Credits Remaining		1.069	1.069	9.659	0.363	1.686	0.000
Cumulative Increase		0.000	0.000	0.000	0.000	0.000	9.903

¹Additional permitted sources will be permanently removed from service; however, only sources and associated pollutant(s) for contemporaneous onsite emission reduction credits are listed.

Contemporaneous onsite emission reduction credits are calculated in accordance with Regulation 2-2-605. The calculated emission reduction credits are real, permanent, quantifiable, and in excess of any reductions required by applicable regulatory requirements.

Fugitive emissions are based on actual inspection readings as part of the facility's Leak Detection and Repair (LDAR) program and emissions are estimated using correlation equations developed by both the United States Environmental Protection Agency (EPA) and the California Air Pollution Control Officers Association (CAPCOA). For the purpose of calculating contemporaneous onsite emission reduction credits, net readings of 0 parts per million (ppm) mean a leak is not detected and is not credited, i.e., the default-zero emission factor is not used to estimate fugitive emissions. Furthermore, net readings greater than the leak threshold of 100 ppm established in Regulation 8-18-301 have been adjusted down to not exceed 100 ppm. 100 ppm was also used for pumps and compressors since it has been demonstrated to be readily achieved using readily available control technology.

Cooling tower emissions are based on weekly gasoline range organics (GRO) and diesel range organics (DRO) water analysis as required by Regulation 11, Rule 10, and emissions are estimated using the methodology established in Emissions Estimation Protocol for Petroleum Refineries, Version 3, Equation 8-2. For the purpose of calculating contemporaneous onsite emission reduction credits, non-detects are not credited, i.e., one half of the level of detection is not used. Furthermore, results greater than the leak action level of 42 ppbw (as methane) established in Regulation 11-10-204 have been adjusted downward.

Combustion emissions are based on a three-year average (October 2017 to September 2020) using average firing rates, actual emissions data from continuous emissions monitoring systems (CEMS) or source test results. The average firing rates for S-904, S-908, S-912, S-950, S-971, and S-972 are 283.3, 130.2, 71.5, 218.6, 135.9, and 21.2 MMBtu/hour, respectively. For source test results, per Regulation 2-2-225, the lowest emission factor of each pollutant in the Air District’s source test database is used for contemporaneous onsite emission reduction credits from shutdown sources. For NO_x, the Air District used SJVAQMD rule 4320 since it’s required within an Air District regulation and resulted in lower emissions than the units had achieved.

Table 3.2 – Emission Factors for Contemporaneous Onsite Emission Reduction Credits

Pollutant	Emission Factor (lbs/MMBtu)	Reference
PM ₁₀	0.0003	OS-4745
PM _{2.5}	0.0003	See Note 1
NO _x	0.0030	SJVAQMD Rule 4320
CO	0.0002	OS-7796
SO ₂	0.0009	FAT 97-17
POC	0.0001	FAT 71-17

Note 1: Emission factor for PM_{2.5} is assumed to be the same as PM₁₀. Since PM_{2.5} is a subset of PM₁₀, it is important to understand the ratio of PM_{2.5} to PM₁₀. According to South Coast Air Quality Management District’s *Final – Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds*, the PM_{2.5} fraction of PM₁₀ is 0.979 for external combustion of gaseous fuel-petroleum and industrial process heaters. Unlike coarse PM from aggregate handling operations, PM emissions from combustion mostly consist of PM_{2.5}. Since PM emissions for S-904, S-908, S-912, S-950, S-971, and S-972 are used to offset PM emissions from A-2000, which is the same source category, this assumption is appropriate for the purpose of contemporaneous onsite emission reduction credits.

4.0 Toxic Screening Analysis

A Health Risk Assessment (HRA) is required when the emissions of toxic air contaminants (TACs) are equal to or exceed the respective trigger levels contained in Regulation 2, Rule 5, Table 2-5-1. As shown in [Table 4.3](#) and [Table 4.4](#), emissions of TACs exceed one or more trigger levels; therefore, an HRA is required. All new and modified sources and sources with an increase in TAC emissions, as defined in either or both Regulation 2-2 and Regulation 2-5, are included in the HRA. In addition, exempt sources that exceed one or more trigger levels are also included in the HRA to demonstrate compliance with best available control technology for toxics (TBACT) requirement and project risk limits pursuant to Regulation 2-1-316. All new and modified sources and sources with an increase in TAC emissions are identified in [Table 4.1](#) and [Table 4.2](#).

Based on the total post-project TAC emission rates as shown in [Table 4.3](#) and [Table 4.4](#), this project passed the HRA. Results from the HRA indicate that the project cancer risk is 0.53 in a million, the project chronic hazard index is 0.0051, and the project acute hazard index is 0.19.¹ This complies with the Regulation 2-5-302 project risk requirements. The TBACT requirement of Regulation 2-5-301 is not triggered for this application.

¹ See July 11, 2022, Health Risk Assessment. An initial HRA was conducted on December 16, 2021 and updated on April 4, 2022. The April 4, 2022, update was conducted to include sulfuric acid mist emissions for S-1600 (via A-2000), which were inadvertently omitted in the initial health risk assessment. The inclusion of the sulfuric acid mist emissions did not increase the risk impacts because sulfuric acid mist is not a carcinogen and maximally impacted target organ groups for the hazard indices (chronic and acute) do not include sulfuric acid mist as a risk contributor. Therefore, the results of the December 16, 2021 HRA report are unchanged. During internal review of the permit application, additional sources have been identified with increases in TAC emissions and should have been included in the HRA. Those sources are S-1560, S-692, and S-819. Emissions from S-1560 are routed to the facility's fuel gas system and combusted at process heaters. Emissions from S-1560 are distributed to the emission points of each process heaters. In addition, there are also increases to one or more TAC pollutants for S-830, S-831, S-842, and S-1026; however, these sources are exempt from Regulation 2-5-401, Health Risk Assessment Requirements, per limited exemption 2-5-114 since the toxicity weighted emissions will not be increasing. Therefore S-830, S-831, S-842, and S-1026 are not included in the HRA. The health risk assessment was updated on July 11, 2022 to include emissions from S-1560, S-692, and S-819. The results of the July 11, 2022 HRA report supersede the previous versions dated December 16, 2021 and April 4, 2022.

Table 4.1 – Changes to Toxic Air Contaminant Hourly Emissions (lbs/hour) by Source

Pollutant	S-2013	S-651	S-850	S-1003	S-1008	S-2010	S-1526	S-1600 A-2000	S-2001	S-2003	S-2016	S-2017	S-2025	S-1560	S-692	S-819
Toluene	1.6E-03	-	(1.1E-03)	(1.1E-02)	(1.4E-04)	6.0E-05	(2.8E-02)	6.4E-06	2.8E-09	1.4E-05	1.1E-02	1.1E-02	2.9E-09	-	(2.5E-02)	4.2E-08
Methanol	2.9E-01	-	-	-	-	7.4E-02	-	-	4.7E-05	3.0E-03	-	-	4.8E-05	-	-	6.0E-08
Ethylene Glycol	5.1E-04	-	(8.1E-04)	(1.9E-04)	(5.5E-04)	1.6E-05	(1.4E-04)	-	2.4E-05	5.8E-07	-	-	2.5E-05	-	-	1.1E-11
Ammonia	2.0E-04	-	6.9E-06	(1.2E-05)	5.8E-05	6.4E-05	(1.2E-03)	1.1E-01	-	2.6E-06	4.2E-06	4.2E-06	-	-	-	1.7E-10
Benzene	6.5E-03	(1.6E-05)	(1.3E-02)	4.0E-05	(5.3E-04)	5.4E-04	(4.5E-03)	3.9E-06	-	1.1E-04	1.7E-02	1.7E-02	-	1.5E-02	5.8E-04	6.1E-08
Ethylbenzene	7.8E-03	-	1.1E-03	(1.0E-03)	6.4E-04	1.6E-04	(3.8E-03)	-	-	1.4E-04	3.3E-03	3.3E-03	-	2.8E-02	(4.5E-03)	5.3E-08
Xylene	3.4E-02	(1.4E-06)	(6.8E-04)	(1.3E-02)	(2.0E-04)	7.5E-04	(2.7E-02)	-	-	4.2E-04	5.4E-03	5.4E-03	-	-	(2.6E-02)	1.4E-07
Naphthalene	1.6E-03	-	(5.8E-04)	(1.9E-03)	(1.7E-04)	4.1E-05	(2.9E-03)	-	-	3.9E-06	1.1E-08	1.1E-08	-	-	(7.3E-04)	6.2E-09
Diethanolamine	-	-	-	-	-	-	(6.9E-02)	-	-	-	-	-	-	-	-	-
Hexane(-N)	-	-	1.7E-02	4.5E-02	2.9E-02	-	9.2E-02	-	-	-	-	-	-	9.8E-01	1.1E-01	(3.7E-07)
Hydrogen Sulfide	-	-	3.9E-05	1.9E-05	2.2E-05	-	(3.0E-03)	-	-	-	-	-	-	-	-	4.4E-07
Chloroform	-	-	-	-	-	-	-	-	-	-	8.6E-05	8.6E-05	-	-	-	1.7E-08
Cresol	-	(2.8E-08)	(3.9E-04)	(1.1E-03)	3.8E-05	-	(1.6E-03)	-	-	-	4.8E-05	4.8E-05	-	-	-	5.8E-11
Methyl Tert-Butyl Ether	-	-	-	-	-	-	-	-	-	-	7.0E-06	7.0E-06	-	-	-	6.1E-10
Phenol	-	(6.0E-08)	6.9E-06	(1.2E-05)	5.8E-05	-	(1.2E-03)	-	-	-	2.1E-05	2.1E-05	-	-	-	1.3E-10
Propylene	-	-	-	(4.3E-03)	(7.8E-04)	-	(1.2E-01)	-	-	-	-	-	-	-	-	-
Sodium Hydroxide	-	-	-	-	(1.5E-03)	-	(4.1E-02)	-	-	-	-	-	-	-	-	-
Formaldehyde	-	-	-	-	-	-	-	1.4E-04	-	-	-	-	-	-	-	-
Sulfuric Acid	-	-	-	-	-	-	-	7.9E-04	-	-	-	-	-	-	-	-

Table 4.2 – Changes to Toxic Air Contaminant Annual Emissions (lbs/year) by Source

Pollutant	S-2013	S-651	S-850	S-1003	S-1008	S-2010	S-1526	S-1600 A-2000	S-2001	S-2003	S-2016	S-2017	S-2025	S-1560	S-692	S-819
Toluene	1.0E+01	-	(9.5E+00)	(9.2E+01)	(1.3E+00)	5.2E-01	(2.4E+02)	5.6E-02	2.5E-05	1.2E-01	9.6E+01	9.6E+01	2.5E-05	(7.6E+00)	(3.2E+01)	(3.3E-02)
Methanol	1.9E+03	-	-	-	-	6.5E+02	-	-	4.1E-01	2.6E+01	-	-	4.2E-01	-	-	1.9E-03
Ethylene Glycol	4.1E+00	-	(7.1E+00)	(1.7E+00)	(4.8E+00)	1.4E-01	(1.2E+00)	-	2.1E-01	5.1E-03	-	-	2.2E-01	-	-	3.7E-07
Ammonia	1.3E+00	-	6.1E-02	(1.0E-01)	5.0E-01	5.6E-01	(1.1E+01)	9.6E+02	-	2.3E-02	3.7E-02	3.7E-02	-	-	-	5.8E-06
Benzene	4.2E+01	1.4E+00	(1.2E+02)	3.5E-01	(4.7E+00)	4.6E+00	(3.9E+01)	3.4E-02	-	9.7E-01	1.5E+02	1.5E+02	-	2.0E+00	1.6E+00	(9.9E-03)
Ethylbenzene	5.1E+01	-	9.4E+00	(8.9E+00)	5.6E+00	1.4E+00	(3.3E+01)	-	-	1.2E+00	2.9E+01	2.9E+01	-	4.3E+00	(4.3E+00)	(7.4E-03)
Xylene	2.3E+02	1.4E+00	(5.9E+00)	(1.1E+02)	(1.8E+00)	6.5E+00	(2.4E+02)	-	-	3.6E+00	4.8E+01	4.8E+01	-	(3.7E+03)	(2.3E+01)	(2.1E-02)
Naphthalene	1.2E+01	-	(5.1E+00)	(1.7E+01)	(1.5E+00)	3.6E-01	(2.5E+01)	-	-	3.4E-02	9.8E-05	9.8E-05	-	(4.7E+01)	(4.8E-01)	(3.8E-04)
Diethanolamine	-	-	-	-	-	-	(6.0E+02)	-	-	-	-	-	-	-	-	-
Hexane(-N)	-	-	1.5E+02	3.9E+02	2.5E+02	-	8.1E+02	-	-	-	-	-	-	1.6E+02	2.6E+02	(4.6E-02)
Hydrogen Sulfide	-	-	3.4E-01	1.7E-01	1.9E-01	-	(2.6E+01)	-	-	-	-	-	-	-	-	(4.5E-02)
Chloroform	-	-	-	-	-	-	-	-	-	-	7.5E-01	7.5E-01	-	-	-	(5.0E-04)
Cresol	-	1.4E+00	(3.4E+00)	(9.7E+00)	3.4E-01	-	(1.4E+01)	-	-	-	4.2E-01	4.2E-01	-	-	-	2.0E-06
Methyl Tert-Butyl Ether	-	-	-	-	-	-	-	-	-	-	6.2E-02	6.2E-02	-	-	-	1.3E-05
Phenol	-	1.4E+00	6.1E-02	(1.0E-01)	5.0E-01	-	(1.1E+01)	-	-	-	1.9E-01	1.9E-01	-	-	-	4.4E-06
Propylene	-	-	-	(3.7E+01)	(6.8E+00)	-	(1.0E+03)	-	-	-	-	-	-	-	-	-
Sodium Hydroxide	-	-	-	-	(1.3E+01)	-	(3.6E+02)	-	-	-	-	-	-	-	-	-
Formaldehyde	-	-	-	-	-	-	-	1.2E+00	-	-	-	-	-	-	-	-
Sulfuric Acid	-	-	-	-	-	-	-	6.9E-00	-	-	-	-	-	-	-	-

Table 4.3 – Total Post-Project Toxic Air Contaminant Hourly Emissions (lbs/hour) by Source

Pollutant	S-2013	S-651	S-850	S-1003	S-1008	S-2010	S-1526	S-1600 A-2000	S-2001	S-2003	S-2016	S-2017	S-2025	S-1560*	S-692	S-819	Trigger Level
Toluene	1.6E-03	-	3.1E-03	2.5E-03	1.8E-03	6.0E-05	5.9E-03	6.4E-06	2.8E-09	1.4E-05	1.1E-02	1.1E-02	2.9E-09	9.4E-02	3.2E-03	2.1E-04	8.2E+01
Methanol	2.9E-01	-	-	-	-	7.4E-02	-	-	4.7E-05	3.0E-03	-	-	4.8E-05	-	-	6.0E-08	6.2E+01
Ethylene Glycol	5.1E-04	-	-	-	-	1.6E-05	-	-	2.4E-05	5.8E-07	-	-	2.5E-05	-	-	1.1E-11	None
Ammonia	2.0E-04	-	9.8E-05	7.8E-05	5.8E-05	6.4E-05	-	1.1E-01	-	2.6E-06	4.2E-06	4.2E-06	-	-	-	6.4E-08	7.1E+00
Benzene	6.5E-03	3.7E-03	3.2E-03	2.6E-03	1.9E-03	5.4E-04	5.9E-03	3.9E-06	-	1.1E-04	1.7E-02	1.7E-02	-	3.0E-02	6.1E-03	8.2E-05	6.0E-02
Ethylbenzene	7.8E-03	-	1.6E-03	1.3E-03	9.2E-04	1.6E-04	3.0E-03	-	-	1.4E-04	3.3E-03	3.3E-03	-	3.3E-02	1.1E-03	4.0E-05	None
Xylene	3.4E-02	1.6E-03	2.5E-03	2.0E-03	1.4E-03	7.5E-04	4.4E-03	-	-	4.2E-04	5.4E-03	5.4E-03	-	9.3E-01	1.7E-03	1.5E-04	4.9E+01
Naphthalene	1.6E-03	-	-	-	-	4.1E-05	-	-	-	3.9E-06	1.1E-08	1.1E-08	-	1.2E-02	-	7.9E-06	None
Diethanolamine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	None
Hexane(-N)	-	-	5.9E-02	4.7E-02	3.5E-02	-	1.1E-01	-	-	-	-	-	-	9.9E-01	1.3E-01	9.9E-05	None
Hydrogen Sulfide	-	-	1.4E-04	1.1E-04	8.0E-05	-	7.3E-05	-	-	-	-	-	-	-	-	2.8E-04	9.3E-02
Chloroform	-	-	-	-	-	-	-	-	-	-	8.6E-05	8.6E-05	-	-	-	8.0E-06	3.3E-01
Cresol	-	1.4E-03	9.8E-05	7.8E-05	5.8E-05	-	-	-	-	-	4.8E-05	4.8E-05	-	-	-	3.1E-08	None
Methyl Tert-Butyl Ether	-	-	-	-	-	-	-	-	-	-	7.0E-06	7.0E-06	-	-	-	3.5E-07	None
Phenol	-	1.4E-03	9.8E-05	7.8E-05	5.8E-05	-	-	-	-	-	2.1E-05	2.1E-05	-	-	-	7.4E-08	1.3E+01
Propylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	None
Sodium Hydroxide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8E-02
Formaldehyde	-	-	-	-	-	-	-	1.4E-04	-	-	-	-	-	-	-	-	4.9E-01
Sulfuric Acid	-	-	-	-	-	-	-	7.9E-04	-	-	-	-	-	-	-	-	2.6E-01

*Emissions from S-1560 are routed to the facility's fuel gas system and combusted at process heaters. Emissions are distributed to the emission points of each process heaters.

Table 4.4 – Total Post-Project Toxic Air Contaminant Annual Emissions (lbs/year) by Source

Pollutant	S-2013	S-651	S-850	S-1003	S-1008	S-2010	S-1526	S-1600 A-2000	S-2001	S-2003	S-2016	S-2017	S-2025	S-1560*	S-692	S-819	Trigger Level
Toluene	1.0E+01	-	2.7E+01	2.2E+01	1.6E+01	5.2E-01	5.2E+01	5.6E-02	2.5E-05	1.2E-01	9.6E+01	9.6E+01	2.5E-05	6.8E+02	3.9E+00	1.6E+00	1.2E+04
Methanol	1.9E+03	-	-	-	-	6.5E+02	-	-	4.1E-01	2.6E+01	-	-	4.2E-01	-	-	1.9E-03	1.5E+05
Ethylene Glycol	4.1E+00	-	-	-	-	1.4E-01	-	-	2.1E-01	5.1E-03	-	-	2.2E-01	-	-	3.7E-07	1.5E+04
Ammonia	1.3E+00	-	8.6E-01	6.9E-01	5.0E-01	5.6E-01	-	9.6E+02	-	2.3E-02	3.7E-02	3.7E-02	-	-	-	5.6E-04	7.7E+03
Benzene	4.2E+01	1.5E+01	2.8E+01	2.3E+01	1.7E+01	4.6E+00	5.2E+01	3.4E-02	-	9.7E-01	1.5E+02	1.5E+02	-	1.1E+02	1.3E+01	6.6E-01	2.9E+00
Ethylbenzene	5.1E+01	-	1.4E+01	1.1E+01	8.1E+00	1.4E+00	2.6E+01	-	-	1.2E+00	2.9E+01	2.9E+01	-	4.2E+01	7.2E-01	3.1E-01	3.3E+01
Xylene	2.3E+02	3.1E+00	2.1E+01	1.7E+01	1.3E+01	6.5E+00	3.9E+01	-	-	3.6E+00	4.8E+01	4.8E+01	-	1.9E+02	1.0E+00	1.2E+00	2.7E+04
Naphthalene	1.2E+01	-	-	-	-	3.6E-01	-	-	-	3.4E-02	9.8E-05	9.8E-05	-	7.0E-01	-	6.8E-02	2.4E+00
Diethanolamine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2E+02
Hexane(-N)	-	-	5.2E+02	4.2E+02	3.1E+02	-	9.8E+02	-	-	-	-	-	-	2.5E+02	3.0E+02	2.7E-01	2.7E+05
Hydrogen Sulfide	-	-	1.2E+00	9.6E-01	7.0E-01	-	6.4E-01	-	-	-	-	-	-	-	-	2.3E+00	3.9E+02
Chloroform	-	-	-	-	-	-	-	-	-	-	7.5E-01	7.5E-01	-	-	-	6.6E-02	1.5E+01
Cresol	-	2.0E+00	8.6E-01	6.9E-01	5.0E-01	-	-	-	-	-	4.2E-01	4.2E-01	-	-	-	2.7E-04	2.3E+04
Methyl Tert-Butyl Ether	-	-	-	-	-	-	-	-	-	-	6.2E-02	6.2E-02	-	-	-	3.1E-03	1.6E+02
Phenol	-	2.1E+00	8.6E-01	6.9E-01	5.0E-01	-	-	-	-	-	1.9E-01	1.9E-01	-	-	-	6.5E-04	7.7E+03
Propylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2E+05
Sodium Hydroxide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	None
Formaldehyde	-	-	-	-	-	-	-	1.2E+00	-	-	-	-	-	-	-	-	1.4E+01
Sulfuric Acid	-	-	-	-	-	-	-	6.9E+00	-	-	-	-	-	-	-	-	3.9E+01

*Emissions from S-1560 are routed to the facility's fuel gas system and combusted at process heaters. Emissions are distributed to the emission points of each process heaters.

5.0 Best Available Control Technology (BACT)

Per Regulation 2-2-301, BACT is triggered for any new or modified source with the potential to emit 10 pounds or more per day of POC, NPOC, NO_x, CO, SO₂, PM₁₀ or PM_{2.5} and the modification will result in an increase in emissions of that pollutant above baseline levels.

The following sources trigger BACT for POC emissions:

1. The new, modified, and replaced fugitive components (e.g., flanges, pumps, emergency pressure relief valves, process valves) in POC service installed as part of the project, which includes fugitive emissions from the Stage 1 Wastewater Treatment Unit (S-2001) and Pretreatment Unit (S-2025).
2. Moving Bed Biofilm Reactor (S-2013, formerly S-432) in the new Stage 1 Wastewater Treatment Unit.

The Air District has conducted a BACT analysis of the above sources. The Air District's BACT analysis of the above sources are evaluated below.

1. BACT for Fugitive Components

BACT requirements for petroleum refinery fugitive emissions are provided in the current Air District's Best Available Control Technology and Best Available Control Technology for Toxics Workbook (BACT/TBACT Workbook) for the following components. Although Marathon will no longer be categorized as a petroleum refinery, the fugitive components are functionally equivalent. Therefore, the BACT determinations for petroleum refinery fugitive emissions are applicable.

All fugitive components have the potential to leak and using the typical BACT control technologies are expected to minimize the potential for a leak. However, frequent inspection and maintenance programs have been considered and are still considered one of the best control technologies available to reduce emissions from fugitive components. Finding a leak and repairing the leak within a short time frame reduces emissions. Although it is true that some components may never have any detectable leaks, it is still considered unreasonable and not technologically feasible to require that level of control. The Air District uses a relatively low leak definition of 100 ppm for all components and frequent inspection and maintenance program in order to address BACT since it is considered both technologically feasible and cost effective.

The Air District reviewed BACT determinations from California Air Pollution Control Officers Association (CAPCOA), California Air Resources Board (CARB) BACT Clearinghouse, the EPA RACT/BACT/LAER Clearinghouse (RBLC), the South Coast Air Quality Management District (SCAQMD) BACT determinations and guidelines, Santa Barbara AQMD BACT guidelines, Sacramento Metropolitan AQMD BACT determinations, San Joaquin Valley AQMD BACT Clearinghouse, and Texas Commission on Environmental Quality (TCEQ) BACT Guidelines. Air Districts, including BAAQMD, have established BACT guidelines for fugitive components by requiring BACT technologies for components and/or implementing a Leak Detection and Repair (LDAR) program to monitor and repair/replace components at an established leak rate threshold. The BACT determination for fugitive components established in the BAAQMD BACT/TBACT Workbook continues to be the lowest leak rate thresholds at 100 ppm. As shown in Appendix I, other agencies have the same leak threshold of 100 ppm, but no other agency has demonstrated or required a lower leak threshold.

All new, modified, and replaced flanges, connectors, valves, pumps, compressors, and others will comply with 100 ppm leak rate threshold and comply with BACT requirements. All new, modified, and replaced emergency pressure relief valves have a rupture disk installed and will be routed to the flare gas recovery system that achieves a recovery efficiency of greater than 98%. In addition, Marathon will continue its Leak Detection and Repair (LDAR) program to ensure that all equipment is inspected at a frequency established in Permit Condition #27596, Part 14, and repaired/replaced as needed per the time periods allowed in Regulation 8-18. For BACT, all components are monitored quarterly, with the exception of flanges and connectors, which are monitored biannually. As such, all new, modified, and replaced fugitive components will satisfy BACT by complying with both the leak standard of 100 ppm and the quarterly/biannual inspection and maintenance frequency.

For projects that involve multiple sources, the Air District groups the component counts for the project including all new and replaced components in order to check if BACT and/or offsets are triggered. This grouped approach helps to confirm that adequate offsets have been provided for the project through the use of the LDAR program. The Air District has also created both emissions limits and limits on the counts per source/process unit that correspond with assumptions made within the HRA for the project. These source/process unit limits will help to confirm ongoing compliance with Regulation 2-5.

Table 5.1 – BACT Determination for Fugitive Components in POC Service

Fugitive Equipment Leak Type	BACT 1 Requirement	BACT 2 Requirement
Flanges	Not Determined	100 ppm expressed as methane measured using EPA Reference Method 21.
Emergency Pressure Relief Valves	Rupture disk w/ vent to fuel gas recovery system, furnace, or flare with a recovery/destruction efficiency >98%.	Vent to fuel gas recovery system, furnace, or flare with a recovery/destruction efficiency >98%.
Process Valves	Not Determined	100 ppm expressed as methane measured using EPA Reference Method 21.
Pumps	100 ppm expressed as methane measured using EPA Reference Method 21.	100 ppm expressed as methane measured using EPA Reference Method 21.
Compressors	100 ppm expressed as methane measured using EPA Reference Method 21.	100 ppm expressed as methane measured using EPA Reference Method 21.
BAAQMD BACT/TBACT Workbook References: <ul style="list-style-type: none"> • Flanges: Document #78.1, Revision 3 dated 1/18/06 • Pressure Relief Valves, Emergency: Document #135.1, Revision 4 dated 6/30/95 • Process Valves: Document #136.1, Revision 3 dated 1/18/06 • Pumps: Document #137.1, Revision 4 dated 1/18/06 • Compressors: Document #48B.1, Revision 4 dated 1/18/06 		

2. BACT for Moving Bed Biofilm Reactor (MBBR) - S-2013

As shown in [Table 2.9.1](#), S-2013 is a new source and has the potential to emit 85.5 pounds of POC per day; therefore, BACT is triggered. To determine the BACT level of emissions control for this source, the Air District reviewed BACT and TBACT determinations from California Air Pollution Control Officers Association (CAPCOA), California Air Resources Board (CARB) BACT Clearinghouse, the EPA RACT/BACT/LAER Clearinghouse (RBLC), the South Coast Air Quality Management District (SCAQMD) BACT determinations and guidelines, Santa Barbara AQMD BACT guidelines, Sacramento Metropolitan AQMD BACT determinations, and San Joaquin Valley AQMD BACT Clearinghouse. There was no BACT determination regarding the use of biological treatment to reduce POC concentrations in the wastewater. The Air District’s BACT/TBACT Workbook does not contain a source category for a MBBR, biofilm reactor, or other biological degradation for industrial process wastewater treatment.

Identified technologies for controlling POC emissions from wastewater treatment operations in other industries included add-on POC control technologies such as oxidation technologies and activated carbon adsorber. The use of an add-on control technology typically requires an enclosure or covering of the MBBR to direct the exhaust stream to the POC control technology.

To determine whether add-on emission controls have been achieved in practice at sources of this type, and are therefore required as BACT2, the Air District reviewed wastewater treatment operations in other industrial wastewater treatment processes. The Air District did not find any such operations that use an enclosure or

covering to collect POC emissions. The Air District identified one wastewater treatment system (biological oxidation units and clarifiers) via Google Maps that appeared to use a covered membrane with emissions are controlled with a thermal oxidizer. Upon review of previous permit applications and historical process flow diagrams associated with the wastewater treatment system, however, there was no documentation of the wastewater treatment sources being covered and abated by a thermal oxidizer. Air District field staff confirmed that these sources are not covered, and are open to the atmosphere. The Air District has therefore concluded that covering and abating a biological treatment unit like the MBBR has not been achieved in practice and is not required as BACT2. Achieved-in-practice technologies for controlling POC emissions from renewable diesel production-related wastewater treatment process is utilizing biodegradation wastewater treatment units without additional add-on POC controls. An MBBR is, inherently, a biological degradation wastewater treatment unit; as such, the MBBR (S-2013) design meets the BACT2 “achieved in practice” criterion.

The Air District also evaluated whether covering or enclosing the system in order to control emissions with an add-on abatement device is technologically feasible and cost-effective, and would therefore be required as BACT1. The Air District has determined that it is not technologically feasible to cover or enclose the MBBR because it presents operational challenges such as the inability to visually inspect the bug population, the inability to adequately monitor and control foaming, the inability to inspect and sample the media, and the inability to inspect media screens, based on other operating facilities with similar units. The Air District also reviewed cost-of-control calculations (Appendix I), which show that even if add-on controls were technologically feasible, those controls would not be cost-effective per Air District guidelines. Therefore, they are not required as BACT1. BACT requires only the BACT2 achieved-in-practice level of control discussed in the preceding paragraph.

The new, modified, and replaced fugitive components and the MBBR (S-2013) will satisfy BACT requirements.

6.0 Offsets

As shown in [Section 3.0](#), Cumulative Increase, the facility will utilize contemporaneous onsite emission reduction credits (ERC’s) from shutdown sources to offset project emission increases from new and/or modified sources. Contemporaneous onsite ERC’s are calculated in accordance with Regulation 2-2-605 and 2-2-603 and have been RACT adjusted. The calculated emission reduction credits are real, permanent, quantifiable, and in excess of any reductions required by applicable regulatory requirements.

	PM ₁₀ (tons/year)	PM _{2.5} (tons/year)	NO _x (tons/year)	SO ₂ (tons/year)	POC (tons/year)
Project Emissions Increase	0.062	0.062	1.651	1.708	25.954
Contemporaneous Onsite Emission Reduction Credits	-1.131	-1.131	-11.310	-3.394	-16.051
Cumulative Increase	0.000	0.000	0.000	0.000	9.903

Pursuant to Regulation 2-2-302, the applicant shall provide offsets at a 1.15:1 ratio of the un-offset cumulative increase in emissions at the facility.

Pollutant	Annual Emissions (tons/year)	Offset Ratio	Offset Amount (tons/year)	Banking Certificate No.	Available ERC’s	Remaining ERC’s
POC	9.903	1.15:1	11.388	1567	3.632	0.000
				1742	3.247	0.000
				1838	5.930	1.421

Banking Certificate Nos. 1567, 1742, and 1838 will be used to offset POC emissions. The Air District will withdraw ERC’s from the provided banking certificates and re-issue a banking certificate for 1.421 tons/year of POC to Plant #14628.

7.0 Statement of Compliance

7.1 Air District Regulations, New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability by Source

Per Regulation 2-1-234.2, the federal “major modification” test or the “federal backstop” test is a test to capture any changes at a facility that do not constitute “modifications” as the Air District has defined that term under its NSR program, but which would be subject to NSR review under the federal NSR program. The federal backstop test is an “actual-to-projected-actual” test. As shown in Appendix K, the proposed changes do not result in an increase in emissions by a net “significant” amount (as defined in Regulation 2-2-227), thus this project is not a major modification. Permit Condition #27583, Part 21, has been imposed for the owner/operator to verify that this project is not a major modification using actual emissions 5 years after the implementation of this project.

Source S-55 (Plant #14629)

Amorco Terminal (Plant #14629, S-55) is currently a permitted source, but will be exempt from permitting per Regulation 2-1-123.3.2 after the proposed changes. In addition, S-55 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

S-55 It is currently subject to Regulation 8, Rule 44, Organic Compounds – Marine Tank Vessel Operations and is currently operated for receipt of crude oil and heavy fuel oil. After completion of the project, it will be used for loading of exclusively renewable diesel and will no longer be used for unloading activities; loading of renewable diesel is exempt from the rule as it does not meet the definition of “regulated organic liquid” at 8-44-222.2 due to flashpoint greater than 100°F.

S-55 is currently used for unloading only, which is not a regulated activity covered by 40 CFR 63 Subpart Y, NESHAPS for Marine Vessel Loading of Organic Liquids. As part of the project, the facility will load renewable diesel product at this terminal; however, the vapor pressure of renewable diesel is less than the applicability threshold. Therefore, it will be exempt from the requirements of 40 CFR 63 Subpart Y, §63.560(d)(1). S-55 and the associated transport vehicles and containers will be used for loading renewable diesel product, which does not meet the definition of organic liquid for purposes of Subpart EEEE per §63.2406. Therefore, S-55 will not be subject to Subpart EEEE. NSPS are not applicable.

Source S-115

Caustic Waste Loading Rack (S-115) is currently subject to and will continue to comply with the following sections of Regulation 8, Rule 6, Organic Compounds — Organic Liquid Bulk Terminals and Bulk Plants:

- Section 101 – Description: applicability
The purpose of this rule is to limit emissions of organic compounds as defined in Section 8-6-207 from transfer operations at non-gasoline organic liquid bulk terminals and bulk plants.
- Section 110 – Exemption, Low Vapor Pressure Organic Liquids
The requirements of this Rule shall not apply to loading and delivery of any organic liquid having a true vapor pressure less than 0.5 psia.
- Section 114 – Exemption, Maintenance and Repair
The requirements of Section 8-6-306 shall not apply to spills resulting from maintenance or repair operations provided proper operating practices are employed to minimize evaporation of organic compounds into the atmosphere.
- Section 302 – Bulk plant limitations
The facility shall not load or allow the loading of any organic liquid from bulk plant loading equipment unless the vapor recovery and submerged fill requirements are satisfied.
- Section 305 – Delivery vehicle requirements
Any delivery vehicle loaded at a terminal or bulk plant shall be equipped to allow proper connection to the vapor balance system or vapor loss control system required by the section and shall be maintained to be vapor tight, leak free, and in good working order.
- Section 306 – Equipment Maintenance

All equipment associated with organic liquid delivery and loading operations shall be maintained to be vapor tight, leak free and in good working order.

- Section 307 – Operating practices
Any organic liquid subject to this Rule shall not be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation to the atmosphere.
- Section 501 – Records
The facility shall maintain records of the true vapor pressure of each organic liquid and organic liquid mixture, monthly records that provide the throughput (gallons) of each organic liquid and organic liquid mixture transferred into delivery vehicles and transportable containers with at least 0.5 psia true vapor pressure.
- Section 502 – Portable Hydrocarbon Detector
Any instrument used for the measurement of organic compounds shall meet the specifications and performance criteria, and shall be calibrated in accordance with EPA Reference Method 21.
- Section 503 – Burden of Proof for exemptions
The burden of proof of eligibility for exemption from the requirements of this rule is on the applicant. Facilities seeking such an exemption shall maintain adequate records and furnish them to the APCO upon request.
- Section 601 – Efficiency and Rate Determination
The means for determining compliance with Sections 8-6-301, 302, and 304 are set forth in the Manual of Procedures.
- Section 603 – Analysis of Samples, True Vapor Pressure
Samples of organic compounds shall be analyzed for true vapor pressure at 25°C (77°F), as prescribed in the Manual of Procedures.
- Section 604 – Determination of Applicability
EPA-450/3-87-026, standard reference texts, or Raoult's Law of partial pressures may be used to determine if an organic liquid is subject to the requirements of this rule based on its true vapor pressure.

NSPS and NESHAP are not applicable.

Sources S-126 and S-127

Propane will be distributed via existing LPG Truck Loading Rack (S-126) and LPG Tank Car Loading Rack (S-127). LPG loading racks operate under pressure and emissions are expected to be negligible under normal operation. S-126 and S-127 are exempt sources and will continue to meet exemption requirements per Regulation 2-1-123.3.1. In addition, S-126 and S-127 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

LPG Loading Racks (S-126 and S-127) are currently subject to Regulation 8, Rule 6, Organic Compounds – Organic Liquid Bulk Terminals and Bulk Plants and will continue to comply with Regulation 8-6-117 for material exemption. The requirements of Regulation 8, Rule 6, do not apply to transfer operations involving liquefied organic gases such as liquefied petroleum gas (LPG) and halogenated gases. NSPS and NESHAP are not applicable.

Source S-323

Storage tank S-323 is permitted to store a variety of materials, including petroleum gasoline. After the completion of this project, S-323 will store slop oil only and Marathon will surrender its permit to store other materials, including petroleum gasoline. S-323 is currently subject to and expected to continue to comply with Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids, Section 306, Requirements for Approved Emission Control Systems, as S-323 will continue to be abated by A-14 Vapor Recovery. S-323 will also be subject to and comply with Regulation 8, Rule 8, Organic Compounds – Wastewater (Oil-Water) Separators. S-323 will comply with the following:

Regulation 8, Rule 5

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 5.

- Section 300 – Standards
 - Section 301 – Storage Tanks Control Requirements
The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure. The storage tank will continue to be abated by A-14, which complies with this requirement.
 - Section 306 – Requirements for Approved Emission Control Systems
An Approved Emission Control System must provide an abatement efficiency of at least 95% by weight and must be gas tight. The storage tank will continue to be abated by A-14, which complies with this requirement.
 - Section 307 – Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks
Tank shells must be in good operating condition, pressure tank must maintain working pressures to prevent loss to the atmosphere, and sealing mechanism on pressure relief devices shall be maintained in a gas tight condition.
 - Section 328 – Tank Degassing Requirements
A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
 - Section 331 – Tank Cleaning Requirements
Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- Section 400 – Administrative Requirements
Inspection requirements for floating roof tanks, pressure relief devices, and abatement efficiency.
- Section 500 – Monitoring and Records
The operator shall keep accurate operating records, maintenance records, and source test records. Section 502, Source Test Requirements, does not apply because emissions are collected and vented to a fuel gas collection system for combustion. Fuel gas users are required to be source tested initially upon issuance and at least once every 5 years after.

Regulation 8, Rule 8

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 8.
- Section 300 – Standards
 - Section 303 – Gauges and Sampling Devices
Any compartment or access hatch shall have a vapor tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.
 - Section 305 – Oil-Water Separator Slop Oil Vessels
The facility shall not store any oil-water separator and/or air flotation unit sludges in an oil-water separator slop oil vessel unless such oil-water separator slop oil vessel is equipped with one of the specified requirements.
- Section 500 – Monitoring and Records
The operator shall maintain operating records, inspection and repair records, and wastewater collection system component records.

According to the Title V permit, S-323 is currently listed under tank group “Non Ka/Kb, MACT Exempt (Abated by Vapor Recovery System).” Following completion of this project, S-323 will no longer be categorized under this group. Instead, S-323 will be subject to and expected to comply with 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing by venting emissions to A-14 Vapor Recovery (fuel gas system) and reduce total HAP emissions by $\geq 95\%$ by weight.

Source S-517

Existing storage tank S-517 will be repurposed from storing fuel oil and cutter stock to store renewable feedstock. Currently tank S-517 is a Group 2 tank. Upon completion of this project, S-517 will be exempt from permitting requirements under Regulation 2, Rule 1, Permits Adopted – General Requirements per Regulation 2-1-123.3.6. In addition, S-517 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

This tank is subject to a limited exemption contained in Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids except for Section 8-5-307.3 because tank contents have a true vapor pressure of less than 25.8 mm Hg (0.5 psia) in accordance with 8-5-117. S-517 is expected to comply with Section 8-5-307.3, which requires that the sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

S-517 will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because renewable feedstock only contains HAP as impurities, therefore S-517 will not be considered a storage tank for the purposes of the Subpart.

Sources S-598, S-652, and S-695

Existing pressurized storage tanks S-598, S-652, and S-695 will be repurposed from storing LPG to store naphtha. Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids will continue to apply as follows:

Regulation 8, Rule 5

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 5.
- Section 300 – Standards
 - Section 301 – Storage Tanks Control Requirements
The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure. Pressure tanks are expected to comply with this requirement.
 - Section 307 – Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks
 - Section 307.1 –
Pressure tank shells must be in good operating condition with no liquid leakage through the shell.
 - Section 307.2 –
Pressure tank must maintain working pressures to prevent loss to the atmosphere.
 - Section 307.3 –
The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
 - Section 328 – Tank Degassing Requirements
A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
 - Section 331 – Tank Cleaning Requirements
Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- Section 400 – Administrative Requirements

- Inspection requirements for floating roof tanks, pressure relief devices, and abatement efficiency.
- Section 500 – Monitoring and Records
The operator shall keep accurate operating records, maintenance records, and source test records.

S-598, S-652, and S-695 are not considered a storage tank subject to 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because it operates as a pressure vessel without emissions to the atmosphere.

Marathon will retain the ability to store LPG, butanes, or pentanes in these storage tanks.

Source S-601

Storage tank S-601 is permitted to store recovered oil. After the implementation of this project, S-601 will store recovered oil and slop oil. Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids will continue to apply as follows:

Regulation 8, Rule 5

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 5.
- Section 300 – Standards
 - Section 301 – Storage Tanks Control Requirements
The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure. An internal floating roof tank is expected comply with this requirement.
 - Section 305 – Requirements for Internal Floating Roof Tanks
An internal floating roof must meet the requirements for primary and secondary seals, viewports, floating roof fittings, and roof/shell must be in good operating condition.
 - Section 320 – Floating Roof Tank Fitting Requirements
All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
 - Section 321 – Primary Seal Requirements
The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
 - Section 322 – Secondary Seal Requirements
The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.
 - Section 328 – Tank Degassing Requirements
A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
 - Section 331 – Tank Cleaning Requirements
Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
 - Section 332 – Sludge Handling Requirements
The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- Section 400 – Administrative Requirements
Inspection requirements for floating roof tanks, pressure relief devices, and abatement efficiency.
- Section 500 – Monitoring and Records
The operator shall keep accurate operating records, maintenance records, and source test records.

Regulation 8, Rule 8

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 8.
- Section 300 – Standards
 - Section 303 – Gauges and Sampling Devices
Any compartment or access hatch shall have a vapor tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.
 - Section 305 – Oil-Water Separator Slop Oil Vessels
The facility shall not store any oil-water separator and/or air flotation unit sludges in an oil-water separator slop oil vessel unless such oil-water separator slop oil vessel is equipped with one of the specified requirements.
- Section 500 – Monitoring and Records
The operator shall maintain operating records, inspection and repair records, and wastewater collection system component records.

S-601 will remain subject to 40 CFR 60, Subpart Kb, NSPS for Volatile Organic Liquid Storage Vessels. The tank is also subject to 40 CFR 63, Subpart FFFF, NESHAP for miscellaneous organic chemical manufacturing, however pursuant to Section §63.2535(c), compliance with Subpart FFFF is demonstrated by complying with Subpart Kb. It is expected that S-601 will continue to comply with Subpart Kb. S-601 will no longer be subject to 40 CFR 63 Subpart CC, NESHAP for Petroleum Refineries, because the facility will no longer be classified as a petroleum refinery. 40 CFR 61 Subpart FF, Benzene Waste Operations, will continue to apply to S-601. After sampling is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.

Source S-613

Vapor recovery/holding tank S-613 will not change service as a result of this project. Regulation 8, Rule 33, Gasoline Bulk Terminals and Gasoline Delivery Vehicles, will continue to apply as follows:

Regulation 8, Rule 33

- Section 308 – Vapor Storage Tank Requirements
Diaphragms used in vapor storage tanks shall be maintained such that the concentration of total organic compound emissions in the airspace above the diaphragm is less than 3,000 parts per million (ppm) expressed as methane, or 6% of the Lower Explosive Limit. Total organic compound concentrations in the airspace above the diaphragm shall be monitored and recorded with a hydrocarbon analyzer weekly when the vapor storage tank is in service, during a period when gasoline loading is in progress.
- Section 502 – Vapor Storage Tank Emissions Records
The facility shall maintain for a period of at least five (5) years a record of the weekly vapor storage tank emission checks.

S-613 is not considered a storage tank subject to 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because it operates as a pressure vessel without emissions to the atmosphere.

Source S-620

Existing storage tank S-620 will be repurposed from storing fuel oil to storing renewable feedstock. S-620 is exempt from permitting requirements under Regulation 2, Rule 1, Permits Adopted, General Requirements per Section 2-1-123.3.6. In addition, S-620 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

This tank is subject to a limited exemption contained in Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids except for Section 8-5-307.3 because tank contents have a true vapor pressure of less than 25.8

mm Hg (0.5 psia) in accordance with 8-5-117. S-620 is expected to comply with Section 8-5-307.3, which requires that the sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

Currently, tank S-620 is a Group 2 tank. Upon completion of this project S-620 will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because renewable feedstock only contains HAP as impurities, therefore S-620 will not be considered a storage tank for the purposes of the Subpart.

Source S-621

S-621 is currently exempt from permitting per Regulation 2, Rule 1, Permits Adopted, General Requirements per 2-1-123.3.2 since materials stored contain less than 1% by weight organic compounds. S-621 will be permitted as a modified source to store intermediate HDO product and will be subject to Regulation 8, Rule 5. S-621 will comply with the following sections:

Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids

- Section 111 – Limited Exemption, Tank Removal From and Return to Service
The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
- Section 112 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
- Section 119 – Limited Exemption, Repair Period
A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
- Section 301 – Storage Tank Control Requirements – External Floating Roof Tank
The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
- Section 304 – Requirements for External Floating Roof Tanks
An external floating roof must meet the requirements for floating roof fittings, primary and secondary seals, and roof/shell must be in good operating condition.
- Section 320 – Floating Roof Tank Fitting Requirements
All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
- Sections 321, 322 – Primary and Secondary Seal Requirements
The facility shall not operate a storage tank equipped with a primary/secondary seal unless such tank meets the conditions specified.
- Section 328 – Tank Degassing Requirements
A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
- Section 331 – Tank Cleaning Requirements
Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- Section 401 – Inspection Requirements for External Floating Roof Tanks

- The operator shall inspect each primary and secondary seal, and fittings at the frequency specified.
- Section 404 – Inspection, Abatement Efficiency Determination and Source Test Reports
A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.
- Section 411 – Enhanced Monitoring Program
Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
- Section 412 – Monitoring of Leaking Pontoons
The operator of a floating roof tank on which a leaking pontoon has been discovered shall inspect the lids and other openings on any leaking pontoon for compliance with the requirements of Section 8-5-304.6.1 once per calendar quarter beginning the quarter after the leaking pontoon is discovered until a repair of the leak is completed.
- Section 501 – Records
The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.

Regulation 8-5-301, Storage Tanks Control Requirements, will apply because S-621 is an external floating roof tank, and therefore subject to and expected to comply with Regulation 8-5-304, Requirements for External Floating Roof Tanks.

S-621 will be subject to 40 CFR 60 Subpart Kb, NSPS for Volatile Organic Liquid Storage Vessels, due to physical changes and change in service resulting in an emission increase. S-621 is expected to comply with §60.112b(a)(2), Standard for Volatile Organic Compounds (VOC) – External Floating Roof.

S-621 will be subject to 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing. Because S-621 is controlled with a floating roof, S-621 will comply with Subpart FFFF by complying with Subpart Kb per §63.2535(c). In addition, S-621 will comply with Table 4 to Subpart FFFF, Emission Limits for Storage Tanks, Item 1.b.i., by complying with the requirements of Subpart WW, NESHAPS for Storage Vessels (Tanks)—Control Level 2.

Source S-622

Tank S-622 currently stores sour distillate and will be converted to store renewable diesel. S-622 is exempt from permitting under Sections 2-1-301 and 2-1-302 of Regulation 2, Rule 1, Permits Adopted, General Requirements due to Section 2-1-123.3.2 – storage or loading of organic liquids where the initial boiling point of the organics is greater than 302° F and exceeds the actual storage temperature by at least 180°F. In addition, S-622 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

This tank is subject to a limited exemption contained in Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids except for Section 8-5-307.3 because current and future tank contents have a true vapor pressure of less than 25.8 mm Hg (0.5 psia) in accordance with 8-5-117. S-622 is expected to comply with Section 8-5-307.3, which requires that the sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

Currently, tank S-622 is a Group 2 tank under 40 CFR 63 Subpart CC, NESHAP for Petroleum Refineries. Upon completion of this project, S-622 will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because renewable feedstock only contains HAP as impurities, therefore S-622 will not be considered a storage tank for the purposes of the Subpart.

Sources S-648 and S-649

Propane product tanks S-648 and S-649 will not change service as a result of this project. S-648 and S-649 are exempt from permitting requirements under Regulation 2, Rule 1, Permits Adopted, General Requirements per Section 2-1-123.3.1 since these pressure tanks store liquefied gases and will continue to meet exemption requirements. In addition, S-648 and S-649 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids will continue to apply as follows:

Regulation 8, Rule 5

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 5.
- Section 300 – Standards
 - Section 301 – Storage Tanks Control Requirements
The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure. These pressure tanks are expected to comply with this requirement.
 - Section 307 – Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks
 - Section 307.1 –
Pressure tank shells must be in good operating condition with no liquid leakage through the shell.
 - Section 307.2 –
Pressure tank must maintain working pressures to prevent loss to the atmosphere.
 - Section 307.3 –
The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
 - Section 328 – Tank Degassing Requirements
A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
 - Section 331 – Tank Cleaning Requirements
Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
 - Section 332 – Sludge Handling Requirements
The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- Section 400 – Administrative Requirements
Inspection requirements for floating roof tanks, pressure relief devices, and abatement efficiency.
- Section 500 – Monitoring and Records
The operator shall keep accurate operating records, maintenance records, and source test records.

S-648 and S-649 are not considered storage tanks subject to 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because they operate as pressure vessels without emissions to the atmosphere.

Source S-650

Sour water tank S-650 will not change service due to this project. Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids will continue to apply as follows:

Regulation 8, Rule 5

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 5.
- Section 300 – Standards
 - Section 301 – Storage Tank Control Requirements – External Floating Roof Tank
The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure. This external floating roof tank is expected to comply with requirement.
 - Section 304 – Requirements for External Floating Roof Tanks
An external floating roof must meet the requirements for floating roof fittings, primary and secondary seals, and roof/shell must be in good operating condition.
 - Section 320 – Floating Roof Tank Fitting Requirements
All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
 - Section 321 – Primary Seal Requirements
The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
 - Section 322 – Secondary Seal Requirements
The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.
 - Section 328 – Tank Degassing Requirements
A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
 - Section 331 – Tank Cleaning Requirements
Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- Section 400 – Administrative Requirements
Inspection requirements for floating roof tanks, pressure relief devices, and abatement efficiency.
- Section 500 – Monitoring and Records
The operator shall keep accurate operating records, maintenance records, and source test records.

S-650 will remain subject to 40 CFR 60, Subpart Kb, NSPS for Volatile Organic Liquid Storage Vessels. The tank is also subject to 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing however pursuant to §63.2535(c), compliance with Subpart FFFF is demonstrated by complying with Subpart Kb.

Source S-651

Reclaimed oil/foul water tank S-651 will not change service due to this project. Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids will continue to apply as follows:

Regulation 8, Rule 5

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 5.
- Section 300 – Standards
 - Section 301 – Storage Tank Control Requirements – External Floating Roof Tank
The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure. This external floating roof tank is expected to comply with requirement.

- Section 304 – Requirements for External Floating Roof Tanks
An external floating roof must meet the requirements for floating roof fittings, primary and secondary seals, and roof/shell must be in good operating condition.
- Section 320 – Floating Roof Tank Fitting Requirements
All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
- Section 321 – Primary Seal Requirements
The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
- Section 322 – Secondary Seal Requirements
The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.
- Section 328 – Tank Degassing Requirements
A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
- Section 331 – Tank Cleaning Requirements
Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- Section 400 – Administrative Requirements
Inspection requirements for floating roof tanks, pressure relief devices, and abatement efficiency.
- Section 500 – Monitoring and Records
The operator shall keep accurate operating records, maintenance records, and source test records.

Tank S-651 is not subject to an NSPS. The tank will become subject to 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing and will be classified as a Group 2 storage tank.

Sources S-656 and S-658

The throughput of existing foul water stripper charge tanks S-656 and S-658 will change due to this project. Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids will continue to apply as follows:

Regulation 8, Rule 5

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 5.
- Section 300 – Standards
 - Section 301 – Storage Tank Control Requirements
The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure. These tanks are vented to controls and are expected to comply with this requirement.
 - Section 302 – Requirements for Submerged Fill Pipes
Where the tank is filled from the top, the end of the discharge pipe or nozzle must be totally submerged when the liquid level is 6 in) from the bottom of the tank. Where the tank is filled from the side, the discharge pipe or nozzle must be totally submerged when the liquid level is 18 in. from the bottom of the tank.
 - Section 306 – Requirements for Approved Emission Control Systems
An Approved Emission Control System must provide an abatement efficiency of at least 95% by weight and must be gas tight.
 - Section 307 – Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks

Tank shells must be in good operating condition, pressure tank must maintain working pressures to prevent loss to the atmosphere, and sealing mechanism on pressure relief devices shall be maintained in a gas tight condition.

- Section 328 – Tank Degassing Requirements
A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
- Section 331 – Tank Cleaning Requirements
Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- Section 400 – Administrative Requirements
Inspection requirements for floating roof tanks, pressure relief devices, and abatement efficiency.
- Section 500 – Monitoring and Records
The operator shall keep accurate operating records, maintenance records, and source test records. Section 502, Source Test Requirements, does not apply because emissions are collected and vented to a fuel gas collection system for combustion. Fuel gas users are required to be source tested initially upon issuance and at least once every 5 years after.

S-656 and S-658 will remain subject to 40 CFR 60, Subpart Kb, NSPS for Volatile Organic Liquid Storage Vessels. The tanks are also subject to 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing however pursuant to §63.2535(c), compliance with Subpart FFFF is demonstrated by complying with Subpart Kb, except Marathon must comply with the monitoring, recordkeeping, and reporting requirements of Subpart FFFF. Tanks S-656 and S-658 emissions are currently abated by a vapor recovery system and will continue to be abated after the project.

Sources S-666, S-667, S-668, S-669, and S-670

Propane product tanks S-666, S-667, S-668, S-669, and S-670 will not change service due to this project. S-666, S-667, S-668, S-669, and S-670 are exempt from permitting requirements under Regulation 2, Rule 1, Section 2-1-123.3.1 since the tanks only store liquefied gases and will continue to meet exemption requirements. In addition, S-666, S-667, S-668, S-669, and S-670 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids will continue to apply as follows:

Regulation 8, Rule 5

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 5.
- Section 300 – Standards
 - Section 301 – Storage Tanks Control Requirements
The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
 - Section 307 – Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks
 - Section 307.1 –
Pressure tank shells must be in good operating condition with no liquid leakage through the shell.
 - Section 307.2 –
Pressure tank must maintain working pressures to prevent loss to the atmosphere.
 - Section 307.3 –
The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition

except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

- Section 328 – Tank Degassing Requirements
A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
- Section 331 – Tank Cleaning Requirements
Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- Section 332 – Sludge Handling Requirements
The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- Section 400 – Administrative Requirements
Inspection requirements for floating roof tanks, pressure relief devices, and abatement efficiency.
- Section 500 – Monitoring and Records
The operator shall keep accurate operating records, maintenance records, and source test records.

S-666, S-667, S-668, S-669, and S-670 are not considered storage tanks subject to 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because they operate as pressure vessels without emissions to the atmosphere.

Source S-692

Gasoline tank S-692 will be used to store naphtha. Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids will continue to apply as follows:

Regulation 8, Rule 5

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 5.
- Section 300 – Standards
 - Section 301 – Storage Tank Control Requirements – External Floating Roof Tank
The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure. This external floating roof tank is expected to comply with requirement.
 - Section 304 – Requirements for External Floating Roof Tanks
An external floating roof must meet the requirements for floating roof fittings, primary and secondary seals, and roof/shell must be in good operating condition.
 - Section 320 – Floating Roof Tank Fitting Requirements
All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
 - Section 321 – Primary Seal Requirements
The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
 - Section 322 – Secondary Seal Requirements
The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.
 - Section 328 – Tank Degassing Requirements
A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.

- Section 331 – Tank Cleaning Requirements
Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- Section 400 – Administrative Requirements
Inspection requirements for floating roof tanks, pressure relief devices, and abatement efficiency.
- Section 500 – Monitoring and Records
The operator shall keep accurate operating records, maintenance records, and source test records.

Tank S-692 is currently not subject to an NSPS. However, the tank will become subject to 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing and will be classified as a Group 1 storage tank. The tank will be equipped with external floating roof controls that meet the requirements of Table 4.1.b.i of Subpart FFFF.

Marathon retains the ability to store gasoline in Tank S-692, though Marathon anticipates that that tank will be primarily used to store naphtha. During periods when gasoline is stored in the tank, Tank S-692 will be subject to 40 CFR 63 Subpart R. The tank will be equipped with external floating roof controls that meet the requirements of §63.423 of Subpart R.

Source S-699

Recovered oil tank S-699 will not change service due to this project. S-699 is currently subject to and expected to continue to comply with Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids and Regulation 8, Rule 8, Organic Compounds – Wastewater (Oil-Water) Separators as follows:

Regulation 8, Rule 5

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 5.
- Section 300 – Standards
 - Section 301 – Storage Tanks Control Requirements
The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure. The storage tank will continue to be abated by A-14, which complies with this requirement.
 - Section 306 – Requirements for Approved Emission Control Systems
An Approved Emission Control System must provide an abatement efficiency of at least 95% by weight and must be gas tight. The storage tank will continue to be abated by A-14, which complies with this requirement.
 - Section 307 – Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks
Tank shells must be in good operating condition, pressure tank must maintain working pressures to prevent loss to the atmosphere, and sealing mechanism on pressure relief devices shall be maintained in a gas tight condition.
 - Section 328 – Tank Degassing Requirements
A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
 - Section 331 – Tank Cleaning Requirements
Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- Section 400 – Administrative Requirements
Inspection requirements for floating roof tanks, pressure relief devices, and abatement efficiency.
- Section 500 – Monitoring and Records

The operator shall keep accurate operating records, maintenance records, and source test records. Section 502, Source Test Requirements, does not apply because emissions are collected and vented to a fuel gas collection system for combustion. Fuel gas users are required to be source tested initially upon issuance and at least once every 5 years after.

Regulation 8, Rule 8

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 8.
- Section 300 – Standards
 - Section 303 – Gauges and Sampling Devices
Any compartment or access hatch shall have a vapor tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.
 - Section 305 – Oil-Water Separator Slop Oil Vessels
The facility shall not store any oil-water separator and/or air flotation unit sludges in an oil-water separator slop oil vessel unless such oil-water separator slop oil vessel is equipped with one of the specified requirements.
- Section 500 – Monitoring and Records
The operator shall maintain operating records, inspection and repair records, and wastewater collection system component records.

Tank S-699 is not subject to an NSPS. Tank S-699 will no longer be subject to 40 CFR 60, Subpart QQQ, Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems. The tank will become subject to 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing and will be classified as a Group 1 storage tank. The tank will be equipped with controls that meet the requirements of Table 4 of Subpart FFFF. Tank S-699 emissions are currently abated by a vapor recovery system and will continue to be abated after the project.

S-699 will no longer be subject to 40 CFR 63 Subpart CC, NESHAP for Petroleum Refineries, because the facility will no longer be classified as a petroleum refinery. 40 CFR 61 Subpart FF, Benzene Waste Operations, will continue to apply to S-699.

Source S-700

Existing API sludge tank S-700 will not change service. S-700 is currently subject to and expected to continue to comply with Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids, 8-5-117, which is a limited exemption, because the true vapor pressure is less than 25.8 mm Hg. Sludge with a low vapor pressure will be subject to Regulation 8-5-307.3 and Regulation 8, Rule 8, Organic Compounds – Wastewater (Oil-Water) Separators as follows:

Regulation 8, Rule 5

- Section 117 – Limited Exemption, Low Vapor Pressure
The provisions of this rule, except for Section 8-5-307.3, shall not apply to tanks storing organic liquids with a true vapor pressure of less than or equal to 0.5 psi.
- Section 307.3 – Requirements for Fixed Roof Tanks, Pressure Tanks and Blanketed Tanks
The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
- Section 501 – Records

The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.

Regulation 8, Rule 8

- Section 101 – Description
The purpose of this Rule is to limit the emissions of organic compounds from wastewater collection and separation systems that handle liquid organic compounds from industrial processes.
- Section 303 – Gauging and Sampling Devices
Any compartment or access hatch shall have a vapor tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.
- Section 305.2 – Oil-Water Separator and/or Air Flotation Unit Slop Oil Vessels
An organic compound vapor recovery system with a combined collection and destruction efficiency of at least 70 percent by weight.
- Section 503 – Inspection and Repair Records
Records of inspections and repairs shall be retained and made available for Inspection by the APCO.
- Section 504 – Portable Hydrocarbon Detector
Any instrument used for the measurement of organic compounds shall be a gas detector that meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21.
- Section 603 – Inspection Procedures
Leaks shall be measured using a portable gas detector as prescribed in EPA Reference Method 21.

NSPS and NESHAP are not applicable. S-700 will no longer be subject to 40 CFR 63 Subpart CC, NESHAP for Petroleum Refineries, because the facility will no longer be classified as a petroleum refinery. 40 CFR 61 Subpart FF, Benzene Waste Operations, will continue to apply to S-700.

Wastewater requirements under 40 CFR 63 Subpart FFFF, NESHAP for miscellaneous organic chemical manufacturing may apply to S-700. Wastewater means water that exits the miscellaneous organic chemical manufacturing process unit (MCPU) or control device and that contains either: an annual average concentration of regulated HAP of at least 5 parts per million weight (ppmw) and has an annual average flowrate of 0.02 liters per minute or greater; or an annual average concentration of regulated HAP of at least 10,000 ppmw at any flowrate. Wastewater means process wastewater or maintenance wastewater and includes exclusions within its definition at §63.2550. There is uncertainty whether Marathon will generate any regulated wastewater or if so, what Group status will apply.

As described in Table 7 to Subpart FFFF, process wastewater streams are subject to the requirements in §63.132 through §63.148 except as specified by Subpart FFFF. Applicability criteria for determining whether a process wastewater stream is considered a Group 1 or Group 2 wastewater stream is provided at §63.132 and §63.2485(c).

Subpart FFFF also regulates maintenance wastewater streams, which include wastewater generated by the draining of process fluid from components in the MCPU into an individual drain system in preparation for or during maintenance activities. Maintenance wastewater can be generated during planned and unplanned shutdowns and during periods not associated with a shutdown and is subject to requirements for Group 1 or Group 2 streams as applicable. As described in Table 7 to Subpart FFFF, maintenance wastewater streams are subject to the requirements of §63.105 except as specified by Subpart FFFF.

Permit Condition #27583, Part 7 has been imposed for Marathon to determine applicability and compliance requirements under Subpart FFFF. Marathon does not anticipate generating any Group 1 wastewater streams, but anticipates its wastewater will meet the definition of Group 2 wastewater, and as such §63.138 would not apply to

S-700. After sampling is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.

Per §63.2485(c), a process wastewater stream in Group 1 for compounds in tables 8-9 to Subpart FFFF if any of the conditions are met:

1. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in table 8 to this subpart is greater than or equal to 200 lb/yr.
2. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min.
3. The combined total annual average concentration of compounds in tables 8 and 9 to this subpart is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to this subpart is greater than or equal to 1 tpy.

Sources S-819 and S-1026

S-819 and S-1026 are currently subject to and will continue to comply with Regulation 6, Rule 1, Particulate Matter, and Regulation 8, Rule 8, Organic Compounds – Wastewater (Oil-Water) Separators.

Regulation 6, Rule 1, Particulate Matter – General Requirements (S-819 and S-1026)

- Section 301 – Ringelmann Number 1 Limitation
The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
- Section 305 – Visible Particles
The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
- Section 310 – Total Suspended Particulate Concentration Limits
No applicable source shall emit total suspended particulate at a concentration in excess of the limit indicated for the source's exhaust gas rate.
- Section 401 – Appearance of Emissions
The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.
- Section 601 – Applicability of Test Methods
The common test methods cited in Regulation 6 shall apply to this Rule, including the methods cited in Regulation 6-601: Assessment of Visible Emissions, and Regulation 6-602: Assessment of Opacity.

Regulation 8, Rule 8, Organic Compounds – Wastewater Collection and Separation Systems (S-819)

- Section 101 – Description
The purpose of this Rule is to limit the emissions of organic compounds from wastewater collection and separation systems that handle liquid organic compounds from industrial processes.
- Section 114 – Exemption, Bypassed Oil-Water Separator or Air Flotation Influent
The requirements of Sections 8-8-301, 302, and 307 shall not apply for wastewater which bypasses either the oil-water separator or air flotation unit provided that: (1) the requirements of Section 8-8-501 are met; and (2) on that day the Air District did not predict an excess of the Federal Ambient Air Quality Standard for ozone.
- Section 302 – Wastewater Separators Larger than or Equal to 18.9 Liters per Second
The facility shall not operate any wastewater separator and/or forebay with a rated or maximum allowable capacity larger than or equal to 300 gals per min. unless such wastewater separator and/or

forebay is operated within its design rated or maximum allowable capacity and is equipped with one of the specified requirements.

- Section 302.3 –
A vapor-tight fixed cover with an organic compound vapor recovery system which has a combined collection and destruction efficiency of at least 95 percent, by weight, inspection and access hatches shall be closed except when the opening is being used for inspection, maintenance, or wastewater sampling.
- Section 302.6 –
Roof seals, fixed covers, access doors, and other openings at refineries shall be inspected initially and semiannually thereafter to ensure that they are vapor tight.
- Section 303 – Gauging and Sampling Devices
Any compartment or access hatch shall have a vapor tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.
- Section 307 – Air Flotation Unit
The facility shall not operate any air flotation units and/or pre-air flotation unit flocculation sump, basin, chamber, or tank greater than 400 gals per min. unless operated within its design rated or maximum allowable capacity and is equipped with one of the specified requirements.
- Section 307.2 –
An organic compound vapor recovery system with a combined collection and destruction efficiency of at least 70 percent, by weight.
- Section 501 – API Separator or Air Flotation Bypassed Wastewater Records
The facility shall maintain records on the amount of bypassed wastewater, duration, date, causes for bypasses, and dissolved critical organic compound concentration (volume).
- Section 503 – Inspection and Repair Records
Records of inspections and repairs shall be retained and made available for inspection by the APCO.
- Section 504 – Portable Hydrocarbon Detector
Any instrument used for the measurement of organic compounds shall be a gas detector that meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21.
- Section 601 – Wastewater Analysis for Critical Organic Compounds
Samples of wastewater shall be taken at the influent stream for each unit and analyzed for the concentration of dissolved critical organic compounds as prescribed in the Manual of Procedures.
- Section 602 – Determination of Emissions
Emissions of organic compounds shall be measured as prescribed by any of the following methods: 1) BAAQMD Manual of Procedures, Volume IV, ST-7, 2) EPA Method 25, or 25A), or 3) any other method approved by the APCO.
- Section 603 – Inspection Procedures
Leaks shall be measured using a portable gas detector as prescribed in EPA Reference Method 21.

Regulation 8, Rule 8, Organic Compounds – Wastewater Collection and Separation Systems (S-1026)

- Section 113 – Exemption, Secondary Wastewater Treatment Processes And Stormwater Sewer Systems
The requirements of Sections 8-8-301, 302, 306, and 308 shall not apply to any secondary wastewater treatment processes or stormwater sewer systems that are used as a wastewater polishing step or for collection of stormwater that is segregated from the process wastewater collection system.

API Oil/Water Separator (S-819) will continue to be subject to 40 CFR 61 Subpart FF, NESHAP for Benzene Waste operations. However, S-819 will no longer be subject to 40 CFR 63 Subpart CC, NESHAP for Petroleum Refineries, or to 40 CFR 60 Subpart QQQ, NSPS for VOC Emissions from Petroleum Refinery Wastewater Systems, because the facility will no longer be classified as a petroleum refinery.

As previously discussed, Marathon will determine applicability and compliance requirements under Subpart FFFF via Permit Condition #27583, Part 7. Marathon does not anticipate generating any Group 1 wastewater streams, but anticipates its wastewater will meet the definition of Group 2 wastewater. After sampling is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.

NSPS is not applicable to S-1026. Wastewater requirements under 40 CFR 63 Subpart FFFF, NESHAP for miscellaneous organic chemical manufacturing may apply to S-1026. As previously discussed, Marathon will determine applicability and compliance requirements under Subpart FFFF via Permit Condition #27583, Part 7. Marathon does not anticipate generating any Group 1 wastewater streams.

Per §63.2485(c), a process wastewater stream in Group 1 for compounds in tables 8-9 to Subpart FFFF if any of the conditions are met:

1. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in table 8 to this subpart is greater than or equal to 200 lb/yr.
2. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min.
3. The combined total annual average concentration of compounds in tables 8 and 9 to this subpart is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to this subpart is greater than or equal to 1 tpy.

Sources S-830, S-831, and S-842

S-830, S-831, and S-842 are subject to Regulation 8, Rule 8, Organic Compounds – Wastewater (Oil-Water) Separators, and will continue to comply with exemption 8-8-113 for Secondary Wastewater Treatment Processes and Stormwater Sewer Systems since (ponds and drains) these sources are secondary wastewater treatment processes per Section 8-8-208 and are considered polishing steps.

NSPS is not applicable. Wastewater requirements under 40 CFR 63 Subpart FFFF, NESHAP for miscellaneous organic chemical manufacturing may apply to S-830, S-831, and S-842. As previously discussed, Marathon will determine applicability and compliance requirements under Subpart FFFF via Permit Condition #27583, Part 7. Marathon does not anticipate generating any Group 1 wastewater streams. After sampling is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.

Per §63.2485(c), a process wastewater stream in Group 1 for compounds in tables 8-9 to Subpart FFFF if any of the conditions are met:

1. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in table 8 to this subpart is greater than or equal to 200 lb/yr.
2. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min.
3. The combined total annual average concentration of compounds in tables 8 and 9 to this subpart is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to this subpart is greater than or equal to 1 tpy.

Sources S-846, S-976, S-978, S-980, S-982, and S-985

Cooling towers S-846, S-976, S-978, S-980, S-982, and S-985 are subject to and will continue to comply with the following:

Regulation 6, Rule 1, Particulate Matter – General Requirements

- Section 301 – Ringelmann Number 1 Limitation
The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
- Section 305 – Visible Particles
The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
- Section 310 – Total Suspended Particulate Concentration Limits
No applicable source shall emit total suspended particulate at a concentration in excess of the limit indicated for the source's exhaust gas rate.
- Section 311 – Total Suspended Particulate Weight Limits
The facility shall not emit total suspended particulate from any source at a rate in excess of the limit indicated for the source's process weight rate.
- Section 401 – Appearance of Emissions
The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.
- Section 601 – Applicability of Test Methods
The common test methods cited in Regulation 6 shall apply to this Rule, including the methods cited in Regulation 6-601: Assessment of Visible Emissions, and Regulation 6-602: Assessment of Opacity.

Regulation 8, Rule 2, Organic Compounds – Miscellaneous Operations

- Section 114 – Exemption, Miscellaneous Plants
Emissions from cooling towers, railroad tank cars, marine vessels and crude oil production operations are exempt from this Rule, provided best modern practices are used, which are covered in Regulation 11-10.

Regulation 11, Rule 10, Hazardous Pollutants – Hexavalent Chromium Emissions from All Cooling Towers and Total Hydrocarbon Emissions from Refinery Cooling Towers

- Section 104 – Limited Exemption, Continuous Hydrocarbon Analyzers
When a continuous hydrocarbon analyzer is installed and is used to detect total hydrocarbon concentrations in cooling tower water, the cooling tower return line(s), and/or the heat exchanger exit line(s) monitored by the analyzer(s) are exempt from the requirements of Section 11-10-402.
- Section 301 – Hexavalent Chromium Removal
The facility shall not operate any cooling tower in the Air District that uses hexavalent chromium chemicals.
- Section 304.1 – Total Hydrocarbon Leak Monitoring Requirements
The owner/operator of a cooling tower located at a refinery shall sample and analyze cooling tower water at each cooling tower return line(s), and/or at each heat exchanger exit line(s) prior to exposure to air.
- Section 305 – Leak Action Requirement
If any of the hydrocarbon leak detection methods result in cooling tower water containing total hydrocarbon concentrations greater than the applicable leak action level, the cooling tower owner/operator shall minimize the leak as soon as practicable or within seven calendar days, whichever is sooner, and conduct a leak repair and/or remove the defective piece of equipment from service within 21 calendar days of first detecting the leak.
- Section 401 –Refinery Cooling Tower Reporting Requirements
When the sampling of cooling tower water exceeds the applicable leak action level the cooling tower owner/operator shall conduct sampling of total hydrocarbon concentration and chlorine concentration in the cooling water as soon as feasible, and no later than 24 hours from the time and date of leak discovery. If the leak has not been repaired after 21 days, the owner/operator shall notify the APCO regarding the magnitude of the leak, the specific repairs performed to date, whether the leaking component was

reinspected for leaks following the repair, the cause of the leak, whether further repair or replacement of equipment will be required at the next turnaround, whether the hydrocarbons associated with the leak were speciated and quantified.

- Section 504 – Operating records
The owner/operators shall retain records of the results of all sampling and/or monitoring conducted, leak minimizations and repairs made, and other required data on site for at least five years from the date of entry.
- Section 602 – Total Hydrocarbon Analyzer Location
If the owner/operator of a cooling tower at a refinery installs one or more Air District-approved total hydrocarbon analyzers in a cooling tower, such analyzers shall be installed at: A) each cooling tower return line to continuously measure the total hydrocarbon concentration in the cooling tower water prior to exposure to air, or B) the exit line for each heat exchanger or group of heat exchangers within that heat exchanger system prior to exposure to air.
- Section 603 – Cooling Tower Water Lab Analysis Methodology
When the owner/operator of a cooling tower located at a refinery performs cooling water sampling and analysis for hydrocarbon concentration in cooling tower water, the laboratory analysis shall follow EPA Method 8015D or any other method approved by the APCO.
- Section 604 – Cooling Tower Water Sampling Methodology
When the owner/operator of a cooling tower located at a refinery performs cooling water sampling and analysis for total hydrocarbon concentration in cooling tower water, the cooling water shall be sampled at each cooling tower return line(s) and/or each heat exchanger exit line(s) prior to exposure to air.

Cooling towers will no longer be subject to 40 CFR 63 Subpart CC, NESHAP from Petroleum Refineries, because the facility will no longer be classified as a petroleum refinery. After the implementation of this project, cooling towers will be subject to 40 CFR 63 Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing. Cooling towers will comply with Table 10 of Subpart FFFF by complying with the requirements in §63.2490(d).

Sources S-854, S-944, S-945, S-992, S-1012, and S-1517

Flares S-854, S-944, S-945, S-992, S-1012, and S-1517 are subject to and will continue to comply with the following:

Regulation 6 Rule 1, Particulate Matter – General Requirements

- Section 301 – Ringelmann Number 1 Limitation
The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
- Section 305 – Visible Particles
The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
- Section 310 – Total Suspended Particulate Concentration Limits
No applicable source shall emit total suspended particulate at a concentration in excess of the limit indicated for the source's exhaust gas rate.
- Section 401 – Appearance of Emissions
The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.
- Section 601 – Applicability of Test Methods
The common test methods cited in Regulation 6 shall apply to this Rule, including the methods cited in Regulation 6-601: Assessment of Visible Emissions, and Regulation 6-602: Assessment of Opacity.

Regulation 12 Rule 11, Miscellaneous Standards of Performance – Flare Monitoring at Refineries

- Section 401 – Flare Data Reporting Requirements

The owner or operator of a flare shall submit a monthly report to the APCO on or before 30 days after the end of each month for each flare subject to this rule.

- Section 402 – Semi-Annual Flow Verification Report
The owner or operator of a flare shall submit a flow verification report to the APCO for each flare subject to the rule.
- Section 501 – Vent Gas Flow Monitoring
The owner or operator of a refinery shall not operate a flare unless vent gas to the flare is continuously monitored for volumetric flow by a device that meets the specified requirements.
- Section 502 – Vent Gas Composition Monitoring
The owner or operator of a refinery shall not operate a flare unless the specified requirements are met.
- Section 502.3 – Vent Gas Composition Monitoring
The owner or operator shall monitor vent gas composition.
- Section 503 – Ignition Monitoring
Any flare subject to this rule must be equipped and operated with an automatic igniter or a continuous burning pilot, which must be maintained in good working order.
- Section 504 – Pilot and Purge Gas Monitoring
The owner or operator of a refinery shall not operate a flare unless (1) volumetric flows of purge and pilot gases are monitored by flow measuring devices, or (2) other parameters are monitored so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored.
- Section 505 – Recordkeeping Requirements
The owner or operator of a flare shall maintain records for all the information required to be monitored for a period of five years and make such records available to the APCO upon request.
- Section 506 – General Monitoring Requirements
Facilities responsible for monitoring subject to this rule shall comply with the specified requirements.
- Section 506.1 – Periods of Inoperation of Vent Gas Monitoring
Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring.
- Section 507 – Video Monitoring
The owner or operator of a flare subject to this rule shall install and maintain equipment that records a real-time digital image of the flare and flame at a frame rate of no less than 1 frame per minute.
- Section 601 – Testing, Sampling, and Analytical Methods
Samples and integrated samples, and vent gas composition continuous analyzers shall be analyzed using specified test methods.
- Section 602 – Flow Verification Test Methods
For purposes of the semi-annual verification, vent gas flow shall be determined using one or more of the specified methods.

Regulation 12 Rule 12, Miscellaneous Standards of Performance – Flares at Petroleum Refineries

- Section 301 – Flare Minimization
Flaring is prohibited unless it is consistent with an approved FMP and all commitments due under that plan have been met.
- Section 404 – Update of Flare Minimization Plans
The FMP shall be updated following the specified requirements.
- Section 405 – Notification of Flaring
The owner or operator of a flare subject to this rule shall notify the APCO as soon as possible, consistent with safe operation of the refinery, if the volume of vent gas flared exceeds 500,000 standard cubic feet per calendar day.
- Section 406 – Determination and Reporting of Cause
The owner or operator of a flare subject to this rule shall submit a report to the APCO within 60 days following the end of the month in which a reportable flaring event occurs.
- Section 408 – Designation of Confidential Information

If a document is submitted that contains information designated confidential in accordance with this Section, the owner or operator shall provide a justification for this designation and shall submit a separate copy of the document with the information designated confidential redacted.

- Section 501 – Water Seal Integrity Monitoring
The owner or operator of a flare subject to this rule with a water seal shall continuously monitor and record the water level and pressure of the water seal that services each flare.

Flares will no longer be subject to 40 CFR 63 Subpart CC, NESHAP from Petroleum Refineries because the facility will no longer be considered a petroleum refinery and the flares will no longer be used as a control device of any emissions point(s) subject to Subpart CC. After the completion of this project, flares will be subject to 40 CFR 63 Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing. For purposes of 40 CFR 63 Subpart FFFF, Marathon has elected to comply with the requirements of §63.2450(e)(5), i.e., comply with requirements of 40 CFR 63 Subpart CC, for all flares that will operate following completion of the project.

In addition, 40 CFR 60 Subpart J, NSPS for Petroleum Refineries applies to several of these flares currently (i.e., S-854, S-1012, and S-1517), but will no longer apply following completion of the project. However, they are subject to Subpart J limits via the Consent Decree (Permit Condition #24324).

Flares will also be subject to 40 CFR 63 Subpart EEEE, NESHAP for Organic Liquids Distribution (Non-Gasoline), for equipment not used in the production of renewable fuels. 40 CFR 63 Subpart EEEE requires compliance with 40 CFR 63 Subpart CC for all flares that will operate following completion of the project.

Source S-873

Existing storage tank S-873 will be repurposed from storing fuel oil to store renewable feedstock. S-873 is exempt from permitting requirements under Regulation 2, Rule 1, Permits Adopted, General Requirements per Section 2-1-123.3.6. In addition, S-873 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

This tank is subject to a limited exemption contained in Regulation 8, Rule 5, Organic Compounds, Storage of Organic Liquids except for Section 8-5-307.3 because tank contents have a true vapor pressure of less than 25.8 mm Hg (0.5 psia) in accordance with 8-5-117. S-873 is expected to comply with Section 8-5-307.3, which requires that the sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

Currently tank S-873 is a Group 2 tank. Upon completion of this project, S-873 will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because renewable feedstock only contains HAP as impurities, therefore S-873 will not be considered a storage tank for the purposes of the Subpart.

Sources S-919, S-920, S-928, S-929, S-930, S-931, S-932, S-933, S-934, S-937, and S-973

Boilers and process heaters S-919, S-920, S-928, S-929, S-930, S-931, S-932, S-933, S-934, S-937, and S-973 are currently subject to and will continue to comply with the following:

Regulation 1, General Provisions & Definitions

- Section 1-520 – Continuous Emission Monitoring
Install continuous emission monitoring as required by Regulations 10, 12, and 2-1-403.
- Section 1-522 – Continuous Emission Monitoring and Recordkeeping Procedures
Continuous emission monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on excess of any emission standard to which the source is required to conform.
- Section 1-523 – Parametric Monitoring and Recordkeeping Procedures

Continuous parametric monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on any violation of permit conditions or District regulations to which the source is required to conform.

- Section 1-602 – Area and Continuous Monitoring Requirements
The procedures for selection and placement, installation scheduling, performance testing, reporting, records retention and instrument calibration are detailed in the Manual of Procedures.

Regulation 6, Rule 1, Particulate Matter – General Requirements

- Section 114 – Limited Exemption, Total Suspended Particulate (TSP) Emission Limits for Fuel Combustion
Sections 6-1-310.2 and 311.2 shall not apply to particulate matter emissions from gas-, liquid- and solid-fuel fired indirect heat exchangers, including furnaces, heaters, boilers, gas turbines and supplemental fuel-fired heat recovery steam generators and gas-fuel fired control devices that control only gaseous emissions
- Section 301 – Ringelmann Number 1 Limitation
The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
- Section 305 – Visible Particles
The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
- Section 310.1 – Total Suspended Particulate Concentration Limits
No person shall emit TSP from any source in excess of 343 mg per dscm (0.15 gr per dscf) of exhaust gas volume.
- Section 601 – Applicability of Test Methods
The common test methods cited in Regulation 6 shall apply to this Rule, including the methods cited in Regulation 6-601: Assessment of Visible Emissions, and Regulation 6-602: Assessment of Opacity.

Regulation 9, Rule 10, Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators, and Process Heaters in Refineries

- Section 301 – Refinery-wide NO_x Emission Limit
The facility shall not exceed a refinery-wide emission rate from boilers, steam generators and process heaters, excluding CO boilers, of 0.033 pounds NO_x per million BTU of heat input, based on an operating day average.
- Section 303 – Federal Refinery-wide and CO Boiler NO_x Emission Limits
The facility shall not exceed a refinery-wide emission rate from boilers, steam generators or process heaters, excluding CO boilers, of 0.20 pounds NO_x per million BTU of heat input, based on an operating day average.
- Section 305 – CO emission limit
Except during start-up, shutdown or curtailed operation, the facility shall not operate a boiler, steam generator or process heater, including CO boilers, unless carbon monoxide emissions of 400 ppmv, dry at 3% oxygen, based on an operating day average, are not exceeded.
- Section 502 – Monitoring
The facility shall maintain good working order and operate in-stack nitrogen oxide (NO_x), carbon monoxide (CO), and oxygen (O₂) continuous emission monitoring system (CEMS), or equivalent parametric monitoring system as specified in a Permit to Operate, and fuel-flow meter in each fuel line for each boiler, steam generator and process heater, including each CO boiler.
- Section 504 – Records
The owner/operator of a source subject to this rule shall keep the following records, in a form suitable for inspection for a period of at least five (5) years: (1) The continuous emission monitoring system (CEMS) measurements for NO_x and CO (ppmv corrected to 3% oxygen) and O₂ (percent by volume on a dry basis) or equivalent parametric monitoring system parameters; and hourly (lb/hour) and daily (lb/day) NO_x

emissions for each source. (2) The type, heat input (BTU/hr and BTU/day), and higher heating value of each fuel burned, and the injection rate for any reactant chemicals used by the emission control system(s) on a daily basis, (3) the date, time, and duration of any startup, shutdown or malfunction in the operation of any unit, emission control equipment or emission monitoring equipment, (4) the results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of any CEMS required by this rule, (5) a list of all sources subject to the NOx refinery-wide emission rate limits, (6) total NOx emissions and total heat input for all sources on a daily basis, (7) the date, time and duration of all start-up and shutdown periods, and (8) the results of source tests.

- Section 505 – Reporting Requirements
The facility shall report to the APCO any violation of this Rule, submit a written report for each calendar quarter to the APCO, and submit to the APCO a permit application to amend the Alternate NOx Compliance Plan whenever Section 9-10-308.4 is triggered.
- Section 601 – Determination of Nitrogen Oxides
Compliance with the nitrogen oxide emission requirements shall be determined by a continuous emission monitoring system (CEMS) that meets the requirements of Regulation 1-522, or by an equivalent parametric monitoring system that is authorized in a Permit to Operate and that meets the requirements of Regulation 1-523. CEMS operation and compliance with Section 9-10-404.3 shall be verified by source test as set forth in the District Manual of Procedures or any other method approved by the APCO.
- Section 602 – Determination of Carbon Monoxide and Stack-Gas Oxygen
Compliance with the carbon monoxide emission requirements shall be determined by a continuous emission monitoring system (CEMS) that meets the requirements of Regulation 1-522, or by an equivalent parametric monitoring system that is authorized in a Permit to Operate and that meets the requirements of Regulation 1-523. CEMS operation and compliance with Section 9-10-404.3 shall be verified by source test as set forth in the District Manual of Procedures or any other method approved by the APCO.
- Section 603 – Compliance Determination
All emission determinations shall be made in the as-found operating condition, except during periods of start-up or shutdown.
- Section 604 – Determination of Higher Heating Value
If certification of the higher heating value is not provided by the third-party fuel supplier, it shall be determined by one of the specified test methods.

Boiler and process heaters are currently subject to and will continue to comply with 40 CFR 63, Subpart DDDDD, NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters.

S-919 and S-973 are currently subject to 40 CFR 60, Subpart J, NSPS for Petroleum Refineries by date of construction, reconstruction, modification, but will no longer apply as a result of the project. However, S-920, S-928, S-929, S-930, S-931, S-932, S-933, S-934, and S-937 are subject to Subpart J by Consent Decree Condition 23562 and will continue to apply and expected to comply with Subpart J.

Sources S-850, S-1002, S-1003, S-1007, S-1008, and S-1526

These sources contain fugitive components subject to Regulation 8, Rule 18, Organic Compounds – Equipment Leaks. This will not change with the conversion from hydrodesulfurization to hydrodeoxygenation. Hydrocracker 2nd Stage (S-1007) will be converted from hydrocracking to isomerization. No. 1 HDS (S-1002) desulfurization will cease to operate and only the propane dryer portion of the unit will be in service. New and replaced fugitive components associated with these sources are subject to the more stringent Regulation 2, Rule 2, BACT leak concentration requirement of 100 ppm, more frequent monitoring than Regulation 8, Rule 18, and offset requirements. Offsets require that the LDAR program be used to verify compliance with an emissions limit on a quarterly basis.

Regulation 8, Rule 18, Organic Compounds – Equipment Leaks

- Section 101 – Description

The purpose of this Rule is to limit emissions of total organic compounds from equipment leaks at refineries, chemical plants, bulk plants, and bulk terminals including, but not limited to: valves, connectors, pumps, compressors, pressure relief devices, diaphragms, hatches, sight-glasses, fittings, sampling ports, meters, pipes, and vessels.

- Section 300 – Standards
Standard requirements for valves, pumps, compressors, connections, pressure relief devices, non-repairable equipment, liquid leak, alternative compliance, open-ended valve or line, recurrent leaks, and mass emissions. The facility shall not use any equipment that leaks total organic compounds in excess of 100 ppm unless the leak has been discovered by the operator, minimized within 24 hours and repaired within 7 days. The 100 ppm standard for pumps and compressors is required for BACT (Regulation 2-2) as opposed to the 500 ppm standard contained in Regulation 8-18.
- Section 400 – Administrative Requirements
Administrative requirements for inspections, identification of components, and inspection schedules.
- Section 500 – Monitoring and Records
Monitoring and records requirements for portable hydrocarbon detector, identification records, inspection and leak records, and non-repairable equipment records.

These sources are also subject to Regulation 8, Rule 10 – Process Vessel Depressurization, and will comply with the following Sections of Regulation 8, Rule 10:

- Section 8-10-301 – Process Vessel Depressurizing
Emissions of organic compounds from depressurizing any process vessel at a refinery or a chemical plant shall be controlled by venting them to a fuel gas system, firebox, incinerator, thermal oxidizer, flare, or otherwise containing and treating them so as to prevent their emissions to the atmosphere.
- Section 8-10-302 – Opening of Process Vessels
No process vessel may be opened to the atmosphere except as provided in 302.1 or 302.2.
- Section 8-10-302.1 –
No process vessel may be opened to the atmosphere unless the internal concentration of total organic compounds has been reduced prior to release to atmosphere to less than 10,000 parts per million (ppm), expressed as methane (C1).
- Section 8-10-302.2 –
A process vessel at a refinery or chemical plant may be opened when the internal concentration of total organic compounds is 10,000 ppm or greater provided that specified requirements are met.
- Section 8-10-401 – Reporting
The annual report shall be submitted by February 1 of each year.
- Section 8-10-501 – Monitoring
Any vessel subject to this rule shall be monitored for the concentration of total organic compounds prior to opening and once per day during the time the vessel is open to the atmosphere.
- Section 8-10-502 – Concentration Measurement
The meter used to measure the concentration of total organic compound emissions shall meet the accuracy requirements specified in EPA Method 21.
- Section 8-10-503 – Records
Any facility subject to the provisions of this rule shall keep records of (1) date, time, type of activity, and duration of depressurization and vessel opening, (2) the type of service, size and name or vessel identification number, (3) the measured total organic compound concentration and calculated mass emissions from each depressurized vessel, and (4) the number and size of any air movers used to assure compliance with confined space entry requirements.
- Section 8-10-601 – Monitoring Procedures
The procedures used to monitor emissions are set forth in EPA Method 21.

Prior to the project, these sources were subject to 40 CFR 63 Subpart CC, NESHAP from Petroleum Refineries. Upon completion of the project, these sources will cease to be subject to 40 CFR 63 Subpart CC and will instead be

subject to 40 CFR 63 Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing for equipment in OHAP service greater than 5 percent by weight. Marathon has elected to comply with equipment leak requirements under Subpart FFFF by monitoring non-pressure relief device components according to 40 CFR 63 Subpart UU, NESHAP for Equipment Leaks – Control Level 2 Standards, and pressure relief devices according to Subpart FFFF as required by §63.2480(e).

No. 5 Gas Plant (S-1526) is currently not subject to any Air District regulations, NSPS, or NESHAP. After the implementation of this project, S-1526 will also be subject to 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing. Marathon will control vent streams for S-1526 by either sending the vent stream into the fuel gas system for combustion in heaters and boilers or to a flare, in accordance with the requirements of Table 1 of 40 CFR 63 Subpart FFFF.

Source S-1005

No. 1 Hydrogen Plant (S-1005) contains fugitive components subject to Regulation 8, Rule 18, Organic Compounds – Equipment Leaks and CO₂ vents subject to Regulation 8, Rule 2, Organic Compounds – Miscellaneous Operations. S-1005 is expected to continue to comply with Air District regulations.

Regulation 8, Rule 2, Organic Compounds – Miscellaneous Operations

- Section 101 – Description
The purpose of this Rule is to reduce emissions of precursor organic compounds from miscellaneous operations.
- Section 301 – Miscellaneous Operations
The facility shall not discharge into the atmosphere from any miscellaneous operation an emission containing more than 15 lbs. per day and containing a concentration of more than 300 PPM total carbon on a dry basis.
- Section 601 – Determination of Compliance
Emissions of organic compounds shall be measured as prescribed by any of the following methods: 1) BAAQMD Manual of Procedures, 2) EPA Method 25 or 25A.

Regulation 8, Rule 18, Organic Compounds – Equipment Leaks

- Section 101 – Description
The purpose of this Rule is to limit emissions of total organic compounds from equipment leaks at refineries, chemical plants, bulk plants, and bulk terminals including, but not limited to: valves, connectors, pumps, compressors, pressure relief devices, diaphragms, hatches, sight-glasses, fittings, sampling ports, meters, pipes, and vessels.
- Section 300 – Standards
Standard requirements for valves, pumps, compressors, connections, pressure relief devices, non-repairable equipment, liquid leak, alternative compliance, open-ended valve or line, recurrent leaks, and mass emissions. The facility shall not use any equipment that leaks total organic compounds in excess of 100 ppm unless the leak has been discovered by the operator, minimized within 24 hours and repaired within 7 days. The 100 ppm standard for pumps and compressors is required for BACT (Regulation 2-2) as opposed to the 500 ppm standard contained in Regulation 8-18.
- Section 400 – Administrative Requirements
Administrative requirements for inspections, identification of components, and inspection schedules.
- Section 500 – Monitoring and Records
Monitoring and records requirements for portable hydrocarbon detector, identification records, inspection and leak records, and non-repairable equipment records.

S-1005 is also subject to Regulation 8, Rule 10 – Process Vessel Depressurization, and will comply with the following Sections of Regulation 8, Rule 10:

- Section 8-10-301 – Process Vessel Depressurizing

Emissions of organic compounds from depressurizing any process vessel at a refinery or a chemical plant shall be controlled by venting them to a fuel gas system, firebox, incinerator, thermal oxidizer, flare, or otherwise containing and treating them so as to prevent their emissions to the atmosphere.

- Section 8-10-302 – Opening of Process Vessels
No process vessel may be opened to the atmosphere except as provided in 302.1 or 302.2.
- Section 8-10-302.1 –
No process vessel may be opened to the atmosphere unless the internal concentration of total organic compounds has been reduced prior to release to atmosphere to less than 10,000 parts per million (ppm), expressed as methane (C1).
- Section 8-10-302.2 –
A process vessel at a refinery or chemical plant may be opened when the internal concentration of total organic compounds is 10,000 ppm or greater provided that specified requirements are met.
- Section 8-10-401 – Reporting
The annual report shall be submitted by February 1 of each year.
- Section 8-10-501 – Monitoring
Any vessel subject to this rule shall be monitored for the concentration of total organic compounds prior to opening and once per day during the time the vessel is open to the atmosphere.
- Section 8-10-502 – Concentration Measurement
The meter used to measure the concentration of total organic compound emissions shall meet the accuracy requirements specified in EPA Method 21.
- Section 8-10-503 – Records
Any facility subject to the provisions of this rule shall keep records of (1) date, time, type of activity, and duration of depressurization and vessel opening, (2) the type of service, size and name or vessel identification number, (3) the measured total organic compound concentration and calculated mass emissions from each depressurized vessel, and (4) the number and size of any air movers used to assure compliance with confined space entry requirements.
- Section 8-10-601 – Monitoring Procedures
The procedures used to monitor emissions are set forth in EPA Method 21.

Prior to the project, this source was subject to 40 CFR 63 Subpart CC, NESHAP from Petroleum Refineries. Upon completion of the project, this source will cease to be subject to 40 CFR 63 Subpart CC, because the facility will no longer be classified as a petroleum refinery. S-1005 will not be subject to 40 CFR 63 Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing, because S-1005 is not considered a miscellaneous organic chemical manufacturing process unit (MCPU).

Source S-1025

Truck Loading Rack (S-1025) is currently subject to and will continue to comply with the following Air District Regulations:

Regulation 8, Rule 6, Organic Compounds – Organic Liquid Bulk Terminals and Bulk Plants
(*applies for non-gasoline loading activities*)

- Section 101 – Description
The purpose of this rule is to limit emissions of organic compounds as defined in Section 8-6-207 from transfer operations at non-gasoline organic liquid bulk terminals and bulk plants.
- Section 110 – Exemption, Low Vapor Pressure Organic Liquids
The requirements of this Rule shall not apply to loading and delivery of any organic liquid having a true vapor pressure less than 0.5 psia.
- Section 114 – Exemption, Maintenance and Repair
The requirements of Section 8-6-306 shall not apply to spills resulting from maintenance or repair operations provided proper operating practices are employed to minimize evaporation of organic compounds into the atmosphere.
- Section 301 – Bulk terminal limitations

The facility shall not transfer or allow the transfer of organic liquids from bulk terminal loading equipment unless a vapor loss control system is properly connected and used. Such transfer operations shall not emit into the atmosphere more than 0.17 pounds per 1,000 gallons of organic liquid loaded.

- Section 304 – Deliveries to Storage Tanks
The facility shall not transfer or allow the transfer of any organic liquid with a true vapor pressure of at least 1.5 psia into any bulk terminal or bulk plant storage tank having a capacity between 2,008 and 39,630 gallons inclusive, unless a vapor balance system or vapor loss control system, has been properly installed on the storage tank and is properly connected during delivery. Emissions to atmosphere shall not exceed 0.17 pounds per 1,000 gallons of organic compound loaded.
- Section 305 – Delivery Vehicle Requirements
Any delivery vehicle loaded at a terminal or bulk plant shall be equipped to allow proper connection to the vapor balance system or vapor loss control system required by the section and shall be maintained to be vapor tight, leak free, and in good working order.
- Section 306 – Equipment Maintenance
All equipment associated with organic liquid delivery and loading operations shall be maintained to be vapor tight, leak free and in good working order.
- Section 307 – Operating Practices
Any organic liquid subject to this Rule shall not be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation to the atmosphere.
- Section 501 – Records
The facility shall maintain records of the true vapor pressure of each organic liquid and organic liquid mixture, monthly records that provide the throughput (gallons) of each organic liquid and organic liquid mixture transferred into delivery vehicles and transportable containers with at least 0.5 psia true vapor pressure.
- Section 502 – Portable Hydrocarbon Detector
Any instrument used for the measurement of organic compounds shall meet the specifications and performance criteria, and shall be calibrated in accordance with EPA Reference Method 21.
- Section 503 – Burden of Proof
The burden of proof of eligibility for exemption from the requirements of this rule is on the applicant. Facilities seeking such an exemption shall maintain adequate records and furnish them to the APCO upon request.
- Section 601 – Efficiency and Rate Determination
The means for determining compliance with Sections 8-6-301, 302, and 304 are set forth in the Manual of Procedures.
- Section 603 – Analysis of Samples, True Vapor Pressure
Samples of organic compounds shall be analyzed for true vapor pressure at 25°C (77°F), as prescribed in the Manual of Procedures.
- Section 604 – Determination of Applicability
EPA-450/3-87-026, standard reference texts, or Raoult's Law of partial pressures may be used to determine if an organic liquid is subject to the requirements of this rule based on its true vapor pressure.

Regulation 8, Rule 33, Organic Compounds – Gasoline Bulk Terminals And Gasoline Delivery Vehicles (*applies for gasoline loading activities*)

- Section 101 – Description
The purpose of this Rule is to limit emissions of organic compounds associated with gasoline transfer operations at gasoline bulk terminals and organic compounds from gasoline cargo tanks.
- Section 112 – Exemption, Tank Gauging and Inspection
Any gasoline cargo tank may be opened for gauging or inspection, provided that the tank is not pressurized or being loaded.
- Section 113 – Exemption, Maintenance and Repair

The requirements of Section 8-33-304.4, 304.5, and 306 shall not apply to liquid gasoline spills and vapor leaks resulting from maintenance or repair operations provided proper operating practices are employed to minimize evaporation of gasoline into the atmosphere to the greatest extent practicable.

- Section 114 – Exemption, CARB Certification
CARB certification requirements in this Rule do not apply to vapor recovery equipment or systems where the gasoline bulk terminal owner or operator demonstrates that CARB has determined that such equipment or systems are not required to be CARB certified.
- Section 116 – Limited Exemption, Source Test Requirements
Any gasoline bulk terminal vapor processing unit that collects organic vapors and routes them to a fuel gas system for combustion shall be exempt from the emission factor source test requirement in 8-33-309.4, provided the gasoline bulk terminal control device has a source test requirement in an EPA approved Title V permit and provided that the terminal conducts an annual source test on its vapor recovery system. The facility Title V permit contains an annual source testing requirement for its vapor recovery system.
- Section 205 – Liquid Leak Free
A liquid fill connector or vapor hose connector that does not leak liquid in excess of three drops per minute, or 10 milliliters per disconnect averaged over three consecutive disconnects.
- Section 216 – Vapor Leak Free (Terminal)
A gasoline bulk terminal liquid fill connector, vapor hose connector, or pressure/vacuum (P/V) valve that does not leak vapor in excess of 3,000 parts per million (ppm) (expressed as methane) or 6% of the Lower Explosive Limit (LEL).
- Section 301 – Gasoline Bulk Terminal Emission Limitations
Emissions of non-methane organic compounds from a vapor recovery system shall not exceed 0.04 pound (lb) per 1,000 gallons of organic liquid loaded.
- Section 303 – Bottom Fill Requirement
Gasoline cargo tank loading operations at gasoline bulk terminals shall be accomplished by bottom fill.
- Section 304 – Gasoline Cargo Tank Requirements
An owner or operator of a gasoline cargo tank must comply with vapor integrity, vapor recovery, purging, drainage, vapor tight, vapor leak, liquid leak, compatible connectors, vapor hose storage, and maintenance requirements.
- Section 305 – Gasoline Bulk Terminal Equipment Maintenance and Repair
An owner or operator of a gasoline bulk terminal shall ensure all equipment are in good working order, comply with requirements prior to opening hoses to the atmosphere, ensure portable maintenance container or slop tank hose connectors are vapor and leak free, and install backpressure monitors.
- Section 306 – Operating Practices
An owner or operator of a gasoline bulk terminal shall not drain or spill liquid gasoline, discard it in sewers, store it in open containers, or handle it in any other manner that would result in its evaporation to the atmosphere.
- Section 307 – Loading Practices
Each cargo tank shall be allowed to only use compatible connectors, and that use of compatible connectors is necessary for continued access to the bulk terminal. An owner or operator of a gasoline bulk terminal shall not load, or permit the loading of gasoline into or out of a gasoline bulk terminal unless a CARB certified vapor recovery system is properly connected and used.
- Section 309 – Gasoline Bulk Terminal Vapor Recovery System Requirements
Vapor recovery systems are subject to CARB certification, loading operation, annual testing, vapor leak, liquid leak, piping, fill hose connection, backpressure, alarm, and monitoring requirements.
- Section 401 – Equipment Installation and Modification
An owner or operator of a gasoline bulk terminal who installs or modifies vapor recovery system equipment at a gasoline bulk terminal shall comply with requirements of Regulation 2, Rule 1, and obtain a CARB certification or recertification.
- Section 403 – Bulk Terminal Monitoring, Inspection, Notification and Reporting Requirements

An owner or operator of a gasoline bulk terminal shall implement an APCO approved plan for monitoring, inspection, notification, and reporting requirements.

- Section 501 – Burden of Proof
The burden of proof of eligibility for exemptions from this rule is on the applicant. Facilities seeking an exemption under this rule shall maintain adequate records and furnish them to the APCO upon request.
- Section 504 – Liquid Fill and Vapor Hose Connector Leak Check Records
The facility shall maintain for a period of at least five (5) years a record, including date and time, of the pressure/vacuum valve and hose connector leak checks, repairs made and re-inspection results.
- Section 505 – Loading Rack Backpressure Records
The facility shall maintain for a period of at least five (5) years a record of the date and time of high-pressure events that exceed the standards or any pressure/vacuum valve release.
- Section 506 – Parametric Correlation Records
The gasoline bulk terminal owner or operator shall retain on site for a period of at least five (5) years of records of vapor recovery system pressure correlation tests and vapor processing unit parametric variable limits and their derivation.
- Section 507 – Parametric Variable Monitoring Records
The gasoline bulk terminal owner or operator shall retain on site for a period of at least five (5) years a record of events where parametric limits were exceeded (or not met), results of investigations to determine causes of such events, and corrective actions taken.
- Section 601 – Emission Rate Determination
Emissions of non-methane organic compounds from vapor recovery systems shall be determined in accordance with the Manual of Procedures.
- Section 603 – Back Pressure Determination from Vapor Recovery Systems
The back pressure from vapor recovery systems during loading of gasoline cargo tanks shall be determined in accordance with the Manual of Procedures.
- Section 604 – Vapor Tight (Gasoline Cargo Tanks)
The determination of vapor tight status for gasoline cargo tanks shall be in accordance with the Manual of Procedures.
- Section 605 – Analysis of Samples
Reid vapor pressure analyses shall be conducted in accordance with the Manual of Procedures.
- Section 606 – Vapor Leak Concentration Determination
Determination of the concentration of vapor leaks shall be conducted in accordance with the procedure set forth in CARB TP-204.3.

It is expected that loading of renewable diesel will be exempt from Regulation 8, Rule 6, due to the exemption at 8-6-110, true vapor pressure less than 0.5 psia. Permit Condition #27583, Part 18 has been imposed to determine true vapor pressure of renewable diesel on a weekly basis. Any other materials loaded that do not qualify for the exemption will be subject to sections of the rule cited above. Similarly, Regulation 8, Rule 33 would only apply for gasoline loading activities.

S-1025 will no longer be subject to 40 CFR 63 Subpart CC, NESHAP from Petroleum Refineries, because the facility will no longer be classified as a petroleum refinery. Subpart CC referenced the requirements of Subpart R via §63.650(a). After the completion of this project, gasoline loading racks will be directly subject to 40 CFR 63 Subpart R, NESHAP for Gasoline Distribution Facilities. The facility will continue to be subject to provisions of 40 CFR 60 Subpart XX, NSPS for Bulk Gasoline Terminals, as directed by §63.422(a), but will not be an affected facility directly subject to 40 CFR 60 Subpart XX.

S-1025 will not be subject to 40 CFR 63 Subpart EEEE, NESHAP for Organic Liquids Distribution (Non-Gasoline). S-1025 and the associated transport vehicles and containers will be used for shipments of gasoline and renewable diesel products, which do not meet the definition of organic liquid at §63.2406 for purposes of Subpart EEEE. In addition, this equipment is an affected facility for Subpart R (for gasoline). If gasoline vapors are present in any truck used for loading of a non-regulated material, the requirements from Subpart R will apply. Therefore, the Bulk

Plant Truck Bottom Loading Rack (S-1025) will not be subject to Subpart EEEE per §63.2338(c)(1). Loading or unloading of naphtha is not expected at this location.

S-1025 will be subject to 40 CFR 63 Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing for loading of renewable diesel, though it will meet the definition of “Group 2 transfer rack” due to containing organic HAP with an average partial pressure of less than 1.5 psia (per definition at §63.2550). Controls will not be required for loading of renewable diesel under 40 CFR 63 Subpart FFFF.

Source S-1463

Existing storage tank S-1463 will be repurposed from storing crude and gas oil to storing renewable feedstock only. S-1463 is exempt from permitting requirements under Regulation 2, Rule 1, Permits Adopted, General Requirements per Section 2-1-123.3.6, which exempts the storage and loading of tallow and vegetable oils, etc. In addition, S-1463 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

This tank is subject to a limited exemption contained in Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids except for Section 8-5-307.3 because tank contents have a true vapor pressure of less than 25.8 mm Hg (0.5 psia) in accordance with 8-5-117. S-1463 is expected to comply with Section 8-5-307.3, which requires that the sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

Currently tank S-1463 is subject to 40 CFR 60, Subpart Kb, NSPS for Volatile Organic Liquid Storage Vessels. Upon completion of this project, S-1463 will not be subject to Subpart Kb and will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because renewable feedstock only contains HAP as impurities, therefore S-1463 will not be considered a storage tank for the purposes of the Subpart.

Sources S-1464 and S-1465

Existing diesel tanks S-1464 and S-1465 will be converted to store renewable diesel. Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids will continue to apply as follows:

Regulation 8, Rule 5

- Section 100 – Description, Applicability
General description, exemptions, and limited exemptions for Regulation 8, Rule 5.
- Section 300 – Standards
 - Section 301 – Storage Tanks Control Requirements
The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure. These external floating roof tanks are expected to comply with this requirement.
 - Section 304 – Requirements for External Floating Roof Tanks
An external floating roof must meet the requirements for floating roof fittings, primary and secondary seals, and roof/shell must be in good operating condition.
 - Section 320 – Floating Roof Tank Fitting Requirements
All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
 - Section 321 – Primary Seal Requirements
The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
 - Section 322 – Secondary Seal Requirements

The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.

- Section 328 – Tank Degassing Requirements
A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
- Section 331 – Tank Cleaning Requirements
Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- Section 332 – Sludge Handling Requirements
The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- Section 400 – Administrative Requirements
Inspection requirements for floating roof tanks, pressure relief devices, and abatement efficiency.
- Section 500 – Monitoring and Records
The operator shall keep accurate operating records, maintenance records, and source test records.

Currently tanks S-1464 and S-1465 are subject to 40 CFR 60, Subpart Kb, NSPS for Volatile Organic Liquid Storage Vessels. Upon completion of this project these tanks will remain subject to Subpart Kb but will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because renewable diesel only contains HAPs as impurities, therefore they will not be considered a storage tank for the purposes of Subpart FFFF.

Marathon intends to retain the ability to store diesel in Tanks S-1464 and S-1465, though Marathon anticipates that the tanks will be primarily used to store renewable diesel. Diesel is exempted from the definition of organic liquid at §63.2406 of Subpart EEEE; therefore, Subpart EEEE does not apply.

§63.2435(d) addresses scenarios in which the predominant use of a storage vessel is associated with a miscellaneous organic chemical manufacturing process, and the storage tank is not part of an affected source under a subpart of Part 63. It is anticipated that Marathon will identify the predominant use of Tank S-1464 and S-1465 as renewable diesel storage and comply with Subpart FFFF via §63.2435(d) during periods when diesel is stored in each tank. In this scenario, each tank would meet the definition of a Group 2 storage vessel under Subpart FFFF due to insufficient vapor pressure from organic HAPs.

When storing diesel, S-1464 and S-1465 would be subject to Subpart Kb, though the vapor pressure (less than 0.2 psia per Permit Condition 17477, Parts D2 and E2) is less than the applicability criteria at §60.112b(b).

Source S-1468

Spent caustic tank S-1468 will not change service as a result of this project. S-1468 is exempt from permitting requirements under Regulation 2, Rule 1, Permits Adopted, General Requirements per Section 2-1-123.3.2 since the materials stored have an initial boiling point greater than 302F and the initial boiling point exceeds the storage temperature by at least 180°F. In addition, S-1468 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

This tank is subject to a limited exemption contained in Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids except for Section 8-5-307.3 because tank contents have a true vapor pressure of less than 25.8 mm Hg (0.5 psia) in accordance with 8-5-117. S-1468 is expected to comply with Section 8-5-307.3, which requires that the sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

Currently tank S-1468 is a Group 2 tank. Upon completion of this project the tank will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because spent caustic only contains HAPs as impurities, therefore S-1468 will not be considered a storage tank for the purposes of the Subpart.

Sources S-1511 and S-1512

As part of the project, Delayed Coker Heater #1 (S-1511) will be reconfigured to function as a hot oil heater for the Pretreatment Unit with Delayed Coker Heater #2 (S-1512) as a backup. S-1511 and S-1512 will undergo operational changes (i.e., from operating as process heaters to operating as a “steam generating unit” as defined under Subpart Db, NSPS for Industrial-Commercial-Institutional Steam Generating Units) and will trigger Subpart Db requirements as a “modification.”

S-1511 and S-1512 are currently subject to and will continue to comply with the following Air District Regulations:

Regulation 1, General Provisions & Definitions

- Section 1-520 – Continuous Emission Monitoring
Install continuous emission monitoring as required by Regulations 10, 12, and 2-1-403.
- Section 1-522 – Continuous Emission Monitoring and Recordkeeping Procedures
Continuous emission monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on excess of any emission standard to which the source is required to conform.
- Section 1-523 – Parametric Monitoring and Recordkeeping Procedures
Continuous parametric monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on any violation of permit conditions or District regulations to which the source is required to conform.
- Section 1-602 – Area and Continuous Monitoring Requirements
The procedures for selection and placement, installation scheduling, performance testing, reporting, records retention and instrument calibration are detailed in the Manual of Procedures.

Regulation 6, Rule 1, Particulate Matter – General Requirements

- Section 114 – Limited Exemption, Total Suspended Particulate (TSP) Emission Limits for Fuel Combustion
Sections 6-1-310.2 and 311.2 shall not apply to particulate matter emissions from gas-, liquid- and solid-fuel fired indirect heat exchangers, including furnaces, heaters, boilers, gas turbines and supplemental fuel-fired heat recovery steam generators and gas-fuel fired control devices that control only gaseous emissions
- Section 301 – Ringelmann Number 1 Limitation
The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
- Section 305 – Visible Particles
The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
- Section 310.1 – Total Suspended Particulate Concentration Limits
No person shall emit TSP from any source in excess of 343 mg per dscm (0.15 gr per dscf) of exhaust gas volume.
- Section 601 – Applicability of Test Methods
The common test methods cited in Regulation 6 shall apply to this Rule, including the methods cited in Regulation 6-601: Assessment of Visible Emissions, and Regulation 6-602: Assessment of Opacity.

S-1511 and S-1512 received an Authority to Construct subject to BACT requirements for NOx on or after January 5, 1994; therefore, S-1511 and S-1512 are exempt from Regulation 9, Rule 10, Inorganic Gaseous Pollutants –

Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators, and Process Heaters in Refineries, per Regulation 9-10-110.6.

S-1511 and S-1512 will be subject to and expected to comply with Subpart Db. The steam generating unit will be subject to emissions limits for NO_x per §60.44b(l)(1) and will use a CEMS to monitor for NO_x in accordance with §60.48b(1). The steam generating unit will be exempt from emissions limits for SO₂ per §60.42b(k)(2) and exempt from emissions limits for PM because the limits at §60.43b do not apply to a steam generating unit that only fires gaseous fuels. In addition, S-1511 and S-1512 are currently subject to 40 CFR 60 Subpart J, NSPS for Petroleum Refineries but will no longer apply as a result of the project.

Sources S-1511 and S-1512 are currently subject to and expected to continue to comply with 40 CFR 63, Subpart DDDDD, NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. Permit Condition #27583, Part 8 has been imposed for Marathon to demonstrate that fuel gas qualifies as an “other gas 1 fuel”, as defined in §63.7575, in accordance with procedures established in §63.7521(f). All applicable requirements shall be included and enforceable through the Title V permit. Per Permit Condition #27583, Part 8, after sampling is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.

Source S-1554

Heavy gas oil tank S-1554 will be converted to store renewable feedstock only. S-1554 is exempt from permitting requirements under Regulation 2, Rule 1, Permits Adopted, General Requirements per Section 2-1-123.3.6, which exempts the storage and loading of tallow and vegetable oils, etc. In addition, S-1554 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

This tank is subject to a limited exemption contained in Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids except for Section 8-5-307.3 because tank contents have a true vapor pressure of less than 25.8 mm Hg (0.5 psia) in accordance with 8-5-117. S-1554 is expected to comply with Section 8-5-307.3, which requires that the sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

Currently tank S-1554 is subject to 40 CFR 60, Subpart Kb, NSPS for Volatile Organic Liquid Storage Vessels. Upon completion of this project, S-1554 will not be subject to Subpart Kb and will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because renewable feedstock only contains HAP as impurities, therefore S-1554 will not be considered a storage tank for the purposes of the Subpart.

Source S-1560

The Avon Wharf Berth 1A (S-1560) is currently subject to and will continue to comply with the following sections of Regulation 8, Rule 44, Organic Compounds – Marine Tank Vessel Operations:

- Section 110 – Exemption, Small Loading Events
Sections 8-44-301 through 305 of this rule shall not apply to loading events of less than 1,000 barrels.
- Section 111 – Exemption, Marine Vessel Fueling
Sections 8-44-301 through 305 of this rule shall not apply to the loading of organic liquids associated with the fueling (bunkering) of marine vessels.
- Section 115 – Exemption, Safety/Emergency Operations
Nothing in this rule shall be construed to require any act or omission that would be in violation of any regulation or other requirement of the United States Coast Guard or prevent any act or omission that is necessary to secure the safety of a vessel or for saving life at sea.
- Section 116 – Limited Exemption, Equipment Leaks

The requirements of Section 8-44-305 shall not apply to any source that is subject to the leak standards of Regulation 8, Rule 18.

- Section 301 – Limitations on Marine Tank Vessel Loading and Lightering
The facility shall not load a regulated organic liquid into a cargo tank of a marine tank vessel or load any liquid into a cargo tank of a marine tank vessel when the tank's prior cargo was a regulated organic liquid within the District or District Waters unless emissions from the loading event are controlled in accordance with the requirements of Section 8-44-304.
- Section 302 – Limitations on Marine Tank Vessel Ballasting
Within the District or District Waters, the facility shall not ballast into a cargo tank for which the prior cargo was a regulated organic liquid unless emissions are controlled in accordance with the requirements of Section 8-4-304.
- Section 303 – Limitations on Marine Tank Vessel Venting
Within the District or District Waters, the facility shall not vent a cargo tank containing a regulated organic liquid or for which the prior cargo was a regulated organic liquid unless emissions are controlled in accordance with the requirements of Section 8-4-304.
- Section 304 – Emission Control Requirements
Limit emissions of organic compounds to 5.7 grams per cubic meter (2 lbs per 1000 bbls) of organic liquid loaded, or reduce emissions by at least 95 percent by weight from uncontrolled conditions; and use emission control equipment that is designed and operated to collect and process all organic compound emissions from the loading, ballasting, or venting operation.
- Section 305 – Equipment Leaks
The owner or operator of a marine terminal or marine vessel shall maintain all equipment associated with the operation up to, but not including, the first connection at the vessel being loaded such that three drops per minute of any liquid leak and 1,000 ppm for any gaseous leak are not exceeded.
- Section 403 – Notification Regarding Safety/Emergency Exemption
The owner or operator of a marine terminal or marine tank vessel shall notify the APCO in writing within 48 hours to invoke the exemption in Section 8-44-115.
- Section 501 – Record Keeping – Marine Terminals
The owner or operator of a marine terminal shall maintain specified records of each loading event of any organic liquid, ballasting operation, and venting operation.
- Section 502 – Record Keeping – Marine Tank Vessels
The owner, operator, or agent for a marine tank vessel shall maintain specified records of each lightering operation, ballasting operation, and venting operation.
- Section 503 – Recordkeeping – Exemptions
A facility that performs an operation and that seeks exemption for that operation under Sections 8-44-110 or 111 shall maintain specified records of each loading event.
- Section 504 – Burden of Proof
Facilities seeking to demonstrate compliance with Section 8-44-304 must maintain adequate test data and provide verification opportunities to the APCO on request.
- Section 601 – Determination of Emission Factors and Emission Control Equipment Efficiencies
Emission factors of organic compounds, or the emission reduction efficiency of a control device shall be determined during the final 50% of the loading event, or for at least 6 hours during the final 50% of the loading event.
- Section 603 – Leak Determinations
Measurements of organic compounds leaking in violation of Section 8-44-305.1 or 305.2 shall be made in accordance with EPA Reference Method 21 (40 CFR 60, Appendix A), or by an alternate method approved in writing by the APCO and U.S. EPA.
- Section 604 – Flash Point Determinations
Measurements of flash point required by this rule shall be in accordance with ASTM Standard Test Method D56 or ASTM Standard Test Method D93, whichever is applicable, or by an alternate method approved in writing by the APCO and U.S. EPA.

S-1560 will be subject to and will continue to comply with 40 CFR 63 Subpart Y, NESHAPS for Marine Vessel Loading of Organic Liquid. After implementation of this project, S-1560 will no longer be subject to 40 CFR 63 Subpart CC, NESHAP from Petroleum Refineries, because the facility will no longer be classified as a petroleum refinery. NSPS are not applicable.

Source S-1600

Components in VOC service supporting source S-1600 (Foul Water Strippers) are subject to Regulation 8, Rule 18, Organic Compounds – Equipment Leaks. New and replaced fugitive components associated with these sources are subject to the more stringent Regulation 2, Rule 2, BACT leak concentration requirement of 100 ppm, more frequent monitoring than Regulation 8, Rule 18, and offset requirements. Offsets require that the LDAR program be used to verify compliance with an emissions limit on a quarterly basis. S-1600 will comply with the following Sections of Regulation 8, Rule 18:

- **Section 101 – Description**
The purpose of this Rule is to limit emissions of total organic compounds from equipment leaks at refineries, chemical plants, bulk plants, and bulk terminals including, but not limited to: valves, connectors, pumps, compressors, pressure relief devices, diaphragms, hatches, sight-glasses, fittings, sampling ports, meters, pipes, and vessels.
- **Section 300 – Standards**
Standard requirements for valves, pumps, compressors, connections, pressure relief devices, non-repairable equipment, liquid leak, alternative compliance, open-ended valve or line, recurrent leaks, and mass emissions. The facility shall not use any equipment that leaks total organic compounds in excess of 100 ppm unless the leak has been discovered by the operator, minimized within 24 hours and repaired within 7 days. Pumps and compressors are subject to the 100 ppm limit per BACT (Regulation 2-2) whereas this rule contains a 500 ppm leak standard for these component types.
- **Section 400 – Administrative Requirements**
Administrative requirements for inspections, identification of components, and inspection schedules.
- **Section 500 – Monitoring and Records**
Monitoring and records requirements for portable hydrocarbon detector, identification records, inspection and leak records, and non-repairable equipment records.

In addition, S-1600 is subject to and expected to comply with facility-wide applicable requirements of the following Sections of Regulation 9, Rule 1, Inorganic Gaseous Pollutants – Sulfur Dioxide and Regulation 9, Rule 2, Inorganic Gaseous Pollutants – Hydrogen Sulfide:

Regulation 9, Rule 1, Inorganic Gaseous Pollutants – Sulfur Dioxide

- **Section 110 – Conditional Exemption, Area Monitoring**
The 300 ppm limitation of Section 9-1-302 shall not apply to a person who meets the requirements of subsections 9-1-110.1 and 110.2, provided such person has complied with those requirements prior to January 1, 1980.
- **Section 301 – Limitations on Ground Level Concentrations**
The facility shall not emit from sources other than ships, sulfur dioxide in quantities which result in ground level concentrations in excess of 0.5 ppm continuously for 3 consecutive minutes or 0.25 ppm averaged over 60 consecutive minutes, or 0.05 ppm averaged over 24 hours.
- **Section 313 – Sulfur Removal Operations at Refineries**
The facility shall not operate a refinery processing more than 20,000 barrels per stream day of crude oil or other alternative feedstock unless one of the specified requirements is met.
- **Section 313.2 –**
There is a sulfur removal and recovery system that removes and recovers, on a refinery wide basis, 95% of the H₂S from the refinery fuel gas, that removes and recovers, on a refinery wide basis, 95% of the H₂S from the process water streams, and removes 95% of the ammonia from the process water streams, provided, however, any refinery which removes sulfurous compounds containing sulfur equivalent of

16.5 tons or more of elemental sulfur in any one day shall install a sulfur recovery plant or a sulfuric acid plant.

- Section 501 – Area Monitoring Requirements
A facility subject to Section 9-1-301 shall comply with the monitoring, maintenance, records, and reporting requirements of Regulation 1, including Sections 1-510, 1-530, 1-540, 1-542, 1-543 and 1-544.
- Section 604 – Ground Level Monitoring
The monitoring requirements for ground level concentrations of sulfur dioxide, including siting procedures and instrument specifications, calibration, and maintenance procedures, are described in the Manual of Procedures.

Regulation 9, Rule 2, Inorganic Gaseous Pollutants – Hydrogen Sulfide

- Section 110 – Exemptions
The limitations of this Rule shall not apply to concentrations of hydrogen sulfide occurring on the property where the emissions occur providing that such property, from the emission point to the point of any such concentrations, is controlled by the person responsible for the emission.
- Section 301 – Limitations on Hydrogen Sulfide
The facility shall not emit during any 24 hour period, hydrogen sulfide in such quantities as to result in ground level concentrations in excess of 0.06 ppm averaged over three consecutive minutes or 0.03 ppm averaged over any 60 consecutive minutes.
- Section 501 – Area Monitoring Requirements
The APCO may require any person emitting hydrogen sulfide from any source to comply with the monitoring, maintenance, records and reporting requirements of Regulation 1, including Sections 1-510, 1-530, 1-540, 1-542, 1-543, and 1-544. The APCO shall notify the affected person in writing that this requirement is being imposed.
- Section 601 – Ground Level Monitoring
The monitoring requirements for ground level concentrations of hydrogen sulfide, including siting procedures and instrument specifications, calibration and maintenance procedures, are described in the Manual of Procedures.

Sources S-2001 and S-2025

Sources S-2001 (Stage 1 Wastewater Treatment Unit) and S-2025 (Pretreatment Unit) are new sources that will be subject to Regulation 8, Rule 18, Organic Compounds – Equipment Leaks. New and replaced fugitive components associated with these sources are subject to the more stringent Regulation 2, Rule 2, BACT leak concentration requirement of 100 ppm, more frequent monitoring than Regulation 8, Rule 18, and offset requirements. Offsets require that the LDAR program be used to verify compliance with an emissions limit on a quarterly basis. S-2001 and S-2025 will comply with the following Sections of Regulation 8, Rule 18:

- Section 101 – Description
The purpose of this Rule is to limit emissions of total organic compounds from equipment leaks at refineries, chemical plants, bulk plants, and bulk terminals including, but not limited to: valves, connectors, pumps, compressors, pressure relief devices, diaphragms, hatches, sight-glasses, fittings, sampling ports, meters, pipes, and vessels.
- Section 300 – Standards
Standard requirements for valves, pumps, compressors, connections, pressure relief devices, non-repairable equipment, liquid leak, alternative compliance, open-ended valve or line, recurrent leaks, and mass emissions. The facility shall not use any equipment that leaks total organic compounds in excess of 100 ppm unless the leak has been discovered by the operator, minimized within 24 hours and repaired within 7 days. Pumps and compressors are subject to the 100 ppm limit due to BACT (Regulation 2-2) whereas this rule contains a 500 ppm leak standard for these component types.
- Section 400 – Administrative Requirements
Administrative requirements for inspections, identification of components, and inspection schedules.
- Section 500 – Monitoring and Records

Monitoring and records requirements for portable hydrocarbon detector, identification records, inspection and leak records, and non-repairable equipment records.

S-2025 will also be subject to Regulation 8, Rule 10 – Process Vessel Depressurization, and will comply with the following Sections of Regulation 8, Rule 10:

- Section 8-10-301 – Process Vessel Depressurizing
Emissions of organic compounds from depressurizing any process vessel at a refinery or a chemical plant shall be controlled by venting them to a fuel gas system, firebox, incinerator, thermal oxidizer, flare, or otherwise containing and treating them so as to prevent their emissions to the atmosphere.
- Section 8-10-302 – Opening of Process Vessels
No process vessel may be opened to the atmosphere except as provided in 302.1 or 302.2.
- Section 8-10-302.1 –
No process vessel may be opened to the atmosphere unless the internal concentration of total organic compounds has been reduced prior to release to atmosphere to less than 10,000 parts per million (ppm), expressed as methane (C1).
- Section 8-10-302.2 –
A process vessel at a refinery or chemical plant may be opened when the internal concentration of total organic compounds is 10,000 ppm or greater provided that specified requirements are met.
- Section 8-10-401 – Reporting
The annual report shall be submitted by February 1 of each year.
- Section 8-10-501 – Monitoring
Any vessel subject to this rule shall be monitored for the concentration of total organic compounds prior to opening and once per day during the time the vessel is open to the atmosphere.
- Section 8-10-502 – Concentration Measurement
The meter used to measure the concentration of total organic compound emissions shall meet the accuracy requirements specified in EPA Method 21.
- Section 8-10-503 – Records
Any facility subject to the provisions of this rule shall keep records of (1) date, time, type of activity, and duration of depressurization and vessel opening, (2) the type of service, size and name or vessel identification number, (3) the measured total organic compound concentration and calculated mass emissions from each depressurized vessel, and (4) the number and size of any air movers used to assure compliance with confined space entry requirements.
- Section 8-10-601 – Monitoring Procedures
The procedures used to monitor emissions are set forth in EPA Method 21.

These sources will be subject to 40 CFR 63 Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing for any equipment in OHAP service greater than 5 percent by weight. The sources will comply with equipment leak requirements under Subpart FFFF by monitoring non-pressure relief device components according to 40 CFR 63 Subpart UU, NESHAP for Equipment Leaks – Control Level 2 Standards, and pressure relief devices according to Subpart FFFF as required by §63.2480(e).

Source S-2002

New Tank S-2002 will be used to store antifoam material for wastewater treatment. The tank is exempt from permitting under Sections 2-1-301 and 2-1-302 of Regulation 2, Rule 1, Permits Adopted, General Requirements due to Section 2-1-123.2 – tanks, vessels, and pumping equipment used exclusively for the storage or dispensing of any aqueous solution that contains less than 1 percent by weight of organic compounds. In addition, S-2002 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

This tank is also subject to limited exemption contained in Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids except for Section 8-5-307.3 because tank contents have a true vapor pressure of less than 25.8 mm Hg in accordance with 8-5-117. S-2002 is expected to comply with Section 8-5-307.3, which requires that the

sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

Tank S-2002 will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because antifoam material only contains HAP as impurities, therefore S-2002 will not be considered a storage tank for the purposes of Subpart FFFF.

Source S-2003

S-2003 (DAF Unit) is a new source that will be subject to Regulation 8, Rule 8, Organic Compounds – Wastewater (Oil-Water) Separators. S-2003 will comply with the following sections of Regulation 8, Rule 8:

- Section 101 – Description
The purpose of this Rule is to limit the emissions of organic compounds from wastewater collection and separation systems that handle liquid organic compounds from industrial processes.
- Section 303 – Gauging and Sampling Devices
Any compartment or access hatch shall have a vapor tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.
- Section 307.1 – Air Flotation Units
A solid, gasketed, fixed cover totally enclosing the air flotation and pre-air-flotation-unit flocculation tank, chamber, or basin (compartment) liquid contents, with all cover openings closed, except when the opening is being used for inspection, maintenance, or wastewater sampling. The cover may include an atmospheric vent or pressure/vacuum valve. Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps greater than 0.32 cm (0.125 inch) occur in the roof or between the roof and wall; and that the access doors and other openings are closed and gasketed properly.
- Section 503 – Inspection and Repair Records
Records of inspections and repairs shall be retained and made available for Inspection by the APCO.
- Section 602 – Determination of Emissions
Emissions of organic compounds shall be measured as prescribed by any of the following methods: 1) BAAQMD Manual of Procedures, Volume IV, ST-7, 2) EPA Method 25, or 25A), or 3) any other method approved by the APCO.

S-2003 is not wastewater collection system components as defined in Section 8-8-230; therefore, Sections 8-8-312, -313, and -314 do not apply. In addition, there are no junction boxes associated with S-2003; therefore, Section 8-8-308 does not apply.

NSPS is not applicable. Wastewater requirements under 40 CFR 63 Subpart FFFF, NESHAP for miscellaneous organic chemical manufacturing may apply to S-2003. As previously discussed, Marathon will determine applicability and compliance requirements under Subpart FFFF via Permit Condition #27583, Part 7. Marathon does not anticipate generating any Group 1 wastewater streams, and as such §63.138 would not apply to S-2003. After sampling is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.

Per §63.2485(c), a process wastewater stream in Group 1 for compounds in tables 8-9 to Subpart FFFF if any of the conditions are met:

1. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in table 8 to this subpart is greater than or equal to 200 lb/yr.

2. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min.
3. The combined total annual average concentration of compounds in tables 8 and 9 to this subpart is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to this subpart is greater than or equal to 1 tpy.

Source S-2004

Sodium Hypochlorite tank S-2004 will not change service due to this project. The tank is exempt from permitting under Sections 2-1-301 and 2-1-302 of Regulation 2, Rule 1, Permits Adopted, General Requirements due to Section 2-1-123.2 – tanks, vessels, and pumping equipment used exclusively for the storage or dispensing of any aqueous solution that contains less than 1 percent by weight of organic compounds. In addition, S-2004 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

S-2004 is not subject to Regulation 8-5 per section 101 since it will not be storing materials that contain organic liquids.

Tank S-2004 will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because sodium hypochlorite is not a HAP, therefore S-2004 will not be considered a storage tank for the purposes of the Subpart.

Source S-2005

New tank S-2005 will be used to store demulsifier for feed pre-treatment. The tank is exempt from permitting under Sections 2-1-301 and 2-1-302 of Regulation 2, Rule 1, Permits Adopted, General Requirements due to Section 2-1-123.2 – tanks, vessels, and pumping equipment used exclusively for the storage or dispensing of any aqueous solution that contains less than 1 percent by weight of organic compounds. In addition, S-2005 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

This tank is also subject to a limited exemption contained in Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids except for Section 8-5-307.3 because tank contents have a true vapor pressure of less than 25.8 mm Hg (0.5 psia) in accordance with 8-5-117. S-2005 is expected to comply with Section 8-5-307.3, which requires that the sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

Tank S-2005 will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because the demulsifier is not a HAP, therefore S-2005 will not be considered a storage tank for the purposes of Subpart FFFF.

Source S-2006

New tank S-2006 will be used to store fresh caustic. The tank is exempt from permitting under Sections 2-1-301 and 2-1-302 of Regulation 2, Rule 1, Permits Adopted, General Requirements due to Section 2-1-123.2 – tanks, vessels, and pumping equipment used exclusively for the storage or dispensing of any aqueous solution that contains less than 1 percent by weight of organic compounds. In addition, S-2006 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

S-2006 is not subject to Regulation 8-5 per section 101 since it will not be storing materials that contain organic liquids.

Tank S-2006 will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because fresh caustic is not a HAP, therefore S-2006 will not be considered a storage tank for the purposes of Subpart FFFF.

Sources S-2007 and S-2008

Diesel tanks S-2007 and S-2008 will be converted to store R99 renewable diesel. These tanks are exempt from permitting under Sections 2-1-301 and 2-1-302 of Regulation 2, Rule 1, Permits Adopted, General Requirements due to Section 2-1-123.3.2 – storage or loading of organic liquids where the initial boiling point of the organics is greater than 302°F and exceeds the actual storage temperature by at least 180°F. They will continue to store diesel during refinery idling operations. In addition, S-2007 and S-2008 will both satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

These tanks are also subject to a limited exemption contained in Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids except for Section 8-5-307.3 because tank contents have a true vapor pressure of less than 25.8 mm Hg (0.5 psia) in accordance with 8-5-117. S-2007 and S-2008 are expected to comply with Section 8-5-307.3, which requires that the sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

Tanks S-2007 and S-2008 will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because renewable diesel only contains HAP as impurities, therefore they will not be considered a storage tank for the purposes of Subpart FFFF.

Source S-2009

Renewable Feedstock Unloading Rack S-2009 is a new source used for unloading renewable feedstocks from railcars. It will be exempt from permitting per Regulation 2-1-123.3.6 for loading equipment used exclusively for loading of tallow and vegetable oils. In addition, S-2009 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

It is not subject to Regulation 8, Rule 6, Terminals and Bulk Plants because the material unloaded is exempt due to low vapor pressure (less than 0.5 psia) per 8-6-110.

It is not subject to 40 CFR 63 Subpart EEEE, NESHAP from Organic Liquids Distribution (Non-Gasoline), because renewable feedstocks do not meet the definition of organic liquid due to insufficient HAP concentration. It is not subject to 40 CFR 63 Subpart FFFF, NESHAP from Miscellaneous Organic Chemical Manufacturing because the rule regulates loading activities, but not unloading activities.

Source S-2010 (formerly S-1496)

Heavy naphtha tank S-1496 will be converted to a wastewater equalization tank S-2010. Since the existing source will no longer operate as a storage tank and instead operate as a wastewater processing unit, this is considered a new source. The Air District will archive S-1496 and assign a new source number for the MBBR (S-2010). In addition to Regulation 2-2, S-2010 will be subject to the following Regulation 8, Rule 8, Organic Compounds – Wastewater Collection and Separation Systems, sections:

Regulation 8, Rule 8, Organic Compounds – Wastewater Collection and Separation Systems

- Section 101 – Description
The purpose of this Rule is to limit the emissions of organic compounds from wastewater collection and separation systems that handle liquid organic compounds from industrial processes.
- Section 303 – Gauging and Sampling Devices
Any compartment or access hatch shall have a vapor tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.
- Section 503 – Inspection and Repair Records
Records of inspections and repairs shall be retained and made available for Inspection by the APCO.

- Section 504 – Portable Hydrocarbon Detector
Any instrument used for the measurement of organic compounds shall be a gas detector that meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21.
- Section 602 – Determination of Emissions
Emissions of organic compounds shall be measured as prescribed by any of the following methods: 1) BAAQMD Manual of Procedures, Volume IV, ST-7, 2) EPA Method 25, or 25A), or 3) any other method approved by the APCO.
- Section 603 – Inspection Procedures
Leaks shall be measured using a portable gas detector as prescribed in EPA Reference Method 21.

S-2010 is not a wastewater collection system component as defined in Section 8-8-230; therefore, Sections 8-8-312, -313, and -314 do not apply. Furthermore, Section 8-8-306 isn't applicable since this source doesn't contain any of the equipment covered by section 306.

As previously discussed, Marathon will determine applicability and compliance requirements under Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing, via Permit Condition #27583, Part 7. Marathon does not anticipate generating any Group 1 wastewater streams, and as such §63.133 would not apply to S-2010. After sampling is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.

Per §63.2485(c), a process wastewater stream in Group 1 for compounds in tables 8-9 to Subpart FFFF if any of the conditions are met:

1. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in table 8 to this subpart is greater than or equal to 200 lb/yr.
2. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min.
3. The combined total annual average concentration of compounds in tables 8 and 9 to this subpart is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to this subpart is greater than or equal to 1 tpy.

Sources S-2011 and S-2012

Cetane tanks S-2011 and S-2012 will be converted to store fossil diesel. These tanks are exempt from permitting under Sections 2-1-301 and 2-1-302 of Regulation 2, Rule 1, Permits Adopted, General Requirements due to Section 2-1-123.3.2 – storage or loading of organic liquids where the initial boiling point of the organics is greater than 302°F and exceeds the actual storage temperature by at least 180°F. In addition, S-2011 and S-2012 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

These tanks are also subject to a limited exemption contained in Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids except for Section 8-5-307.3 because tank contents have a true vapor pressure of less than 25.8 mm Hg (0.5 psia) in accordance with 8-5-117. S-2011 and S-2012 are expected to comply with Section 8-5-307.3, which requires that the sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

Tanks S-2011 and S-2012 will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because fossil diesel only contains HAP as impurities, therefore they will not be considered a storage tank for the purposes of Subpart FFFF.

Source S-2013 (formerly S-432)

Existing storage tank S-432 will be repurposed to function as a moving bed biofilm reactor (MBBR) in the new Stage 1 Wastewater Treatment Unit, and it will be disconnected from A-14 Vapor Recovery. Since the existing source will no longer operate as a storage tank and instead operate as a wastewater processing unit, this is considered a new source. The Air District will archive S-432 and assign a new source number for the MBBR (S-2013). S-2013 is considered a secondary treatment process per Regulation 8-8-208. S-2013 is not a wastewater collection system component as defined in Section 8-8-230; therefore, Sections 8-8-312, -313, and -314 do not apply. S-2013 will be subject to the following Air District Regulations:

Regulation 8, Rule 8, Organic Compounds – Wastewater Collection and Separation Systems

- Section 101 – Description
The purpose of this Rule is to limit the emissions of organic compounds from wastewater collection and separation systems that handle liquid organic compounds from industrial processes.
- Section 113 – Exemption, Secondary Wastewater Treatment Processes
The requirements of Sections 8-8-301, 302, 306, and 308 shall not apply to any secondary wastewater treatment processes or stormwater sewer systems that are used as a wastewater polishing step or for collection of stormwater that is segregated from the process wastewater collection system.
- Section 303 – Gauging and Sampling Devices
Any compartment or access hatch shall have a vapor tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.
- Section 503 – Inspection and Repair Records
Records of inspections and repairs shall be retained and made available for Inspection by the APCO.
- Section 504 – Portable Hydrocarbon Detector
Any instrument used for the measurement of organic compounds shall be a gas detector that meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21.
- Section 602 – Determination of Emissions
Emissions of organic compounds shall be measured as prescribed by any of the following methods: 1) BAAQMD Manual of Procedures, Volume IV, ST-7, 2) EPA Method 25, or 25A), or 3) any other method approved by the APCO.
- Section 603 – Inspection Procedures
Leaks shall be measured using a portable gas detector as prescribed in EPA Reference Method 21.

NSPS is not applicable. Wastewater requirements under 40 CFR 63 Subpart FFFF, NESHAP for miscellaneous organic chemical manufacturing may apply to S-2013. As previously discussed, Marathon will be required to determine applicability and compliance requirements under Subpart FFFF via Permit Condition #27583, Part 7. Marathon does not anticipate generating any Group 1 wastewater streams, and as such §63.138 would not apply to S-2013. After sampling is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.

Per §63.2485(c), a process wastewater stream in Group 1 for compounds in tables 8-9 to Subpart FFFF if any of the conditions are met:

1. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in table 8 to this subpart is greater than or equal to 200 lb/yr.
2. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min.

3. The combined total annual average concentration of compounds in tables 8 and 9 to this subpart is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to this subpart is greater than or equal to 1 tpy.

Sources S-2014 and S-2015

Sodium Sulfide Tank No. 1 (S-2014) and Sodium Sulfide Tank No. 2 (S-2015) are new exempt sources under Rule 2-1-123.2 for "Tanks, vessels and pumping equipment used exclusively for the storage or dispensing of any aqueous solution which contains less than 1 percent by weight of organic compounds." Sodium sulfide does not contain any organic compounds. In addition, both S-2014 and S-2015 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

The storage tanks are not subject to Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids, or 40 CFR 60 Subpart Kb, NSPS for Volatile Organic Liquid Storage Vessels because sodium sulfide does not meet the definition of an organic liquid.

The storage tanks are not subject to 40 CFR 63 Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because the liquids do not contain organic HAP.

Sources S-2016 and S-2017

Neutralization Tanks S-2016 and S-2017 are existing sources that will be newly listed as exempt from permitting requirements based on Regulation 2, Rule 1, Permits Adopted, General Requirements, Section 2-1-123.2. The tanks are used to store predominantly stripped sour water, an aqueous solution which contains less than 1 percent organic compounds. In addition, S-2016 and S-2017 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

These tanks are also subject to a limited exemption contained in Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids except for Section 8-5-307.3 because tank contents have a true vapor pressure of less than 25.8 mm Hg (0.5 psia) in accordance with 8-5-117. S-2016 and S-2017 are expected to comply with Section 8-5-307.3, which requires that the sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

S-2016 and S-2017 will be subject to the following Regulation 8, Rule 8, Organic Compounds – Wastewater Collection and Separation Systems, sections:

Regulation 8, Rule 8, Organic Compounds – Wastewater Collection and Separation Systems

- Section 101 – Description
The purpose of this Rule is to limit the emissions of organic compounds from wastewater collection and separation systems that handle liquid organic compounds from industrial processes.
- Section 303 – Gauging and Sampling Devices
Any compartment or access hatch shall have a vapor tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.
- Section 503 – Inspection and Repair Records
Records of inspections and repairs shall be retained and made available for Inspection by the APCO.
- Section 504 – Portable Hydrocarbon Detector
Any instrument used for the measurement of organic compounds shall be a gas detector that meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21.
- Section 602 – Determination of Emissions

Emissions of organic compounds shall be measured as prescribed by any of the following methods: 1) BAAQMD Manual of Procedures, Volume IV, ST-7, 2) EPA Method 25, or 25A), or 3) any other method approved by the APCO.

- Section 603 – Inspection Procedures

Leaks shall be measured using a portable gas detector as prescribed in EPA Reference Method 21.

S-2016 and S-2017 are not wastewater collection system components as defined in Section 8-8-230; therefore, Sections 8-8-312, -313, and -314 do not apply. In addition, there are no junction boxes associated with S-2016 and S-2017; therefore, Section 8-8-308 does not apply.

Tanks S-2016 and S-2017 will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because wastewater storage tanks are not considered a storage tank for the purposes of the Subpart.

As previously discussed, Marathon will determine applicability and compliance requirements under Subpart FFFF for wastewater via Permit Condition #27583, Part 7. Marathon does not anticipate generating any Group 1 wastewater streams, and as such §63.133 would not apply to S-2016 or S-2017. After sampling is complete the Air District will confirm compliance with any applicable regulations and add any associated additional conditions as necessary to maintain compliance with any applicable regulatory requirements prior to issuance of the permit to operate.

Per §63.2485(c), a process wastewater stream in Group 1 for compounds in tables 8-9 to Subpart FFFF if any of the conditions are met:

1. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in table 8 to this subpart is greater than or equal to 200 lb/yr.
2. The total annual average concentration of compounds in table 8 to this subpart is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min.
3. The combined total annual average concentration of compounds in tables 8 and 9 to this subpart is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to this subpart is greater than or equal to 1 tpy.

Source S-2018

Sulfuric Acid Storage Tank S-2018 is a new source that will be exempt from permitting requirements based on Regulation 2, Rule 1, Permits Adopted, General Requirements, Section 2-1-123.2.1. The tank is used to store an aqueous solution which contains less than 1 percent organic compounds, sulfuric acid with an acid strength of less than 99 percent by weight (Regulation 123.2.1). In addition, S-2018 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

S-2018 is not subject to Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids, 40 CFR 60 Subpart Kb, or 40 CFR 63 Subpart FFFF because it does not contain any organic compounds.

Source S-2019

Coagulant Storage Tank S-2019 is a new source that will be exempt from permitting requirements based on Regulation 2, Rule 1, Permits Adopted, General Requirements, Section 2-1-103, Source not Subject to any District Rule.

103.1: Source is not in a source category subject to the provisions of Regulation 6, 8 excluding rules 1-4, or Regulation 9 through 12.

103.2: Source is not subject to Sections 2-1-316 through 2-1-319 (see below).

103.3: Representative SDSs for the potential DAF coagulants do not contain POCs/NPOCs. Therefore, the tank does not emit criteria pollutants and thus the emissions are inherently less than 10 pounds per highest day.

103.4: Source is not considered an ozone generator (less than 1 lb/day or more of ozone).

316.1: Emissions of TACs do not exceed any trigger levels.

316.2: Pursuant to the representative SDSs, this tank will not store HAP-containing materials, so the emissions will be less than the associated HAP emission thresholds.

317: Source is not expected to cause public nuisance conditions.

318: Source will not emit air contaminants in quantities greater than the thresholds listed in 2-1-318.1-318.8.

319: Source will not emit air contaminants in quantities greater than 5 tpy.

S-2019 is not subject to Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids; 40 CFR 60 Subpart Kb, NSPS for Volatile Organic Liquid Storage Vessels; or 40 CFR 63 Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because it does not contain organic compounds.

The tank is not subject to Regulation 8, Rule 8, Organic Compounds, Wastewater (Oil-Water) Separators since this tank does not handle wastewater; it stores the coagulant additive chemicals that are fed to the wastewater treatment system.

Source S-2022

Urea Storage Tank S-2022 is a new source that will be exempt from permitting requirements based on Regulation 2, Rule 1, Permits Adopted, General Requirements, Section 2-1-123.2. The tank is used to store an aqueous solution which contains less than 1 percent organic compounds. In addition, S-2022 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

S-2022 is not subject to Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids; 40 CFR 60 Subpart Kb, NSPS for Volatile Organic Liquid Storage Vessels; or 40 CFR 63 Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because it does not contain organic compounds.

Source S-2023

Polymer Storage Tank S-2023 is a new source subject to permitting requirements specified under Regulation 2, Rule 1, Permits Adopted, General Requirements, 2-1-301 and -302. The stored material contains VOC and is therefore subject to Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids. S-2023 will comply with the following sections:

Regulation 8, Rule 5

- Section 117 – Limited Exemption, Low Vapor Pressure
The provisions of this rule, except for Section 8-5-307.3, shall not apply to tanks storing organic liquids with a true vapor pressure of less than or equal to 0.5 psi.
- Section 307.3 – Requirements for Fixed Roof Tanks, Pressure Tanks and Blanketed Tanks
The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
- Section 501 – Records
The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.

S-2023 is not subject to 40 CFR Subpart Kb, NSPS for Volatile Organic Liquid Storage Vessels because its volume (1,000 gallons) is less than applicable thresholds. S-2023 is not subject to 40 CFR 63 Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because it will not contain any listed organic HAPs.

Source S-2024

Phosphoric Acid Storage Tank S-2024 is a new source that will be exempt from permitting requirements specified under Regulation 2, Rule 1, Permits Adopted, General Requirements, Sections 2-1-301 and -302 based on Section 2-1-123.2.2. Specifically, this tank is used to store phosphoric acid with a strength less than 99 percent by weight (Section 2-1-123.2.2). In addition, S-2024 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

Source S-2026

Weak Acid Storage Tank S-2026 is a new source that will be exempt from permitting requirements specified under Regulation 2, Permits Adopted, General Requirements, Sections 2-1-301 and -302 based on Section 2-1-123.2. Specifically, the acid stored in this tank will contain less than 1 percent by weight organic compounds. In addition, S-2026 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

Source S-2028

Diesel storage tank S-2028 will be converted to store renewable diesel. This tank is exempt from permitting under Regulation 2, Rule 1, Permits Adopted, General Requirements, Sections 2-1-301 and 2-1-302 of due to 2-1-123.3.2 – storage or loading of organic liquids where the initial boiling point of the organics is greater than 302°F and exceeds the actual storage temperature by at least 180°F. In addition, S-2028 will satisfy the requirements of Regulation 2-1-319 to qualify for the exemption.

This tank is also subject to a limited exemption contained in Regulation 8, Rule 5, Organic Compounds – Storage of Organic Liquids except for Section 8-5-307.3 because tank contents have a true vapor pressure of less than 25.8 mm Hg (0.5 psia) in accordance with 8-5-117. S-2028 is expected to comply with Section 8-5-307.3, which requires that the sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

Tank S-2028 will be exempt from requirements under 40 CFR 63, Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing because renewable diesel only contains HAP as impurities, therefore it will not be considered a storage tank for the purposes of the Subpart.

7.2 California Environmental Quality Act (CEQA)

Notice of Determination:

Contra Costa County has plenary land use authority over this Project and is the Lead Agency under the California Environmental Quality Act (CEQA) for this project. Contra Costa County has prepared an Environmental Impact Report (EIR) for the Project. On February 17, 2021, the County released a Notice of Preparation and held a scoping meeting on March 15, 2021. On October 14, 2021, the County posted a Notice of Availability for the Draft Environmental Impact Report (DEIR). The comment period began on October 18, 2021 and was extended to December 17, 2021. The Air District submitted comments on the DEIR, including recommendations to improve the efficacy and enforceability of Mitigation Measures AQ-1 and AQ-2, which were accepted by the Contra Costa County. The Final EIR was presented to the County Planning Commission for adoption on March 23, 2022 and was appealed. The Final EIR was certified by the Contra Costa Board of Supervisors on May 3, 2022 pursuant to the provisions of CEQA. The EIR identified certain potentially significant environmental impacts that could occur as a result of the Project. The Final EIR and associated documents for the Project are available to the general public for review at the Contra Costa County Community Development Department, 651 Pine Street, 4th Floor, North Wing, Martinez, CA, 94553, or online at <https://www.contracosta.ca.gov/7961/Martinez-Refinery-Renewable-Fuels-Projec>.

The Air District is a Responsible Agency under CEQA for the Project. The Air District reviewed and considered Contra Costa County's EIR for the Project pursuant to CEQA and based on the EIR has made its own findings regarding the project as required by CEQA. The Air District found that certain significant environmental impacts could occur as a result of the Project. For each such impact: (i) changes or alterations have been required in

and/or incorporated into the Project which avoid or substantially lessen the significant impacts; (ii) changes or alterations within the responsibility and jurisdiction of other public agencies have been (or can and should be) adopted by such other agencies; and/or (iii) there are specific economic, legal, social, technological, and other considerations that make it infeasible to impose mitigation measures or alternatives addressed in the Final EIR. In approving the Conditional Use Permit for this Project, Contra Costa County adopted mitigation measures as a condition of the approval and adopted a Mitigation Monitoring and Reporting Program. However, potentially significant and unavoidable impacts remain after mitigation. The Air District has determined that the significant and unavoidable adverse impacts of the Project as documented in the Final EIR are acceptable in light of the specific economic, legal, social, technological and other benefits of the project, which outweigh the significant and unavoidable adverse impacts. The Air District bases this conclusion about the Project's overriding considerations on the evidence and analysis provided in the County's Final EIR and its detailing of the Project's benefits in the County's Statement of Overriding Considerations, and on the Air District's own analysis of the Project and its impacts and benefits.

The Air District will file with the Contra Costa County Clerk a Notice of Determination and CEQA Findings, Supporting Facts and Statement of Overriding Considerations for the Project pursuant to CEQA Guidelines Sections 15091, 15093, and 15096. A draft of the Air District's CEQA Findings, Supporting Facts and Statement of Overriding Considerations and Notice of Determination for the project can be found in Appendix M.

7.3 School Notification

This project is over 1,000 feet from the nearest K-12 school, and is therefore not subject to the public notification requirements.

7.4 Prevention of Significant Deterioration (PSD)

Major facility review is triggered if the emissions increase or net emissions increase is above the significance thresholds of PSD for attainment pollutants. As shown in Appendix K, the emissions increase is below the significance thresholds; therefore, this project is not a PSD project as defined in Regulation 2-2-224.

7.5 Public Notification

Regulation 2-1-412

Public notice is required if an application for an authority to construct or permit to operate for (i) a new or modified source located within 1000 feet of the outer boundary of a K-12 school site and which results in the increase in emissions of any substance into the ambient air which has been identified by the California Air Resources Board or the APCO as a toxic air contaminant or a hazardous air contaminant or which is on the list required to be prepared pursuant to subdivision (a) of Section 25532 or Section 44321 subsections (a) to (f) inclusive of the Health and Safety Code, or (ii) a new or modified source located within an Overburdened Community as defined in Section 2-1-243 and for which a Health Risk Assessment is required pursuant to Section 2-5-401. This project is over 1,000 feet from the nearest K-12 school, and is therefore not subject to the public notification requirements for proximity close to a school. However, this is an application for new and modified sources located within an Overburdened Community and a Health Risk Assessment is required; therefore, public notice is required prior to approving this application.

Pursuant to Regulation 2-1-412, a public notice will be prepared for a 30-day public comment period. The Air District will review and consider all comments received during the 30 days public comment period, and shall include written responses to the comments in the permit application file prior to taking final action on the application.

Regulation 2-2-404

Public notice is required if an application is for (i) a new major facility or a major modification of an existing major facility, (ii) any new facility, or a modification to any existing facility will involve an increase in emissions in an amount that is significant as defined in Section 2-2-227.2, or (iii) a PSD Project. This application is not a major modification of an existing major facility, does not involve an increase in emissions in an amount that is significant, and not a PSD project; therefore, public notice is not triggered per Regulation 2-2-204.

Regulation 2-4-405

Public notice is required for banking applications of any emission reduction in excess of 40 tons per year of any pollutant. This is not a banking application; therefore, public notice is not triggered per Regulation 2-4-405.

Regulation 2-6-412

Public notice is required for major facility review permit issuance of any proposed initial issuance, significant revision or five-year renewal of a major facility review permit. Marathon has submitted a major facility review application (Application No. 30769) for a significant revision to the Title V permit. This application is not a major facility review application; therefore, public notice is not triggered per Regulation 2-6-412.

8.0 Permit Conditions

See Appendix J.

9.0 Title V Permit

This facility is a major facility that operates pursuant to, and in compliance with, a federal operating permit, aka Title V permit, pursuant to Regulation 2, Rule 6, Major Facility Review. Marathon submitted Application No. 30769 for a significant revision to the Title V permit. The Statement of Basis will be completed during the Title V application review.

10.0 Recommendation

The Air District has reviewed the material contained in the permit application for the proposed project and has made a preliminary determination that the project is expected to comply with all applicable requirements of Air District, state, and federal air quality-related regulations. The preliminary recommendation is to issue an Authority to Construct for the equipment listed below. However, the proposed sources are located within an Overburdened Community and a Health Risk Assessment is required for this project, which triggers the public notification requirements of Air District Regulation 2-1-412. After the comments are received and reviewed, the Air District will make a final determination on the permit.

I recommend that the Air District initiate a public notice and consider any comments received prior to taking any final action on issuance of an Authority to Construct for the following sources/abatement devices:

Source/ Abatement No.*	Source/Abatement Description	Permit Action
S-115	Bulk Plant (truck/rail); Caustic waste; 4 Loading Arms	Authority to Construct
S-323	Tank A-323, Slop Oil, A14 Vapor Recovery; 924,000 gallons	Authority to Construct
S-598	Tank A-598, Renewable Naphtha; 478,000 gallons	Authority to Construct
S-601	Tank A-601, Recovered Oil, Gas Oil; 714,000 gallons	Authority to Construct
S-613	Tank A-613, Vapor Storage Tank, A14 Vapor Recovery; 420,000 gallons	Authority to Construct
S-621	Tank A-621, Intermediate HDO Product; 3,360,000 gallons	Authority to Construct
S-650	Tank A-650, Sour Waste Water; 5,502,000 gallons	Authority to Construct
S-651	Tank A-651, Oil/Water Mixture, Sour Waste Water; 5,502,000 gallons	Authority to Construct
S-652	Tank A-652, Renewable Naphtha; 512,000 gallons	Authority to Construct
S-656	Tank A-846, Foul Water Stripper Charge Tank, Sour Waste Water; 126,000 gallons; A-12 Vapor Recovery, A-14 Vapor Recovery	Authority to Construct
S-658	Tank A-847, Foul Water Stripper Charge Tank, Sour Waste Water, 126,000 gallons; A-12 Vapor Recovery, A-14 Vapor Recovery	Authority to Construct

Source/ Abatement No.*	Source/Abatement Description	Permit Action
S-692	Tank A-692, Gasoline, Renewable Naphtha Storage Tank; 2,352,000 gallons	Authority to Construct
S-695	Tank A-695, Renewable Naphtha; 1,071,000 gallons	Authority to Construct
S-699	Tank A-699, API Separator Recovered Oil; 777,000 gallons, A-14 Vapor Recovery	Authority to Construct
S-700	Tank A-700, API Separator Sludge; 84,000 gallons	Authority to Construct
S-819	API Oil-Water, Separator/Dissolved Nitrogen Flotation System; 436,677 bbl/day, 43,800,348 bbl/year, Abated by A-39 Thermal Oxidizer or A-14 Vapor Recovery	Authority to Construct
S-830	Wastewater Surge Ponds; 319,476 bbl/day, 35,522,066 bbl/year	Authority to Construct
S-831	Bio-Oxidation Pond, Open pond; 319,476 bbl/day, 35,522,066 bbl/year	Authority to Construct
S-842	Wastewater Treatment Plant Clarifiers, filters, and granular activated carbon; 319,476 bbl/day, 35,522,066 bbl/year	Authority to Construct
S-846	Diesel HDO Unit No. 3 (formerly No. 3 HDS Unit) Cooling Tower; 6,500 gallons/min	Authority to Construct
S-850	Diesel HDO Unit No. 3 (formerly No. 3 HDS Unit); 23,000 bbl/day	Authority to Construct
S-854	East Air Flare	Authority to Construct
S-919	No. 2 HDS Depent Reboiler (F19); 65 MMBtu/hr	Authority to Construct
S-920	No. 2 HDS Charge Heater (F20); 63 MMBtu/hr	Authority to Construct
S-928	HDN Reactor A Heater (F28); 20 MMBtu/hr	Authority to Construct
S-929	HDN Reactor B Heater (F29); 20 MMBtu/hr	Authority to Construct
S-930	HDN Reactor C Heater (F30); 20 MMBtu/hr	Authority to Construct
S-931	Hydrocracker Reactor 1 Heater (F31); 20 MMBtu/hr	Authority to Construct
S-932	Hydrocracker Reactor 2 Heater (F32); 20 MMBtu/hr	Authority to Construct
S-933	Hydrocracker Reactor 3 Heater (F33); 20 MMBtu/hr	Authority to Construct
S-934	Hydrocracker Stabilizer Reboiler (F34); 135 MMBtu/hr	Authority to Construct
S-937	Hydrogen Plant Heater (F37); 743 MMBtu/hr	Authority to Construct
S-944	North Steam Flare	Authority to Construct
S-945	South Steam Flare	Authority to Construct
S-973	No. 3 HDS Recycle Gas Heater (F55); 20 MMBtu/hr, Abated by A-31 SCR	Authority to Construct
S-976	No. 5 Gas Plant Cooling Tower; 64,500 gallons/min	Authority to Construct
S-978	Foul Water Stripper Cooling Tower; 5,200 gallons/min	Authority to Construct
S-980	Diesel HDO Unit No. 1 and Diesel Isomerization Unit (formerly Hydrocracker) Cooling Tower; 14,028 gallons/min	Authority to Construct
S-982	Diesel HDO Unit No. 2 (formerly No. 2 HDS) Cooling Tower; 18,000 gallons/min	Authority to Construct
S-985	No. 1 Gas Plant Cooling Tower; 5,500 gallons/min	Authority to Construct
S-992	Emergency Flare	Authority to Construct
S-1002	Propane Dryers (formerly No. 1 HDS Unit); 6,000 bbl/day	Authority to Construct
S-1003	Diesel HDO Unit No. 2 (formerly No. 2 HDS Unit); 20,000 bbl/day	Authority to Construct
S-1005	No. 1 Hydrogen Plant; 93 MMscf/day, 31,025 MMscf/year	Authority to Construct

Source/ Abatement No.*	Source/Abatement Description	Permit Action
S-1007	Diesel Isomerization Unit (formerly 2nd Stage Hydrocracker Unit); 58,000 bbl/day	Authority to Construct
S-1008	Diesel HDO Unit No. 1 (formerly 1st Stage Hydrocracker Unit); 24,000 bbl/day	Authority to Construct
S-1012	West Air Flare	Authority to Construct
S-1025	Bulk Plant; Bottom Loading Facilities, A-14 Vapor Recovery; 20 Loading Arms	Authority to Construct
S-1026	DNF Effluent Air Stripper, Abated by A-39 Thermal Oxidizer; 4,000 cfm	Authority to Construct
S-1464	Tank A-868, Diesel, R100 Renewable Diesel Storage Tank; 4,200,000 gallons	Authority to Construct
S-1465	Tank A-869, Diesel, R100 Renewable Diesel Storage Tank; 4,200,000 gallons	Authority to Construct
S-1511	Hot Oil Heater #1 (F78), Abated by A-1511 SCR; 230 MMBtu/hr	Authority to Construct
S-1512	Hot Oil Heater #2 (F79), Abated by A-1512 SCR; 230 MMBtu/hr	Authority to Construct
S-1517	Coker Flare	Authority to Construct
S-1526	No. 5 Gas Plant, Abated by A2001 H2S Adsorption Vessels; 40 MMscf/day	Authority to Construct
S-1560	Avon Wharf Berth No. 1A, Marine Bulk Plant with A1560 Vapor Recovery System; 15 Loading Arms	Authority to Construct
S-1564	Tank A-938 Avon Wharf Recovered Oil Tank, Berth 1A; 3,800 gallons	Authority to Construct
S-1600	Foul Water Strippers; 1,400 gpm, Abated by A2002 H2S Adsorption Vessels and A2000 Sour Water Stripper Thermal Oxidizer	Authority to Construct
S-2001	Stage 1 Wastewater Treatment Unit; 600 gallon/minute (Max Daily), 450 gallons/minute (Annual Average)	Authority to Construct
S-2003	DAF Unit; 600 gallon/minute (Max Daily), 450 gallons/minute (Annual Average)	Authority to Construct
S-2010	Tank A-876, Stage 1 WWTP, Equalization Tank (formerly S-1496); 600 gallon/minute (Max Daily), 450 gallons/minute (Annual Average)	Authority to Construct
S-2013	Tank A-432, Moving Bed Biofilm Reactor (formerly S-432); 600 gallon/minute (Max Daily), 450 gallons/minute (Annual Average)	Authority to Construct
S-2023	Tank TK-1044, Polymer Storage Tank; 1,000 gallons	Authority to Construct
S-2025	Pretreatment Unit; 48,000 bbl/day	Authority to Construct
A-2000	Sour Water Stripper Off-Gas Thermal Oxidizer; 1.91 MMBtu/hr	Authority to Construct
A-2001	H2S Adsorption Vessels #1 (No. 5 Gas Plant); 28,000 scfm	Authority to Construct
A-2002	H2S Adsorption Vessels #2 (Sour Water Stripper); 140 dscfm	Authority to Construct
S-19 (Plant #21200)	B19 Tank (from Plant #14629), Renewable Diesel Storage Tank; 2,604,000 gallons	Authority to Construct
S-21 (Plant #21200)	Tank B-21 (from Plant #14629), Renewable Diesel Storage Tank; 2,604,000 gallons	Authority to Construct

*Source and abatement device numbers are associated with Plant #14628, unless otherwise specified.

I recommend that the Air District initiate a public notice and consider any comments received prior to taking any final action on the Certificate of Exemption for the following sources:

Source/ Abatement No.*	Source/Abatement Description	Permit Action	Exemption Citation (Regulation)
S-126	LPG Truck Loading Rack; 16 Loading Arms	Certificate of Exemption	2-1-123.3.1
S-127	LPG Tank Car Loading Rack; 10 Loading Arms	Certificate of Exemption	2-1-123.3.1
S-517	Tank A-517, Renewable Feedstock (Clean); 3,154,000 gallons	Certificate of Exemption	2-1-123.3.6
S-620	Tank A-620, Renewable Feedstock (Raw); 3,360,000 gallons	Certificate of Exemption	2-1-123.3.6
S-622	Tank A-622, R100 Renewable Diesel Storage Tank; 3,360,000 gallons	Certificate of Exemption	2-1-123.3.2
S-648	Tank A-648, Renewable Propane Tank; 42,000 gallons	Certificate of Exemption	2-1-123.3.1
S-649	Tank A-649, Renewable Propane Tank; 42,000 gallons	Certificate of Exemption	2-1-123.3.1
S-666	Tank A-666, Renewable Propane Tank; 45,000 gallons	Certificate of Exemption	2-1-123.3.1
S-667	Tank A-667, Renewable Propane Tank; 45,000 gallons	Certificate of Exemption	2-1-123.3.1
S-668	Tank A-668, Renewable Propane Tank; 45,000 gallons	Certificate of Exemption	2-1-123.3.1
S-669	Tank A-669, Renewable Propane Tank; 42,000 gallons	Certificate of Exemption	2-1-123.3.1
S-670	Tank A-670, Renewable Propane Tank; 45,000 gallons	Certificate of Exemption	2-1-123.3.1
S-873	Tank A-895, Renewable Feedstock (Raw); 4,074,000 gallons	Certificate of Exemption	2-1-123.3.6
S-1463	Tank A-867, Renewable Feedstock; 10,080,000 gallons	Certificate of Exemption	2-1-123.3.6
S-1468	Tank A-877, Spent Sulfidic Caustic; 1,008,000 gallons	Certificate of Exemption	2-1-123.3.2
S-1554	Tank A-943, Renewable Feedstock (Clean); 2,761,000 gallons	Certificate of Exemption	2-1-123.3.6
S-2002	Tank TK-1048, Antifoam Tank; 1,000 gallons	Certificate of Exemption	2-1-123.2
S-2004	Tank TK-845, Sodium Hypochlorite Tank; 1,861 gallons	Certificate of Exemption	2-1-123.2
S-2005	Tank MTK-10162, Demulsifier Tank; 1,800 gallons	Certificate of Exemption	2-1-123.2
S-2006	Tank TK-958, Fresh Caustic Storage Tank; 7,715 barrels	Certificate of Exemption	2-1-123.2
S-2007	Tank A-905, R99 Renewable Diesel Storage Tank; 131,000 barrels	Certificate of Exemption	2-1-123.3.2
S-2008	Tank A-933, R99 Renewable Diesel Storage Tank; 131,000 barrels	Certificate of Exemption	2-1-123.3.2
S-2009	Renewable Feedstock Unloading Rack; 8 Loading Arms	Certificate of Exemption	2-1-123.3.6
S-2011	Tank A-981, Fossil Diesel Storage Tank; 190 barrels	Certificate of Exemption	2-1-123.3.2
S-2012	Tank A-961, Fossil Diesel Storage Tank; 190 barrels	Certificate of Exemption	2-1-123.3.2
S-2014	Sodium Sulfide Tank No. 1; 8,700 gallons	Certificate of Exemption	2-1-123.2
S-2015	Sodium Sulfide Tank No. 2; 8,700 gallons	Certificate of Exemption	2-1-123.2
S-2016	Neutralization Tank T-796, FRT; 23,600 gallons	Certificate of Exemption	2-1-123.2
S-2017	Neutralization Tank T-797, FRT; 23,600 gallons	Certificate of Exemption	2-1-123.2
S-2018	Tank TK-1036, Sulfuric Acid Tank; 2,100 gallons	Certificate of Exemption	2-1-123.2.1
S-2019	Tank TK-10193, Coagulant Tank; 8,700 gallons	Certificate of Exemption	2-1-103
S-2022	Tank TK-10198, Urea Storage Tank; 8,700 gallons	Certificate of Exemption	2-1-123.2
S-2024	Tank TK-1035, Phosphoric Acid Tank; 3,000 gallons	Certificate of Exemption	2-1-123.2.2
S-2026	Tank NV-406, Weak Acid Tank Storage Tank; 74,850 gallons	Certificate of Exemption	2-1-123.2

Source/ Abatement No.*	Source/Abatement Description	Permit Action	Exemption Citation (Regulation)
S-2028	Tank A-932, FRT, R99 Renewable Diesel Storage Tank; 96,000 barrels	Certificate of Exemption	2-1-123.3.2
S-55 (Plant #14629)	Amorco Terminal; 21 Loading Arms	Certificate of Exemption	2-1-123.3.2

*Source and abatement device numbers are associated with Plant #14628, unless otherwise specified.

11.0 Appendices

- Appendix A – Draft Marathon Martinez Fuel Gas System
- Appendix B – Draft Process Heaters Emissions Calculation
- Appendix C – Draft Summary of Storage Tanks Emissions Calculation
- Appendix D – Draft Fugitive Emissions Calculation
- Appendix E – Draft Loading Operations Emissions Calculation
- Appendix F – Draft TOXCHEM Modeling Results for Wastewater Treatment Equipment
- Appendix G – Draft Transportation Emissions (Marine Vessels, Trucks, Rails)
- Appendix H – Draft Tank Calculation Printouts
- Appendix I – Draft BACT Analyses
- Appendix J – Draft Permit Conditions
- Appendix K – Draft Federal Modification Test
- Appendix L – Draft Preliminary Title V Markups
- Appendix M – Draft Air District’s CEQA Findings, Supporting Facts and Statement of Overriding Considerations and Notice of Determination

Prepared by: Danny Nip, Senior Air Quality Engineer
Date: 7/22/2022