State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Tim Davis
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-IN103350083-26

February 5, 2026

Dean Anderson
Tesoro Refining & Marketing Company LLC
474 West 900 North
Salt Lake City, UT 84103
dpanderson@marathonpetroleum.com

Dear Mr. Anderson:

Re: Intent to Approve: Modification to Approval Order DAQE-AN103350075-18 for Installation of Selective Catalytic Reduction and Other Upgrades
Project Number: N103350083

The attached document is the Intent to Approve (ITA) for the above-referenced project. The ITA is subject to public review. Any comments received shall be considered before an Approval Order (AO) is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Future correspondence on this ITA should include the engineer's name, **John Jenks,** as well as the DAQE number as shown on the upper right-hand corner of this letter. John Jenks, can be reached at (801) 536-4459 or jjenks@utah.gov, if you have any questions.

Sincerely,

Jon L. Black (Feb 5, 2026 11:43:48 MST)

Jon L. Black, Manager
New Source Review Section

JLB:JJ:jg

cc: Salt Lake County Health Department
EPA Region 8

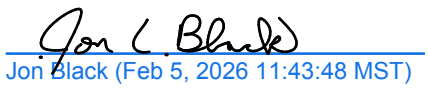
STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

INTENT TO APPROVE
DAQE-IN103350083-26
Modification to Approval Order DAQE-AN103350075-18 for Installation of Selective Catalytic Reduction and Other Upgrades

Prepared By
John Jenks, Engineer
(801) 536-4459
jjenks@utah.gov

Issued to
Tesoro Refining & Marketing Company LLC - Salt Lake City Refinery

Issued On
February 5, 2026



New Source Review Section Manager
Jon L. Black

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name
Tesoro Refining & Marketing Company LLC

Source Name
Tesoro Refining & Marketing Company LLC - Salt Lake City Refinery

Mailing Address
474 West 900 North
Salt Lake City, UT 84103

Physical Address
474 West 900 North
Salt Lake City, UT 84103

Source Contact
Name: Brian Mitchell
Phone: (801) 606-2165
Email: bamitchell2@marathonpetroleum.com

UTM Coordinates
423,400 m Easting
4,515,950 m Northing
Datum NAD27
UTM Zone 12

SIC code 2911 (Petroleum Refining)

SOURCE INFORMATION

General Description
The Tesoro Salt Lake City Refinery is a petroleum refinery capable of processing 75,000 barrels per day of crude oil.

NSR Classification
Minor Modification at Major Source

Source Classification
Located in Salt Lake City UT $PM_{2.5}$ NAA, Salt Lake County SO_2 NAA
Salt Lake County
Airs Source Size: A

Applicable Federal Standards
NSPS (Part 60), A: General Provisions
NSPS (Part 60), Db: Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
NSPS (Part 60), J: Standards of Performance for Petroleum Refineries
NSPS (Part 60), Ja: Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007
NSPS (Part 60), K: Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978
NSPS (Part 60), Ka: Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and

Prior to July 23, 1984
NSPS (Part 60), Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984
NSPS (Part 60), Kc: Standards of Performance for Volatile Organic Liquid Storage Vessels
NSPS (Part 60), GG: Standards of Performance for Stationary Gas Turbines
NSPS (Part 60), XX: Standards of Performance for Bulk Gasoline Terminals
NSPS (Part 60), GGGa: Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
NSPS (Part 60), NNN: Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations
NSPS (Part 60), QQQ: Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems
NESHAP (Part 61), A: General Provisions
NESHAP (Part 61), M: National Emission Standard for Asbestos
NESHAP (Part 61), FF: National Emission Standard for Benzene Waste Operations
MACT (Part 63), A: General Provisions
MACT (Part 63), CC: National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
MACT (Part 63), UUU: National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units
MACT (Part 63), DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters
Title V (Part 70) Major Source

Project Description
Tesoro Refining & Marketing Company LLC (Tesoro) has submitted an NOI to the UDAQ for planned investments at its Salt Lake City Refinery. The NOI covers the installation of a Selective Catalytic Reduction (SCR) system at the Cogeneration Units to meet the requirements of the moderate ozone State Implementation Plan (SIP). The NOI also covers various other changes at the refinery occurring on a similar schedule. The resulting emissions increase is less than the significant emissions rate for all New Source Review pollutants.

SUMMARY OF EMISSIONS

The emissions listed below are an estimate of the total potential emissions from the source. Some rounding of emissions is possible.

Criteria Pollutant	Change (TPY)	Total (TPY)
CO_2 Equivalent	0	900279.06
Carbon Monoxide	19.55	1405.55
Nitrogen Oxides	-305	333.00
Particulate Matter - PM_{10}	-11.26	270.74
Particulate Matter - $PM_{2.5}$	11.41	165.41

Sulfur Dioxide	-1337	300.00
Volatile Organic Compounds	-15.52	751.48

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Total HAPs (CAS #THAPS)	2840	473540
	Change (TPY)	**Total (TPY)**
Total HAPs	1.42	236.77

PUBLIC NOTICE STATEMENT

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Director.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Salt Lake Tribune and Deseret News on February 8, 2026. During the public comment period, the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing within 15 days of publication, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.3	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
I.4	All records referenced in this AO, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Records shall be kept for a minimum of five (5) years. Records for the Consent Decree, Civil Action No. 2:96 CV 095 RL shall be kept for the life of the Consent Decree. [R307-415-6a]
I.5	The owner/operator shall comply with R307-401-4: General Requirements. [R307-401-4]
I.6	The owner/operator shall comply with R307-150 Series. Inventories [R307-150]
I.7	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]

I.8	The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attn.: NSR Section. [R307-401-18]

SECTION II: PERMITTED EQUIPMENT

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.A THE APPROVED EQUIPMENT

II.A.1	Salt Lake City Refinery
II.A.2	**H-101** Crude Unit Furnace, with ultra-low NO_x burners and one (1) stack, PS #1
II.A.3	**F-1** Ultraformer Unit (UFU) Furnace, with ultra-low NO_x burners and four (4) stacks, PS #2
II.A.4	**F-15** UFU Regeneration Heater, with low NO_x burners and one (1) stack, PS #3
II.A.5	**FCCU/CO Boiler** Fluid Catalytic Cracking Unit (FCCU) Regenerator, Carbon Monoxide Boiler (Heat Recovery Unit), with $CONO_x$ oxygen injection, ammonia injection, electrostatic precipitator (ESP), wet gas scrubber/LoTOx system (WGS), and one (1) stack, PS #4
II.A.6	**F-680 and F-681** Distillate Desulfurization Unit (DDU) charge heater and rerun boiler, combined rating approx. 37.8 MMBtu/hr, equipped with "ultra-ultra" low NO_x burners. Heaters share a common convection section and stack, PS #5.
II.A.7	**K1s** Hydrogen Compressors (Ultraformer compressors), with catalytic converters and two (2) stacks, PS #6
II.A.8	**South Flare** Flare covering Crude/UFU Unit/DDU, Flare gas header routed to FGR system, PS #7
II.A.9	**North Flare** Flare covering FCCU/VRU/Alkylation Unit/GHT Flare gas header routed to FGR system, PS #8
II.A.10	**Modular FGR System (FGR)** Flare gas recovery compressors (electrically driven) and associated equipment
II.A.11	**CO Boiler Bypass** CO Boiler Bypass, with one (1) stack, PS #9

II.A.12	**SRU/TGTU/TGI** Sulfur Recovery Unit/Tail Gas Treatment Unit/Tail Gas Incinerator, PS #10
II.A.13	**FGDU/SWS** Fuel Gas Desulfurization Unit/Sour Water Stripper (FGDU/SWS) Flare (this unit is physically integrated with the Sulfur Recovery Unit (SRU)), PS #11
II.A.14	**T-104** Sour Water Storage Tank
II.A.15	**Emergency/Standby Sources** Waste Water Treatment Plant (WWTP) Generator, Electrical Generators, Plant Air Compressors, Miscellaneous Air Compressors, Fire Water Pumps, B-1 Air Preheater, Package Boilers, Fire House Generator
II.A.16	**F-701** Gasoline Hydrotreater (GHT) Unit with 8.0 MMBtu/hr process heater, new process vessel, and new components in VOC service
II.A.17	**BSU** Benzene Saturation Unit (BSU): 3,000 bpd Bensat reactor and 10,000 bpd reformate splitter.
II.A.18	**CG1 and CG2 (update)** Cogeneration Unit: two (2) cogeneration trains (CG1 and CG2), each with one (1) 12.2 MW (based on an annual average) turbine with SCR (NEW) controls and one (1) heat recovery steam generating unit rated at approx. 157.8 MMBtu/hr (HHV). Both rates are based on an annual average.
II.A.19	**Loading/Unloading Racks**
II.A.20	**Blending Component Loading Rack (BCLR)** Loading rack capacity of 1,000 gallons per minute, controlled by VRU with two (2) carbon adsorption units and supplemental VRU control equipment; new components in VOC service
II.A.21	**Cooling Towers UU2 and UU3** Cooling towers with high-efficiency mist eliminators
II.A.22	**WWTP** Wastewater treatment plant Includes: enclosed API separators, dissolved nitrogen floatation, and carbon vapor controls
II.A.23	**Tank 140: Storage vessel - petroleum liquids** Storage tank with internal floating roof and primary seals
II.A.24	**Tank 141: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.25	**Tank 142: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.26	**Tank 144: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals
II.A.27	**Tank 157: Storage vessel - petroleum liquids** Storage tank with fixed roof

II.A.28	**Tank 158: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.29	**Tank 186: Storage vessel - petroleum liquids** Storage tank with internal floating roof, primary and secondary seals
II.A.30	**Tank 188: Storage vessel - petroleum liquids** Storage tank with internal floating roof, primary and secondary seals
II.A.31	**Tank 189: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.32	**Tank 190: Storage vessel - petroleum liquids** Storage tank with internal floating roof, primary and secondary seals
II.A.33	**Tank 201: Storage vessel - amine** Storage tank with fixed roof
II.A.34	**Tank 204: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.35	**Tank 205: Storage Vessel - Petroleum Liquids** Storage tank with internal floating roof, primary and secondary seals
II.A.36	**Tank 206: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.37	**Tank 212: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.38	**Tank 213: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.39	**Tank 236: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.40	**Tank 241: Storage vessel - surge tank** Storage tank with external floating roof, primary and secondary seals
II.A.41	**Tank 242: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals
II.A.42	**Tank 243: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals
II.A.43	**Tank 244: Storage vessel - petroleum liquids** Storage tank with internal floating roof, primary and secondary seals
II.A.44	**Tank 246: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals
II.A.45	**Tank 247: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals
II.A.46	**Tank 248: Storage Vessel - Petroleum Liquids** Storage tank with internal floating roof, primary and secondary seals

II.A.47	**Tank 252: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals
II.A.48	**Tank 291: Storage vessel - petroleum liquids** Storage tank with fixed roof to be retrofitted with internal floating roof
II.A.49	**Tank 297: Storage vessel - petroleum liquids** Storage tank with internal floating roof and primary seals
II.A.50	**Tank 298: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals
II.A.51	**Tank 307: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals
II.A.52	**Tank 308: Storage vessel - chemicals** Storage tank with external floating roof, primary and secondary seals
II.A.53	**Tank 309: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals (OOS)
II.A.54	**Tank 310: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.55	**Tank 311: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.56	**Tank 312: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.57	**Tank 313: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.58	**Tank 314: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.59	**Tank 315: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.60	**Tank 321: Storage vessel - petroleum liquids** Storage tank with internal floating roof, primary and secondary seals
II.A.61	**Tank 322: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.62	**Tank 323: Storage vessel - petroleum liquids** Storage tank with fixed roof
II.A.63	**Tank 324: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals
II.A.64	**Tank 325: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals
II.A.65	**Tank 326: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals

II.A.66	**Tank 327: Storage vessel - gasoline** Storage tank with external floating roof, primary and secondary seals, and slotted guide pole controls
II.A.67	**Tank 328: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals
II.A.68	**Tank 330: Storage vessel - petroleum liquids** Storage tank with external floating roof, primary and secondary seals
II.A.69	**Tank 331: Storage vessel - petroleum liquids** Storage tank with internal floating roof, primary and secondary seals
II.A.70	**Spent caustic tank**
II.A.71	**SO_2 Cap Sources** Sources included in emissions cap
II.A.72	**NO_x Cap Sources** Sources included in emissions cap
II.A.73	**PM_{10} Cap Sources** Sources included in emissions cap

SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.B REQUIREMENTS AND LIMITATIONS

II.B.1	**Site-wide Requirements**
II.B.1.a	Visible emissions from the stacks of combustion units without controls shall be no greater than 10 percent (%) opacity. Other fugitive emissions (not including fugitive dust) shall not exceed 15% opacity. Compliance shall be determined using opacity observations performed in accordance with 40 CFR 60, Appendix A, Method 9. [R307-309-4, R307-401-8(1)(a)]
II.B.1.b	Visible emissions from the FCCU/CO boiler shall not exceed 20% opacity. Compliance shall be determined using opacity observations performed in accordance with 40 CFR 60, Appendix A, Method 9. Visible emissions from process flares, fugitive dust, and the FCCU (when going through the bypass stack) shall not exceed 20% opacity. Compliance shall be determined using opacity observations performed in accordance with 40 CFR 60, Appendix A, Method 9. [40 CFR 60, R307-309-5, R307-401-8(1)(a)]
II.B.1.c	The owner/operator shall submit to the Director a projection of planned and required process shutdowns for the upcoming calendar year by January 15th of each year. [R307-401]
II.B.1.d	The owner/operator shall control the sulfur pit emissions by continuing to route sulfur pit emissions to the incinerator at the SRU. [R307-401]

II.B.1.e	The owner/operator shall supply no more than one-third of its potential electrical output capacity on an annual basis to any utility power distribution system for sale (on a gross basis). Records of capacity and annual electrical sales shall be maintained. [R307-401]
II.B.1.f	The owner/operator shall install and operate a flare gas recovery system designed to limit hydrocarbon flaring from each of the North Flare and South Flare to levels below the values listed in 40 CFR 60.103a(c), except during periods of startup, shutdown, or malfunction. [40 CFR 60 Subpart Ja, SIP Section IX.H.11]
II.B.1.g	Plant-wide Emission Limits: By no later than January 1, 2019, combined emissions of: A. Total (Filterable+Condensable) PM_{10} shall not exceed 2.25 tons per day, B. NO_x shall not exceed 1.988 tons per day and 475 tons per rolling 12-month period prior to SCR installation and 333 tons per rolling 12-month period post SCR installation, and C. SO_2 shall not exceed 3.1 tons per day and 300 tons per rolling 12-month period. For purposes of this requirement, a "day" is defined as a period of 24 hours commencing at midnight and ending at the following midnight. Compliance with the emission limits shall be determined as outlined in Section IX.H.2. [SIP Section IX.H.2]
II.B.1.h	NO_x emissions to the atmosphere from the indicated emission points shall not exceed the following rates and concentrations. A. Crude Unit Furnace H-101: 0.054 lb/MMBtu B. UFU Furnace F-1: 0.065 lb/MMBtu. [SIP Section IX.H.12.m.i]
II.B.1.h.1	Initial NO_x stack testing has been performed for the Crude Unit Furnace H-101 and UFU Furnace F-1 and shall be conducted at least once within a three (3)-year period from the date of the last stack test. Stack testing shall be performed as outlined in IX.H.11.e. In lieu of the stack testing requirements listed above, any unit equipped with a CEMs shall determine compliance with the emission limits by the CEMs. For units equipped with CEMs, compliance shall be determined on a 30-day rolling average. The CEMs shall operate as outlined in IX.H.11.f. [SIP Section IX.H.12.m.ii and iii]
II.B.1.i	SO_2 emissions from the SRU/TGTU/TGI shall be limited to: A. 1.68 tons per day (tpd) for up to 21 days per rolling 12-month period, and B. 0.69 tpd for the remainder of the rolling 12-month period. [SIP Section IX.H.12.m.vi]
II.B.1.i.1	Daily sulfur dioxide emissions from the SRU/TGTU/TGI shall be determined by multiplying the SO_2 concentration in the flue gas by the mass flow of the flue gas. The sulfur dioxide concentration in the flue gas shall be determined by CEM as outlined in IX.H.11.f. [SIP Section IX.H.12.m.vi]

II.B.2	**Requirements on the BCLR**
II.B.2.a	Total loading at the BCLR shall not exceed 1,460,000 barrels per 12-month rolling period. The owner/operator shall keep a daily record of the material that is loaded. By the twentieth day of each month, both a total of the previous month's loading and a summation of the previous twelve (12) months totals shall be calculated. This summation shall serve as the total per 12-month rolling period listed above. [R307-401-8(1)(a)]
II.B.2.b	The owner/operator shall keep a record of the activated carbon replacements and the occurrence and duration of alternative flaring control. [R307-401-8(1)(a)]
II.B.3	**Conditions on Crude Unit Furnace (H-101)**
II.B.3.a	Emissions of NO_x shall not exceed 0.054 lb/MMBtu on a three (3)-hour average basis. Compliance shall be demonstrated by means of annual NO_x emissions testing as directed in 40 CFR 60 Appendix A, Test Method 7, 7A, 7B, 7C, 7D or 7E. [R307-401]
II.B.4	**Conditions on FCCU/CO Boiler and CO Boiler Bypass**
II.B.4.a	Emissions of NO_x and SO_2 shall not exceed the following values: A. 10 ppmvd NO_x at 0% O_2 on a 365-day rolling average basis B. 20 ppmvd NO_x at 0% O_2 on a 7-day rolling average basis C. 10 ppmvd SO_2 at 0% O_2 on a 365-day rolling average basis D. 18 ppmvd SO_2 at 0% O_2 on a 7-day rolling average basis. NO_x and SO_2 emissions during periods of startup, shutdown, or malfunction of the FCCU, or malfunction of the associated NO_x or SO_2 control equipment, if any, shall not be used in determining compliance with the 7-day NO_x and SO_2 limits established above, provided that during such periods the owner/operator, to the extent practicable, maintains and operates the FCCU, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. The 365-day NO_x and SO_2 limits shall apply at all times. The owner/operator shall use NO_x, SO_2, and O_2 CEMS to monitor performance of the FCCU. CEMS shall be used to demonstrate compliance with the 7-day and 365-day NO_x emission limits established above. The owner/operator shall make CEMS data available to UDAQ or EPA within thirty (30) days of a written request. The owner/operator shall install, certify, calibrate, maintain, and operate all CEMS at the FCCU required by this paragraph in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to COMS) and Part 60 Appendices A and F and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B. [R307-401]
II.B.4.b	The owner/operator shall comply with an SO_2 emission limit of 25 ppmvd @ 0% excess air on a 365-day rolling average basis and 50 ppmvd @ 0% excess air on a 7-day rolling average basis. Compliance with this limit shall be determined by following 40 C.F.R. §60.105a(g). [SIP Section IX.H.11.g.i]

II.B.4.c	The owner/operator shall comply with an emission limit of 1.0 pounds PM per 1000 pounds of coke burned on a three (3)-hour average basis. Compliance with this limit shall be determined by following the stack test protocol specified in 40 C.F.R. §60.106(b) to measure PM emissions from the FCCU. Stack tests shall be conducted once every five (5) years. By no later than January 1, 2019, each owner or operator of an FCCU shall install, operate, and maintain a continuous parameter monitor system (CPMS) to measure and record operating parameters for determination of source-wide $PM_{2.5}$ emissions as appropriate. [SIP Section IX.H.11.g.i]
II.B.4.d	The owner/operator shall comply with the following CO limits at the FCCU: (1) a short-term FCCU CO emission limit of 500 ppmvd CO @ 0% O_2 (one-hour block average); and (2) a long-term FCCU CO emission limit of 100 ppmvd CO @ 0% O_2 (365-day rolling average). CO emissions during periods of startup, shutdown, or malfunction of the FCCU, or malfunction of the associated CO control equipment, if any, shall not be used in determining compliance with the short-term FCCU CO emission limit established above, provided that during such periods Tesoro, to the extent practicable, maintains and operates the FCCU, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. The long-term CO emission limit established above shall apply at all times. The owner/operator shall use a CO and O_2 CEMS to monitor the performance of the FCCU. The owner/operator shall make CEMS data available to UDAQ or EPA within 30 days of a written request. The owner/operator shall install, certify, calibrate, maintain, and operate all CEMS at the FCCU required by this paragraph in accordance with the provisions of 40 C.F.R. § 60.13 that are applicable to CEMS (excluding those provisions applicable only to COMS) and Part 60 Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B. [R307-401]
II.B.4.e	Beginning on October 1, 2015, the FCCU became an "affected facility" as that term is used in 40 C.F.R. Part 60, Subpart Ja for PM and CO in lieu of Subpart J. Beginning on January 1, 2018, the FCCU became an "affected facility" as that term is used in 40 C.F.R. Part 60, Subpart Ja for NO_x, and Subpart Ja for SO_2 in lieu of Subpart J. The owner/operator shall comply with all applicable requirements in 40 C.F.R. Part 60, Subpart Ja at the FCCU. [40 CFR 60 Subpart J, 40 CFR 60 Subpart Ja]
II.B.5	**Conditions on SRU/TGTU/TGI**
II.B.5.a	Gaseous emissions from the SRU shall be treated by the TGTU during normal operations prior to final treatment at the TGI. [R307-401-8]
II.B.5.b	The SO_2 emissions from the SRU/TGTU/TGI will be limited to 1.68 tpd for up to 21 days per rolling 12-month period and will be limited to 0.69 tpd for the remainder of the rolling 12-month period. Compliance with the daily limitation shall be determined as follows: Daily sulfur dioxide emissions from the SRU/TGTU/TGI shall be determined by multiplying the SO_2 concentration in the flue gas by the mass flow of the flue gas. Emissions of SO_2 from the SRU/TGTU/TGI shall not exceed 60 tons per rolling 12-month period. Compliance shall be determined on a 12-month rolling total. Within 20 days of the beginning of each calendar month, the SO_2 emission totals calculated to demonstrate compliance with the daily limitations shall be totaled for the previous month. The monthly total shall be added to the totals from the previous 11 months to determine the new 12-month rolling total. [R307-401]

II.B.5.b.1	The SO_2 concentration in the flue gas shall be determined by a CEM that meets or exceeds the requirements contained in 40 CFR 60, Appendix B, Performance Specification 2. Daily zero (0-20% of span value) and span (50-100% of span value) calibration drift tests shall be conducted in accordance with UAC R307-170. Quarterly cylinder gas audits and an annual relative accuracy test audit shall be conducted in accordance with the procedures outlined in UAC R307-170. 40 CFR 60 Methods 2, 3, and 6 shall be used to determine relative accuracy. If a new monitor is installed, an initial performance specification test shall be performed within 30 days of installation. The performance specification test shall be conducted and data reduced in accordance with the test methods and procedures contained in 40 CFR 60, Appendix B, Performance Specification 2. Notification must be made to the Director prior to conducting the performance specification test. Whenever the SO_2 CEM is bypassed for short periods, SO_2 CEM data from the previous three (3) days will be averaged and used as an emission factor to determine emissions. The mass flow rate of the flue gas shall be determined by a volumetric flow measurement device that meets or exceeds the requirements contained in 40 CFR 60 Appendix B. An annual relative accuracy test audit shall be conducted in accordance with the procedures outlined in UAC R307-170 and 40 CFR 60 Appendix B. If a new volumetric flow measurement device is installed, an initial performance specification test shall be performed within 30 days of installation. The performance specification test shall be conducted and data reduced in accordance with the test methods and procedures contained in 40 CFR 52 Appendix E. Notification must be made to the Director prior to conducting the performance specification test. The owner/operator shall comply with a 95% recovery efficiency requirement for all periods of operation except during periods of startup, shutdown, or malfunction of the SRU/TGTU/TGI. The 95% recovery efficiency will be determined on a daily basis; however, compliance will be determined on a rolling 30-day average basis. Tesoro shall determine the percent recovery by measuring the flow rate and concentration of H_2S in the feed streams going to the SRU and by measuring the SO_2 emissions with the CEMS at the SRU incinerator. The feed streams shall include the overhead stream from the Fuel Gas Desulfurization unit (Amine unit) regenerator and the overhead stream from the Sour Water Stripper. The flow rate will be determined continuously; the H_2S concentration shall be determined at least once every three (3) years (samples may be collected as manual grabs or through remote monitoring). The flow rate and H_2S concentration values will be used to determine the daily feed rate. SRU efficiency results shall be reported to the Director a minimum of once per year. [R307-401]
II.B.6	**Conditions on the Cogeneration Turbines with Heat Recovery Steam Generation CG1 & CG2**
II.B.6.a	A. Emissions to the atmosphere from the cogeneration turbines with heat recovery steam generation CG1 and CG2 shall not exceed 32 ppmdv NO_x (15% O_2 dry). Following installation of the SCR controls on CG1 and CG2 this limit shall no longer apply. B. Upon installation of the SCR controls on CG1 and CG2, but no later than October 1, 2028, emissions to the atmosphere from CG1 and CG2 shall not exceed 5 ppmdv (at 15% O_2 dry). [SIP Section IX.H.12.m.iv, SIP Section IX.H.32]

II.B.6.a.1	The above emission limits apply to steady-state operations when ambient temperature is between 0 °F and 120 °F, not including startup, shutdown, and minimum power load operations. Compliance with the above NO_x concentration limit shall be determined by a stack test following installation of SCR controls on CG1 and CG2 as outlined in SIP Section IX Part H.31.f. Subsequent stack testing shall be conducted at least once within a two (2) year period from the date of the last stack test. Stack testing shall be performed as outlined in SIP Sections IX.H.11.e and IX.H.31.f. In lieu of the stack testing requirements, any unit equipped with a CEMs shall determine compliance with the emission limits by the CEMs. For units equipped with CEMs, compliance shall be determined on a 30-day rolling average. The CEMs shall operate as outlined in IX.H.11.f. [SIP Section IX.H.12.m.iv, SIP Section IX.H.32]
II.B.6.b	Cogeneration Unit Startup/Shutdown/Minimum Power Load Emission Minimization Plan A. Startup and shutdown events shall not exceed 614 hours per 12-month rolling period per turbine B. Cumulative minimum power load operations shall not exceed 421 hours per 12-month rolling period per turbine C. Startup begins when the fuel valves open and natural gas or fuel gas is supplied to the combustion turbines D. Startup ends when the gas temperature is at least 575 °F, and the unit has reached an output of 50% operating load E. Shutdown begins when the unit load or output is reduced below 50% operating load with the intent of removing the unit from service F. Shutdown ends at the cessation of fuel input to the turbine combustor G. Minimum Power Load begins when the turbine generator is less than 50% operating load and the heat recovery steam generation unit is no longer supplemental fired, with the intent to continue operation of the turbine generator at minimum power while maintaining operation of all controls H. Minimum Power Load ends when the turbine generator is greater than 50% operating load J. Turbine output (turbine load) shall be monitored and recorded on an hourly basis with an electrical meter. [SIP Section IX.H.32]
II.B.7	**Wastewater System API Separator Unit**
II.B.7.a	The wastewater system API separator unit shall be equipped with a closed vent system vented to carbon adsorption in compliance with 40 CFR 60 NSPS Subpart QQQ no later than December 31, 2025. [SIP Section IX.H.32]

II.B.8	**Conditions on Tanks**
II.B.8.a	For the primary seals, the accumulated area of gaps between the tank wall and the metallic shoe seal or the liquid-mounted seal shall not exceed 10 square inches per foot of tank diameter. The width of any portion of any gap shall not exceed one and one half inches. If the seal is a vapor-mounted seal, the accumulated area of gaps between the tank wall and seal shall not exceed one square inch per foot of tank diameter, and the width of any portion of any gap shall not exceed one-half inch. This condition applies to Tanks 242, 243, 246, 247, 308, 309, 326, and 330. [R307-327]
II.B.8.b	Tanks 246 and 247 shall be used only to store heavy distillate products with a True Vapor Pressure (TVP) of less than 1.5 psia, such as Jet A fuel. [R307-401-8]
II.B.8.c	For the secondary seals, the accumulated area of gaps between the tank wall and the secondary seal shall not exceed one square inch per foot of tank diameter, and the width of any portion of any gap shall not exceed one-half inch. This condition applies to Tanks 242, 243, 308, 309, 326, and 330. This condition does not apply to Tanks 246 and 247. The secondary seals shall be properly installed and maintained according to the manufacturer's recommendations. [R307-327]
II.B.8.d	The owner/operator shall comply with all applicable parts of R307-327 - Petroleum Liquid Storage. [R307-327]
II.B.8.e	T-104 shall be a fixed-roof vessel with closed vent controls. The tank shall have a closed-vent system with nitrogen purge, and shall vent gases as required by NSPS Kb and/or the approved Control Device Operating Plan per 60.113b(c). The tank shall comply with 40 CFR 60 Subpart Kb. [40 CFR 60 Subpart Kb, R307-401]
II.B.8.f	Tank 321 shall be equipped with secondary seals in compliance with 40 CFR 63 MACT Subpart CC no later than May 1, 2026. [SIP Section IX.H.32]

PERMIT HISTORY

This Approval Order shall supersede (if a modification) or will be based on the following documents:

Supersedes	AO DAQE-AN103350075-18 dated January 11, 2018
Is Derived From	NOI dated January 30, 2025
Incorporates	Additional Information Received dated July 31, 2025

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by Environmental Protection Agency to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent - Title 40 of the Code of Federal Regulations Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal Division of Air Quality use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - Title 40 of the Code of Federal Regulations 52.21 (b)(49)(i)
GWP	Global Warming Potential - Title 40 of the Code of Federal Regulations Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds