

**Data Base Summary (Statement of Basis)**

**PSD Permit**

Type of Permit Action: PSD-Major Modification

PSD or Not	Minor or Title V	Portable or Not
Major w/BACT	Major-Title V	Stationary

**Facility:** HF Sinclair Navajo Refining LLC (“Artesia Refinery”)  
**Company:** HollyFrontier Navajo Refining LLC  
**Facility Type:** O&G-Refinery  
**Permit No. (NSR)** PSD-195-M40  
**Operating Permit No. (TV)** P051-R3 through R3M2  
**Agency Interest No.** 198 - PRN20210005  
**AIRS ID No.** 350150010  
**SIC CODE:** 2911: Petroleum refining  
**Permit Writer:** James E. Nellesen

**Application Notarized Date:** September 2, 2021  
**Receive Date:** September 9, 2021  
**Timeliness of TV Application:** NA  
**Ruled Incomplete:** October 7, 2021  
**Ruled Complete:** October 27, 2022  
**APP. sent to Field Office:** October 28, 2022  
**Public involvement Plan (PIP):** November 1, 2022  
**PSD APP. Sent to EPA:** November 9, 2022  
**Public Notice Date & Newspaper:** November 10, 2022  
**Comments Due:** December 12, 2022  
**Analysis Review Begins:** March 21, 2023  
**Analysis Review Ends:** April 20, 2023  
**Public Hearing:** TBD  
**Proposed Permit to EPA Acknowledged:** NA  
**Permit Due:** April 25, 2023  
**Permit Issued:** TBD  
**PSD Permit to EPA:** March 21, 2023

**Facility Location:** This facility is located on Main Street in Artesia, New Mexico, Eddy County. 32.842611, -104.395167  
**UTM Zone:** 13 ; **Datum:** NAD83  
**UTM Easting:** 557,021 meters  
**UTM Northing:** 3,633,819 meters  
**Elevation:** 3365 ft  
**County:** Eddy

**Contact Name:** Kawika Tupou  
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**Email:** Kawika.Tupou@HFSinclair.com

**Contact Address:** 501 East Main  
PO Box 159  
Artesia, NM 882110159

**Consultant Name:** Colin Campbell  
RTP Environmental Associates Inc  
**Phone:** 919-845-1422  
**Email:** campbell@rtpenv.com

**Consultant Address:** 304-A West Millbrook Road  
Raleigh, NC 27609

**Title V Affected Program\* Notification:**

Affected Program	Distance	Units	Date Letter Sent
N/A – this is an NSR action			

\*As defined by 20.2.70.7.B: All States, local air pollution control programs, and Indian Tribes and Pueblos, that are within 50 miles (80.5 km) of the source.

**NSR and PSD Agency\* Notification:**

Agency	Distance	Units	Date Email Sent
Class I - Carlsbad Caverns National Park	72	km	4/11/2022
Class I – Salt Creek Wilderness (Fish & Wildlife Service)	81	km	4/11/2022
Class I – Guadalupe Mountains National Park	100	km	4/11/2022
Class I – White Mountains Wilderness (National Forest)	150	km	4/11/2022
Class I – Bosque del Apache Wilderness Area (Fish & Wildlife Service)	256	km	4/11/2022

\*As required by 20.2.72.206.A.(7): Mail a copy of the public notice at the same time it is sent for publication to the appropriate agency in the following locations if the source will locate within 50 kilometers (31.1 miles) of the boundary of other states, Bernalillo County, or a Class I Area.

Per 20.2.74 NMAC, at 20.2.74.400 NMAC and 20.2.74.403 NMAC notify federal land managers (FLM) within 100 km and per FLM AQRV Work Group (FLAG) guidance documents notify FLM of Class I Areas within 300 km (for air quality related values (AQRV), per 20.2.74.403 NMAC, which includes visibility.

**Part II – Facility Specifications**

**Table 102.A: Total Pollutant Emissions from Entire Facility:**

Pollutant	Emissions (tons per year)	Emission Type	Change in Emissions since Permit 195-M39R1
Nitrogen Dioxide	760.6	Allowable	+20.9
Carbon Monoxide	1379.9	Allowable	+22.9
Volatile Organic Compounds (VOC)	1268.1	Allowable	-441.8
Sulfur Dioxide	417.8	Allowable	+29.9

**Table 102.A: Total Pollutant Emissions from Entire Facility:**

Pollutant	Emissions (tons per year)	Emission Type	Change in Emissions since Permit 195-M39R1
Particulate Matter (total suspended)	208.9	Allowable	+0.2
Particulate Matter (10 microns or less)	204.0	Allowable	-1.1
Particulate Matter (2.5 microns or less)	198.8	Allowable	-0.8
Hydrogen sulfide (NMAAQ)	5.2	Allowable	+0.5
Greenhouse gases (CO <sub>2</sub> e)	2,029,709	Potential	Not known

Note: Total Potential Pollutant Emissions in Table 102.A, may include fugitive emissions; routine or predictable, startup, shutdown, and maintenance emissions (SSM); and permitted malfunction allowances if these are a sources of regulated air pollutants from this facility.

**Table 102.B: Total Potential Hazardous Air Pollutants (HAPs)\* and State Toxic Air Pollutants (TAPs)<sup>1</sup>**

Pollutant	Emissions (tons per year)	Emission Type	Change in Emissions since Permit 195-M39R1
Acetaldehyde; (Ethyl aldehyde)	1.1	Potential	Not known
Acrolein	3.4	Potential	Not known
Ammonia <sup>1</sup>	77.2	Potential	+71.1
Benzene	9.0	Potential	-29.8
Butadiene (1,3-)	4.1	Potential	Not known
Carbon Disulfide	4.0	Potential	Not known
Ethylbenzene	3.1	Potential	-16.2
Formaldehyde	3.4	Potential	Not known
Hexane	35.3	Potential	-114.5
Hydrogen Cyanide; (Hydrocyanic acid)	92.1	Potential	Not known
Methylene chloride; (Dichloromethane)	8.2	Potential	Not known
Phenol	5.3	Potential	Not known
Sulfuric acid <sup>1</sup>	17.2	Potential	Not known
Toluene; (Methyl benzene)	15.7	Potential	-16.1
Trimethylpentane (2,2,4-)	17.3	Potential	Not known
Xylenes (total); (Xylol)	15.1	Potential	-1.1
Total HAP	217.1	Potential	-38.7

\* HAP emissions are included in the Table 102.A VOC emissions total.

\*\* Total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs emitted at a rate greater than 1.0 ton per year are listed in Table 102.B.

**Air Pollution Control Devices:**

Unit # (Subject Item ID)	SI Description	Primary	Secondary	Tertiary	Quaternary	Control Equipment Mfg & model (or equivalent)
API 894-895 (EQPT57)	Above Ground API Oil-Water Separator	Absorber/Adsorber				
B-0009 (EQPT241)	Boiler B-9	Low NOX Burners	Flue Gas Economizer			
B-0009 (EQPT241)	Boiler B-9	Low NOX Burners				
CT TT-0006 (EQPT189)	Unit 07 Amine W-0745 Cooling Tower	Mist Eliminator				
FCC Regenerator (EQPT14)	FCC Regenerator Scrubber	Scrubber				
H-0019 (EQPT155)	South Crude Charge Heater	Low NOX Burners				
H-0040 (EQPT32)	Unit 13 Charge Heater	Low NOX Burners				
H-0355 (EQPT36)	Unit 70 Stabilizer Reboiler Heater	Low NOX Burners				
H-0464 (EQPT150)	SRU Hot Oil Heater	Low NOX Burners				
H-0600 (EQPT37)	Unit 09 Depropanizer Reboiler Heater	Low NOX Burners				
H-0601 (EQPT55)	Unit 33 Charge Heater	Low NOX Burners				
H-8801, H-8802 (EQPT156)	Unit 63 Hydrogen Plant Reformer Furnaces	Low NOX Burners				
SSM T-0737 (EQPT231)	SSM Emissions from roof landing	Floating Roof (Internal or External)				
SSM Tanks Misc (EQPT240)	Roof Landings and Degassings	Floating Roof (Internal or External)				

**Air Pollution Control Devices:**

Unit # (Subject Item ID)	SI Description	Primary	Secondary	Tertiary	Quaternary	Control Equipment Mfg & model (or equivalent)
TL-4 VRU (EQPT68)	Fuels Truck Loading Rack	Vapor Recovery Unit	Thermal Oxidizer (Incinerator)			
Y-0001 (EQPT61)	TCC Cooling Tower	Mist Eliminator				
Y-0008 (EQPT65)	North Alkyl Cooling Tower	Mist Eliminator				
Y-0011 (EQPT217)	FCC & NP Cooling Tower	Mist Eliminator				
Y-0011 (EQPT217)	FCC & NP Cooling Tower	Mist Eliminator-High Efficiency				
Y-0012 (EQPT218)	Hydrogen Plants Cooling Tower	Mist Eliminator				
Y-0012 (EQPT218)	Hydrogen Plants Cooling Tower	Mist Eliminator-High Efficiency				

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
Alky Reactor	Alky Reactor	N/R	N/R	N/R	Not reported	Not reported	Not reported	Not reported		Alky Reactor is part of Alkylation Unit

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
API 894-895 EQPT57	Separator	N/R	N/R	N/R	09-SEP-03	09-SEP-03	1200 gal/min / 1200 gal/min	1200 gal/min / 1200 gal/min	Active	Above Ground API Oil-Water Separator
B-0007 EQPT49	Boiler	Todd/John Zink burners	N/R	N/R	08-OCT-01	12-MAR-01	215 MM BTU/h / 215 MM BTU/h	215 MM BTU/h / 215 MM BTU/h	Active	Boiler B-7
B-0008 EQPT50	Boiler	Todd/John Zink burners	N/R	N/R	12-MAR-03	12-MAR-01	215 MM BTU/h / 215 MM BTU/h	215 MM BTU/h / 215 MM BTU/h	Active	Boiler B-8
B-0009 EQPT241	Boiler	Babcock & Wilcox	N/R	N/R	01-JAN-12	01-JAN-12	220 MM BTU/h / 220 MM BTU/h	220 MM BTU/h / 220 MM BTU/h	Active	Boiler B-9
CT TT-0006 EQPT189	Cooling Tower	N/R	N/R	N/R	01-APR-11	01-APR-11	3000 gal/min / 3000 gal/min	3000 gal/min / 3000 gal/min	Active	Unit 07 Amine W-0745 Cooling Tower
Collection Sump TRMT1	Wastewater Treatment System			N/A	TBD		1200 gal/min /	72000 g/h /	Active	Collector Sump, T-0845 Weir Box, T-0844 Stilling Well, T-0846 Stormwater Lift Station

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
D-810/811 & D-808/809 RPNT162	Fugitives				TBD		/ 2400 gal/min	2400 gal/min /	Active	Walnut Hull and Mechanical Filters
FCC Regenerator EQPT14	Fluidized Catalytic Cracking Unit	Exxon	IV	N/R	02-MAY-79	02-MAY-79	16000 bbl / 16000 bbl	16000 bbl / 16000 bbl	Active	FCC Regenerator Scrubber
FL-400 EQPT142	Process Flare	Callidus	N/R	N/R	20-AUG-73	20-AUG-73	3 MM BTU/h / 3 MM BTU/h	3 MM BTU/h / 2.65 MM BTU/h	Active	North Plant Flare
FL-401 EQPT141	Process Flare	John Zinc	N/R	N/R	21-AUG-73	20-AUG-73	1 MM BTU/h / 1 MM BTU/h	1 MM BTU/h / .66 MM BTU/h	Active	South Plant Flare
FL-402 EQPT140	Process Flare	Flare Gas Corporation	N/R	N/R	01-JAN-79	20-AUG-73	53 MM BTU/h / .66 MM BTU/h	53 MM BTU/h / .66 MM BTU/h	Active	FCC Flare
FL-403 EQPT139	Process Flare	John Zinc	N/R	N/R	14-MAR-91	14-MAR-91	8 MM BTU/h / 8 MM BTU/h	16.49 MM BTU/h / 16.49 MM BTU/h	Active	Alky Flare
FL-404 EQPT138	Process Flare	John Zink	N/R	N/R	01-JAN-03	13-SEP-96	8 MM BTU/h / 8 MM BTU/h	27.76 MM BTU/h / 27.76 MM BTU/h	Active	GOHT Flare
FUG-02-SP CRUDE RPNT49	Fugitives	N/R	N/R	N/R	01-JAN-09	01-JAN-09	/	/	Active	South Division Crude Unit

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
FUG-06-NHDU RPNT65	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	Naphtha HDS Unit 06
FUG-07-N AMINE RPNT68	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	Amine Unit - Treating/Regen.
FUG-07-SWS1 RPNT78	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	Sour Water Stripper
FUG-08-TRUCK RK RPNT61	Fugitives	Loading Rack	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	Loading Rack
FUG-09-N ALKY RPNT63	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	North Alkylation Unit (new-Inside battery limits)
FUG-10-FCC RPNT51	Fugitives	N/R	FCCU w/CVS	N/R	09-SEP-03	09-SEP-03	/	/	Active	FCC w/CVS
FUG-13-NHDU RPNT55	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	Naphtha HDS Unit 13
FUG-18-LSR MEROX TRT RPNT56	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	Merox/Merichem Treating Units
FUG-19-NAPHTHA RPNT163	Fugitives	N/R	N/R	N/R	TBD		/	/	Active	Naphtha Merox
FUG-20-ISOM RPNT52	Fugitives	BenFree Unit	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	BenFree Unit



**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
FUG-21-SP VACUUM RPNT64	Fugitives	N/R	N/R	N/R	01-MAY-05	01-MAY-05	/	/	Active	Flasher Vacuum Unit
FUG-25-ROSE-2 RPNT147	Fugitives	N/R	N/R	N/R			/	/	Active	ROSE Unit
FUG-29- BLENDER/TK FARM RPNT57	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	Light Oil Tanker
FUG-30- SRU3/TGTU RPNT164	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	SRU2/SWS w/CVS
FUG-31- SRU3/TGTU3/TGI3 RPNT142	Fugitives	N/R	N/R	N/R	01-JAN-07		/	/	Active	SRU3 Unit
FUG-33-DIST HDU RPNT75	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	Relocated Diesel HDS Unit w/CVS
FUG-34- HYDROCRACKER RPNT145	Fugitives	N/R	N/R	N/R	01-JAN-08		/	/	Active	WX Hydrocracker
FUG-35-SAT GAS RPNT66	Fugitives	Saturates Gas Plant	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	Saturates Gas Plant
FUG-36-RO RPNT165	Fugitives	Reverse Osmosis	N/R	N/R	TBD		/	/	Active	Reverse Osmosis
FUG-37-NP-UT RPNT166	Fugitives	Reverse Osmosis	N/R	N/R	TBD		/	/	Active	North Plant Utilities

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
FUG-41-PBC RPNT73	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	PBC Unit
FUG-43-S ALKY RPNT62	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	South Alky Unit (W-76)
FUG-44-DIST-HDU RPNT74	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	Gas Oil Hydrotreater (incl. CVS)
FUG-45-DIST-HDU RPNT141	Fugitives	N/R	N/R	N/R			/	/	Active	Gas Oil Hydrotreater (incl. CVS)
FUG-54-PRIMEG RPNT157	Fugitives	Prime G Unit	N/R	N/R	01-DEC-16	01-DEC-16	/	/	Active	Prime G Unit
FUG-63-H2 PLANT-1 RPNT137	Fugitives	N/R	N/R	N/R	01-MAR-06	01-MAR-06	/	/	Active	Hydrogen Plant
FUG-64-H2 PLANT-2 RPNT149	Fugitives	N/R	N/R	N/R	01-JAN-08		/	/	Active	Hydrogen Plant
FUG-70-CCR RPNT53	Fugitives	CCR	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	CCR Reformer (w/in battery limits)
FUG-73-SP UTIL RPNT76	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	Utilities
FUG-80-WWTP CVS RPNT59	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	Oil Water Separator

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
FUG-LPG RPNT72	Fugitives	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/	/	Active	LPG Storage System
FUGITIVES RPNT152	Fugitives	N/R	N/R	N/R			/	/	Active	Total of All Fugitives
FWG-0600 EQPT275	Internal combustion engine	Clark Diesel (John Deere)	JW6H-UFAD70	RG6090L113548	01-NOV-12		376 hp / 376 hp	/	Active	Fire Water Pump Engine
FWG-0601 EQPT276	Internal combustion engine	Clark Diesel (John Deere)	JW6H-UFAD70	RG6090L113561	01-NOV-12		376 hp / 376 hp	/	Active	Fire Water Pump Engine
FWG-0602 EQPT277	Internal combustion engine	Clark Diesel (John Deere)	JW6H-UFAD70	RG6090L113574	01-NOV-12		376 hp / 376 hp	/	Active	Fire Water Pump Engine
FWG-0603 EQPT278	Internal combustion engine	Clark Diesel (John Deere)	JU6H-UFAX8	PE6068L228486	01-APR-13		305 hp / 305 hp	/	Active	Fire Water Pump Engine
Fixed Roof Tanks EQPT210	Tank - Above Ground	N/R	N/R	N/R			/	/	Active	Fixed Roof (all - total)
Flare Malf Cap EQPT235	Process Flare	N/R	N/R	N/R	22-OCT-12		/	/ 166667 SCF/h	Active	Malfunction Emissions (upsets)
Floating-Roof Tanks EQPT213	Tank - Above Ground	N/R	N/R	N/R			/	/	Active	Floating-Roof (all - total)

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
H-0009 EQPT160	Heater	Zeeco burners	GSFW-12 burners	N/R	01-JAN-70	01-JAN-70	44 MM BTU/h / 44 MM BTU/h	44 MM BTU/h / 44 MM BTU/h	Active	Unit 13 Naphtha Splitter Reboiler
H-0011 EQPT12	Heater	John Zink burners	HEVD-14	N/R	26-SEP-14	26-SEP-14	38 MM BTU/h / 38 MM BTU/h	38 MM BTU/h / 38 MM BTU/h	Active	Unit 21 Vacuum Flasher Heater
H-0018 EQPT161	Heater	Zeeco burners	GSFW-8 burners	N/R	14-NOV-75	14-NOV-75	32 MM BTU/h / 32 MM BTU/h	32 MM BTU/h / 32 MM BTU/h	Active	Unit 06 HDS Reboiler
H-0019 EQPT155	Heater	Callidus Technologies, LLC burners	CUBL-8W burners	N/R	01-MAY-05	01-MAY-05	54 MM BTU/h / 54 MM BTU/h	54 MM BTU/h / 54 MM BTU/h	Active	South Crude Charge Heater
H-0020 EQPT2	Heater	Callidus Technologies, LLC burners	CUBL-12W burners	N/R	01-DEC-05	20-AUG-73	90 MM BTU/h / 90 MM BTU/h	90 MM BTU/h / 90 MM BTU/h	Active	South Crude Charge Heater
H-0028 EQPT43	Heater	John Zink burners	PSFG-12 burners	N/R	01-NOV-93	20-AUG-73	12.3 MM BTU/h / 12.3 MM BTU/h	12.3 MM BTU/h / 12.3 MM BTU/h	Active	Unit 21 Heater
H-0030 EQPT52	Heater	John Zink burners	PSFG-16R burners	N/R	19-DEC-01	12-MAR-00	42 MM BTU/h / 42 MM BTU/h	42 MM BTU/h / 42 MM BTU/h	Active	Unit 06 Charge Heater
H-0040 EQPT32	Heater	John Zink burners	PSFG-16 burners	N/R	01-NOV-97	28-AUG-90	42 MM BTU/h / 42 MM BTU/h	42 MM BTU/h / 42 MM BTU/h	Active	Unit 13 Charge Heater

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
H-0312 EQPT24	Heater	John Zink burners	VYD-18 burners	N/R	02-MAY-90	02-MAY-79	35 MM BTU/h / 35 MM BTU/h	35 MM BTU/h / 35 MM BTU/h	Active	Unit 10 FCC Feed Heater
H-0352, H-0353, H-0354 EQPT33	Heater	Callidus Technologies, LLC burners	CUBL-10W burners	N/R	28-AUG-05	28-AUG-90	200 MM BTU/h / 200 MM BTU/h	200 MM BTU/h / 200 MM BTU/h	Active	Unit 70 CCR Reformer Heaters (aka: 70-H1, 70-H2, 70-H3)
H-0355 EQPT36	Heater	John Zink burners	N/R	N/R	28-AUG-91	28-AUG-90	28 MM BTU/h / 28 MM BTU/h	28 MM BTU/h / 28 MM BTU/h	Active	Unit 70 Stabilizer Reboiler Heater
H-0362,H-0363, H-0364 EQPT143	Heater	Callidus Technologies, LLC burners	CUBL-8W and 6W burners	N/R	01-MAR-06		125 MM BTU/h / 125 MM BTU/h	125 MM BTU/h / 125 MM BTU/h	Active	Unit 70 CCR Heaters (3 heaters combined)
H-0421 EQPT42	Heater	John Zink burners	LNC-PC-18 burners	N/R	23-MAY-01	20-AUG-73	27 MM BTU/h / 27 MM BTU/h	27 MM BTU/h / 27 MM BTU/h	Active	Unit 44 Charge Heater
H-0464 EQPT150	Heater	Callidus Technologies, LLC burners	LE-CSG-4W burners	N/A	01-NOV-03	22-OCT-03	9.6 MM BTU/h / 9.6 MM BTU/h	9.6 MM BTU/h / 9.6 MM BTU/h	Active	SRU Hot Oil Heater
H-0473 EQPT48	Incinerator	N/R	N/R	N/R	01-DEC-01	01-DEC-01	35 MM BTU/h / 35 MM BTU/h	35 MM BTU/h / 35 MM BTU/h	Active	SRU2 Tail Gas Incinerator

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
H-0600 EQPT37	Heater	Callidus Technologies, LLC burners	CUBL-12W burners	N/R	20-AUG-09	20-AUG-73	84 MM BTU/h / 84 MM BTU/h	84 MM BTU/h / 84 MM BTU/h	Active	Unit 09 Depropanizer Reboiler Heater
H-0601 EQPT55	Heater	Callidus Technologies, LLC burners	CUB-8P-CW burners	N/R	13-DEC-03	13-DEC-01	78 MM BTU/h / 78 MM BTU/h	78 MM BTU/h / 78 MM BTU/h	Active	Unit 33 Charge Heater
H-2421 EQPT147	Heater	Zeeco, Inc. burners	GLSF-14 Round Flame "Free Jet" burners	N/R	01-MAR-06	01-MAR-06	27 MM BTU/h / 27 MM BTU/h	27 MM BTU/h / 27 MM BTU/h	Active	Unit 45 Charge Heater
H-2501 EQPT170	Heater	John Zink Company, LLC burners	COOLstar-18 burners	N/R	01-JAN-09	01-JAN-09	120 MM BTU/h / 120 MM BTU/h	120 MM BTU/h / 120 MM BTU/h	Active	Unit 25 ROSE2 Hot Oil Heater
H-3101 EQPT179	Heater	Callidus Technologies, LLC burner	N/R	N/R	11-MAY-09	11-MAY-09	11 MM BTU/h / 11 MM BTU/h	11 MM BTU/h / 11 MM BTU/h	Active	SRU3 Hot Oil Heater
H-3103 EQPT181	Incinerator	Callidus Technologies, LLC burners	N/R	N/R	11-MAY-09	11-MAY-09	10.2 MM BTU/h / 10.2 MM BTU/h	10.2 MM BTU/h / 10.2 MM BTU/h	Active	SRU3 Tail Gas Incinerator
H-3402 EQPT174	Heater	Callidus Technologies, LLC burners	LE-CSG-12W burners	N/R	01-JAN-09	01-JAN-09	52 MM BTU/h / 52 MM BTU/h	52 MM BTU/h / 52 MM BTU/h	Active	Unit 34 Hydrocraker Reboiler 1

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
H-3403 EQPT229	Heater	Callidus Technologies, LLC burners	CUBL-10W burners	N/R	01-JAN-11	01-JAN-11	32 MM BTU/h / 32 MM BTU/h	32 MM BTU/h / 32 MM BTU/h	Active	Unit 34 Hydrocracker Reactor Charge Heater
H-5401 EQPT244	Heater	Unit 54 HDS Reactor Heater	N/R	N/R	27-JAN-16	27-JAN-16	19 MM BTU/h / 19 MM BTU/h	19 MM BTU/h / 19 MM BTU/h	Active	Unit 54 HDS Reactor Heater
H-8801, H-8802 EQPT156	Heater	Callidus Technologies, LLC burners	LE-CSG-12W-PSA burners	N/R	01-MAR-06	01-MAR-06	152 MM BTU/h / 152 MM BTU/h	152 MM BTU/h / 152 MM BTU/h	Active	Unit 63 Hydrogen Plant Reformer Furnaces
H-9851 EQPT176	Heater	Callidus Technologies, LLC burners	CUBL-3WDF burners	N/R	01-JAN-09	01-JAN-09	337 MM BTU/h / 337 MM BTU/h	337 MM BTU/h / 337 MM BTU/h	Active	Unit 64 Hydrogen Plant Reformer
MG-0001 EQPT265	Internal combustion engine	Cummins	QSC 8.3	44358719	01-FEB-12	01-FEB-12	280 hp / 280 hp	280 hp / 280 hp	Active	Portable Air Compressor Diesel Engine (was V-0543)
MG-0002 EQPT268	Internal combustion engine	Cummins	QSC 8.3	46338720	01-FEB-12	01-FEB-12	280 hp / 280 hp	280 hp / 280 hp	Active	Portable Air Compressor Diesel Engine (was V-0545)

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
MG-0003 EQPT269	Internal combustion engine	Doosan/Cummins	QSB 4.5	489581UKA CF68	01-FEB-19	01-FEB-19	138 hp / 138 hp	138 hp / 138 hp	Active	Portable Air Compressor Diesel Engine (was V-0546)
MG-0004 EQPT272	Pump	Caterpillar	C18	WJH07870		01-OCT-10	700 hp / 700 hp	/	Active	Portable Fire Water Pump Engine
RLO-19 EQPT76	Loading/Unloading Rack	N/R	N/R	N/R	09-SEP-03	09-SEP-03	3950 bbl/h / 3950 bbl/h	3950 bbl/h / 3950 bbl/h	Active	Railcar Loading & Off-Loading Rack
RLO-8 EQPT71	Loading/Unloading Rack	N/R	N/R	N/R	09-SEP-03	09-SEP-03	1500 bbl/h / 1500 bbl/h	1500 bbl/h / 1500 bbl/h	Active	Rail Car Loading and Off-Loading Rack
S-1/T-1 TRMT2	Wastewater Treatment System	N/A	N/A	N/A	TBD		1200 gal/min /	72000 g/h /	Active	Barscreen & Junction Box
SG-0100 EQPT273	Internal combustion engine	Deutz	F4L912GEN	WDZXL05.70 10	01-JAN-02	01-JAN-98	54 hp / 52 hp	/	Active	UPS Backup Generator
SG-0101 EQPT274	Internal combustion engine	Deutz	F4L1011F	EI97- 68CA00- 000-0053	01-JAN-06	01-JAN-99	54 hp / 54 hp	/	Active	UPS Backup Generator
SG-0102 EQPT247	Internal combustion engine	John Deere	N/R	4045HFS80	01-JAN-18	01-JAN-18	74 kW / 99.23 hp	99.23 hp / 74 kW	Active	Server Backup Generator Engine



**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
SSM FL-HEP-PORT EQPT228	Process Flare	Flarestack, Inc.	N/R	N/R	01-AUG-11		/	/ 166667 SCF/h	Active	Portable Flare for Pigging Operation
SSM Flare Cap EQPT233	Process Flare	N/R	N/R	N/R	22-OCT-12		/	/ 166667 SCF/h	Active	Venting SSM to FL-400, FL-401, FL-402, FL-403, or FL-404
SSM H-0473 EQPT236	Incinerator	N/R	N/R	N/R	01-DEC-01	01-DEC-01	35 MM BTU/h / 35 MM BTU/h	35 MM BTU/h / 35 MM BTU/h	Active	SSM Emissions from SRU2 Tail Gas Incinerator
SSM H-3103 EQPT232	Incinerator	Callidus Technologies, LLC burners	N/R	N/R	11-MAY-09	11-MAY-09	10.2 MM BTU/h / 10.2 MM BTU/h	10.2 MM BTU/h / 10.2 MM BTU/h	Active	SSM Emissions from SRU3 Tail Gas Incinerator
SSM H-9851 EQPT230	Heater	Callidus Technologies, LLC burners	CUBL-3WDF burners	N/R	01-JAN-09	01-JAN-09	337 MM BTU/h / 337 MM BTU/h	337 MM BTU/h / 337 MM BTU/h	Active	SSM Emissions during SCR downtime
SSM Pigging RPNT167	Fugitives						/	/	Active	Pigging Operations
SSM T-0737 EQPT231	Tank - Above Ground	N/R	N/R	N/R	01-JAN-09	01-JAN-09	730 bbl/y / 22200 bbl	932400 gal / 30660 gal/y	Active	SSM Emissions from roof landing

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
SSM Tanks Misc EQPT240	Tank - Above Ground	N/A	N/A	N/A	01-JAN-08	01-JAN-08	1226.4 MM bbl/y / 80000 bbl	80000 bbl / 1226.4 MM bbl/y	Active	Roof Landings and Degassings
SSM Tanks VCU EQPT259	Incinerator	N/R	N/R	N/R	09-SEP-19	09-SEP-19	1900 degrees F / 1900 degrees F	1900 degrees F / 1900 degrees F	Active	Storage Tank Maintenance Vapor Combustion Units
SSM-1 MISC RPNT153	Fugitives	N/R	N/R	N/R			/	/	Active	Emissions from catalyst handling
SSM-2 MISC RPNT154	Fugitives	N/R	N/R	N/R	29-APR-11		/	/	Active	Low-emitting Maintenance Activities
T-0011 EQPT82	Tank - Above Ground	N/R	N/R	N/R	01-JAN-73	09-SEP-03	5 MM bbl/y / 32130 bbl	1349460 gal / 222 MM gal/y	Active	Gasolines, IFR
T-0012 EQPT88	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	5 MM bbl/y / 32130 bbl	1349460 gal / 220 MM gal/y	Active	Gasolines, IFR

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
T-0020 EQPT260	Tank - Above Ground	N/R	N/R	N/R	01-OCT-20	01-OCT-20	1800 M bbl/y / 54380 bbl	/	Active	Gasolines, internal floating roof (IFR)tanks for gasoline blending
T-0021 EQPT261	Tank - Above Ground	N/R	N/R	N/R	01-OCT-20	01-OCT-20	1800 M bbl/y / 54380 bbl	/	Active	Gasolines, internal floating roof (IFR)tanks for gasoline blending
T-0022 EQPT262	Tank - Above Ground	N/R	N/R	N/R	01-OCT-20	01-OCT-20	1800 M bbl/y / 37770 bbl	/	Active	Gasolines, internal floating roof (IFR)tanks for gasoline blending
T-0023 EQPT263	Tank - Above Ground	N/R	N/R	N/R	01-OCT-20	01-OCT-20	1800 M bbl/y / 37770 bbl	/	Active	Gasolines, internal floating roof (IFR)tanks for gasoline blending
T-0040 EQPT196	Tank - Above Ground	N/R	N/R	N/R	01-JAN-73	01-JAN-73	2 MM bbl/y / 820 bbl	34440 gal / 88 MM gal/y	Active	Distillates, FXR

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
T-0041 EQPT197	Tank - Above Ground	N/R	N/R	N/R	01-JAN-73	01-JAN-73	2 MM bbl/y / 820 bbl	34440 gal / 88 MM gal/y	Active	Distillates, FXR
T-0049 EQPT198	Tank - Above Ground	N/R	N/R	N/R	01-JAN-73	01-JAN-73	70828 bbl/y / 610 bbl	610 bbl / 3 MM gal/y	Active	Slop, FXR
T-0055 EQPT163	Tank - Above Ground	N/A	N/A	N/A	01-JAN-79	01-JAN-79	1 MM bbl/y / 10200 bbl	10200 bbl / 45 MM gal/y	Active	Distillates, FXR
T-0056 EQPT207	Tank - Above Ground	N/R	N/R	N/R	01-JAN-71	01-JAN-71	1 MM bbl/y / 11600 bbl	11600 bbl / 76 MM gal/y	Active	Naphthas, IFR
T-0059 EQPT130	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	47578 bbl/y / 5140 bbl	5140 bbl / 2 MM gal/y	Active	Carbon Black Oil, FXR
T-0061 EQPT132	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	1 MM bbl/y / 10500 bbl	441000 gal / 42 MM gal/y	Active	Distillates, FXR
T-0063 EQPT133	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	99821 bbl/y / 10910 bbl	10910 bbl / 4 MM gal/y	Active	Carbon Black Oil, FXR
T-0065 EQPT128	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	730000 bbl/y / 10490 bbl	10490 bbl / 30 MM gal/y	Active	Carbon Black Oil, FXR
T-0075 EQPT199	Tank - Above Ground	N/R	N/R	N/R	01-JAN-03	01-JAN-03	176319 bbl/y / 18900 bbl	793800 gal / 7 MM gal/y	Active	Carbon Black Oil, FXR

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
T-0079 EQPT215	Tank - Above Ground	TBD	TBD	TBD	01-JAN-08	01-JAN-08	1226.4 MM bbl/y / 87420 bbl	87420 bbl / 1226.4 MM bbl/y	Active	Isomerates, EFR
T-0081 formerly PITCH-TK2 EQPT203	Tank - Above Ground	N/R	N/R	N/R	01-JAN-10	01-JAN-10	420 MM gal/y / 65870 bbl	65870 bbl / 420 MM gal/y	Active	Asphalt/Pitch, FXR
T-0082 formerly PITCH-TK3 EQPT216	Tank - Above Ground	TBD	TBD	TBD	01-JAN-10	01-JAN-10	252 MM gal/y / 109660 bbl	109660 bbl / 252 MM gal/y	Active	Asphalt/Pitch, FXR
T-0106 EQPT77	Tank - Above Ground	N/R	N/R	N/R	01-JAN-71	01-JAN-71	2.4 MM bbl/y / 25120 bbl	100.38 MM gal/y / 100.38 MM gal/y	Active	Distillates, IFR
T-0107 EQPT78	Tank - Above Ground	N/R	N/R	N/R	01-JAN-71	01-JAN-71	4 MM bbl/y / 25120 bbl	25120 bbl / 170 MM gal/y	Active	Gasolines, IFR
T-0108 EQPT80	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	110 MM gal/y / 25120 gal	22900 bbl / 177.47 MM bbl/y	Active	Gasolines, IFR
T-0109 EQPT79	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	3 MM bbl/y / 25120 bbl	936600 gal / 152 MM gal/y	Active	Gasolines, IFR
T-0110 EQPT109	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	1 MM bbl/y / 57900 bbl	2431800 gal / 59 MM gal/y	Active	Asphalt/Pitch, FXR
T-0111 EQPT81	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	1 MM bbl/y / 10080 bbl	382200 gal / 64 MM gal/y	Active	Naphthas, IFR

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
T-0112 EQPT84	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	1 MM bbl/y / 9670 bbl	436800 gal / 74 MM gal/y	Active	Naphthas, IFR
T-0117 EQPT91	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	2 MM bbl/y / 15470 bbl	588000 gal / 95 MM gal/y	Active	Gasolines, EFR
T-0124 EQPT85	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	1 MM bbl/y / 6710 bbl	260400 gal / 42 MM gal/y	Active	Gasolines, IFR
T-0400 EQPT102	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	6 MM bbl/y / 96680 bbl	4 gal / 288 MM gal/y	Active	Gas Oils, FXR
T-0401 EQPT92	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	5 MM bbl/y / 56650 bbl	2226000 gal / 220 MM gal/y	Active	Gasolines, EFR
T-0402 EQPT93	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	5 MM bbl/y / 56650 bbl	2226000 gal / 220 MM gal/y	Active	Gasolines, EFR
T-0410 EQPT114	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	874530 bbl/y / 34920 bbl	1499400 gal / 36 MM gal/y	Active	Asphalt Pitch, FXR
T-0411 EQPT94	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	8 MM bbl/y / 55950 bbl	2184000 gal / 354 MM gal/y	Active	Gasolines, EFR
T-0412 EQPT95	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	8 MM bbl/y / 55950 bbl	2184000 gal / 354 MM gal/y	Active	Gasolines, EFR

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
T-0413 EQPT117	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	2 MM bbl/y / 24490 bbl	979800 gal / 88 MM gal/y	Active	Distillates, IFR
T-0415 EQPT86	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	4 MM bbl/y / 25120 bbl	1255800 gal / 203 MM gal/y	Active	Gasolines, IFR
T-0417 EQPT83	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	1 MM bbl/y / 10490 bbl	390600 gal / 63 MM gal/y	Active	Gasolines, IFR
T-0418 EQPT115	Tank - Above Ground	N/R	N/R	N/R	01-JAN-21	01-JAN-21	1 MM bbl/y / 20720 bbl	823200 gal / 176.43 MM gal/y	Active	Distillates, FXR
T-0419 EQPT165	Tank - Above Ground	N/A	N/A	N/A	01-JAN-73	01-JAN-73	1 MM bbl/y / 11000 bbl	453600 gal / 43 MM gal/y	Active	Distillates, FXR
T-0420 EQPT119	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	97022 bbl/y / 10400 bbl	436800 gal / 4 MM gal/y	Active	Carbon Black Oil, FXR
T-0422 EQPT121	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	1 MM bbl/y / 10400 bbl	436800 gal / 42 MM gal/y	Active	Distillates, FXR
T-0423 EQPT106	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	1 MM bbl/y / 10500 bbl	441000 gal / 42 MM gal/y	Active	Distillates, FXR
T-0431 EQPT122	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	5 MM bbl/y / 53180 bbl	2373000 gal / 220 MM gal/y	Active	Distillates, FXR

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
T-0432 EQPT123	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	5 MM bbl/y / 53180 bbl	2310000 gal / 220 MM gal/y	Active	Distillates, FXR
T-0433 EQPT124	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	5 MM bbl/y / 80420 bbl	33558000 gal / 220 MM gal/y	Active	Gas Oils, FXR
T-0434 EQPT108	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	7 MM bbl/y / 80420 bbl	3292800 gal / 317 MM gal/y	Active	Distillates, FXR
T-0435 EQPT97	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	2 MM bbl/y / 5040 bbl	210000 gal / 110 MM gal/y	Active	Crude Oil, EFR
T-0437 EQPT125	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	36 MM bbl/y / 90640 bbl	3570000 gal / 1545 MM gal/y	Active	Crude Oil, EFR
T-0438 EQPT166	Tank - Above Ground	N/R	N/R	N/R	01-JUN-78	01-JUN-78	3 MM bbl/y / 54380 bbl	2276400 gal / 162 MM bbl/y	Active	Gas Oils, FXR
T-0439 EQPT89	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	36 MM bbl/y / 108740 bbl	4536000 gal / 1545 MM gal/y	Active	Crude Oil, IFR
T-0450 EQPT100	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	13 MM bbl/y / 80570 bbl	3360000 gal / 569 MM gal/y	Active	Naphthas, EFR
T-0451 EQPT243	Tank - Above Ground	N/R	N/R	N/R	09-SEP-15	09-SEP-15	/ 6900 bbl	6900 bbl / 949000 bbl/y	Active	BIODIESEL, IFR



**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
T-0452 EQPT246	Tank - Above Ground	N/R	N/R	N/R	09-SEP-15	09-SEP-15	/ 6850 bbl	6850 bbl / 142350 bbl/y	Active	Newethanol, IFR
T-0737 EQPT209	Tank - Above Ground	N/R	N/R	N/R	01-JAN-09	01-JAN-09	730 bbl/y / 22200 bbl	932400 gal / 30660 gal/y	Active	Sour Water, EFR
T-0801 EQPT59	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	1200 gal/min /	/	Active	Enhanced Biodegradation Tank T-0801
T-0802 EQPT101	Tank - Above Ground	Sour Water (HC) 10,000 gal	N/R	N/R	09-SEP-03	09-SEP-03	73 bbl/y / 11330 bbl	420000 gal / 30660 gal/y	Active	Sour Water, EFR
T-0805 RPNT160	Fugitives				TBD		/ 1200 gal/min	1200 gal/min /	Active	Flocculator
T-0806 RPNT150	Fugitives	N/R	N/R	N/R	14-FEB-11		/ 1200 gal/min	1200 gal/min /	Active	DAF Unit T-0806
T-0809 EQPT280	Tank - Above Ground						/ 1200 gal/min	1200 gal/min /	Active	DAF Surge Tank
T-0814 EQPT201	Tank - Above Ground	N/R	N/R	N/R	01-JAN-05	01-JAN-05	274362 bbl/y / 11190 bbl	11190 bbl / 11 MM bbl/y	Active	Asphalt Pitch, FXR
T-0815 EQPT153	Tank - Above Ground	N/R	N/R	N/R	01-APR-11		8 MM bbl/y / 80930 bbl	3580500 gal / 344 MM gal/y	Active	Distillates, FXR

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
T-0821 (formerly 5401) EQPT245	Tank - Above Ground	N/R	N/A	N/A	01-JAN-16	01-JAN-16	/ 78580 bbl	78580 bbl / 25.2 MM gal/y	Active	External Floating Roof Tank
T-0830 EQPT279	Tank - Above Ground				01-JAN-11		/	109660 bbl / 109660 bbl	Active	Stormwater Surge Tank
T-0834 EQPT116	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	3 MM bbl/y / 40420 bbl	1680000 gal / 161 MM gal/y	Active	Distillates, EFR
T-0835 EQPT99	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	5 MM bbl/y / 68940 bbl	2562000 gal / 246 MM gal/y	Active	Distillates, EFR
T-0836 EQPT219	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	/ 1200 gal/min	1200 gal/min /	Active	Enhanced Biodegradation Tank T-0836
T-0838 EQPT135	Tank - Above Ground	N/R	N/R	N/R	09-SEP-03	09-SEP-03	2 MM bbl/y / 30640 bbl	1234800 gal / 118 MM gal/y	Active	Distillates, FXR
T-0896 RPNT140	Fugitives	N/R	N/R	N/R	14-FEB-11		1200 gal/min /	/ 1200 gal/min	Active	DAF Unit T-0896
T-0897 RPNT161	Fugitives				TBD		/ 1200 gal/min	72000 g/h /	Active	DAF Surge Open Sump
T-1225 (Formerly NAP-TK) EQPT208	Tank - Above Ground	N/R	N/R	N/R	01-JAN-09	01-JAN-09	17 MM bbl/y / 125890 bbl	4200000 gal / 712 MM gal/y	Active	Naphthas, EFR

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
T-1227(formerly PITCH-TK1 EQPT202)	Tank - Above Ground	N/R	N/R	N/R	01-JAN-09	01-JAN-09	126 MM gal/y / 33170 bbl	33170 bbl / 126 MM gal/y	Active	Asphalt/Pitch,FXR
TL-2 EQPT67	Loading/Unloading Rack	N/R	N/R	N/R	09-SEP-03	09-SEP-03	300 bbl/h / 300 bbl/h	300 bbl/h / 300 bbl/h	Active	Asphalt Truck Loading Rack #2
TL-4 VCU EQPT248	Incinerator	N/R	N/R	N/R	15-OCT-18	15-OCT-18	/	/	Active	Vapor Combustion, secondary control for TL-4
TL-4 VRU EQPT68	Loading/Unloading Rack	N/R	N/R	N/R	09-SEP-03	09-SEP-03	3571 bbl/h / 3571 bbl/h	3571 bbl/h / 3571 bbl/h	Active	Fuels Truck Loading Rack
TL-7 EQPT70	Loading/Unloading Rack	N/R	N/R	N/R	09-SEP-03	09-SEP-03	681 bbl/h / 681 bbl/h	681 bbl/h / 681 bbl/h	Active	CBO/LCO Truck Loading Rack
TLO-1 EQPT66	Loading/Unloading Rack	N/R	N/R	N/R	09-SEP-03	09-SEP-03	350 bbl/h / 350 bbl/h	350 bbl/h / 350 bbl/h	Active	Asphalt Truck Loading and Off-Loading Rack #1
TLO-20 EQPT220	Loading/Unloading Rack	N/R	N/R	N/R	09-SEP-03	09-SEP-03	600 bbl/h / 600 bbl/h	600 bbl/h / 600 bbl/h	Active	Asphalt/Pitch Truck Loading Rack

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
TRLO-9 EQPT72	Loading/Unloading Rack	N/R	N/R	N/R	TBD		/ 330 tons/d	330 tons/d /	Active	Molten Sulfur Truck/Railcar Loading Rack
TVCU EQPT281	Thermal Oxidizer (Incinerator)	N/A		N/A	TBD		/ 52 lb/h	52 lb/h /	Active	Floating Roof Tank Landings Vapor Combustion Unit (VCU)
W-623	Depropanizer Column	N/R	N/R	N/R	Not reported	Not reported	Not reported	Not reported		Depropanizer Column of Alkylation Unit
Y-0001 EQPT61	Cooling Tower	N/R	N/R	N/R	09-SEP-03	09-SEP-03	5000 gal/min / 5000 gal/min	5000 gal/min / 5000 gal/min	Active	TCC Cooling Tower
Y-0002 EQPT62	Cooling Tower	N/R	N/R	N/R	09-SEP-03	09-SEP-03	5000 gal/min / 5000 gal/min	5000 gal/min / 5000 gal/min	Active	South Alky Cooling Tower (Marley CT)
Y-0008 EQPT65	Cooling Tower	N/R	N/R	N/R	09-SEP-03	09-SEP-03	12500 gal/min / 12500 gal/min	12500 gal/min / 12500 gal/min	Active	North Alky Cooling Tower

**Equipment Specifications (Active/Alternative):**

Unit No.	Unit Type	Make	Model No.	Serial No.	Yr of Construction	Yr of Manufacture	Operating Rate Max/Site	Operating Capacity Max/Site	Subject Item Status	Subject Item Description
Y-0011 EQPT217	Cooling Tower	N/R	N/R	N/R	01-APR-11	01-APR-11	30000 gal/min / 30000 gal/min	30000 gal/min / 30000 gal/min	Active	FCC & NP Cooling Tower
Y-0012 EQPT218	Cooling Tower	N/R	N/R	N/R	01-APR-11	01-APR-11	10000 gal/min / 10000 gal/min	10000 gal/min / 10000 gal/min	Active	Hydrogen Plants Cooling Tower

**Emissions:** Pollutant **Permitted** (Allowable and SSM) Emissions per piece of equipment or Subject Item as represented by applicant.

Unit No.	NO <sub>x</sub> (pph)	<sup>1</sup> NO <sub>x</sub> (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO <sub>2</sub> (pph)	SO <sub>2</sub> (tpy)	TSP (pph)	TSP (tpy)	PM <sub>10</sub> (pph)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (pph)	PM <sub>2.5</sub> (tpy)	H <sub>2</sub> S (pph)	H <sub>2</sub> S (tpy)
B-0007 (EQPT49)	12.9	56.5	19.7	86.2	1.3	5.6	8	13.9	1.8	7.8	1.8	7.8	1.8	7.8		
B-0008 (EQPT50)	12.9	56.5	19.7	86.2	1.3	5.6	8	13.9	1.8	7.8	1.8	7.8	1.8	7.8		
B-0009 (EQPT241)	4	17.3	4	17.6	.3	1.2	1.6	2.8	.4	1.6	.4	1.6	.4	1.6		
B-0010 (EQPT255)	.22	.97	.67	2.92	.06	.26	.14	.6			.08	.36	.08	.36		
CT TT-0006 (EQPT189)					1.1	4.7			.16	.69	.09	.42	.0004	.0017		
Collection Sump (TRMT1)					.02	.08										

Unit No.	NO <sub>x</sub> (pph)	<sup>1</sup> NO <sub>x</sub> (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO <sub>2</sub> (pph)	SO <sub>2</sub> (tpy)	TSP (pph)	TSP (tpy)	PM <sub>10</sub> (pph)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (pph)	PM <sub>2.5</sub> (tpy)	H <sub>2</sub> S (pph)	H <sub>2</sub> S (tpy)
FCC Regenerator (EQPT14)	34.9	101.8	121.8	106.7	15.7	68.6	27.9	61	25	109.5	22.9	95.6	22.9	95.6		
FL-400 (EQPT142)	47	5.45	14.23	22.35	26.01	32.7	4.48	3.92							.05	.04
FL-401 (EQPT141)	1.66	1.85	6.82	7.58	19.72	2.51	57.35	5.88							.61	.06
FL-402 (EQPT140)	8.11	2.21	33.29	9.08	98.18	7.72	98.54	5.58							1.05	.06
FL-403 (EQPT139)	2.74	2.53	11.25	10.38	32.54	13.57	1.1	.76							.01	.01
FL-404 (EQPT138)	11.7	23.49	48.01	96.4	160.5	99.85	39.92	11.14							.42	.12
FUG-ODOR (RPNT156)					.46	2										
FUGITIVES (RPNT152)					108.8 7	476.8 5										
FWG-0600 (EQPT275)	2.49	.12	2.16	.11	2.49	.12	.0046	.0002	.12	.01	.12	.01	.12	.01		
FWG-0601 (EQPT276)	2.49	.12	2.16	.11	2.49	.12	.0046	.0002	.12	.01	.12	.01	.12	.01		
FWG-0602 (EQPT277)	2.49	.12	2.16	.11	2.49	.12	.0046	.0002	.12	.01	.12	.01	.12	.01		
FWG-0603 (EQPT278)	2.02	.1	1.75	.09	2.02	.1	.0037	.0001	.1	.01	.1	.01	.1	.01		
Fixed Roof Tanks (EQPT210)						181.5										

Unit No.	NO <sub>x</sub> (pph)	<sup>1</sup> NO <sub>x</sub> (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO <sub>2</sub> (pph)	SO <sub>2</sub> (tpy)	TSP (pph)	TSP (tpy)	PM <sub>10</sub> (pph)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (pph)	PM <sub>2.5</sub> (tpy)	H <sub>2</sub> S (pph)	H <sub>2</sub> S (tpy)
Flare Malf Cap (EQPT235)		10		10		10		10								1
Floating- Roof Tanks (EQPT213)						134.7										.73
H-0009 (EQPT160)	4	17.3	4	17.6	.3	1.2	1.6	2.8	.4	1.6	.4	1.6	.4	1.6		
H-0011 (EQPT12)	9.5	31.7	3.5	15.3	.2	1	1.4	2.5	.3	1.4	.3	1.4	.3	1.4		
H-0018 (EQPT161)	3.5	15.3	2.9	12.8	.2	.8	1.2	2.1	.3	1.2	.3	1.2	.3	1.2		
H-0019 (EQPT155)	2.9	12.5	4.9	21.6	.3	1.4	2	3.5	.4	2	.4	2	.4	2		
H-0020 (EQPT2)	8	21.1	8.2	36.1	.5	2.4	3.4	5.8	.8	3.3	.8	3.3	.8	3.3		
H-0028 (EQPT43)	2.2	9.5	1.1	4.9	.1	.3	.5	.8	.1	.4	.1	.4	.1	.4		
H-0030 (EQPT52)	3.2	14	3.8	16.9	.3	1.1	1.6	2.7	.4	1.5	.4	1.5	.4	1.5		
H-0040 (EQPT32)	3.8	16.6	3.8	16.9	.3	1.1	1.6	2.7	.4	1.5	.4	1.5	.4	1.5		
H-0303 (EQPT17)	1.2	5.2	1	4.4	.1	.3	.4	.7			.1	.4				
H-0312 (EQPT24)	4.6	20.2	3.2	14	.2	.9	1.3	2.3	.3	1.3	.3	1.3	.3	1.3		

Unit No.	NO <sub>x</sub> (pph)	<sup>1</sup> NO <sub>x</sub> (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO <sub>2</sub> (pph)	SO <sub>2</sub> (tpy)	TSP (pph)	TSP (tpy)	PM <sub>10</sub> (pph)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (pph)	PM <sub>2.5</sub> (tpy)	H <sub>2</sub> S (pph)	H <sub>2</sub> S (tpy)
H-0352, H-0353, H-0354 (EQPT33)	9	39.4	18.3	80.2	1.2	5.2	8.1	15.6	1.7	7.2	1.7	7.2	1.6	7.2		
H-0355 (EQPT36)	2.5	11	2.6	11.2	.2	.7	1.1	2.2	.2	1	.2	1	.2	1		
H-0362,H-0363, H-0364 (EQPT143)	6.9	30.1	11.4	50.1	.8	3.3	5	9.7	1	4.5	1	4.5	1	4.5		
H-0421 (EQPT42)	2.4	10.6	2.5	10.8	.2	.7	1	1.7	.2	1	.2	1	.2	1		
H-0464 (EQPT150)	.5	2.3	.9	3.8	.1	.3	.4	.6	.1	.4	.1	.4	.1	.4		
H-0473 (EQPT48)	6.5	28.5	27.7	121.2	.1	.6	30	81.8	3.5	8.4	3.5	8.4	3.5	8.4	.3	1.4
H-0600 (EQPT37)	4.7	20.4	7.7	33.7	.5	2.2	3.1	5.4	.7	3	.7	3	.7	3		
H-0601 (EQPT55)	3.5	15.4	7.1	31.3	.5	2	2.9	5	.6	2.8	.6	2.8	.6	2.8		
H-2421 (EQPT147)	1.2	5.3	2.5	10.8	.2	.7	1	1.6	.2	1	.2	1	.2	1		
H-2501 (EQPT170)	3.6	15.8	7.2	31.5	.7	3.2	4.4	7.2	1	4.3	1	4.3	1	4.3		
H-2601 (EQPT256)	1.29	5.66	2.59	11.33	.23	1.02	.53	2.31			.32	1.41	.32	1.41		
H-3101 (EQPT179)	.3	1.4	1	4.3	.1	.3	.4	.7	.1	.4	.1	.4	.1	.4		



Unit No.	NO <sub>x</sub> (pph)	<sup>1</sup> NO <sub>x</sub> (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO <sub>2</sub> (pph)	SO <sub>2</sub> (tpy)	TSP (pph)	TSP (tpy)	PM <sub>10</sub> (pph)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (pph)	PM <sub>2.5</sub> (tpy)	H <sub>2</sub> S (pph)	H <sub>2</sub> S (tpy)
H-3103 (EQPT181)	13	28.53	30	65.77	.23	.6006	189	82.2	3.4	8.4	3.4	8.4	3.4	8.4	.3	1.4
H-3402 (EQPT174)	1.6	6.8	4.7	20.5	.3	1.4	1.9	3.1	.4	1.9	.4	1.9	.4	1.9		
H-3403 (EQPT229)	1	4.2	2.9	12.8	.2	.8	1.2	1.9	.3	1.2	.3	1.2	.3	1.2		
H-5401 (EQPT244)	.77	3.4	.64	2.8	.12	.5	.72	1.3	.2	.7	.2	.7	.2	.7		
H-8801, H- 8802 (EQPT156)	8.7	38	13.9	60.9	.9	4	2.8	5	1.3	5.5	1.3	5.5	1.3	5.5		
H-9851 (EQPT176)	8.4	19.61	40.4	91	4	9.3	12.6	11.1	2.8	12.3	5.6	12.6	2.8	12.3		
MG-0001 (EQPT265)	1.8	8.1	1.6	7.1	1.8	8.1	.003	.02			.09	.4	.09	.4		
MG-0002 (EQPT268)	1.8	8.1	1.6	7.1	1.8	8.1	.003	.02			.09	.4	.09	.4		
MG-0003 (EQPT269)	.09	.4	1.1	5	.04	.2	.003	.02			.09	.4	.09	.4		
MG-0004 (EQPT272)	4.6	.23	4.03	.2	4.6	.23					.23	.01	.23	.01		
RLO-19 (EQPT76)					65.6	11.7										
RLO-26 (EQPT257)					4.76	1.54										
RLO-8 (EQPT71)					19.9	6.4										
S-1/T-1 (TRMT2)					.0001	.0006										

Unit No.	NO <sub>x</sub> (pph)	<sup>1</sup> NO <sub>x</sub> (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO <sub>2</sub> (pph)	SO <sub>2</sub> (tpy)	TSP (pph)	TSP (tpy)	PM <sub>10</sub> (pph)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (pph)	PM <sub>2.5</sub> (tpy)	H <sub>2</sub> S (pph)	H <sub>2</sub> S (tpy)
SG-0100 (EQPT273)	1.61	.4	.35	.09	.13	.03	.0006	.0002	.11	.03	.11	.03	.11	.03		
SG-0101 (EQPT274)	1.7	.4	.36	.09	.14	.03	.0006	.0002	.12	.03	.12	.03	.12	.03		
SG-0102 (EQPT247)	.07	.02	.81	.2	.03	.01	.001	.0003								
SSM FL-HEP- PORT (EQPT228)	11.56	.09	50.12	.38	106.7	.8	.11	.001							.001	
SSM Flare Cap (EQPT233)	162.9	18.3	1243	77	1376. 3	68.7	1133. 4	14.9							12.4	.16
SSM H-0473 (EQPT236)	6.5	.03	27.7	.12	.1	.0005	135	.38			11.53	.03	11.53	.03	1.44	.004
SSM H-3103 (EQPT232)	6.5	.03	15	.07	.1	.0005	50	.23			4.93	.02	4.93	.02	.53	.002
SSM H-9851 (EQPT230)	11.23	1.35	20.2	2.4	2	.2	6.32	.3			2.8	.3	2.8	.3		
SSM Piggings (RPNT167)					24.7	.64										
SSM T-0737 (EQPT231)					.24	.004									.02	
SSM Tanks Misc (EQPT240)					51.9	8.1									.02	.004
SSM Tanks VCU (EQPT259)	.17	.037	.17	.033	2.6	.21	.05	.02	.009	.002	.009	.002	.009	.002	.001	

Unit No.	NO <sub>x</sub> (pph)	<sup>1</sup> NO <sub>x</sub> (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO <sub>2</sub> (pph)	SO <sub>2</sub> (tpy)	TSP (pph)	TSP (tpy)	PM <sub>10</sub> (pph)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (pph)	PM <sub>2.5</sub> (tpy)	H <sub>2</sub> S (pph)	H <sub>2</sub> S (tpy)
SSM-1 MISC (RPNT153)												.01				
SSM-2 MISC (RPNT154)	17	1.9	127.1	7.8	137.7	6.9	129.3	1.6	.06	.02	.06	.02	.06	.02	.7	.1
T-0801 (EQPT59)					.5	2.2										
T-0805 (RPNT160)						.01										
T-0806 (RPNT150)					1.64	7.18										
T-0809 (EQPT280)					.0004	.02										
T-0830 (EQPT279)					.0005	.0024										
T-0836 (EQPT219)					.8	3.5										
T-0896 (RPNT140)					.2	.7										
T-0897 (RPNT161)					.01	.02										
TL-2 (EQPT67)					12.5	3.8										
TL-4 VCU (EQPT248)	1.97	1.23	1.97	1.22	.05	.001	.51	.014	.11	.066	.11	.066	.11	.066		
TL-4 VRU (EQPT68)					4.5	4.8										
TL-7 (EQPT70)					12.2	1.9										

Unit No.	NO <sub>x</sub> (pph)	<sup>1</sup> NO <sub>x</sub> (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO <sub>2</sub> (pph)	SO <sub>2</sub> (tpy)	TSP (pph)	TSP (tpy)	PM <sub>10</sub> (pph)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (pph)	PM <sub>2.5</sub> (tpy)	H <sub>2</sub> S (pph)	H <sub>2</sub> S (tpy)
TLO-1 (EQPT66)					14.6	14.5										
TLO-13 (EQPT74)					28.6	7.5										
TLO-14 (EQPT75)																
TLO-20 (EQPT220)					25	3.8										
TRLO-9 (EQPT72)															.005	.02
TVCU (EQPT281)	1.97	1.23	1.97	1.22	.05	.001	.51	.014								
Y-0001 (EQPT61)					.2	.9			.3	1.2	.16	.69	.0006	.0026		
Y-0002 (EQPT62)					.2	.9			.3	1.2	.2	.7	.001	.003		
Y-0008 (EQPT65)					.5	2.3			.6	2.7	.4	1.6	.002	.007		
Y-0011 (EQPT217)					1.3	5.5			.5	2.3	.3	1.4	.002	.005		
Y-0012 (EQPT218)					.4	1.8			.2	.8	.1	.5	.0004	.002		
Y-0014 (EQPT258)					.11	.46			.044	.19	.026	.115	.0001	.0004		

- 1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub>.
  - 2 Title V annual fee assessments are based on the sum of allowable tons per year emission limits in Sections A106 and A107.
  - 3 Compliance with emergency flare emission limits is demonstrated by limiting combustion to pilot and/or purge gas only.
- “-” indicates the application represented emissions are not expected for this pollutant.

“<” indicates that the application represented the uncontrolled mass emission rates are less than 1.0 pph. or 1.0 tpy. for this emissions unit and this air pollutant. The Department determined that allowable mass emission limits were not required for this unit and this pollutant.

“\*” indicates hourly emission limits are not appropriate for this operating situation.

Why this statement is true, PM=PM10=PM2.5.

PM = PM (Condensable) + PM10 (filterable) = 9.91 E-03 + 7.71 E-05 = 9.99 E-03 for natural gas-fired reciprocating engines. (AP-42 (7/00), 3.2.3.3, Table 3.2-2) References from AP-42 indicate particulate matter from combustion of natural gas is primarily very small-sized particulate matter. Since, by definition, the total suspended particulate includes all particle-sizes less than an aerodynamic diameter of approximately 30 microns and PM10 includes those less than 10 microns in size. This is recognized by the NMED in the particle depletion parameters that are provided by the AQB Modeling Section which state that combustion particulates are 100% PM2.5 or smaller.

**POTENTIAL HAPs and TAPs EMISSIONS FROM TEMPO, Table has the most common HAPS – it is not inclusive of all HAPS that might be entered in TEMPO.** All emissions are in tons/year. **NOTE:** Only selected larger figures summarized here. See application Table 2-I for full details. And see Table 102.B in this Database Summary.

Unit No.	Total HAPs and TAPs (tpy)	Ammonia (tpy) TAP	Sulfuric Acid (tpy) TAP	Benzene (tpy)	Cyclo Hexane (tpy)	Hexane (tpy)	Hydrogen cyanide (tpy)	Formaldehyde (tpy)	Hexane (tpy)	Methanol (tpy)	Toluene (tpy)	Xylene (tpy)
FCC Regen	130	71	4.7				92					
FUG-10-FCC	5.8											
FUG-29-Blender	6.5											
FUG-70-CCR	6.3											
Total TAP (2 TAPs)	94.4	71										
TOTAL HAP*	217.1						92					
HAP + TAP	311.5											

\* Totals are for information only and may not match the totals in the table “TOTAL HAPS and NM TAPS”