

Mail Application To: New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico, 87505 Phone: (505) 476-4300 Fax: (505) 476-4375 www.env.nm.gov/aqb		For Department use only:
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Universal Air Quality Permit Application

Use this application for NOI, NSR, or Title V sources.

Use this application for: the initial application, modifications, technical revisions, and renewals. For technical revisions, complete Sections, 1-A, 1-B, 2-E, 3, 9 and any other sections that are relevant to the requested action; coordination with the Air Quality Bureau permit staff prior to submittal is encouraged to clarify submittal requirements and to determine if more or less than these sections of the application are needed. Use this application for streamline permits as well.

This application is submitted as (check all that apply): ☐ Request for a No Permit Required Determination (no fee)
☐ **Updating** an application currently under NMED review. Include this page and all pages that are being updated (no fee required).
Construction Status: ☐ Not Constructed ☒ Existing Permitted (or NOI) Facility ☐ Existing Non-permitted (or NOI) Facility
Minor Source: ☐ NOI 20.2.73 NMAC ☒ 20.2.72 NMAC application or revision ☐ 20.2.72.300 NMAC Streamline application
Title V Source: ☐ Title V (new) ☐ Title V renewal ☐ TV minor mod. ☐ TV significant mod. ☐ TV Acid Rain: ☐ New ☐ Renewal
PSD Major Source: ☐ PSD major source (new) ☒ Minor Modification to a PSD source ☐ a PSD major modification

Acknowledgements:

- ☒ I acknowledge that a pre-application meeting is available to me upon request. ☐ Title V Operating, Title IV Acid Rain, and NPR applications have no fees.
- ☒ \$500 NSR application Filing Fee enclosed **OR** ☐ The full permit fee associated with 10 fee points (required w/ streamline applications).
- ☒ Check No.: _____ in the amount of \$500.00
- ☒ I acknowledge the required submittal format for the hard copy application is printed double sided 'head-to-toe', 2-hole punched (except the Sect. 2 landscape tables is printed 'head-to-head'), numbered tab separators. Incl. a copy of the check on a separate page.
- ☒ I acknowledge there is an annual fee for permits in addition to the permit review fee: www.env.nm.gov/air-quality/permit-fees-2/.
- ☐ This facility qualifies for the small business fee reduction per 20.2.75.11.C. NMAC. The full \$500.00 filing fee is included with this application and I understand the fee reduction will be calculated in the balance due invoice. The Small Business Certification Form has been previously submitted or is included with this application. (Small Business Environmental Assistance Program Information: www.env.nm.gov/air-quality/small-biz-eap-2/.)

Citation: Please provide the **low level citation** under which this application is being submitted: **20.2.72.219.D NMAC**
 (e.g. application for a new minor source would be 20.2.72.200.A NMAC, one example for a Technical Permit Revision is 20.2.72.219.B.1.b NMAC, a Title V acid rain application would be: 20.2.70.200.C NMAC)

Section 1 – Facility Information

Section 1-A: Company Information		Updating Permit/NOI #: PSD- 195-M40
1	Facility Name: HF Sinclair Navajo Refining LLC – Artesia	AI # if known: 198 Plant primary SIC Code (4 digits): 2911 Plant NAIC code (6 digits): 324110
	Facility Street Address (If no facility street address, provide directions from a prominent landmark): 501 E. Main St., Artesia, NM 88210	
2	Plant Operator Company Name: HF Sinclair Navajo Refining LLC	Phone/Fax: (575) 748-3311

a	Plant Operator Address: P.O. Box 159, Artesia, NM 88211-0159	
b	Plant Operator's New Mexico Corporate ID or Tax ID: Tax ID is CRS # 02-488869-00-9	
3	Plant Owner(s) name(s): HF Sinclair Navajo Refining LLC	Phone/Fax: (575) 748-3311
a	Plant Owner(s) Mailing Address(s): P.O. Box 159, Artesia, NM 88211-0159	
4	Bill To (Company): HF Sinclair Navajo Refining LLC	Phone/Fax: (575) 748-3311
a	Mailing Address: P.O. Box 159, Artesia, NM 88211-0159	E-mail:
5	<input type="checkbox"/> Preparer: <input checked="" type="checkbox"/> Consultant: Connor McBride (Ashworth Leininger Group)	Phone/Fax: (346) 459-6990
a	Mailing Address: 2219 Sawdust Rd Suite 1604, Spring, TX 77380	E-mail: cmcbride@algcorp.com
6	Plant Operator Contact: Justin Mills	Phone/Fax: (575) 909-3143
a	Address: PO Box 159, Artesia, NM 88211	E-mail: Justin.Mills@HFSinclair.com
7	Air Permit Contact: Robert Dunaway	Title: Environmental Specialist
a	E-mail: Rob.Dunaway@HFSinclair.com	Phone/Fax: (575) 746-5281
b	Mailing Address: 501 E. Main St., Artesia, NM 88210	
c	The designated Air permit Contact will receive all official correspondence (i.e. letters, permits) from the Air Quality Bureau.	

Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.b If yes to question 1.a, is it currently operating in New Mexico? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Is the facility currently shut down? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, give month and year of shut down (MM/YY):
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: P-051-R3
7	Has this facility been issued a No Permit Required (NPR)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NPR No. is:
8	Has this facility been issued a Notice of Intent (NOI)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NOI No. is:
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: PSD-195-M40
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the register No. is:

Section 1-C: Facility Input Capacity & Production Rate

1	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: N/A	Daily: N/A	Annually: N/A
b	Proposed	Hourly: N/A	Daily: N/A	Annually: N/A
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: N/A	Daily: N/A	Annually: N/A
b	Proposed	Hourly: N/A	Daily: N/A	Annually: N/A

Section 1-D: Facility Location Information

1	Latitude (decimal degrees): 32°50'33.6"	Longitude (decimal degrees): 104°23'26.5"	County: Eddy	Elevation (ft): 3,365
2	UTM Zone: <input type="checkbox"/> 12 or <input checked="" type="checkbox"/> 13		Datum: <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> WGS 84	
a	UTM E (in meters, to nearest 10 meters): 557,020		UTM N (in meters, to nearest 10 meters): 3,634,010	
3	Name and zip code of nearest New Mexico town: Artesia 88210			
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): Refinery is within Artesia city limits			
5	The facility is 0 (distance) miles East (direction) of Artesia (nearest town).			
6	Land Status of facility (check one): <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian/Pueblo <input type="checkbox"/> Government <input type="checkbox"/> BLM <input type="checkbox"/> Forest Service <input type="checkbox"/> Military			
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: Eddy County, Chaves County, Artesia			
8	20.2.72 NMAC applications only : Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see www.env.nm.gov/air-quality/modeling-publications/)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers:			
9	Name nearest Class I area: Carlsbad Caverns National Park			
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 71 km			
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: 12 m			
12	Method(s) used to delineate the Restricted Area: Fencing, walls, and gates "Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.			
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.			
14	Will this facility operate in conjunction with other air regulated parties on the same property? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, what is the name and permit number (if known) of the other facility?			

Section 1-E: Proposed Operating Schedule (The 1-E.1 & 1-E.2 operating schedules may become conditions in the permit.)

1	Facility maximum operating ($\frac{\text{hours}}{\text{day}}$): 24	($\frac{\text{days}}{\text{week}}$): 7	($\frac{\text{weeks}}{\text{year}}$): 52	($\frac{\text{hours}}{\text{year}}$): 8,760
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$)? Start:		<input type="checkbox"/> AM <input type="checkbox"/> PM	End: <input checked="" type="checkbox"/> AM <input checked="" type="checkbox"/> PM
3	Month and year of anticipated start of construction: N/A			
4	Month and year of anticipated construction completion: N/A			
5	Month and year of anticipated startup of new or modified facility: N/A			
6	Will this facility operate at this site for more than one year? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

Section 1-F: Other Facility Information

1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, specify:	
a	If yes, NOV date or description of issue:	NOV Tracking No:

b	Is this application in response to any issue listed in 1-F, 1 or 1a above? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide the 1c & 1d info below:		
c	Document Title:	Date:	Requirement # (or page # and paragraph #):
d	Provide the required text to be inserted in this permit: See supporting documentation		
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
a	If Yes, what type of source? <input checked="" type="checkbox"/> Major (<input type="checkbox"/> >10 tpy of any single HAP OR <input checked="" type="checkbox"/> >25 tpy of any combination of HAPS) OR <input type="checkbox"/> Minor (<input type="checkbox"/> <10 tpy of any single HAP AND <input type="checkbox"/> <25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
a	If yes, include the name of company providing commercial electric power to the facility: Xcel Energy Commercial power is purchased from a commercial utility company, which specifically does not include power generated on site for the sole purpose of the user.		

Section 1-G: Streamline Application (This section applies to 20.2.72.300 NMAC Streamline applications only)

1	<input type="checkbox"/> I have filled out Section 18, "Addendum for Streamline Applications." <input checked="" type="checkbox"/> N/A (This is not a Streamline application.)
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Section 1-H: Current Title V Information - Required for all applications from TV Sources

(Title V-source required information for all applications submitted pursuant to 20.2.72 NMAC (Minor Construction Permits), or 20.2.74/20.2.79 NMAC (Major PSD/NNSR applications), and/or 20.2.70 NMAC (Title V))

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC): Travis Gibb		Phone: (713) 299-5314
a	R.O. Title: Vice President and Refinery Manager	R.O. e-mail: Travis.Gibb@hollyfrontier.com	
b	R. O. Address: P.O. Box 159, Artesia, NM 88211-0159		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC):		Phone:
a	A. R.O. Title:	A. R.O. e-mail:	
b	A. R. O. Address:		
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship): HF Sinclair Navajo Refining LLC		
4	Name of Parent Company ("Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.): HF Sinclair Corporation		
a	Address of Parent Company: 2828 N. Harwood, Suite 1300, Dallas, TX 75201		
5	Names of Subsidiary Companies ("Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.):		
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations: Robert Dunaway (575) 746-5281		
7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers: Carlsbad Caverns National Park – 71 km, Salt Creek Wilderness Area – 71 km		

Section 1-I – Submittal Requirements

Each 20.2.73 NMAC (**NOI**), a 20.2.70 NMAC (**Title V**), a 20.2.72 NMAC (**NSR** minor source), or 20.2.74 NMAC (**PSD**) application package shall consist of the following:

Hard Copy Submittal Requirements:

- 1) One hard copy **original signed and notarized application package printed double sided 'head-to-toe' 2-hole punched** as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be **head-to-head**. Please use **numbered tab separators** in the hard copy submittal(s) as this facilitates the review process. For NOI submittals only, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required. **Please include a copy of the check on a separate page.**
- 2) If the application is for a minor NSR, PSD, NNSR, or Title V application, include one working hard **copy** for Department use. This copy should be printed in book form, 3-hole punched, and **must be double sided**. Note that this is in addition to the head-to-to 2-hole punched copy required in 1) above. Minor NSR Technical Permit revisions (20.2.72.219.B NMAC) only need to fill out Sections 1-A, 1-B, 3, and should fill out those portions of other Section(s) relevant to the technical permit revision. TV Minor Modifications need only fill out Sections 1-A, 1-B, 1-H, 3, and those portions of other Section(s) relevant to the minor modification. NMED may require additional portions of the application to be submitted, as needed.
- 3) The entire NOI or Permit application package, including the full modeling study, should be submitted electronically. Electronic files for applications for NOIs, any type of General Construction Permit (GCP), or technical revisions to NSRs must be submitted with compact disk (CD) or digital versatile disc (DVD). For these permit application submittals, **two CD** copies are required (in sleeves, not crystal cases, please), with additional CD copies as specified below. NOI applications require only a **single CD** submittal. Electronic files for other New Source Review (construction) permits/permit modifications or Title V permits/permit modifications can be submitted on CD/DVD or sent through AQB's secure file transfer service.

Electronic files sent by (check one):

☒ CD/DVD attached to paper application

☐ Secure electronic transfer. Air Permit Contact Name_____, Email_____ Phone number _____.

a. If the file transfer service is chosen by the applicant, after receipt of the application, the Bureau will email the applicant with instructions for submitting the electronic files through a secure file transfer service. Submission of the electronic files through the file transfer service needs to be completed within 3 business days after the invitation is received, so the applicant should ensure that the files are ready when sending the hard copy of the application. The applicant will not need a password to complete the transfer. **Do not use the file transfer service for NOIs, any type of GCP, or technical revisions to NSR permits.**

- 4) Optionally, the applicant may submit the files with the application on compact disk (CD) or digital versatile disc (DVD) following the instructions above and the instructions in 5 for applications subject to PSD review.
- 5) If **air dispersion modeling** is required by the application type, include the **NMED Modeling Waiver** and/or electronic air dispersion modeling report, input, and output files. The dispersion modeling **summary report only** should be submitted as hard copy(ies) unless otherwise indicated by the Bureau.
- 6) If the applicant submits the electronic files on CD and the application is subject to PSD review under 20.2.74 NMAC (PSD) or NNSR under 20.2.79 NMC include,
 - a. one additional CD copy for US EPA,
 - b. one additional CD copy for each federal land manager affected (NPS, USFS, FWS, USDI) and,
 - c. one additional CD copy for each affected regulatory agency other than the Air Quality Bureau.

If the application is submitted electronically through the secure file transfer service, these extra CDs do not need to be submitted.

Electronic Submittal Requirements [in addition to the required hard copy(ies)]:

- 1) All required electronic documents shall be submitted as 2 separate CDs or submitted through the AQB secure file transfer service. Submit a single PDF document of the entire application as submitted and the individual documents comprising the application.

- 2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc.), submit these items in hard copy format. We must be able to review the formulas and inputs that calculated the emissions.
- 3) It is preferred that this application form be submitted as 4 electronic files (**3 MSWord docs**: Universal Application section 1 [UA1], Universal Application section 3-19 [UA3], and Universal Application 4, the modeling report [UA4]) and **1 Excel file** of the tables (Universal Application section 2 [UA2]). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.
- 4) The **electronic file names** shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: "A-3423-FacilityName". The "A" distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with "A-". Modifications to existing facilities should use the **core permit number** (i.e. '3423') the Department assigned to the facility as the next 4 digits. Use 'XXXX' for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: "A-3423-9-description", where "9" stands for the **section #** (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the **header information** throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision number (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. Do not use special symbols (#, @, etc.) in file names. The footer information should not be modified by the applicant.

Table of Contents

Section 1:	General Facility Information
Section 2:	Tables
Section 3:	Application Summary
Section 4:	Process Flow Sheet
Section 5:	Plot Plan Drawn to Scale
Section 6:	All Calculations
Section 7:	Information Used to Determine Emissions
Section 8:	Map(s)
Section 9:	Proof of Public Notice
Section 10:	Written Description of the Routine Operations of the Facility
Section 11:	Source Determination
Section 12:	PSD Applicability Determination for All Sources & Special Requirements for a PSD Application
Section 13:	Discussion Demonstrating Compliance with Each Applicable State & Federal Regulation
Section 14:	Operational Plan to Mitigate Emissions
Section 15:	Alternative Operating Scenarios
Section 16:	Air Dispersion Modeling
Section 17:	Compliance Test History
Section 20:	Other Relevant Information
Section 22:	Certification Page

Table 2-A: Regulated Emission Sources

Unit and stack numbering must correspond throughout the application package. If applying for a NOI under 20.2.73 NMAC, equipment exemptions under 2.72.202 NMAC do not apply.

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/Reconstruction ²	Emissions vented to Stack #				
B-0007	Boiler 7	Todd/John Zink burners	Unknown		215 MMBtu/hr (LHV Basis)	215 MMBtu/hr (LHV Basis)	2001	N/A B-0007	10200701	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
B-0008	Boiler 8	Todd/John Zink burners	Unknown		215 MMBtu/hr (LHV Basis)	215 MMBtu/hr (LHV Basis)	2003	N/A B-0008	10200701	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
B-0009	Boiler 9	Babcock & Wilcox	Unknown		220 MMBtu/hr (LHV Basis)	220 MMBtu/hr (LHV Basis)	2012	N/A B-0009	10200701	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0009	Unit 13 Naphtha Splitter Reboiler	Zeeco burners	GSFW-12 burners		44 MMBtu/hr (LHV Basis)	44 MMBtu/hr (LHV Basis)	1970	N/A H-0009	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0011	Unit 21 Vacuum Unit Heater	John Zink burners	HEVD-14		38 MMBtu/hr (LHV Basis)	38 MMBtu/hr (LHV Basis)	est. 1972	N/A H-0011	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0018	Unit 06 HDS Reboiler	Zeeco burners	GSFW-8 burners		32 MMBtu/hr (LHV Basis)	32 MMBtu/hr (LHV Basis)	est. 1976	N/A H-0018	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0019	South Crude Charge Heater	Callidus Technologies, LLC burners	CUBL-8W burners		54 MMBtu/hr (LHV Basis)	54 MMBtu/hr (LHV Basis)	2005	N/A H-0019	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0020	South Crude Charge Heater	Callidus Technologies, LLC burners	CUBL-12W burners		90 MMBtu/hr (LHV Basis)	90 MMBtu/hr (LHV Basis)	est. 1972	N/A H-0020	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0028	Unit 21 Heater	John Zink burners	PSFG-12 burners		12.3 MMBtu/hr (LHV Basis)	12.3 MMBtu/hr (LHV Basis)	11/1/1993	N/A H-0028	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0030	Unit 06 Charge Heater	John Zink burners	PSFG-16R burners		42 MMBtu/hr (LHV Basis)	42 MMBtu/hr (LHV Basis)	12/19/2001	N/A H-0030	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0040	Unit 13 Charge Heater	John Zink burners	PSFG-16 burners		42 MMBtu/hr (LHV Basis)	42 MMBtu/hr (LHV Basis)	11/1/1997	N/A H-0040	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0312	Unit 10 FCC Feed Heater	John Zink burners	VYD-18 burners		35 MMBtu/hr (LHV Basis)	35 MMBtu/hr (LHV Basis)	1990	N/A H-0312	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0352	Unit 70 CCR Reformer Heaters (previously 70H1)	Callidus Technologies, LLC burners	CUBL-10W burners		63 MMBtu/hr (LHV)	63 MMBtu/hr (LHV)	est. 1990	N/A H-0352	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0353	Unit 70 CCR Reformer Heaters (previously 70H2)	Callidus Technologies, LLC burners	CUBL-10W burners		81 MMBtu/hr (LHV)	81 MMBtu/hr (LHV)	est. 1990	N/A H-0353	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0354	Unit 70 CCR Reformer Heaters (previously 70H3)	Callidus Technologies, LLC burners	CUBL-10W burners		56 MMBtu/hr (LHV)	56 MMBtu/hr (LHV)	est. 1990	N/A H-0354	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
H-0355	Unit 70 Stabilizer Reboiler Heater (previously 70H4)	John Zink burners	Unknown		28 MMBtu/hr (LHV Basis)	28 MMBtu/hr (LHV Basis)	8/28/1990	N/A H-0355	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/ Reconstruction ²	Emissions vented to Stack #				
H-0362	Unit 70 CCR Heater	Callidus Technologies, LLC burners	CUBL-8W burners		40 MMBtu/hr (LHV)	40 MMBtu/hr (LHV)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							May-2006	H-0362				
H-0363	Unit 70 CCR Heater	Callidus Technologies, LLC burners	CUBL-8W burners		50 MMBtu/hr (LHV)	50 MMBtu/hr (LHV)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							May-2006	H-0363				
H-0364	Unit 70 CCR Heater	Callidus Technologies, LLC burners	CUBL-6W burners		35 MMBtu/hr (LHV)	35 MMBtu/hr (LHV)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							May-2006	H-0364				
H-0421	Unit 44 Charge Heater	John Zink burners	LNC-PC-18 burners		27 MMBtu/hr (LHV Basis)	27 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							5/23/2001	H-0421				
H-0464	SRU Hot Oil Heater	Callidus Technologies, LLC burners	LE-CSG-4W burners		9.6 MMBtu/hr (LHV Basis)	9.6 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							11/1/2003	H-0464				
H-0600	Unit 09 Depropanizer Reboiler Heater	Callidus Technologies, LLC burners	CUBL-12W burners		84 MMBtu/hr (LHV Basis)	84 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							est. 1991	H-0600				
H-0601	Unit 33 Charge Heater	Callidus Technologies, LLC burners	CUB-8P-CW burners		78 MMBtu/hr (LHV Basis)	78 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							2003	H-0601				
H-2421	Unit 45 Charge Heater	Zeeco, Inc. burners	GLSF-14 Round Flame "Free Jet" burners		27 MMBtu/hr (LHV Basis)	27 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							2006	H-2421				
H-2501	Unit 25 ROSE® Unit No. 2 Hot Oil Heater	John Zink Company, LLC burners	COOLstar-18 burners		120 MMBtu/hr (LHV Basis)	120 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							2009	H-2501				
H-3101	SRU3 Hot Oil Heater	Callidus Technologies, LLC burners	Unknown		11 MMBtu/hr (LHV Basis)	11 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							2009	H-3101				
H-3402	Unit 34 Hydrocracker Reboiler 1	Callidus Technologies, LLC burners	LE-CSG-12W burners		52 MMBtu/hr (LHV Basis)	52 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							2009	H-3402				
H-3403	Unit 34 Hydrocracker Reactor Charge Heater	Callidus Technologies, LLC burners	CUBL-10W burners		32 MMBtu/hr (LHV Basis)	32 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							2011	H-3403				
H-5401	Unit 54 HDS Reactor Heater	Tulsa Heaters Inc.	TBD		19 MMBtu/hr (LHV Basis)	19 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							2016	H-5401				
H-8801	Unit 63 Hydrogen Plant Reformer Furnaces	Callidus Technologies, LLC burners	LE-CSG-12W-PSA burners		76 MMBtu/hr (LHV Basis)	76 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							3/1/2006	H-8801				
H-8802	Unit 63 Hydrogen Plant Reformer Furnaces	Callidus Technologies, LLC burners	LE-CSG-12W-PSA burners		76 MMBtu/hr (LHV Basis)	76 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							3/1/2006	H-8802				
H-9851	Unit 64 Hydrogen Plant Reformer	Callidus Technologies, LLC burners	CUBL-3WDF burners		337 MMBtu/hr (LHV Basis)	337 MMBtu/hr (LHV Basis)		N/A	30600106	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							2009	H-9851				
H-0473 (SRU2 TGI)	SRU2 Tail Gas Incinerator				35 MMBtu/hr (LHV Basis)	35 MMBtu/hr (LHV Basis)		N/A	30609904	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified		
							Dec-2001	H-0473 (SRU2 TGI)				

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							Date of Construction/Reconstruction ²	Emissions vented to Stack #				
H-3103 (SRU3 TGI)	SRU3 Tail Gas Incinerator	Callidus Technologies, LLC burners			10.2 MMBtu/hr (LHV Basis)	10.2 MMBtu/hr (LHV Basis)	5/11/2009	N/A H-3103 (SRU3 TGI)	30609904	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
FCC Regen	FCC Regenerator Scrubber	Exxon	IV		N/A	N/A	est. 1979	N/A FCC Regen	30600201	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
FL-400	North Plant Flare	N/A	N/A	N/A	N/A	N/A	est. 1972	N/A FL-400	30600904	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
FL-401	South Plant Flare	N/A	N/A	N/A	N/A	N/A	est. 1972	N/A FL-401	30600904	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
FL-402	FCC Flare	N/A	N/A	N/A	N/A	N/A	est. 1979	N/A FL-402	30600904	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
FL-403	Alky Flare	N/A	N/A	N/A	N/A	N/A	est. 1991	N/A FL-403	30600904	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
FL-404	GOHT Flare	N/A	N/A	N/A	N/A	N/A	2003	N/A FL-404	30600904	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
FL-HEP-PORT	FL-HEP Portable Flare	N/A	N/A	N/A	N/A	N/A		N/A FL-HEP-PORT	30600904	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
MG-0001	Portable Air Compressor	Cummins	QSC 8.3, 44358719		280 HP	280 HP	2012	N/A MG-0001	20200102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	CI	
MG-0002	Portable Air Compressor	Cummins	QSC 8.3, 46338720		280 HP	280 HP	2012	N/A MG-0002	20200102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	CI	
MG-0003	Portable Air Compressor	Doosan/Cummins	QSB 4.5, 489581UKA CF68		138 HP	138 HP	2019	N/A MG-0003	20200102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	CI	
MG-0004	Portable Fire Water Pump Engine	Caterpillar	C18, WJH07870		700 HP	700 HP	Oct-2010	N/A MG-0004	20200102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	CI	
SG-0100	UPS backup generator (exempt*)	Deutz	F4L912GEN/WDZXL05.7010		52 HP	52 HP	1998 2002	N/A SG-0100	20200102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	CI	
SG-0101	UPS backup generator (exempt*)	Deutz	F4L 1011 F/ EI97-68CA00-000-0053		54 HP	54 HP	1999 <2006	N/A SG-0101	20200102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	CI	
SG-0102	Server Backup Generator (exempt*)	John Deere	4045HFS80		99 HP	99 HP	2018	N/A SG-0102	20200102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	CI	
FWG-0600	Fire Water Pump Engine	Clarke Diesel (John Deere)	JW6H-UFAD70/RG6090L113548		376 HP	376 HP	Nov-2012	N/A FWG-0600	20200102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	CI	
FWG-0601	Fire Water Pump Engine	Clarke Diesel (John Deere)	JW6H-UFAD70/RG6090L113561		376 HP	376 HP	Nov-2012	N/A FWG-0601	20200102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	CI	

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							Date of Construction/Reconstruction ²	Emissions vented to Stack #				
FWG-0602	Fire Water Pump Engine	Clarke Diesel (John Deere)	JW6H-UFAD70/RG6090L113574		376 HP	376 HP	Nov-2012	N/A FWG-0602	20200102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	CI	
FWG-0603	Fire Water Pump Engine	Clarke Diesel (John Deere)	JU6H-UFADX8/PE6068L228486		305 HP	305 HP	Apr-2013	N/A FWG-0603	20200102	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced	CI	
Y-0001	TCC Cooling Tower				5,000 gpm	5,000 gpm		N/A Y-0001	30600701	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
Y-0002	S. Alky Cooling Tower (Marley Cooling Tower)				5,000 gpm	5,000 gpm		N/A Y-0002	30600701	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
Y-0008	North Alky Cooling Tower				12,500 gpm	12,500 gpm		N/A Y-0008	30600701	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
Y-0011	FCC & NP Cooling Tower				30,000 gpm	30,000 gpm		N/A Y-0011	30600701	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
Y-0012	Hydrogen Plants Cooling Tower				10,000 gpm	10,000 gpm		N/A Y-0012	30600701	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
CT TT-0006	Unit 07 Amine W-0745 Cooling Tower				3,000 gpm	3,000 gpm		N/A CT TT-0006	30600701	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
Collection Sump	WW System Collection Sump				1,200 gpm	1,200 gpm		N/A Collection Sump	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-0845	Weir Box (WW)				1,200 gpm	1,200 gpm		D-8000/D-8001 D-8000/D-8001	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-0844	Stilling Well (WW)				1,200 gpm	1,200 gpm		D-8000/D-8001 D-8000/D-8001	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-0846	Stormwater Lift Station (SWLS)				1,200 gpm	1,200 gpm		D-8000/D-8001 D-8000/D-8001	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-0830	Stormwater Surge Tank (external floater)				109,660 bbl	109,660 bbl	1/1/2011	T-801/T-830 TO T-801/T-830 TO	40301150	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
S-1/T-1	Barscreen & Junction Box				1,200 gpm	1,200 gpm		D-829/D-830 D-829/D-830	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
API-894/ API-895	API Separators				1,200 gpm	1,200 gpm		D-829/D-830 D-829/D-830	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-0829	SRO Reject Tank				30,5000 bbl	30,5000 bbl	pre-1971	N/A T-0829	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-801	Enhanced Biodegradation Tank				1,200 gpm	1,200 gpm	1987	T-801/T-830 TO T-801/T-830 TO	30600503	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		

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							Date of Construction/ Reconstruction ²	Emissions vented to Stack #				
T-836	Enhanced Biodegradation Tank				1,200 gpm	1,200 gpm	1998	T-836 TO T-836 TO	30600503	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
T-805	Flocculator				1,200 gpm	1,200 gpm		N/A T-805	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
DAF T-896	DAF Unit T-896				1,200 gpm	1,200 gpm		N/A DAF T-896	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
DAF T-806	DAF Unit T-806				1,200 gpm	1,200 gpm		N/A DAF T-806	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
T-897	DAF Surge Open Sump				1,200 gpm	1,200 gpm		N/A T-897	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
D-810/811	Walnut Hull Filters				1,200 gpm	1,200 gpm		N/A D-810/811	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
D-808/809	Mechanical Filters				1,200 gpm	1,200 gpm		N/A D-808/809	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
T-809	DAF Surge Tank				1,200 gpm	1,200 gpm		N/A T-809	30600503	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
TLO-1	Asphalt Truck Loading and Off-Loading Rack				350 bbl/hr	350 bbl/hr		N/A TLO-1	40400150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
TL-2	Asphalt Truck Loading Rack #2				300 bbl/hr	300 bbl/hr		N/A TL-2	40400150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
TL-4	Fuels Truck Loading Rack				3,571 bbl/hr	3,571 bbl/hr		TL-4 VRU TL-4 VCU TL-4	40400150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
TL-7	CBO/LCO Truck Loading Rack				681 bbl/hr	681 bbl/hr		N/A TL-7	40400150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
RLO-8	Railcar Loading and Off-Loading Rack				1,500 bbl/hr	1,500 bbl/hr		N/A RLO-8	40400150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
RLO-19	Railcar Loading and Off-Loading Rack				3,950 bbl/hr	3,950 bbl/hr		N/A RLO-19	40400150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
TLO-20	Asphalt/Pitch Truck Loading Rack				600 bbl/hr	600 bbl/hr		N/A TLO-20	40400150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
TRLO-9	Molten Sulfur Truck/Railcar Loading Rack				330 LTPD	330 LTPD		N/A TRLO-9	40400150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	
FUG-02-SP CRUDE	South Division Crude Unit						2009	N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/ Reconstruction ²	Emissions vented to Stack #				
FUG-06-NH DU	Naphtha HDS Unit 06							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-07-N AMINE	Amine Unit-Treating/Regen. 2							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-07-SWS1	Sour Water Stripper							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-08-TRUCK RK	Loading Racks							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-09-N ALKY	North Alkylation Unit (New-Inside battery limits)							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-10-FCC	FCC w/CVS							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-13-NH DU	Naphtha HDS Unit 13							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-18-LSR MEROX TRT	Merox/Merichem Treating Units							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-19-NAPHTHA	Naptha Merox							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-20-ISOM	BenFree Unit							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-21-SP VACUUM	Flasher/Vacuum Unit							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-25-ROSE-2	ROSE Unit							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-29-BLENDER/TK FARM	Light Oil Tankage							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-30-SRU2/TGTU	SRU2/SWS w/CVS							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-31-SRU3/TGTU 3/TG 13	SRU3 Unit						2007	N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-33-DIST HDU	Diesel HDS Unit w/CVS							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
FUG-34-HYDROCRACKER	WX Hydrocracker						2008	N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/Reconstruction ²	Emissions vented to Stack #				
FUG-35-SAT GAS	Saturates Gas Plant							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
								N/A				
FUG-36-RO	Reverse Osmosis							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
								N/A				
FUG-37-NP-UT	North Plant Utilities							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
								N/A				
FUG-41-PBC	PBC Unit							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
								N/A				
FUG-43-SALKY	South Alky Unit (W-76)							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
								N/A				
FUG-44-DIST- HDU	Gas Oil Hydrotreater (incl. CVS)							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
								N/A				
FUG-45-DIST- HDU	Gas Oil Hydrotreater (incl. CVS)							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
								N/A				
FUG-54-PRIMEG	Prime G Unit							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							2016	N/A				
FUG-63-H2 PLANT-1	Hydrogen Plant							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
								N/A				
FUG-64-H2 PLANT-2	Hydrogen Plant							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							2008	N/A				
FUG-70-CCR	CCR Reformer (w/in battery limits)							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
								N/A				
FUG-73-SP UTIL	Utilities							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
								N/A				
FUG-80-WWTP CVS	Oil/Water Separator							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
								N/A				
FUG-LPG	LPG Storage System							N/A	40388801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
								N/A				
T-0011	INT				32,130 bbl	32,130 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							pre-1973	T-0011				
T-0012	INT				32,130 bbl	32,130 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							pre-1973	T-0012				
T-0020	INT				54,380 bbl	54,380 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							10/1/2020	T-0020				

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							Date of Construction/ Reconstruction ²	Emissions vented to Stack #				
T-0021	INT				54,380 bbl	54,380 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							10/1/2020	T-0021				
T-0022	INT				37,770 bbl	37,770 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							10/1/2020	T-0022				
T-0023	INT				37,770 bbl	37,770 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							10/1/2020	T-0023				
T-0040	CR				820 bbl	820 bbl		N/A	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							pre-1973	T-0040				
T-0041	CR				820 bbl	820 bbl		N/A	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							1973	T-0041				
T-0049	HFR				610 bbl	610 bbl		Carbon Cannister	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							pre-1971	T-0049				
T-0055	CR				10,200 bbl	10,200 bbl		N/A	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							1979	T-0055				
T-0056	INT				11,600 bbl	11,600 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							pre-1971	T-0056				
T-0059	CR				5,140 bbl	5,140 bbl		N/A	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							pre-1973	T-0059				
T-0061	CR				10,490 bbl	10,490 bbl		N/A	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							pre-1973	T-0061				
T-0063	CR				10,910 bbl	10,910 bbl		N/A	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							pre-1973	T-0063				
T-0065	CR				10,490 bbl	10,490 bbl		N/A	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							1999	T-0065				
T-0075	CR				18,910 bbl	18,910 bbl		N/A	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							2003	T-0075				
T-0079	EXT				87,420 bbl	87,420 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							9/7/2008	T-0079				
T-0081	INT				109,660 bbl	109,660 bbl		N/A	40301099	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							2023	T-0081				
T-0082	CR				65,870 bbl	65,870 bbl		N/A	40301099	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							2010	T-0082				
T-0106	INT				25,120 bbl	25,120 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
							pre-1971	T-0106				

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							Date of Construction/ Reconstruction ²	Emissions vented to Stack #				
T-0107	INT				25,120 bbl	25,120 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							pre-1971	T-0107				
T-0108	INT				25,120 bbl	25,120 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							pre-1971	T-0108				
T-0109	INT				25,120 bbl	25,120 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							pre-1971	T-0109				
T-0110	CR				57,100 bbl	57,100 bbl		N/A	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							pre-1971	T-0110				
T-0111	INT				10,080 bbl	10,080 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							pre-1973	T-0111				
T-0112	INT				9,670 bbl	9,670 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							pre-1973	T-0112				
T-0117	EXT				15,470 bbl	15,470 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							pre-1971	T-0117				
T-0124	INT				6,710 bbl	6,710 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							1981	T-0124				
T-0400	CR				96,680 bbl	96,680 bbl		N/A	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							1983	T-0400				
T-0401	EXT				56,650 bbl	56,650 bbl		TK 401/411 TO	40301150	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							1982	TK 401/411 TO				
T-0402	EXT				56,650 bbl	56,650 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							1983	T-0402				
T-0410	CR				34,920 bbl	34,920 bbl		N/A	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							1973	T-0410				
T-0411	EXT				55,950 bbl	55,950 bbl		TK 401/411 TO	40301150	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							pre-1971	TK 401/411 TO				
T-0412	EXT				55,950 bbl	55,950 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							pre-1971	T-0412				
T-0413	INT				24,490 bbl	24,490 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							pre-1971	T-0413				
T-0415	INT				25,120 bbl	25,120 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							pre-1971	T-0415				
T-0417	INT				10,490 bbl	10,490 bbl		N/A	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced		
							pre-1973	T-0417				

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/Reconstruction ²	Emissions vented to Stack #				
T-0418	INT				20,720 bbl	20,720 bbl	N/A		40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							>2021	T-0418				
T-0419	CR				11,000 bbl	11,000 bbl	N/A		40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							pre-1973	T-0419				
T-0420	CR				10,490 bbl	10,490 bbl	N/A		40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							pre-1973	T-0420				
T-0422	CR				10,490 bbl	10,490 bbl	N/A		40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							pre-1973	T-0422				
T-0423	CR				10,490 bbl	10,490 bbl	N/A		40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							pre-1971	T-0423				
T-0431	CR				53,180 bbl	53,180 bbl	N/A		40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							pre-1973	T-0431				
T-0432	CR				53,180 bbl	53,180 bbl	N/A		40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							pre-1972	T-0432				
T-0433	CR				80,420 bbl	80,420 bbl	N/A		40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							pre-1973	T-0433				
T-0434	CR				80,420 bbl	80,420 bbl	N/A		40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							1979	T-0434				
T-0435	EXT				5,040 bbl	5,040 bbl	N/A		40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							1/1/1997	T-0435				
T-0437	EXT				90,640 bbl	90,640 bbl	N/A		40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							Built 1976 Relocated 2009	T-0437				
T-0438	CR				54,380 bbl	54,380 bbl	N/A		40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							6/1/1978	T-0438				
T-0439	INT				108,740 bbl	108,740 bbl	N/A		40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							11/1/1978	T-0439				
T-0450	EXT				80,570 bbl	80,570 bbl	N/A		40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							1/1/1997	T-0450				
T-0451	INT				6,850 bbl	6,850 bbl	N/A		40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							1/1/2016	T-0451				
T-0452	INT				6,850 bbl	6,850 bbl	N/A		40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							1/1/2016	T-0452				
T-0737	EXT				22,210 bbl	22,210 bbl	N/A		40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Replaced		
							1/1/2009	T-0737				

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/Reconstruction ²	Emissions vented to Stack #				
T-0802	EXT				11,330 bbl	11,330 bbl	1/1/2002	T-0802	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-0814	CR				11,190 bbl	11,190 bbl	2005	T-0814	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-0815	CR				80,930 bbl	80,930 bbl	2005	T-0815	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-0821	EXT				78,580 bbl	78,580 bbl	1/1/2016	T-0821	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-0834	EXT				40,420 bbl	40,420 bbl	pre-1971	T-0834	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-0835	EXT				68,940 bbl	68,940 bbl	pre-1973	T-0835	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-0838	CR				30,640 bbl	30,640 bbl	4/1/1977	T-0838	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-1225	EXT				125,890 bbl	125,890 bbl	2009	T-1225	40301150	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-1227	CR				33,170 bbl	33,170 bbl	2009	T-1227	40301099	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
TVCU	Floating Roof Tank Landings Vapor Combustion Unit (VCU)					52 lb/hr		N/A	30205021	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
Pigging	Pigging Operations	N/A	N/A	N/A	N/A	N/A		N/A	2310021801	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-801/T-830 TO	TOX	John Zink PSC		TBD	10 MMBtu/hr	10 MMBtu/hr	8/28/2023	T-801/T-830 TO		<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-836 TO	TOX	John Zink PSC		TBD	10 MMBtu/hr	10 MMBtu/hr	8/28/2023	T-836 TO		<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		
T-401/T-411 TO	TOX	John Zink PSC		TBD	10 MMBtu/hr	10 MMBtu/hr	10/13/2021	TK 401/411 TO		<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To Be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Replaced		

¹ Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits is provided.

² Specify dates required to determine regulatory applicability.

³ To properly account for power conversion efficiencies, generator set rated capacity shall be reported as the rated capacity of the engine in horsepower, not the kilowatt capacity of the generator set.

⁴ "4SLB" means four stroke lean burn engine, "4SRB" means four stroke rich burn engine, "2SLB" means two stroke lean burn engine, "CI" means compression ignition, and "SI" means spark ignition

Table 2-B: Insignificant Activities¹ (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 20.2.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see http://www.env.nm.gov/aqb/permit/aqb_pol.html), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at <https://www.env.nm.gov/wp-content/uploads/sites/2/2017/10/InsignificantListTitleV.pdf>. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	
T-0001	DAF Waste Talon Tank				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0002	DAF Waste Talon Tank				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0003	DAF Waste Talon Tank				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0004	DAF Waste Talon Tank				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0026	Brine - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0028	Scrubber Lime - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0031	Spent Caustic - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0042	Pressurized - Naphthas				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0045	Pressurized - Propane/Butane				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0046	Pressurized - Isobutane				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0064	Caustic - Inorganic				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0071	Pressurized - Propane				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0072	Pressurized - Propane				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0073	Pressurized - Propane				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	
T-0074	Pressurized - Propane				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0076	Pressurized - Propane				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0114	Pressurized - n-Butane				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0115	Pressurized - n-Butane				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0116	Pressurized - Isobutane				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0119	Pressurized - Isobutane				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0446	Calcium Chloride - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0447	Sulfuric Acid - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0448	Antiscalant - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0449	Cleaner - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0453	Calcium Chloride - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0460	Sulfur - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0465	RO Water				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0466	RO Water				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0467	Sulfuric Acid - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0468	Brine - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0600	Soda Ash - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	
T-0803	DAF Waste - Wastewater				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0804	DAF Waste - Wastewater				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0807	Caustic - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0809	Wastewater				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0816	Amine			940	20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
				GAL	N/A		
T-0829	RO Reject Tank				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0839	Condensate Water				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0840	Water				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0841	Calcium Chloride - Inorganic				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0891	Groundwater				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-0892	Groundwater				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-1221	RO Water				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-1222	RO Water				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
T-1223	Fresh Caustic - Inorganic			84,000	20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
				GAL	N/A		
T-1224	Filter Backwash - Wastewater				20.2.72.202.B.2		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
SSM Misc 1	Catalyst Handling				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		
-	Gas Fueling Tanks			500	20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
				GAL	N/A		

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	
-	Diesel Fueling Tanks			500	20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
				GAL	N/A		
-	Sampling Locations				20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
					N/A		

¹ Insignificant activities exempted due to size or production rate are defined in 20.2.70.300.D.6, 20.2.70.7.Q NMAC, and the NMED/AQB List of Insignificant Activities, dated September 15, 2008. Emissions from these insignificant activities do not need to be reported, unless specifically requested.

² Specify date(s) required to determine regulatory applicability.

Unit and stack numbering must correspond throughout the application package. Only list control equipment for TAPs if the TAP's maximum uncontrolled emissions rate is over its respective threshold as listed in 20.2.72 NMAC, Subpart V, Tables A and B. In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions.

¹ List each control device on a separate line. For each control device, list all emission units controlled by the control device.

☒ This Table was intentionally left blank because it would be identical to Table 2-E.

[illegible]

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Table 2-E: Requested Allowable Emissions

Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E⁴).

Unit No.	NOx		CO		VOC		SOx		PM ¹		PM10 ¹		PM2.5 ¹		H ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
B-0008	12.90	56.50	19.67	86.16	1.29	5.64	8.04	13.94	1.78	7.80	1.78	7.80	1.78	7.80	-	-	-	-
B-0009	4.89	21.41	9.04	39.61	0.98	4.28	2.89	12.67	1.82	7.98	1.82	7.98	1.82	7.98	-	-	-	-
H-0009	3.96	17.34	4.03	17.63	0.26	1.20	1.64	2.84	0.36	1.60	0.36	1.60	0.36	1.60	-	-	-	-
H-0011	9.52	31.73	3.48	15.30	0.23	1.00	1.42	2.46	0.31	1.38	0.31	1.38	0.31	1.38	-	-	-	-
H-0018	3.49	15.27	2.93	12.82	0.19	0.84	1.19	2.07	0.26	1.16	0.26	1.16	0.26	1.16	-	-	-	-
H-0019	2.90	12.46	4.94	21.64	0.32	1.42	2.02	3.50	0.45	2.00	0.45	2.00	0.45	2.00	-	-	-	-
H-0020	4.82	21.09	8.23	36.07	0.54	2.36	3.37	5.84	0.75	3.26	0.75	3.26	0.75	3.26	-	-	-	-
H-0028	2.17	9.50	1.13	4.93	0.07	0.32	0.46	0.80	0.10	0.45	0.10	0.45	0.10	0.45	-	-	-	-
H-0030	3.19	13.98	3.84	16.90	0.25	1.10	1.57	2.71	0.40	1.52	0.40	1.52	0.40	1.52	-	-	-	-
H-0040	3.78	16.56	3.84	16.90	0.25	1.10	1.57	2.71	0.40	1.52	0.40	1.52	0.40	1.52	-	-	-	-
H-0312	4.62	20.24	3.20	14.03	0.21	0.92	1.31	2.27	0.29	1.27	0.29	1.27	0.29	1.27	-	-	-	-
H-0352, H-0353 H ₂	9.00	39.42	18.30	80.15	1.20	5.25	8.07	15.56	1.70	7.25	1.70	7.25	1.70	7.25	-	-	-	-
H-0355	2.52	11.04	2.56	11.22	0.17	0.73	1.13	2.18	0.23	1.02	0.23	1.02	0.23	1.02	-	-	-	-
H-0362, H-0363 H ₂	6.88	30.11	11.44	50.09	0.75	3.28	5.04	9.73	1.03	4.53	1.03	4.53	1.03	4.53	-	-	-	-
H-0421	2.43	10.64	2.47	10.82	0.16	0.71	1.01	1.74	0.22	0.98	0.22	0.98	0.22	0.98	-	-	-	-
H-0464	0.52	2.29	0.88	3.85	0.06	0.25	0.36	0.62	0.08	0.40	0.08	0.40	0.08	0.40	-	-	-	-
H-0600	4.70	20.44	7.69	33.66	0.50	2.20	3.14	5.43	0.70	3.05	0.70	3.05	0.70	3.05	-	-	-	-
H-0601	3.51	15.37	7.14	31.26	0.47	2.05	2.91	5.04	0.65	2.83	0.65	2.83	0.65	2.83	-	-	-	-
H-2421	1.22	5.32	2.47	10.82	0.16	0.71	0.98	1.61	0.22	0.98	0.22	0.98	0.22	0.98	-	-	-	-
H-2501	3.60	15.77	7.20	31.54	0.72	3.15	4.35	7.19	0.99	4.35	0.99	4.35	0.99	4.35	-	-	-	-
H-3101	0.33	1.45	0.99	4.34	0.07	0.29	0.41	0.71	0.09	0.40	0.09	0.40	0.09	0.40	-	-	-	-
H-3402	1.56	6.83	4.68	20.50	0.31	1.36	1.89	3.12	0.43	1.89	0.43	1.89	0.43	1.89	-	-	-	-
H-3403	0.96	4.20	2.93	12.82	0.19	0.84	1.16	1.92	0.26	1.16	0.26	1.16	0.26	1.16	-	-	-	-
H-5401	0.77	3.38	0.64	2.82	0.12	0.51	0.72	1.25	0.16	0.70	0.16	0.70	0.16	0.70	-	-	-	-
H-8801/8802	8.66	37.95	13.91	60.91	0.91	3.99	2.85	4.96	1.26	5.51	1.26	5.51	1.26	5.51	-	-	-	-
H-9851	4.21	18.45	20.22	88.56	2.02	8.84	6.32	11.00	2.79	12.30	2.79	12.30	2.79	12.30	-	-	-	-
H-0473 (SRU2 TGD)	6.50	28.50	27.70	121.10	0.10	0.60	30.00	81.80	1.20	2.10	3.50	8.36	3.50	8.36	0.30	1.40	-	-
H-3103 (SRU3 TGD)	6.50	28.50	15.00	65.70	0.10	0.60	30.00	81.80	1.10	2.10	3.40	8.36	3.40	8.36	0.30	1.40	-	-
FCC REGEN	34.92	101.80	121.79	106.69	15.66	68.60	27.85	61.00	25.00	109.50	22.88	95.55	22.88	95.55	-	-	-	-
FL0400	3.47	5.45	14.23	22.35	26.01	32.70	4.48	3.92	-	-	-	-	-	-	0.05	0.04	-	-
FL0401	1.66	1.85	6.82	7.58	19.72	2.51	57.35	5.88	-	-	-	-	-	-	0.61	0.06	-	-
FL0402	8.11	2.21	33.29	9.08	98.18	7.72	98.54	5.58	-	-	-	-	-	-	1.05	0.06	-	-
FL0403	2.74	2.53	11.25	10.38	32.54	13.57	1.10	0.76	-	-	-	-	-	-	0.01	0.01	-	-

Unit No.	NOx		CO		VOC		SOx		PM ¹		PM10 ¹		PM2.5 ¹		H ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
FL0404	11.70	23.49	48.01	96.40	160.50	99.85	39.92	11.14	-	-	-	-	-	-	0.42	0.12	-	-
MG-0001	1.84	8.06	1.61	7.06	1.84	8.06	3.48E-03	0.02	0.09	0.40	0.09	0.40	0.09	0.40	-	-	-	-
MG-0002	1.84	8.06	1.61	7.06	1.84	8.06	3.48E-03	0.02	0.09	0.40	0.09	0.40	0.09	0.40	-	-	-	-
MG-0003	0.09	0.40	1.13	4.97	0.04	0.19	1.72E-03	0.01	0.00	0.02	4.54E-03	0.02	#####	0.02	-	-	-	-
MG-0004	4.60	0.23	4.03	0.20	4.60	0.23	8.70E-03	4.35E-04	0.23	0.01	0.23	0.01	0.23	0.01	-	-	-	-
SG-0100	1.61	0.40	0.35	0.09	0.13	0.03	6.47E-04	1.62E-04	0.11	0.03	0.11	0.03	0.11	0.03	-	-	-	-
SG-0101	1.67	0.42	0.36	0.09	0.14	0.03	6.72E-04	1.68E-04	0.12	0.03	0.12	0.03	0.12	0.03	-	-	-	-
SG-0102	0.07	0.02	0.82	0.20	0.03	0.01	1.23E-03	3.08E-04	3.26E-03	8.16E-04	3.26E-03	8.16E-04	#####	8.16E-04	-	-	-	-
FWG-0600	2.49	0.12	2.16	0.11	2.49	0.12	4.68E-03	2.34E-04	0.12	0.01	0.12	0.01	0.12	0.01	-	-	-	-
FWG-0601	2.49	0.12	2.16	0.11	2.49	0.12	4.68E-03	2.34E-04	0.12	0.01	0.12	0.01	0.12	0.01	-	-	-	-
FWG-0602	2.49	0.12	2.16	0.11	2.49	0.12	4.68E-03	2.34E-04	0.12	0.01	0.12	0.01	0.12	0.01	-	-	-	-
FWG-0603	2.02	0.10	1.75	0.09	2.02	0.10	3.79E-03	1.90E-04	0.10	0.01	0.10	0.01	0.10	0.01	-	-	-	-
Y-0001	-	-	-	-	0.21	0.92	-	-	0.26	1.15	0.158	0.69	0.00059	0.00260	-	-	-	-
Y-0002	-	-	-	-	0.21	0.92	-	-	0.26	1.15	0.16	0.69	0.0006	0.003	-	-	-	-
Y-0008	-	-	-	-	0.53	2.30	-	-	0.61	2.68	0.37	1.62	0.0014	0.0061	-	-	-	-
Y-0011	-	-	-	-	1.26	5.52	-	-	0.53	2.30	0.32	1.38	0.0012	0.005	-	-	-	-
Y-0012	-	-	-	-	0.42	1.84	-	-	0.18	0.77	0.11	0.46	0.0004	0.0017	-	-	-	-
CT TT-0006	-	-	-	-	1.08	4.73	-	-	0.16	0.69	0.09	0.42	0.0004	0.002	-	-	-	-
Collection (collector sump, T-845 Weir Box, T-844 Stilling Well, T-0846 SWKS)					0.02	0.08												
T-0830 Stormwater Surge Tank					1.34	5.85												
S1/T1 API-894/API-895					1.37E-04	6.02E-04												
T-801/T-836					1.34	5.85												
T-805 Flocculator					0.00	0.01												
T-896/T-806 DAF					1.64	7.18												
T-897 DAF Surge Open Sump					0.01	0.02												
D-810/811 & D-808/809 Filters					1.08E-07	4.72E-07												
T-809 DAF Surge Tank					0.004	0.02												
TLO-1	-	-	-	-	14.57	14.46	-	-	-	-	-	-	-	-	0.01	0.01	-	-
TL-2	-	-	-	-	12.49	3.75	-	-	-	-	-	-	-	-	0.01	0.002	-	-
TL-4	-	-	-	-	4.50	4.81	-	-	-	-	-	-	-	-	0.02	0.03	-	-

Unit No.	NOx		CO		VOC		SOx		PM ¹		PM10 ¹		PM2.5 ¹		H ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
TL-7	-	-	-	-	12.17	1.86	-	-	-	-	-	-	-	-	3.19E-05	4.88E-06	-	-
RLO-8	-	-	-	-	19.93	6.44	-	-	-	-	-	-	-	-	0.01	0.001	-	-
RLO-19	-	-	-	-	65.55	11.72	-	-	-	-	-	-	-	-	0.03	0.003	-	-
TLO-20	-	-	-	-	24.97	3.75	-	-	-	-	-	-	-	-	0.01	0.002	-	-
TRLO-9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.005	0.02	-	-
TL4-VCU	1.97	1.23	1.97	1.22	0.050	0.0013	0.51	0.014	0.11	0.066	0.11	0.07	0.11	0.066	-	-	-	-
Fugitives					108.87	476.85												
Tanks						319.83									0.72	0.80		
T-801/T-830 TO	2.84	12.45	1.64	7.18	0.22	0.96	-	-	0.15	0.67	0.15	0.67	0.15	0.67	-	-	-	-
T-836 TO	2.84	12.45	1.64	7.18	0.22	0.96	-	-	0.15	0.67	0.15	0.67	0.15	0.67	-	-	-	-
T-401/T-411 TO	2.84	12.45	1.64	7.18	0.22	0.96	-	-	0.15	0.67	0.15	0.67	0.15	0.67				
Totals	223.05	747.56	488.16	1,292.86	656.07	1,183.38	363.64	389.75	50.29	209.51	51.97	204.60	50.77	199.36	3.54	3.95	0.00	0.00

¹ **Condensable Particulate Matter:** Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10

Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)

☐ This table is intentionally left blank since all emissions at this facility due to routine or predictable startup, shutdown, or scheduled maintenance are no higher than those listed in Table 2-E and a malfunction emission limit is not already permitted or requested. If you are required to report GHG emissions as described in Section 6a, include any GHG emissions during Startup, Shutdown, and/or Scheduled Maintenance (SSM) in Table 2-P. Provide an explanation of SSM emissions in Section 6 and 6a.

All applications for facilities that have emissions during routine or predictable startup, shutdown or scheduled maintenance (SSM)¹, including NOI applications, must include in this table the Maximum Emissions during routine or predictable startup, shutdown and scheduled maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). In Section 6 and 6a, provide emissions calculations for all SSM emissions reported in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (https://www.env.nm.gov/aqb/permit/aqb_pol.html) for more detailed instructions. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

Unit No.	NOx		CO		VOC		SOx		PM ²		PM10 ²		PM2.5 ²		H ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Flare Malf Cap		10.0		10.0		10.0		10.0								1		
SSM FL-HEP-PORT	11.56	0.09	50.12	0.38	106.7	0.80	0.11	0.001							0.001	<		
SSM Flare Cap	162.9	18.3	1243	77	1376.3	68.7	1133.4	14.9							12.04	0.16		
SSM H-0473	6.5	0.03	27.7	0.12	0.1	0.0005	135	0.38	11.53	0.03	11.53	0.03	11.53	0.03	1.44	0.004		
SSM H-3103	6.5	0.03	15	0.07	0.1	0.0005	50	0.23	4.93	0.02	4.93	0.02	4.93	0.02	0.53	0.002		
SSM H-9851	11.23	1.35	20.2	2.4	2	0.2	6.32	0.3	2.8	0.3	2.8	0.3	2.8	0.3				
SSM Piggings					24.7	0.64												
SSM T-0737					0.24	0.004									0.02	<		
SSM Tanks Misc					51.9	8.1									0.02	0.004		
SSM Tanks VCU	0.17	0.037	0.17	0.033	2.6	0.21	0.05	0.02	0.009	0.002	0.009	0.002	0.009	0.002	0.001	<		
SSM-2MISC	17	1.9	127.1	7.8	137.7	6.9	129.3	1.6	0.06	0.02	0.06	0.02	0.06	0.02	0.7	0.1		
Totals		31.73		97.83		95.58		27.42		0.37		0.41		0.41		1.27		0.00

¹ For instance, if the short term steady-state Table 2-E emissions are 5 lb/hr and the SSM rate is 12 lb/hr, enter 7 lb/hr in this table. If the annual steady-state Table 2-E emissions are 21.9 TPY, and the number of scheduled SSM events result in annual emissions of 31.9 TPY, enter 10.0 TPY in the table below.

² **Condensable Particulate Matter:** Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but it is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

☒ I have elected to leave this table blank because this facility does not have any stacks/vents that split emissions from a single source or combine emissions from more than one source listed in table 2-A. Additionally, the emission rates of all stacks match the Requested allowable emission rates stated in Table 2-E.

[illegible]

Unit and stack numbering must correspond throughout the application package. Include the stack exit conditions for each unit that emits from a stack, including blowdown venting parameters and tank emissions. If the facility has multiple operating scenarios, complete a separate Table 2-H for each scenario and, for each, type scenario name here:

[illegible]

Table 2-J: Fuel

Specify fuel characteristics and usage. Unit and stack numbering must correspond throughout the application package.

[illegible]

Table 2-K: Liquid Data for Tanks Listed in Table 2-L

For each tank, list the liquid(s) to be stored in each tank. If it is expected that a tank may store a variety of hydrocarbon liquids, enter "mixed hydrocarbons" in the Composition column for that tank and enter the corresponding data of the most volatile liquid to be stored in the tank. If tank is to be used for storage of different materials, list all the materials in the "All Calculations" attachment, run the newest version of TANKS on each, and use the material with the highest emission rate to determine maximum uncontrolled and requested allowable emissions rate. The permit will specify the most volatile category of liquids that may be stored in each tank. Include appropriate tank-flashing modeling input data. Use additional sheets if necessary. Unit and stack numbering must correspond throughout the application package.

[illegible]

Include appropriate tank-flashing modeling input data. Use an addendum to this table for unlisted data categories. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary. See reference Table 2-L2. Note: 1.00 bbl = 10.159 M3 = 42.0 gal

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Table 2-P: Greenhouse Gas Emissions

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC are required to complete this Table. Power plants, Title V major sources, and PSD major sources must report and calculate all GHG emissions for each unit. Applicants must report potential emission rates in short tons per year (see Section 6.a for assistance). Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table. For minor source facilities that are not power plants, are not Title V, or are not PSD, there are three options for reporting GHGs 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHG as a second separate unit; OR 3) check the following box.

☒ By checking this box, the applicant acknowledges the total CO₂e emissions are less than 75,000 tons per year.

		CO ₂ ton/yr	N ₂ O ton/yr	CH ₄ ton/yr	SF ₆ ton/yr	PFC/HFC ton/yr ²									Total GHG Mass Basis ton/yr ⁴	Total CO ₂ e ton/yr ⁵
Unit No.	GWPs ¹	1	298	25	22,800	footnote 3										
T-801/T-830 TO	mass GHG	5983.61	0.43	0.1	0	0									5984.14	6114.38
	CO ₂ e	5983.61	128.38	2.39	0	0										
T-836 TO	mass GHG	5983.61	0.43	0.1	0	0									5984.14	6114.38
	CO ₂ e	5983.61	128.38	2.39	0	0										
T-401/T-411 TO	mass GHG	5983.61	0.43	0.1	0	0									5984.14	6114.38
	CO ₂ e	5983.61	128.38	2.39	0	0										
	mass GHG															
	CO ₂ e															
	mass GHG															
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	mass GHG															
	CO ₂ e															
	mass GHG															
	CO ₂ e															
	mass GHG															
	CO ₂ e															
Total	mass GHG	17950.82	1.29	0.3											17952.41	18343.13
	CO ₂ e	17950.82	385.14	7.17												

¹ GWP (Global Warming Potential): Applicants must use the most current GWPs codified in Table A-1 of 40 CFR part 98. GWPs are subject to change, therefore, applicants need to check 40 CFR 98 to confirm GWP values.

² For HFCs or PFCs describe the specific HFC or PFC compound and use a separate column for each individual compound.

³ For each new compound, enter the appropriate GWP for each HFC or PFC compound from Table A-1 in 40 CFR 98.

⁴ Green house gas emissions on a **mass basis** is the ton per year green house gas emission before adjustment with its GWP.

⁵ CO₂e means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

Section 3

Application Summary

The **Application Summary** shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will affect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

The **Process Summary** shall include a brief description of the facility and its processes.

Startup, Shutdown, and Maintenance (SSM) routine or predictable emissions: Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions.

Facility Description/ Process Summary

HF Sinclair Navajo Refining LLC ("Navajo") owns and operates the Artesia Refinery, located along Highway 82, partially within and partially outside of the city limits of Artesia, in Eddy County, New Mexico (see Section 8 Maps). The Artesia Refinery has a crude oil capacity of 110,000 barrels per day. The facility process units include atmospheric and vacuum distillation, fluid catalytic cracking ("FCC"), alkylation, isomerization, saturates gas plants, amine units, sulfur recovery units ("SRU"), and various hydrodesulphurization units ("HDS"). Products from the refining processes include, but are not limited to, gasoline of various grades, kerosene, diesel, liquefied petroleum gas ("LPG"), jet fuel (primarily JP-8), carbon black oil, and asphalt products.

The emissions from the refining processes include nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), sulfur dioxide (SO₂), particulate matter (i.e., PM, PM₁₀, and PM_{2.5}), hydrogen sulfide (H₂S), sulfuric acid mist (SAM), hazardous air pollutants (HAP) and greenhouse gases (GHG)

Permit Application Summary

Navajo is submitting this application for a Significant Permit Revision of Permit No. PSD-0195M40, in accordance with 20.2.72.219.D and 20.2.72.402 New Mexico Administrative Code ("NMAC"). This revision is being submitted to; (1) update storage tank representations for Tanks T-0081 and T-0082 and conduct a change of service for Tank T-0081, (2) install a thermal oxidizer to control Tank T-801 or T-830 (T-801/T-830 TO), (3) install a thermal oxidizer to control tank T-401 or T-411 (T-401/411 TO), and (4) install a thermal oxidizer to control Tank T-836 (T-836 TO). Additional details regarding these changes are provided in Sections 6, 7, and 20 of this permit application.

Biodegradation Tanks T-0801, T-0830, & T-0836 – Thermal Oxidizer Authorization

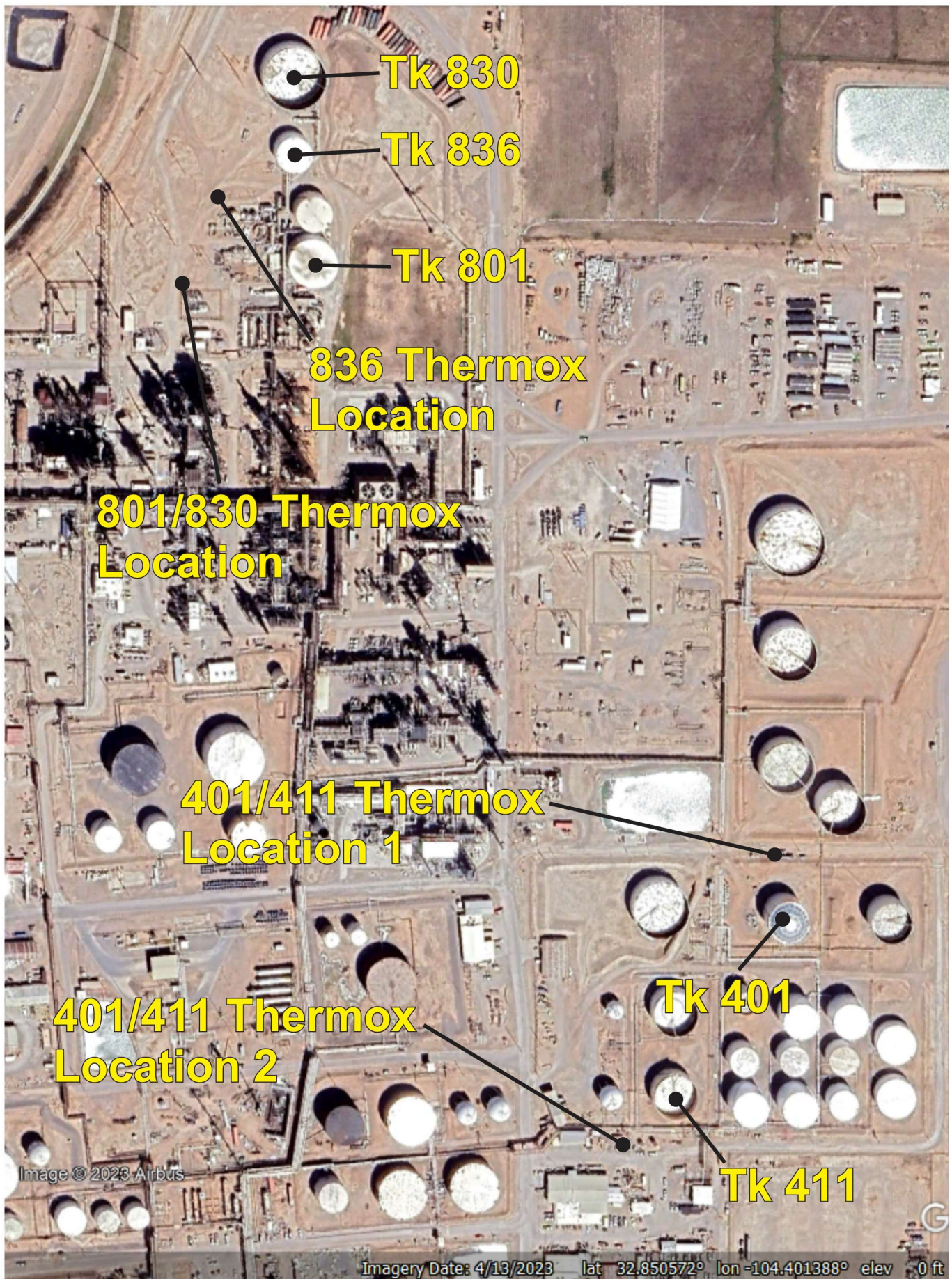
Enhanced Biodegradation Tanks T-0801 and T-0836 are equipped with activated sludge to degrade organic compounds found in the wastewater system. These tanks are aerated, providing oxygen to the activated sludge, and vent to atmosphere; the activated sludge achieves 95% removal of organics. Hot temperatures caused reduced biological activity of the activated sludge media, resulting in a reduction in VOC control. With this application, Tank T-0830 will also be used as an alternative to T-0801. Navajo has installed two

thermal oxidizers (both 10 MMBtu/hr) in order to collect and control organics being vented. These oxidizer systems have a performance guarantee of >99%, which meets or exceeds the control efficiency of the activated sludge. One oxidizer will continuously service tank T-0836. The other oxidizer will either service Tank T-0801 or Tank T-0830. Both Tank T-0830 and T-0801 will be in service, however only one will be routed to the thermal oxidizer at any given time. Utilization of the thermal oxidizer systems will ensure continued compliance with the current emission limits in Table 106.I.

With this application, Navajo requests inclusion of these previously installed thermal oxidizers to the PSD permit. Navajo requests T-0801 and T-0836 be allowed to operate utilizing either activated sludge techniques, or thermal oxidation, depending on refinery operational need.

Storage Tanks 0401 & 0411 - New Thermal Oxidizer Authorization

A single new thermal oxidizer (10 MMBtu/hr) was installed to control Tanks 401 and 411 to reduce organic compound emissions. The thermal oxidizer is designed to control one or both tanks as needed. The thermal oxidizer is portable and will be located in one of two locations as indicated in the diagram below.



Storage Tanks 81 & 82 Representations and Change of Service

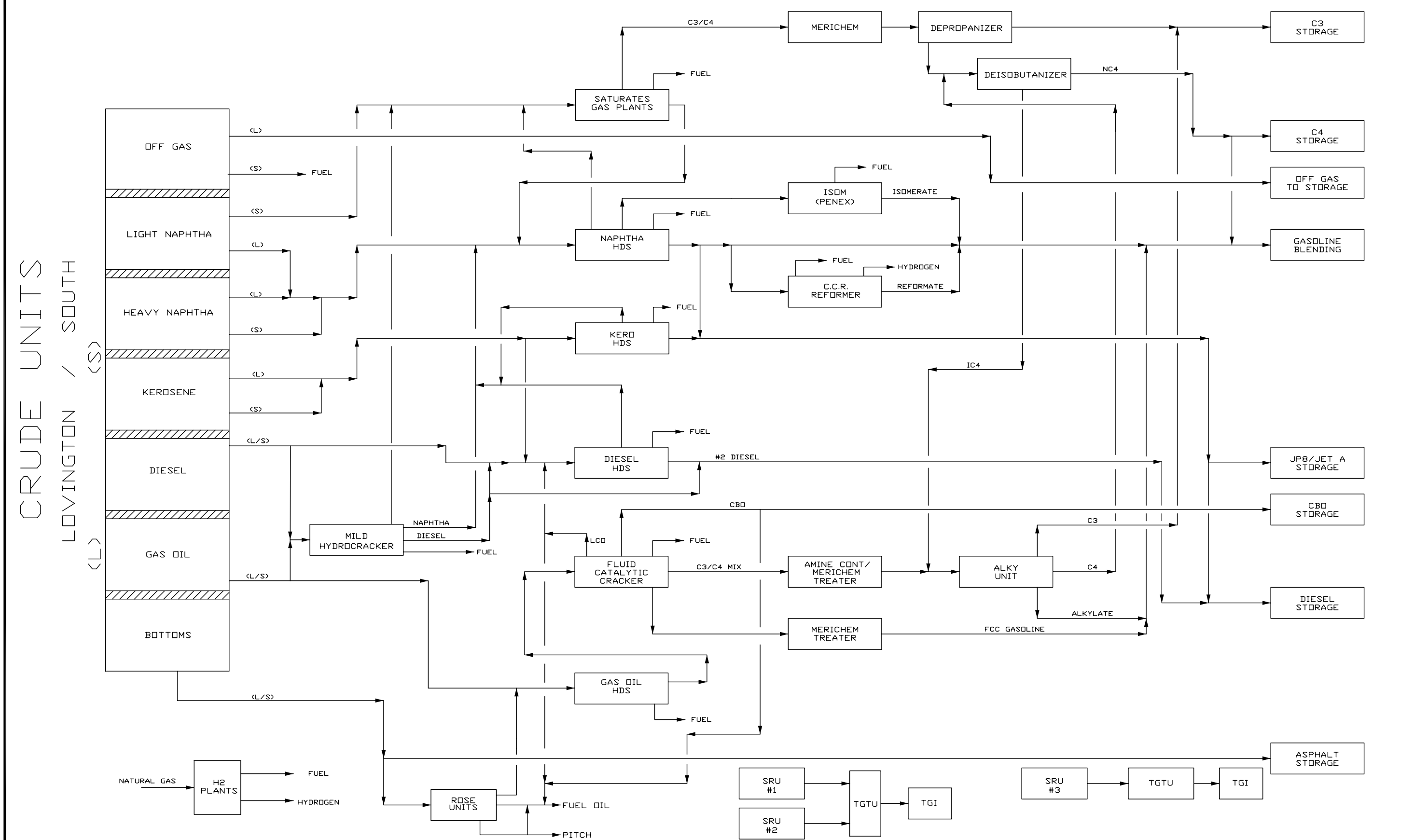
HF Sinclair requests correction to the tank representations of Tanks 81 and 82; the diameters of these tanks were inadvertently swapped during a previous permitting action. Additionally, the service of Tank 81 will be changed from fuel oil to crude oil. To reduce emissions associated with this change of service, Tank 81 will be converted from a fixed roof tank to an internal floating roof tank.


Section 4

Process Flow Sheet

A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.

A process flow diagram for the refinery is included in this section.



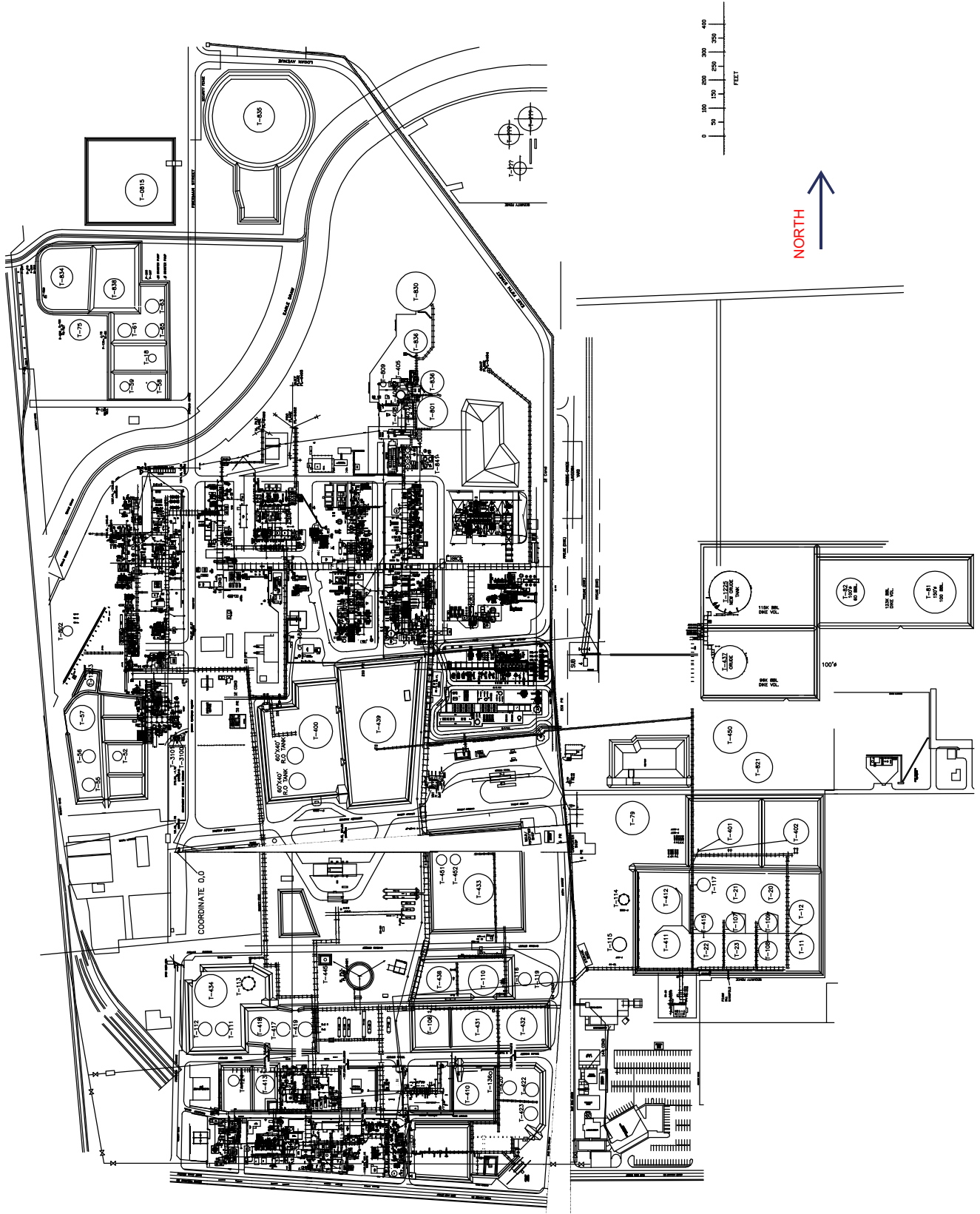
NOTES	REFERENCE DRAWINGS	<table><tr><th>NO.</th><th>REVISIONS</th><th>BY</th><th>CHK.</th><th>DATE</th><th>APPR.</th><th>APPR.</th><th>NO.</th><th>REVISIONS</th><th>BY</th><th>CHK.</th><th>DATE</th><th>APPR.</th><th>APPR.</th></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>9</td><td>REVISED PER GKC</td><td>DGJ</td><td></td><td>02-19-90</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>8</td><td>REVISED PER JLH</td><td>DGJ</td><td></td><td>02-26-90</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>7</td><td>REVISED PER JER</td><td>DGJ</td><td></td><td>02-23-90</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>6</td><td>REVISED PER SLB</td><td>DGJ</td><td>SLB</td><td>02-23-90</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>5</td><td>REVISED PER SLB</td><td>DGJ</td><td>SLB</td><td>02-24-90</td><td></td><td></td></tr><tr><td>13</td><td>REVISED PER MC</td><td>DWW</td><td></td><td>6-19-90</td><td></td><td></td><td>4</td><td>REVISED PER RRH MARK-UP</td><td>BHR</td><td>DGJ</td><td>03-14-90</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>3</td><td>UPDATED NOMENCLATURE</td><td>DLW</td><td>DGJ</td><td>03-24-90</td><td></td><td></td></tr><tr><td>11</td><td>REVISED PER MC</td><td>DWW</td><td></td><td>05-14-97</td><td></td><td></td><td>2</td><td>REDRAWN & UPDATED PER JLM</td><td>PETE</td><td>DJ</td><td>01-14-94</td><td></td><td></td></tr><tr><td>10</td><td>REVISED PER MPK (PRELIM)</td><td>DGJ</td><td></td><td>07-29-96</td><td></td><td></td><td>1</td><td>UPDATED PER JLM</td><td>PETE</td><td></td><td>05-94</td><td></td><td></td></tr></table>												NO.	REVISIONS	BY	CHK.	DATE	APPR.	APPR.	NO.	REVISIONS	BY	CHK.	DATE	APPR.	APPR.								9	REVISED PER GKC	DGJ		02-19-90										8	REVISED PER JLH	DGJ		02-26-90										7	REVISED PER JER	DGJ		02-23-90										6	REVISED PER SLB	DGJ	SLB	02-23-90										5	REVISED PER SLB	DGJ	SLB	02-24-90			13	REVISED PER MC	DWW		6-19-90			4	REVISED PER RRH MARK-UP	BHR	DGJ	03-14-90										3	UPDATED NOMENCLATURE	DLW	DGJ	03-24-90			11	REVISED PER MC	DWW		05-14-97			2	REDRAWN & UPDATED PER JLM	PETE	DJ	01-14-94			10	REVISED PER MPK (PRELIM)	DGJ		07-29-96			1	UPDATED PER JLM	PETE		05-94			DRAWING TITLE SIMPLIFIED BLOCK FLOW NAV6076	<div><div>NAVAJO REFINING CO. ENGINEERING DEPARTMENT P.O. DRAWER 159 ARTESIA, NEW MEXICO</div></div> <table><tr><td>DRAWN BY DGJ</td><td>CHK'D BY SCALE NONE</td></tr><tr><td>DATE 08-01-94</td><td>APPR BY DRAWING NUMBER 55-V-1001-D-01</td></tr></table>	DRAWN BY DGJ	CHK'D BY SCALE NONE	DATE 08-01-94	APPR BY DRAWING NUMBER 55-V-1001-D-01
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Section 5

Plot Plan Drawn to Scale

A **plot plan drawn to scale** showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.

A plot plan is included in this section.



Section 6

All Calculations

Show all calculations used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

Tank Flashing Calculations: The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

SSM Calculations: It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rational for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

Glycol Dehydrator Calculations: The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

Road Calculations: Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

Significant Figures:

- A. All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.
- B. At least 5 significant figures shall be retained in all intermediate calculations.
- C. In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

- (1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;
- (2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**
- (3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.
- (4) The final result of the calculation shall be expressed in the units of the standard.

Control Devices: In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

Biodegradation Tanks T-0801 & T-0836 – Thermal Oxidizer Authorization

Enhanced Biodegradation Tanks T-0801 and T-0836 are currently represented as having sludge that achieves a 95% control efficiency for organic compounds. The thermal oxidizers proposed in this project have a control efficiency of 99% or greater, which meet the 95% control efficiency required by the permit. Combustion emissions from the thermal oxidizers were calculated using EPA's AP-42 Ch. 1.5 for LPG Combustion. Emissions associated with the combustion of the assist gas fuel for the thermal oxidizers has been provided with this application.

Storage Tanks 0401 & 0411 - New Thermal Oxidizer Authorization

Tanks 401 and 411 are currently represented as releasing emissions to the atmosphere without add-on vapor control. The thermal oxidizer proposed for this project has a control efficiency of 99% or greater, which will result in lower emissions of organic compounds. Combustion emissions from the thermal oxidizers were calculated using EPA's AP-42 Ch. 1.5 for LPG Combustion. Emissions associated with the combustion of the assist gas fuel for the thermal oxidizer has been provided with this application.

Storage Tanks 81 & 82 Representations and Change of Service

The diameters of Tanks 81 and 82 were inadvertently swapped in a previous permitting action and are being corrected in this project. Additionally, Tank 81 will undergo a change of service from fuel oil to crude oil. Tank 81 will be converted from a fixed roof tank to an internal floating roof tank in order to mitigate emissions resulting from this change of service. Storage tank emissions were calculated using EPA's AP-42 Ch. 7.1 for Liquid Storage Tanks.

Section 6.a

Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC) applicants must estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO₂e emissions from your facility.
2. GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO₂e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.
3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
4. Report GHG mass and GHG CO₂e emissions in Table 2-P of this application. Emissions are reported in **short** tons per year and represent each emission unit's Potential to Emit (PTE).
5. All Title V major sources, PSD major sources, and all power plants, whether major or not, must calculate and report GHG mass and CO₂e emissions for each unit in Table 2-P.
6. For minor source facilities that are not power plants, are not Title V, and are not PSD there are three options for reporting GHGs in Table 2-P: 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHGs as a second separate unit; 3) or check the following ☐ By checking this box, the applicant acknowledges the total CO₂e emissions are less than 75,000 tons per year.

Sources for Calculating GHG Emissions:

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at <http://www.epa.gov/ttn/chief/ap42/index.html>
- EPA's Internet emission factor database WebFIRE at <http://cfpub.epa.gov/webfire/>
- 40 CFR 98 Mandatory Green House Gas Reporting except that tons should be reported in short tons rather than in metric tons for the purpose of PSD applicability.
- API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.
- Sources listed on EPA's NSR Resources for Estimating GHG Emissions at <http://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases>:

Global Warming Potentials (GWP):

Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO₂ over a specified time period.

"Greenhouse gas" for the purpose of air permit regulations is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. **(20.2.70.7 NMAC, 20.2.74.7 NMAC)**. You may also find GHGs defined in 40 CFR 86.1818-12(a).

Metric to Short Ton Conversion:

Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 Mandatory Greenhouse Reporting requires metric tons.

1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

Biodegradation Tanks T-0801 & T-0836 – Thermal Oxidizer Authorization

Greenhouse Gas emissions associated with the combustion of fuel for the thermal oxidizers has been provided with this application.

Storage Tanks 0401 & 0411 - New Thermal Oxidizer Authorization

Greenhouse Gas emissions associated with the combustion of fuel for the thermal oxidizers has been provided with this application.

Storage Tanks 81 & 82 Representations and Change of Service

No Greenhouse Gas emissions are expected to occur from the tank diameter correction and change of service in this project.

HOLLYFRONTIER NAVAJO REFINERY

AP-42 Chapter 7.1 Organic Liquid Storage Tanks (06/2020)

Table 1. Floating Roof Tanks (EXT, INT) Emissions Summary

Commodity	Tanks	Net Throughput	VOC
		bbl/yr	tpy
Crude Oil	T-0437, T-1225	14,600,000	4.1
Ethanol	T-0452	0	0.0
Gasolines & Gasoline Blendstocks	Reformats: T-0011, T-0012, T-0079 Alkylates: T-0108, T-0109, T-0415 Isom Gasolines: T-0107, T-0401, T-0411	0	0.0
Light Cat Naphtha	T-0402, T-0821	0	0.0
Sour Naphtha	T-0439, T-0450	0	0.0
Sour Water	T-0106, T-0435, T-0737, T-0802	0	0.0
Gas Oil	T-0400a	0	0.0
Straight Run Diesel	T-0451, T-0834, T-0835	0	0.0
Straight Run Kerosene	T-0413	0	0.0
Sweet Naphtha	T-0056, T-0112, T-0117, T-0412	0	0.0
TOTAL		14,600,000	4.107
Table 106.E			105.96

Totals plus T-0400, T-0418 and T-0434 retrofitted as INT

#REF!

#REF!

#REF!

Total HAPS, tpy =

#REF!

HOLLYFRO
AP-42 Chapter 1

Table 1. Flare

Component	H2S	HAPs
	tpy	tpy
Crude Oil	0.00	0.0
Ethanol	-	0
Gasolines & Gas	-	0.0
Light Cat Naptha	-	0.0
Sour Naphtha	-	0.0
Sour Water	-	0.00
Gas Oil	-	0.000
Straight Run D	-	0.000
Straight Run K	-	0.0000
Sweet Naphtha	-	0.00
	0.003	0.043
	0.83	

#REF!

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Total HAPS,

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HOLLYFRO
AP-42 Chapt

Table 1. Flo

	Co
Crude Oil	
Ethanol	
Gasolines & G	
Light Cat Naph	
Sour Naphtha	
Sour Water	
Gas Oil	
Straight Run C	
Straight Run K	
Sweet Naphth	

#REF!
Total HAPS,

HOLLYFRONTIER NAVAJO REFINERY

AP-42 Chapter 7.1 Organic Liquid Storage Tanks (06/2020)

Table 2. Floating Roof Tanks (EXT, INT) Emissions Detailed Calculations

Tank ID	Construction Reconstruction Modification Date	Month OR Annual	Stored Commodity	Stored Commodity	Table PSD-NM-C
					Typical Liquid Stored
			Per Tank Applicability Analysis by Artesia	Per Artesia Speciation from API4723A	
			TK DATA	TK DATA	

THIS NEEDS TO BE THE FIRST ROW OF THE DETAIL TABLE. INSERT ROWS BELOW AND DRAG EQUATIONS AS NEEDED FOR ADDITIONAL CALCULATIONS.

T-81 service change from asphalt to crude oil and convert from CR to a IFR tank

T-0081	1/1/2010	Annual			
--------	----------	--------	--	--	--

THIS NEEDS TO BE THE LAST ROW OF THE DETAIL TABLE. INSERT ROWS BELOW AND DRAG EQUATIONS AS NEEDED FOR ADDITIONAL CALCULATIONS.

HOLLYFRO
AP-42 Chapter 2

Table 2. Flow

Tank ID	INPUTS						
	106C 0195-M39	Surrogated Chemical	Surrogated Chemical	Maximum Hourly Throughput	Net Throughput	Are Seal Gap Is Maintained with Gaps < 1/8 in.?	H2S in Liquid
	Most Volatile Category of Allowable Liquids to be Stored	CHEMICAL NAME		Q _H	Q		H2S _{liq}
				bbl/hr	#REF!		wt%
		For VOC	For HAPs			No - Avg. Fitting Yes - Tight Fitting	API4723A
							7783-06-4
THIS NEEDS T							
T-81 service							
T-0081	High Vapor Pressure	Crude Oil	Supply System - Crude Oil	5,200	14,600,000	Avg. Fitting	1.25E-03
THIS NEEDS T							

Table 2. Flc

[illegible]

Table 2. Flc

[illegible]

HOLLYFRO
AP-42 Chapter

Table 2. Flc

Alena Miro 4/21/2021 - Use avg. of monthly avg

[illegible]

HOLLYFRO
AP-42 Chapter 7

Table 2. Flow

Tank ID	REGULATORY ANALYSIS				TANK PRESSURE V	
	MACT CC Group 1 Group 2 Storage Vessel	TVP Regulatory Limit (MACT/NSPS)		Max Vapor Pressure <u>PERMIT LIMIT</u>	True Vapor Pressure at Daily Avg Temp. (T _{LA})	True Vapor Pressure at Daily Avg Temp. (T _{LA})
		Limit and Analysis	TVP Limit	TVP	P _{VA} Calculated	P _{VA} Adjusted
			psia	psia	psia	psia
		TVP per date, tank type, content		Max Vapor Pressure (psia) Table 106C PSD-NM-0195-M39	AP-42, Ch. 7.1, Eq. 1-25 Petroleum Eq. 1-26 Org Liq Trumbore Asphalts	Adjusted to Min Calculated vs Regulatory Limit
					If P _{VA} > Limit TVP cell will be automatically highlighted	Used on Loss Calculation
THIS NEEDS T						
T-81 service						
T-0081	Group 2	TVP < 11.1 psia (NSPS Kb, HAPs<4wt%,V>20,000gal)	11.1		6.5	6.5
THIS NEEDS T						

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HOLLYFRO
AP-42 Chapter 7

Table 2. Flow

Tank ID	VARIABLES	
	Vapor Pressure Function (P_{VA})	Vapor Pressure Function (TVP Limit)
	p^*	p^*_{max}
	unitless	unitless
	AP-42 Ch. 7.1 Eq. 2-4	AP-42 Ch. 7.1 Eq. 2-4
	If $P_{VA}/P_A > 1$, P_{VA}/P_A , else Eq. 2-4	If $P_{VA}/P_A > 1$, P_{VA}/P_A , else Eq. 2-4
THIS NEEDS TO BE		
T-81 service		
T-0081	0.170	0.441
THIS NEEDS TO BE		

HOLLYFRO
AP-42 Chapter

Table 2. Flc

[illegible]

[illegible]

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HOLLYFRO
AP-42 Chapt

Table 2. Flo

Tank ID	APs sions
	#REF!
	ts Law
THIS NEEDS T	
T-81 service	
T-0081	0.0
THIS NEEDS T	

HOLLYFRONTIER NAVAJO REFINERY
AP-42 Chapter 7.1 Organic Liquid Storage Tanks (06/2020)

Table 1. Floating Roof Tanks Roof Landing Emissions Sumamry

Commodity	Tanks	VOC		H2S	
		lb/hr	tpy	lb/hr	tpy
Casinghead (Natural Gasoline)	T-0107, T-0411	0.0	0.0	-	-
Crude Oil	T-0437, T-1225	1.5	0.0	0.001	0.0000
Ethanol	T-0432	0.0	0.0	-	-
Gasolines & Gasoline Blendstocks	Reformates: T-0011, T-0012, T-0079 Alkylates: T-0108, T-0109, T-0415 Isom Gasolines: T-0107, T-0401, T-0411	0.0	0.0	-	-
Light Cat Napththa	T-0402, T-0821	0.0	0.0	-	-
Slop Oil	T-0830	0.0	0.0	-	-
Sour Napththa	T-0439, T-0450	0.0	0.0	-	-
Sour Water	T-0106, T-0435, T-0797, T-0802	0.0	0.0	-	-
Straight Run Diesel	T-0451, T-0834, T-0835	0.0	0.0	-	-
Straight Run Kerosene	T-0413	0.0	0.0	-	-
Sweet Napththa	T-0056, T-0112, T-0117, T-0412	0.0	0.0	-	-
TOTAL		1.5	0.024	0.001	0.000
Table 107.A		173.1	10.60	0.10	0.10

#REF!

#REF!

#REF!

#REF!

Total HAPS, tpy =

#REF!

Total plus T-0400, T-0418 and T-0434 retrofitted as INT

0.024

0.001

0.000

Commodity	Tanks	VOC		H2S		
		lb/hr	tpy	lb/hr	-	tpy
Casinghead (Natural Gasoline)	T-0107, T-0411	0.0	0.0	-	-	-
Crude Oil	T-0417, T-1225	1.5	0.0	0.001	-	0.0000
Ethanol	T-0452	0.0	0.0	-	-	-
Gasolines & Gasoline Blendstocks	Reformates: T-0011, T-0012, T-0079	0.0	0.0	-	-	-
	Alkylates: T-0108, T-0109, T-0415					
	Isom Gasolines: T-0107, T-0401, T-0411					
Light Cut Naphtha	T-0402, T-0821	0.0	0.0	-	-	-
Slop Oil	T-0830	0.0	0.0	-	-	-
Sour Naphtha	T-0428, T-0450	0.0	0.0	-	-	-
Sour Water	T-0106, T-0435, T-0737, T-0802	0.0	0.0	-	-	-
Straight Run Diesel	T-0451, T-0834, T-0835	0.0	0.0	-	-	-
Straight Run Kerosene	T-0412	0.0	0.0	-	-	-
Sweet Naphtha	T-0056, T-0112, T-0117, T-0412	0.0	0.0	-	-	-
TOTAL		1.5	0.024	0.001	-	0.000
Table 107.A		173.1	10.60	0.10	-	0.10

HOLLYFRONTIER NAVAJO REFINERY
AP-42 Chapter 7.1 Organic Liquid Storage Tanks (06/2020)

Tank ID	Construction Reconstruction Modification Date	Month OR Annual	INPUTS														TANK CHARACTERISTICS					TANK PAINT														
			Stored Commodity	Stored Commodity	Table 106C PSD-MM-0155-M39		Surrogated Chemical	Surrogated Chemical	H2S in Liquid	H2S in Liquid	Type of Landing	Number of Days Tank Stands Idle	Deck Leg Height at the Tank Shell	Height of Liquid at the Tank Shell	Vertical Distance from Bottom Shell down to the 1 in. in. Surface.	Capture Efficiency	Control Efficiency	Tank Type	Tank Insulated	Tank Construction	Tank Diameter	Tank Shell Height	Shell Capacity	Tank Shell Paint	Tank Roof Paint											
					Typical Liquid Stored	Most Volatile Category of Allowable Liquids to be Stored															CHEMICAL NAME	H2S _{in}	H2S _{out}			D	H _s	ft	ft	ft	ft	%	%	ft	ft	gallons
			Per Tank Applicability Analysis by Athena	Per Athena Specification from AP4723A			For VOC	For HAP's	AP4723A		Full Head Partial Head Drain Dry		AP-42 CH. 7.1 Table 7.1-4 Figure 7.1-23 Figure 7.1-24	AP-42 CH. 7.1 Table 7.1-4 Figure 7.1-23 Figure 7.1-24			CR DIA HFR	YES-ALL-STE YES-ALL-CLCLE YES-SHELL YES-SHPL	Riveted-Bolted Welded	HFR, diam of vertical cross-section	HFR, length															
			7L-0001A	7L-0001A					7783-06-4								7L-0001A	7L-0001A	7L-0001A	7L-0001A	7L-0001A	7L-0001A	7L-0001A	7L-0001A												
T-81 service change from asphalt to crude oil and convert from CR to a IFR tank T-0001 2020 Annual High Vapor Pressure Crude Oil Supply System - Crude Oil 1.25E-03 12.50 Drain Dry 1.00 6.00 0.25 98.7% 99.0% INT NO Welded 140.0 4,605,720 White White																																				

HOLLYFRC
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Casinghead (H)	
Crude Oil	
Ethanol	
Gasolines & G	
Light Cat Napl	
Slop Oil	
Sour Naphtha	
Sour Water	
Straight Run E	
Straight Run K	
Sweet Naphth	

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AP-42 Chapt

Alena Miro 4/21/2021 - Use avg. of monthly avg

			CHEMICAL PROPERTIES				METEOROLOGICAL DATA					TANK TEMPERATURE VARIABLES													REGULATORY ANALYSIS			
Tank ID	Shell Paint Condition	Roof Paint Condition	Internal Shell Condition	Product Category	Liquid Molecular Weight	Vapor Molecular Weight	Density of the Liquid	Average Wind Speed	Atmosph. Pressure	Daily Maximum Ambient Temp.	Daily Minimum Ambient Temp.	Daily Total Solar Insulation Factor	Tank Shell Surface Solar Absorbance	Tank Roof Surface Solar Absorbance	Daily Average Temp.	Liquid Bulk Temp. based on Ambient Met Data	Monitored Liquid Bulk Temperature	Liquid Bulk Temp.	Daily Average Liquid Surface Temp.	Average Vapor Temp.	Daily Temp. Range	Avg. Daily Vapor Temp. Range	Daily Maximum Liquid Surface Temp.	Daily Minimum Liquid Surface Temp.	Total HAPs §112(b)	MACT CC Group 1 Group 2 Storage Vessel	TVP Regulatory Limit (MACT/NSPS)	
					M _L	M _V	W _L	v	P _A	T _{AX}	T _{MX}	I	α _s	α _r	T _{AX}	T _b (AP-42)	T _b (Monitored)	T _b	T _{LX}	T _v	ΔT _s	ΔT _v	T _{LX}	T _{MX}			TVP Limit	
					lb/lbmole	lb/lbmole	lb/gal	mph	psia	°F	°F	Btu/hr-ft²-d	unitless	unitless	°R	°R	°R	°R	°R	°R	°R	°R	°R	°R				
	New Average Aged	New Aged	Light Rust Deterior Rust Gunite Lining	Crude Oil Petroleum Stock Organic Liquids									AP-42, Ch. 7.1, Table 7.1-6	AP-42, Ch. 7.2, Table 7.1-6	AP-42, Ch. 7.2, Ch. 1-30	AP-42, Ch. 7.1, Ch. 1-31	Ops Data	Max. Monitored as AP-42 Estimate	AP-42, Ch. 7.1, § 1-29 Shell Insul Eq. 1-27 Non Insul	AP-42, Ch. 7.1, § 1-34 Shell Insul Eq. 1-32 Non Insul	AP-42, Ch. 7.1, Fig. 7.1-7 ΔT _s = 0 Full Insul and ΔT _v = 4 Full Insul and Cycle Temp	AP-42, Ch. 7.1, Fig. 7.1-7 For Full Insul T _{MX} = T _{AX}	AP-42, Ch. 7.1, Fig. 7.1-7 For Full Insul T _{MX} = T _{AX}	Based on Surrogate for HAPs		TVP per data, tank type, content		
	PL DATA	PL DATA	PL DATA	CFRMS DATA	CFRMS DATA	CFRMS DATA	CFRMS DATA	NET DATA	NET DATA	NET DATA	NET DATA	NET DATA					Avg of Monthly Avg		If tank is fully insulated then T _b = T _s				Max of Monthly Max	Max of Monthly Min	API 672.3a			
THIS NEEDS TO BE THE FIRST ROW OF THE DETAIL TABLE. INSERT ROWS BELOW AND DRAG EQUATIONS AS NEEDED FOR ADDITIONAL ENTRIES. THIS WILL ENSURE MONTHLY CALCULATIONS ARE UPDATED WITH EACH NEW ENTRY																												
T-81 (see T-801)																												
THIS NEEDS	New	New	Light Rust	Crude Oil	207.0	58.0	7.10	9.0	13.1	77.9	50.0	1,711.9	0.17	0.17	523.6	524.5		524.5	525.6	526.8	27.9	24.8	531.8	519.4	2.94	Group 2	TVP < 11.1 psia (NSPS KB, HAPs<44%v/v<20,000gal)	11.1

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Casinghead (
Crude Oil	
Ethanol	
Gasolines & G	
Light Cat Napl	
Slop Oil	
Sour Naphtha	
Sour Water	
Straight Run E	
Straight Run K	
Sweet Naphth	

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Table 2.Flo

		TANK PRESSURE VARIABLES								
Tank ID	Max Vapor Pressure <u>PERMIT LIMIT</u>	True Vapor Pressure at Daily Avg Temp. (T_v)	True Vapor Pressure at Daily Avg Temp. (T_v)	True Vapor Pressure at Daily Max. Liq. Surface Temp (T_{ls})	True Vapor Pressure at Daily Max. Liq. Surface Temp (T_{ls})	True Vapor Pressure at Daily Min. Liq. Surface Temp (T_{ls})	True Vapor Pressure at Daily Min. Liq. Surface Temp (T_{ls})	Avg. Daily Vapor Pressure Range	Vapor Pressure Function	
	TVP	P_{v1} Calculated	P_{v2} Adjusted	P_{v3} Calculated	P_{v4} Adjusted	P_{v5} Calculated	P_{v6} Adjusted	ΔP_v	P^*	
		psia	psia	psia	psia	psia	psia	psia	unitless	
	Max Vapor Pressure Limit Table 230C FED-NAH-0035-0039	AP-42, Ch. 7.2, Eq. 2-5: Petroleum Table 230C Eq. 3-26 Osg Lig Tumbarello Agraphis	Adjusted to Min. Calculated or Permit Limit	AP-42, Ch. 7.2, Eq. 2-5: Petroleum Table 230C Eq. 3-26 Osg Lig Tumbarello Agraphis	Adjusted to Min. Calculated or Permit Limit	AP-42, Ch. 7.2, Eq. 2-5: Petroleum Table 230C Eq. 3-26 Osg Lig Tumbarello Agraphis	Adjusted to Min. Calculated or Permit Limit	AP-42, Ch. 7.2, Eq. 3-6 Eq. 3-9 Eq. 3.13.8.4	AP-42, Ch. 7.2, Eq. 3-9	Ch. 7.2, Eq. 3-9
		If $P_{v1} > P_{VL}$ tank top will be automatically highlighted	Used on Loss Calculation	If $P_{v3} > \text{Limit Top}$ tank top will be automatically highlighted	Used on Loss Calculation	If $P_{v5} > \text{Limit Top}$ tank top will be automatically highlighted	Used on Loss Calculation	If $P_{v6} > P_{v1} - 1$, $P_{v6} > P_{v1}$, else Eq. 2.4		
	1.81 sen 1.0003 THIS NEEDS	6.497	6.497	7.205	7.205	5.843	5.843	1.362	0.170	

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AP-42 Chapt

Casinghead (
Crude Oil	
Ethanol	
Gasolines & G	
Light Cat Napl	
Slop Oil	
Sour Naphtha	
Sour Water	
Straight Run E	
Straight Run K	
Sweet Naphth	

HOLLYFRICAP-42 Chapt

HEEL PARAMETERS CALCULATION						ROOF LANDING LOSSES FOR INTERNAL OR DOMED EXTERNAL FLOATING ROOF TANKS WITH A LIQUID HEEL		ROOF LANDING LOSSES FOR EXTERNAL FLOATING ROOF TANKS WITH A LIQUID HEEL		ROOF LANDING LOSSES FOR ALL GRAIN-DRIE TANKS			TOTAL ROOF LANDING LOSSES		REFILLING LOSSES				VOC Emissions	VOC Emissions	H2S Emissions	H2S Emissions	HAPs Emissions
Tank ID	Slope of Tank Bottom	Effective Liquid Height During Roof Jamtime	Vapor Space Height under Landed Floating Roof	Volume of the Vapor Space	Vapor Space Expansion Factor	Filling Saturation Factor	Vented Vapor Saturation Factor	Limit on Standing Idle Loss	Standing Idle Loss	Limit on Standing Idle Loss (Rim Loss)	Standing Idle Loss (Rim Loss)	Clingage Factor	Limit on Standing Idle Loss (Clingage)	Standing Idle Loss (Clingage)	Filling Saturation Correction Factor for Wind	Limit on Filling Loss	Filling Loss						
	S_b	h_b	h_v	V_v	K_c	S_{at}	K_c	$L_{c,max}$	L_{cL}	$L_{c,max}$	$L_{c,max}$	C_c	$L_{c,max}$	$L_{cClingage}$	C_w	$L_{c,max}$	L_{cL}						
	ft/ft	ft	ft	ft ³	unitless	unitless	unitless	lb/event	lb/event	lb/event	lb/event	lb/event	lb/event	lb/event	unitless	lb/event	lb/event	lb/yr	ton/event	lb/yr	ton/event	ton/event	ton/event
	$S_b < 0$ (Cone In) $S_b > 0$ (Flat) $S_b > 0$ (Cone Down)	AP-42 Ch. 7.1 Table 7.1.4	AP-42 Ch. 7.1 Table 7.1.4	AP-42 Ch. 7.1 Eq. 3.22	AP-42 Ch. 7.1 Eq. 3.5	AP-42 Ch. 7.1 Table 7.1.37 Eq. 3.22	AP-42 Ch. 7.1 Table 7.1.37 Eq. 3.22	AP-42 Ch. 7.1 Table 7.1.37 Eq. 3.4	AP-42 Ch. 7.1 Table 7.1.37 Eq. 3.7	AP-42 Ch. 7.1 Table 7.1.38 Eq. 3.4	AP-42 Ch. 7.1 Table 7.1.38 Eq. 3.4	AP-42 Ch. 7.1 Table 7.1.39 Eq. 3.35	AP-42 Ch. 7.1 Table 7.1.39 Eq. 3.35	AP-42 Ch. 7.1 Table 7.1.39 Eq. 3.35	AP-42 Ch. 7.1 Table 7.1.39 Eq. 3.35	AP-42 Ch. 7.1 Table 7.1.37 Eq. 3.18	AP-42 Ch. 7.1 Table 7.1.37 Eq. 3.18						
	Results Low Results Low																						
	T-801 THIS NEEDS	0.25	5.75	0.254	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.60	3,561.2	2,754.3	2,754.3	1.00	921.2	1.5	0.02	1.28E-03	4.14E-05	2.52E-04	

[illegible][illegible]

HF Sinclair T-801/T-830 TO Combustion Emissions

Heat Input	10 MMBtu/hr				Heat Content ²		91.5 MMBtu/kgal			
	Pollutant									
	PM	PM ₁₀ ³	PM _{2.5}	SO ₂	NO _x	CO	VOC	CO ₂	CH ₄	N ₂ O
Emission Factor ¹ (lbs/kgal)	0.7	0.7	0.7	0	13	7.5	1.0	12500	0.2	0.9
Emission Factor (lbs/MMBtu)	0.01	0.01	0.01	0.00	0.14	0.08	0.01	136.61	0.00	0.01
PTE (lb/hr)	0.08	0.08	0.08	0.00	1.42	0.82	0.11	1366.12	0.02	0.10
PTE (ton/yr)	0.34	0.34	0.34	0.00	6.22	3.59	0.48	5983.61	0.10	0.43
Global Warming Potential ⁴	-	-	-	-	-	-	-	1.00	25.00	298.00
CO2e (ton/yr)								5983.61	2.39	128.38
Combined CO2e (ton/yr)										6114.38

1. Emission factors were taken from AP-42 Table 1.5-1 for Emission Factors for LPG Combustion.
2. The heat content of 91.5 MMBtu/kgal for propane was taken from AP-42 Table 1.5-1 for Emission Factors for LPG Combustion.
3. Particulate emissions are calculated assuming PM=PM10=PM2.5.
4. Global Warming Potentials obtained from 40 CFR Part 98 Subpart A.

HF Sinclair T-836 TO Combustion Emissions

Heat Input	10 MMBtu/hr				Heat Content ²		91.5 MMBtu/kgal			
	Pollutant									
	PM	PM ₁₀ ³	PM _{2.5}	SO ₂	NO _x	CO	VOC	CO ₂	CH ₄	N ₂ O
Emission Factor ¹ (lbs/kgal)	0.7	0.7	0.7	0	13	7.5	1.0	12500	0.2	0.9
Emission Factor (lbs/MMBtu)	0.01	0.01	0.01	0.00	0.14	0.08	0.01	136.61	0.00	0.01
PTE (lb/hr)	0.08	0.08	0.08	0.00	1.42	0.82	0.11	1366.12	0.02	0.10
PTE (ton/yr)	0.34	0.34	0.34	0.00	6.22	3.59	0.48	5983.61	0.10	0.43
Global Warming Potential ⁴	-	-	-	-	-	-	-	1.00	25.00	298.00
CO2e (ton/yr)								5983.61	2.39	128.38
Combined CO2e (ton/yr)										6114.38

1. Emission factors were taken from AP-42 Table 1.5-1 for Emission Factors for LPG Combustion.
2. The heat content of 91.5 MMBtu/kgal for propane was taken from AP-42 Table 1.5-1 for Emission Factors for LPG Combustion.
3. Particulate emissions are calculated assuming PM=PM10=PM2.5.
4. Global Warming Potentials obtained from 40 CFR Part 98 Subpart A.

HF Sinclair T-401/T-411 TO Combustion Emissions	
--	--

Heat Input	10 MMBtu/hr				Heat Content ²		91.5 MMBtu/kgal			
	Pollutant									
	PM	PM ₁₀ ³	PM _{2.5}	SO ₂	NO _x	CO	VOC	CO ₂	CH ₄	N ₂ O
Emission Factor ¹ (lbs/kgal)	0.7	0.7	0.7	0	13	7.5	1.0	12500	0.2	0.9
Emission Factor (lbs/MMBtu)	0.01	0.01	0.01	0.00	0.14	0.08	0.01	136.61	0.00	0.01
PTE (lb/hr)	0.08	0.08	0.08	0.00	1.42	0.82	0.11	1366.12	0.02	0.10
PTE (ton/yr)	0.34	0.34	0.34	0.00	6.22	3.59	0.48	5983.61	0.10	0.43
Global Warming Potential ⁴	-	-	-	-	-	-	-	1.00	25.00	298.00
CO2e (ton/yr)								5983.61	2.39	128.38
Combined CO2e (ton/yr)										6114.38

- | |
|---|
| <ol style="list-style-type: none"> 1. Emission factors were taken from AP-42 Table 1.5-1 for Emission Factors for LPG Combustion. 2. The heat content of 91.5 MMBtu/kgal for propane was taken from AP-42 Table 1.5-1 for Emission Factors for LPG Combustion. 3. Particulate emissions are calculated assuming PM=PM10=PM2.5. 4. Global Warming Potentials obtained from 40 CFR Part 98 Subpart A. |
|---|

Max Fire Duty (MMBtu/hr)

30

Pollutant	Emission Factor (lb/10 ⁶ scf)	Emission Factor (lb/MMBtu)	Emissions (lb/hr)	NMAC Standard	Toxics Review Needed?
Benzene	0.0021	2.05882E-06	6.17647E-05	20	No
Dichlorobenzene	0.0012	1.17647E-06	3.52941E-05	0.0133	No

Speciation taken from AP-42 Ch. 1.4.

Section 7

Information Used to Determine Emissions

Information Used to Determine Emissions shall include the following:

- ☒ If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
 - ☐ If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
 - ☒ If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
 - ☐ If an older version of AP-42 is used, include a complete copy of the section.
 - ☐ If an EPA document or other material is referenced, include a complete copy.
 - ☐ Fuel specifications sheet.
 - ☐ If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.
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Biodegradation Tanks T-0801 & T-0836 – Thermal Oxidizer Authorization

This project proposes a 10 MMBtu/hr oxidizer to control T-0801 or T-0830, and a 10 MMBtu/hr oxidizer to control T-0836. Emissions associated with the thermal oxidizers are estimated using manufacturer data in combination with AP-42 Section 1.5-Liquified Petroleum Gas Combustion, dated July 2008. The manufacturer data for the thermal oxidizers, as well as the emission factors from AP-42 used, has been included with application.

Storage Tanks 0401 & 0411 - New Thermal Oxidizer Authorization

This project proposes a 10 MMBtu/hr oxidizer to control T-401 or T-411. Emissions associated with the thermal oxidizers are estimated using manufacturer data in combination with AP-42 Section 1.5-Liquified Petroleum Gas Combustion, dated July 2008. The manufacturer data for the thermal oxidizers, as well as the emission factors from AP-42 used, has been included with application.

Storage Tanks 81 & 82 Representations and Change of Service

Storage tank emissions for each of these tanks were calculated using EPA's AP-42 Ch. 7.1 for Liquid Storage Tanks. The most recent version of AP-42 Ch. 7.1 has been included with this application.

7.1.3.2 Routine Losses From Floating Roof Tanks^{3-5,13-17}

Routine floating roof tank emissions are the sum of standing and working losses. Routine losses from floating roof tanks may be written as:

$$L_T = L_S + L_W \quad (2-1)$$

where:

L_T = total routine loss, lb/yr

L_S = standing loss, lb/yr; see Equation 2-2

L_W = working (withdrawal) loss, lb/yr; see Equation 2-19

The equations presented in this subsection apply only to floating roof tanks. The equations are not intended to be used in the following applications:

1. To estimate losses from unstable or boiling stocks (see Section 7.1.3.5) or from mixtures of hydrocarbons or petrochemicals for which the vapor pressure is not known or cannot readily be predicted;
2. To estimate losses from floating roof tanks vented only through a pressure/vacuum vent in the fixed roof (*i.e.*, no open vents) (see Section 7.1.3.8.2);
3. To estimate losses from tanks in which the materials used in the rim seal and/or deck fittings are either deteriorated or significantly permeated by the stored liquid;
4. To estimate losses that result from the landing of a floating roof (see Section 7.1.3.3); or
5. To estimate losses that result from cleaning a tank (see Section 7.1.3.4).

7.1.3.2.1 Standing Loss

Standing losses from floating roof tanks are the sum of rim seal, deck fitting and deck seam losses, and may be written as:

$$L_S = L_R + L_F + L_D \quad (2-2)$$

where:

L_S = standing loss, lb/yr

L_R = rim seal loss, lb/yr; see Equation 2-3

L_F = deck fitting loss, lb/yr; see Equation 2-13

L_D = deck seam loss (internal floating roof tanks only), lb/yr; see Equation 2-18

Rim Seal Loss - Rim seal loss from floating roof tanks can be estimated using the following equation:

$$L_R = (K_{Ra} + K_{Rb} v^2) DP^* M_V K_C \quad (2-3)$$

where:

- L_R = rim seal loss, lb/yr
 K_{Ra} = zero wind speed rim seal loss factor, lb-mole/ft•yr; see Table 7.1-8
 K_{Rb} = wind speed dependent rim seal loss factor, lb-mole/(mph)ⁿft•yr; see Table 7.1-8
 v = average ambient wind speed at tank site, mph; see Note 1
 n = seal-related wind speed exponent, dimensionless; see Table 7.1-8
 P^* = vapor pressure function, dimensionless; see Note 2

$$P^* = \frac{\frac{P_{VA}}{P_A}}{\left(1 + \left[1 - \left(\frac{P_{VA}}{P_A}\right)\right]^{0.5}\right)^2} \quad (2-4)$$

where: P_{VA} = vapor pressure at average daily liquid surface temperature, psia;

See Note 3 below and Notes 1 and 2 to Equation 1-22 P_A = atmospheric pressure, psia

- D = tank diameter, ft
 M_V = average vapor molecular weight, lb/lb-mole; see Note 1 to Equation 1-22,
 K_C = product factor;
 $K_C = 0.4$ for crude oils; $K_C = 1$ for all other organic liquids.

Notes:

1. If the ambient wind speed at the tank site is not available, use wind speed data from the nearest local weather station or values from Table 7.1-7. Ambient wind speed should be measured at an elevation of at least 10 meters above grade. If the tank is an internal or domed external floating roof tank, the value of v is zero.

2. P^* can be calculated or read directly from Figure 7.1-19.

3. The average daily liquid surface temperature, T_{LA} , for calculation of vapor pressure, P_{VA} , for floating roof tanks shall be determined as follows:

For internal and domed external floating roof tanks:

$$T_{LA} = \frac{[2.86 (H_S/D) + 1.43] T_{AA} + [3.52 (H_S/D) + 3.79] T_B + 0.027 \alpha_R I + 0.017 (H_S/D) \alpha_S I}{6.38 (H_S/D) + 5.22} \quad (2-5)$$

where:

- T_{LA} = average daily liquid surface temperature, °R
 H_S = tank shell height, ft
 D = tank diameter, ft,
 T_{AA} = average daily ambient temperature, °R; see Equation 1-30
 T_B = liquid bulk temperature, °R;
 α_R = tank roof surface solar absorptance, dimensionless; see Table 7.1-6
 α_S = tank shell surface solar absorptance, dimensionless; see Table 7.1-6
 I = average daily total insolation factor, Btu/(ft² day); see Table 7.1-7

API assigns a default value of $H_S/D = 0.5$ and an assumption of $\alpha_R = \alpha_S$, resulting in the simplified equation shown below for an uninsulated internal or domed external floating roof tank:²²

$$T_{LA} = 0.3 T_{AA} + 0.7 T_B + 0.004 \alpha I \quad (2-6)$$

where:

α = average tank surface solar absorptance, dimensionless

The average daily liquid surface temperature, T_{LA} , for external floating roof tanks is independent of H_s/D for a given value of T_B . Different expressions for T_{LA} are given for the two common types of external floating roof deck. If the type of external floating roof deck is unknown, assume the deck to be the steel peripheral pontoon type.

For external floating roof tanks with a steel peripheral pontoon deck (single deck center area):

$$T_{LA} = 0.7 T_{AA} + 0.3 T_B + 0.008 \alpha_R I \quad (2-7)$$

where the liquid bulk temperature, T_B , is preferably determined from measurements or estimated from process knowledge, but otherwise may be estimated as follows:

$$T_B = T_{AA} + [0.71 \alpha_R I + 0.485 (H_s/D) \alpha_S I] / (170 H_s/D + 57) \quad (2-8)$$

For default $H_s/D = 0.5$, when $\alpha_R = \alpha_S$:

$$T_B = T_{AA} + 0.007 \alpha I \quad (2-9)$$

For external floating roof tanks with a steel double deck:

$$T_{LA} = 0.3 T_{AA} + 0.7 T_B + 0.009 \alpha_R I \quad (2-10)$$

where the liquid bulk temperature, T_B , is preferably determined from measurements or estimated from process knowledge, but otherwise may be estimated as follows:

$$T_B = T_{AA} + [0.39 \alpha_R I + 0.485 (H_s/D) \alpha_S I] / (170 H_s/D + 45) \quad (2-11)$$

For default $H_s/D = 0.5$, when $\alpha_R = \alpha_S$:

$$T_B = T_{AA} + 0.005 \alpha I \quad (2-12)$$

Deck Fitting Loss - Deck fitting losses from floating roof tanks can be estimated by the following equation:

$$L_F = F_F P^* M_V K_C \quad (2-13)$$

where:

L_F = the deck fitting loss, lb/yr

F_F = total deck fitting loss factor, lb-mole/yr

$$F_F = [(N_{F_1} K_{F_1}) + (N_{F_2} K_{F_2}) + \dots + (N_{F_{n_f}} K_{F_{n_f}})] \quad (2-14)$$

where:

N_{F_i} = number of deck fittings of a particular type ($i = 0, 1, 2, \dots, n_f$), dimensionless