



December 18, 2024

Air Quality Bureau
New Mexico Environment Department
525 Camino De los Marquez, Suite 1
Sana Fe, New Mexico 87505

Re: Title V Renewal Application
NuStar Logistics, L.P.
Hope Pump Station
AI #52
Current Authorization: Title V Operating Permit P183-R4
Hope, NM

To whom it may concern,

NuStar Logistics, L.P. submits the enclosed application for a Title V renewal for the Hope Pump Station located approximately 43 miles west of Artesia, NM. The facility currently operates under Title V Operating Permit P183-R4 which has a Title V renewal application due date of January 22, 2025.

In addition, you may be aware of Sunoco LP's recent acquisition of NuStar Energy L.P. through an all-stock purchase. All NuStar operating companies, including NuStar Logistics, L.P., still own and operate the same assets as before the transaction. In other words, no asset transfer or change of operational control has occurred. As such, all company names on terminal and pipeline permits and plans will remain the same at this time. However, our communications going forward will be on Sunoco letterhead and from the Sunoco.com email domain.

If you have any questions regarding this submittal, please contact me at (361) 249-9446 or david.edge@sunoco.com. Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "David Edge". The signature is stylized with a large, sweeping "D" and "E".

David Edge
Manager Environmental
Sunoco LP
2829 Texaco Rd.
Corpus Christi, TX 78402
Office: (361) 249-9446

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/aq		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: ☐ a 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
- ☐ 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.B.1.g 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		AI # if known (see 1 st 3 to 5 #s of permit IDEA ID No.): 52	Updating Permit/NOI #: P183-R4
1	Facility Name: Hope Pump Station	Plant primary SIC Code (4 digits): 4613	
		Plant NAIC code (6 digits): 486910	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): From the western edge of Hope, NM travel 12.8 miles west on Highway 82. Turn left (south) on to the station access road. Travel 0.2 miles to arrive at Hope Pump Station.		
2	Plant Operator Company Name: NuStar Logistics, L.P.	Phone/Fax: (361) 696-7520	

a	Plant Operator Address: 2829 Texaco Rd. Corpus Christi, Texas 78402	
b	Plant Operator's New Mexico Corporate ID or Tax ID: 02-441515-00-4	
3	Plant Owner(s) name(s): NuStar Logistics, L.P.	Phone/Fax: (361) 696-7520
a	Plant Owner(s) Mailing Address(s): 2829 Texaco Rd. Corpus Christi, Texas 78402	
4	Bill To (Company): NuStar Logistics, L.P.	Phone/Fax: (361) 696-7520
a	Mailing Address: 2829 Texaco Rd. Corpus Christi, Texas 78402	E-mail: David.edge@sunoco.com
5	☐ Preparer: ☒ Consultant: Barr Engineering Co.	Phone/Fax: (720) 400-8392
a	Mailing Address: 225 E 16 th Ave, Floor 5, Suite 500; Denver, CO 80203	E-mail: twade@barr.com
6	Plant Operator Contact: Les Jones	Phone/Fax: (806) 371-1316
a	Address: 4200 West Cliffside Road, Amarillo, Texas 79124	E-mail: Les.Jones@sunoco.com
7	Air Permit Contact: David Edge	Title: Manager Environmental – Central West Region
a	E-mail: David.edge@sunoco.com	Phone/Fax: (361) 249-9446
b	Mailing Address: 2829 Texaco Rd. Corpus Christi, Texas 78402	
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? ☒ Yes ☐ No	1.b If yes to question 1.a, is it currently operating in New Mexico? ☒ Yes ☐ 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? ☐ Yes ☒ 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? ☒ Yes ☐ No
3	Is the facility currently shut down? ☐ Yes ☒ No	If yes, give month and year of shut down (MM/YY): N/A
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? ☐ Yes ☒ 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? ☐ Yes ☐ No ☒ N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? ☒ Yes ☐ No	If yes, the permit No. is: P183-R4
7	Has this facility been issued a No Permit Required (NPR)? ☐ Yes ☒ No	If yes, the NPR No. is: N/A
8	Has this facility been issued a Notice of Intent (NOI)? ☐ Yes ☒ No	If yes, the NOI No. is: N/A
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? ☒ Yes ☐ No	If yes, the permit No. is: 1922-M1
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? ☐ Yes ☒ No	If yes, the register No. is: N/A

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: 3,000 bbl	Daily: 72,000 bbl	Annually: 26,280,000 bbl
b	Proposed	Hourly: 3,000 bbl	Daily: 72,000 bbl	Annually: 26,280,000 bbl
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: 3,000 bbl	Daily: 72,000 bbl	Annually: 26,280,000 bbl
b	Proposed	Hourly: 3,000 bbl	Daily: 72,000 bbl	Annually: 26,280,000 bbl

Section 1-D: Facility Location Information

1	Section: 1 & 6	Range: 19E & 20E	Township: 17S	County: Chavez	Elevation (ft): 5,270
2	UTM Zone: ☐ 12 or ☒ 13			Datum: ☐ NAD 27 ☐ NAD 83 ☒ WGS 84	
a	UTM E (in meters, to nearest 10 meters): 505,029 m			UTM N (in meters, to nearest 10 meters): 3,635,470 m	
b	AND Latitude (deg., min., sec.): 32° 51' 26.3232"			Longitude (deg., min., sec.): 104° 56' 46.5065"	
3	Name and zip code of nearest New Mexico town: Hope, NM 88250				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From the western edge of Hope, NM travel 12.8 miles west on Highway 82. Turn left (south) on to the station access road. Travel 0.2 miles to arrive at Hope Pump Station.				
5	The facility is 12.3 (distance) miles west (direction) of Hope, New Mexico (nearest town).				
6	Status of land at facility (check one): ☐ Private ☐ Indian/Pueblo ☐ Federal BLM ☐ Federal Forest Service ☒ Other (State)				
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: Municipalities: None; Indian Tribes: None; Counties: Chavez County and Eddy County				
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/)? ☐ Yes ☒ No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: N/A				
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): ~81 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: >1600 m				
12	Method(s) used to delineate the Restricted Area: "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? ☐ Yes ☒ 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? ☒ No ☐ Yes If yes, what is the name and permit number (if known) of the other facility? N/A				

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: N/A		☐ AM ☐ PM	End: N/A ☐ AM ☐ PM
3	Month and year of anticipated start of construction: N/A – Title V Renewal			
4	Month and year of anticipated construction completion: N/A – Title V Renewal			
5	Month and year of anticipated startup of new or modified facility: N/A – Title V Renewal			
6	Will this facility operate at this site for more than one year? ☒ Yes ☐ 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? ☒ Yes ☐ No If yes, specify: Violation #1: Failure to submit an Annual Compliance Certification Report within 30 days of the end of the 12-month reporting period: Title V Permit #P183-R4, Specific Condition A109.B states that "The Annual Compliance Certification Report is due within 30 days of the end of every 12-month reporting period. The reporting period starts on August 1st of each year." An NMED inspector discovered the posted date stamped on the Annual Compliance Certifications ("ACC") for the reporting period of August 1, 2020 – July 31, 2021, was September 9, 2021, 10 days after the deadline of August 30, 2021. Violation #2: Failure to include a fuel flow calibration certificate with the submitted quarterly emissions test reports: Title V Permit #P183-R4, General Condition B111.C(5) states that the facility operator must submit "a recent fuel flow meter calibration certificate (within the most recent quarter) with the final test report." An NMED inspector discovered that three (3) of the quarterly reports submitted on February 18, April 27, and August 13, 2021, did not include the required fuel flow calibration certificate associated with these emissions tests.		
a	If yes, NOV date or description of issue: 5/14/2024	NOV Tracking No: NSL-0052-2201	
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? ☐ Yes ☒ No If Yes, provide the 1c & 1d info below:		
c	Document Title: N/A	Date: N/A	Requirement # (or page # and paragraph #): N/A
d	Provide the required text to be inserted in this permit: N/A		
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? ☐ Yes ☒ 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? ☐ Yes ☒ No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? ☒ Yes ☐ No		
a	If Yes, what type of source? ☐ Major (☐ ≥10 tpy of any single HAP OR ☐ ≥25 tpy of any combination of HAPS) OR ☒ Minor (☐ <10 tpy of any single HAP AND ☒ <25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? ☒ Yes ☐ No		
a	If yes, include the name of company providing commercial electric power to the facility: Central Valley Electric Cooperative		

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

1	☐ I have filled out Section 18, "Addendum for Streamline Applications." ☒ 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.) Wes Gore (20.2.70.300.D.2 NMAC):		Phone: (361) 249-9402
a	R.O. Title: Senior Director Operations	R.O. e-mail: wes.gore@sunoco.com	
b	R. O. Address: 2829 Texaco Rd. Corpus Christi, Texas 78402		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): N/A		Phone: N/A
a	A. R.O. Title: N/A	A. R.O. e-mail: N/A	
b	A. R. O. Address: N/A		
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): N/A		

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.): Sunoco LP
a	Address of Parent Company: 8111 Westchester Drive Dallas, TX 75225
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.): N/A
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations: N/A
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: Mescalero Apache Indian Reservation: <30 miles

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:

- 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.**
- 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-toe 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.
- 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.**

- 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.
- 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.
- 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,
 - one additional CD copy for US EPA,
 - 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.

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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 #	Manufact-urer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classi- fication 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 #				
E-1	Diesel Engine	Caterpillar	3606	8RB00655	2300 hp	2300 hp	3/25/1997	E-1	40400251	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	CI	N/A
							Jul-97	N/A				
S-3M1	Diesel Tank	Unknown	N/A	N/A	3000 bbl	3000 bbl	Jul-97	N/A	2505040090	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							Jul-97	N/A				
F-1	Fugitives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31000220	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							N/A	N/A				

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 202.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

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	
GEN-1	Emergency Generator	Kohler Power System	N/A	66	20.2.72.202.B.3	1/1/1997	☒ Existing (unchanged) ☐ To be Removed
			30R0ZJ	hp	N/A	Jul-97	☐ New/Additional ☐ Replacement Unit
							☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed
							☐ New/Additional ☐ Replacement Unit
							☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed
							☐ New/Additional ☐ Replacement Unit
							☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed
							☐ New/Additional ☐ Replacement Unit
							☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed
							☐ New/Additional ☐ Replacement Unit
							☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed
							☐ New/Additional ☐ Replacement Unit
							☐ To Be Modified ☐ To be Replaced

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.

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

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
E-1	47.50	208.05	15.00	65.70	2.70	11.83	7.80	34.16	0.06	0.26	0.06	0.26	0.06	0.26	--	--	--	--
S-3M1	--	--	--	--	39.40	0.03	--	--	--	--	--	--	--	--	0.20	0.00	--	--
F-1 combined	--	--	--	--	0.56	2.45	--	--	<0.01	<0.01	--	--	--	--	<0.01	0.01	--	--
Totals	47.50	208.05	15.00	65.70	42.66	14.31	7.80	34.16	0.06	0.26	0.06	0.26	0.06	0.26	0.20	0.01	<0.01	<0.01

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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 scehduled 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 explanations of SSM emissions in Section 6 and 6a.

All applications for facilities that have emissions during routine our 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
There are no routine or predictable additional emissions during startup, shutdown, and routine maintenance. Therefore this table is not applicable.																		
Totals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<0.01	<0.01	--	--

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).

3 - VOC and H2S emissions represented at FL-1 FL-3, and FL-4 are from compressor blowdowns and plant blowdowns.

Use this table to list stack emissions (requested allowable) from split and combined stacks. List Toxic Air Pollutants (TAPs) and Hazardous Air Pollutants (HAPs) in Table 2-I. List all fugitives that are associated with the normal, routine, and non-emergency operation of the facility. Unit and stack numbering must correspond throughout the application package. Refer to Table 2-E for instructions on use of the “-” symbol and on significant figures.

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In the table below, report the Potential to Emit for each HAP from each regulated emission unit listed in Table 2-A, only if the entire facility emits the HAP at a rate greater than or equal to one (1) ton per year. For each such emission unit, HAPs shall be reported to the nearest 0.1 tpy. Each facility-wide Individual HAP total and the facility-wide Total HAPs shall be the sum of all HAP sources calculated to the nearest 0.1 ton per year. Per 20.2.72.403.A.1 NMAC, facilities not exempt [see 20.2.72.402.C NMAC] from TAP permitting shall report each TAP that has an uncontrolled emission rate in excess of its pounds per hour screening level specified in 20.2.72.502 NMAC. TAPs shall be reported using one more significant figure than the number of significant figures shown in the pound per hour threshold corresponding to the substance. Use the HAP nomenclature as it appears in Section 112 (b) of the 1990 CAAA and the TAP nomenclature as it listed in 20.2.72.502 NMAC. Include tank-flashing emissions estimates of HAPs in this table. For each HAP or TAP listed, fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected or the pollutant is emitted in a quantity less than the threshold amounts described above.

2 - VOC and H2S emissions for DEHY 1-2 are represented at ECD 1-2.

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.

Tank No.	SCC Code	Material Name	Composition	Liquid Density (lb/gal)	Vapor Molecular Weight (lb/lb*mol)	Average Storage Conditions		Max Storage Conditions	
						Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)
S-3M1	2505040090	Diesel Tank	H2S 0.5% wt.	7.1	130	61.7	0.008	93.9	0.018

Table 2-L: Tank Data

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

Tank No.	Date Installed	Materials Stored	Seal Type (refer to Table 2-LR below)	Roof Type (refer to Table 2-LR below)	Capacity		Diameter (M)	Vapor Space (M)	Color (from Table VI-C)		Paint Condition (from Table VI-C)	Annual Throughput (gal/yr)	Turn- overs (per year)
					(bbl)	(M ³)			Roof	Shell			
S-3M1	1997	Diesel Tank	N/A	FX	3,000	477	9.3	3.66	WH	WH	Good	938,000	7.4

Table 2-L2: Liquid Storage Tank Data Codes Reference Table

Roof Type	Seal Type, Welded Tank Seal Type		Seal Type, Riveted Tank Seal Type		Roof, Shell Color	Paint Condition
FX: Fixed Roof	Mechanical Shoe Seal	Liquid-mounted resilient seal	Vapor-mounted resilient seal	Seal Type	WH: White	Good
IF: Internal Floating Roof	A: Primary only	A: Primary only	A: Primary only	A: Mechanical shoe, primary only	AS: Aluminum (specular)	Poor
EF: External Floating Roof	B: Shoe-mounted secondary	B: Weather shield	B: Weather shield	B: Shoe-mounted secondary	AD: Aluminum (diffuse)	
P: Pressure	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	LG: Light Gray	
					MG: Medium Gray	
					BL: Black	
					OT: Other (specify)	

Note: 1.00 bbl = 0.159 M³ = 42.0 gal

Table 2-M: Materials Processed and Produced (Use additional sheets as necessary.)

Material Processed				Material Produced			
Description	Chemical Composition	Phase (Gas, Liquid, or Solid)	Quantity (specify units)	Description	Chemical Composition	Phase	Quantity (specify units)
Gasoline	Gasoline	Liquid	Any combination of listed materials averaging 72,000 bbl/day. (Based on annual throughput-this is not daily maximum)	This facility is a pipeline pump station that moves materials but does not produce materials.			
Turbine Fuel	Turbine Fuel	Liquid					
Diesel	Diesel	Liquid					
Jet A	Jet A	Liquid					
LPG	LPG	Liquid					
Ethanol	Ethanol	Liquid					

Table 2-N: CEM Equipment

Enter Continuous Emissions Measurement (CEM) Data in this table. If CEM data will be used as part of a federally enforceable permit condition, or used to satisfy the requirements of a state or federal regulation, include a copy of the CEM's manufacturer specification sheet in the Information Used to Determine Emissions attachment. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

Stack No.	Pollutant(s)	Manufacturer	Model No.	Serial No.	Sample Frequency	Averaging Time	Range	Sensitivity	Accuracy
There is no CEM equipment in use at the Hope Pump Station. Therefore this table is not applicable.									

Table 2-O: Parametric Emissions Measurement Equipment

Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

Unit No.	Parameter/Pollutant Measured	Location of Measurement	Unit of Measure	Acceptable Range	Frequency of Maintenance	Nature of Maintenance	Method of Recording	Averaging Time
There is no parametric monitoring equipment in use at the Hope Pump Station. Therefore this table is not applicable.								

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.

This is an application of renewal of Title V Operating Permit P183-R4 for NuStar Logistics L.P.'s (NuStar's) Hope Pump Station. The Hope Pump Station services NuStar's refined products pipeline from Valero's refinery in Sunray, Texas. The pipeline handles gasoline, turbine fuel, diesel, ethanol, Jet-A and liquefied petroleum gas. The emission units at the Hope Pump Station are a diesel engine driven pump, a diesel storage tank, equipment fugitives, and an emergency generator engine. This station is not equipped with breakout storage tanks. The pipeline throughput is an average (based on annual throughput) of 72,000 barrels per day for all products combined.

The application is for the renewal only and there are no proposed changes that would affect facility emissions or have de-bottlenecking impacts. The facility remains a major source for Title V purposes and a minor source for PSD purposes.

The pump engine (E-1) is currently required to undergo periodic emission testing for NOx and CO every calendar quarter per permit condition A202.A of permit P183-M4. With this application, NuStar proposes adjusting the testing frequency based on the engine's runtime hours, specifically every 2,190 hours (equivalent to one-quarter of 8,760 hours) instead of every calendar quarter. Since E-1 does not operate continuously, NuStar believes that continuously tracking the engine's runtime and performing tests every 2,190 hours will satisfy the periodic testing requirement.

SSM Overview:

The facility does not have routine or predictable emissions during startup or shutdown that vary from the requested normal operating emission limits.

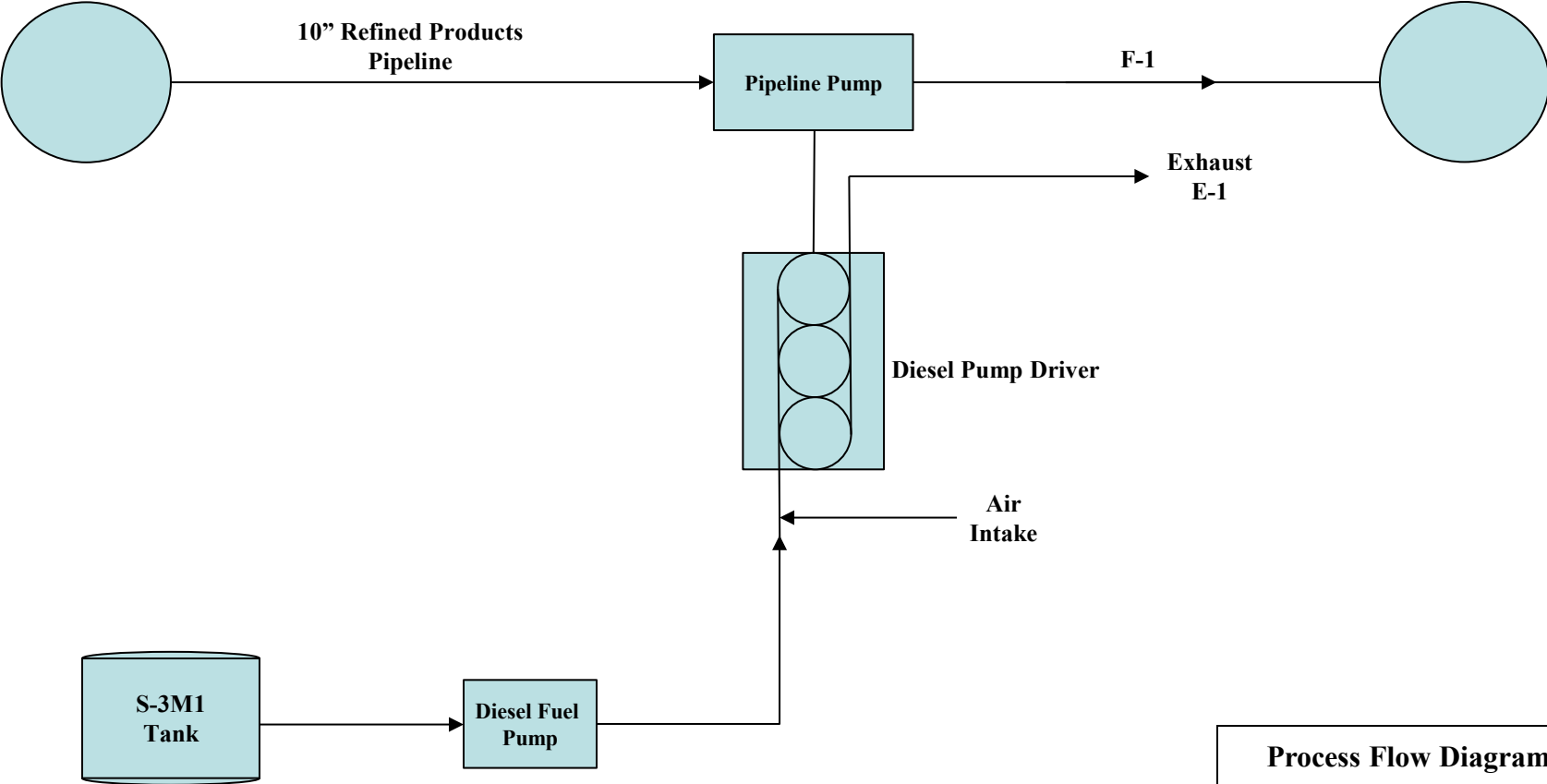
Section 4

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.

The facility process flow sheet is provided on the next page.

Process Flow Diagram



Process Flow Diagram

Hope Pump Station:
EI Paso Pipeline
Title V Renewal Application

NuStar Logistics, L.P.

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.

The facility plot plan is provided on the next page.

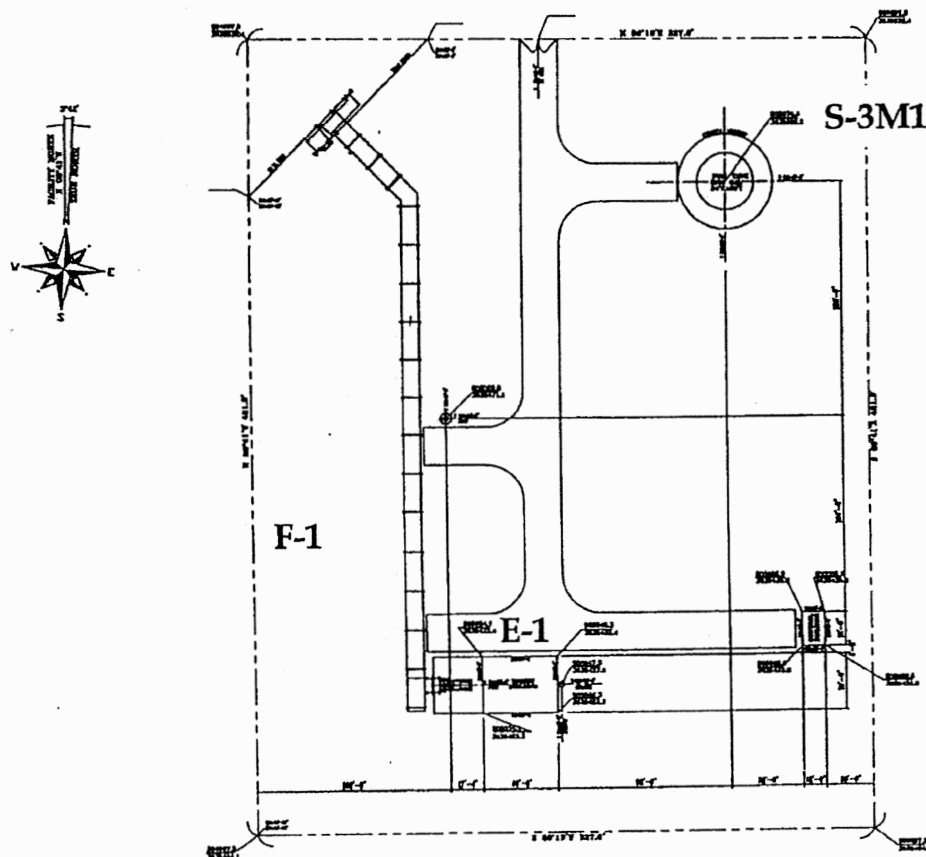


Figure 2. Site Map

DATE		BY	CHKD
NOTE: This drawing has been created with AUTOCAD 2000			
NATIONAL BUREAU OF STANDARDS			
HOPE PUMP STATION			
PLOT PLAN			
DIAMOND SHAMROCK SERVICE & SUPPLY CO. INC.			
Chesapeake County, New Mexico			
SCALE	DATE	BY	CHKD
1" = 40'-0"	5/15/94	J. K. KILGUS	J. K. KILGUS
DATE	BY	CHKD	DATE
5/15/94	J. K. KILGUS	J. K. KILGUS	5/15/94
PROJECT NO.			HO-21-001

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 rationale 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.

Pump Engines (E-1)

Criteria pollutant emission calculations from the pump engine are based on manufacturing data and Hazardous Air Pollutant (HAP) emissions are based on AP-42, Section 3.3 –Gasoline and Diesel Industrial Engines, Table 3.4. A 70% reduction in CO is required by MACT ZZZZ for the engine. NuStar added a catalyst to the engine before May 2013 to meet the requirements of MACT ZZZZ. Greenhouse gas emissions (GHG) were calculated using 40 CFR 98 Subpart C.

Equipment Fugitives (F-1)

Fugitive emissions from piping components (e.g. pumps, valves, flanges), are estimated using EPA's Protocol for Estimating Fugitive Emissions, November 1995, EPA-453/R-95-017, Table 2-2.

Diesel Storage Tank (S-3M1)

The diesel storage tank is not controlled. The emissions from the diesel storage tank are based on the output of BTECS *.

*BTECS = Barr Tank Emission Calculation Spreadsheet v.1.4.1, which is a tool developed by Barr Engineering to calculate tank emissions in accordance with AP-42 Chapter 7.1 (June 2020) methodology.

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)

Green House Gas emissions have been included in the emission calculations in section 6 and on form UA2.

Summary of Uncontrolled Air Emission Units

Unit Name	Unit Description	NOx		CO		VOC		SO2		Potential Emissions PM		PM10		PM2.5		H2S		HAPs	
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
E-1	Diesel Engine	47.50	208.05	15.00	65.70	2.70	11.83	7.80	34.16	0.06	0.26	0.06	0.26	0.06	0.26	--	--	0.06	0.27
S-3M1	Diesel Tank	--	--	--	--	39.40	0.03	--	--	--	--	--	--	--	--	0.20	<0.01	9.22	0.01
F-1	Fugitives	--	--	--	--	0.56	2.45	--	--	--	--	--	--	--	--	<0.01	0.01	0.15	0.65
Facility-Wide Total Emissions		47.50	208.05	15.00	65.70	42.66	14.31	7.80	34.16	0.06	0.26	0.06	0.26	0.06	0.26	0.20	0.01	9.43	0.93
Facility-Wide Total Emissions Less Fugitives Equipment		47.50	208.05	15.00	65.70	42.10	11.85	7.80	34.16	0.06	0.26	0.06	0.26	0.06	0.26	0.20	0.00	9.28	0.27

Summary of Controlled Air Emission Units

Unit Name	Unit Description	NOx		CO		VOC		SO2		Potential Emissions PM		PM10		PM2.5		H2S		HAPs		CO2e
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	
E-1	Diesel Engine	47.50	208.05	4.50	19.71	2.70	11.83	7.80	34.16	0.06	0.26	0.06	0.26	0.06	0.26	--	--	0.06	0.27	10,515
S-3M1	Diesel Tank	--	--	--	--	39.40	0.03	--	--	--	--	--	--	--	--	0.20	<0.01	9.22	0.01	--
F-1	Fugitives	--	--	--	--	0.56	2.45	--	--	--	--	--	--	--	--	<0.01	0.01	0.15	0.65	--
Facility-Wide Total Emissions		47.50	208.05	4.50	19.71	42.66	14.31	7.80	34.16	0.06	0.26	0.06	0.26	0.06	0.26	0.20	0.01	9.43	0.93	10,515
Facility-Wide Total Emissions Less Fugitives Equipment		47.50	208.05	4.50	19.71	42.10	11.85	7.80	34.16	0.06	0.26	0.06	0.26	0.06	0.26	0.20	0.00	9.28	0.27	10,515

Summary of Uncontrolled HAP Emissions

Unit Name	Unit Description	Potential Emissions Uncontrolled + No Product Recovered																			
		Formaldehyde		Acetaldehyde		Acrolein		Benzene		Propylene		Toluene		Ethylbenzene		Xylenes		n-Hexane		2,2,4-TMP	
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
E-1	Diesel Engine	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.05	0.04	0.18	<0.01	0.02	0.04	0.18	<0.01	0.01	--	--	--	--
S-3M1	Diesel Tank	--	--	--	--	--	--	0.36	<0.01	--	--	2.24	<0.01	4.26	<0.01	2.00	<0.01	0.33	<0.01	0.04	<0.01
F-1	Fugitives	--	--	--	--	--	--	0.01	0.06	--	--	<0.01	0.02	0.05	0.20	0.01	0.03	0.05	0.20	<0.01	<0.01
Facility-Wide Total HAP Emissions		0.00	0.01	0.00	0.00	0.00	0.00	0.39	0.11	0.04	0.18	2.25	0.04	4.34	0.38	2.01	0.05	0.38	0.20	0.04	0.00

Summary of Controlled HAP Emissions

Unit Name	Unit Description	Potential Emissions Controlled + Product Recovery																			
		Formaldehyde		Acetaldehyde		Acrolein		Benzene		Propylene		Toluene		Ethylbenzene		Xylenes		n-Hexane		2,2,4-TMP	
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
E-1	Diesel Engine	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.05	0.04	0.18	<0.01	0.02	0.04	0.18	<0.01	0.01	--	--	--	--
S-3M1	Diesel Tank	--	--	--	--	--	--	0.36	<0.01	--	--	2.24	<0.01	4.26	<0.01	2.00	<0.01	0.33	<0.01	0.04	<0.01
F-1	Fugitives	--	--	--	--	--	--	0.01	0.06	--	--	<0.01	0.02	0.05	0.20	0.01	0.03	0.05	0.20	<0.01	<0.01
Facility-Wide Total HAP Emissions		0.00	0.01	0.00	0.00	0.00	0.00	0.39	0.11	0.04	0.18	2.25	0.04	4.34	0.38	2.01	0.05	0.38	0.20	0.04	0.00

Engine Emission Detail Sheet

Item	Value
Source Name	E-1
Description	Diesel Engine
Make	Caterpillar
Model	3606
Serial Number	8RB00655
Manufacture Date	3/25/1997
Fuel Type	Diesel Engine
Engine Type	CI
JJJJ Engine?	No
ZZZZ Engine?	Yes

Item	Value	Units	Source
Rated Horsepower	2,300	hp	Manufacturer
Heat Rate	14.67	MMBtu/hr	Calculated
Fuel Consumption	107.1	gal/hr	Manufacturer
Heating Value	137,000	btu/gal	AP-42 Appendix A page A-5
	19,300	btu/lb	AP-42 Table 3.3-1 Note c
Diesel Density	7.05	lb/gal	AP-42 Appendix A page A-7
Engine Speed	1,000	RPM	Estimated-Typical
Potential Operation	8,760	hr/yr	

Stack Information	
Height (ft)	35.0
Temperature (°F)	920
Exit Velocity (ft/s)	24.5
Diameter (ft)	1.5
Flow Rate (acfs)	43.3
Flow Rate (acfm)	2,598

Fuel Use
107.10 gal/hr
938,196.00 gal/yr

Potential Emissions Per Engine

Pollutant	Uncontrolled Emissions					Controlled Emissions					Source of Emission Factor
	EF	Units	Safety Factor ^(1,2) (%)	(lb/hr)	(tpy)	EF	Units	Control Efficiency (%)	(lb/hr)	(tpy)	
NOx	47.50	lb/hr	0.0%	47.50	208.05	47.50	lb/hr	0.0%	47.50	208.05	Manufacturer Data
Total VOC	2.70	lb/hr	0.0%	2.70	11.83	2.70	lb/hr	0.0%	2.70	11.83	Manufacturer Data
CO ⁴	8.68	lb/hr	72.8%	15.00	65.70	4.50	lb/hr	70.0%	4.50	19.71	Manufacturer Data
SO2	3.90	lb/hr	100.0%	7.80	34.16	7.80	lb/hr	0.0%	7.80	34.16	Manufacturer Data
PM10 ³	0.06	lb/hr	0.0%	0.06	0.26	0.06	lb/hr	0.0%	0.06	0.26	Manufacturer Data
Formaldehyde	7.89E-05	lb/mmBtu	0.0%	0.00	0.01	7.89E-05	lb/mmBtu	0.0%	0.00	0.01	EPA AP-42 Table 3.4
Acetaldehyde	2.52E-05	lb/mmBtu	0.0%	0.00	0.00	2.52E-05	lb/mmBtu	0.0%	0.00	0.00	EPA AP-42 Table 3.4
Acrolein	7.88E-06	lb/mmBtu	0.0%	0.00	0.00	7.88E-06	lb/mmBtu	0.0%	0.00	0.00	EPA AP-42 Table 3.4
Benzene	7.76E-04	lb/mmBtu	0.0%	0.01	0.05	7.76E-04	lb/mmBtu	0.0%	0.01	0.05	EPA AP-42 Table 3.4
Propylene	2.79E-03	lb/mmBtu	0.0%	0.04	0.18	2.79E-03	lb/mmBtu	0.0%	0.04	0.18	EPA AP-42 Table 3.4
1,3-Butadiene	N/A	lb/mmBtu	0.0%	--	--	N/A	lb/mmBtu	0.0%	--	--	EPA AP-42 Table 3.4
Toluene	2.81E-04	lb/mmBtu	0.0%	0.00	0.02	2.81E-04	lb/mmBtu	0.0%	0.00	0.02	EPA AP-42 Table 3.4
Xylene	1.93E-04	lb/mmBtu	0.0%	0.00	0.01	1.93E-04	lb/mmBtu	0.0%	0.00	0.01	EPA AP-42 Table 3.4
Total HAPs				0.06	0.27				0.06	0.27	
CO2	73.96	kg/mmBtu	0.0%	2,392.44	10,478.88	73.96	kg/mmBtu	0.0%	2,392.44	10,478.88	40 CFR 98 Subpart C Table C-1
CH4	3.00E-03	kg/mmBtu	0.0%	0.10	0.43	3.00E-03	kg/mmBtu	0.0%	0.10	0.43	40 CFR 98 Subpart C Table C-2
N2O	6.00E-04	kg/mmBtu	0.0%	0.02	0.09	6.00E-04	kg/mmBtu	0.0%	0.02	0.09	40 CFR 98 Subpart C Table C-2
CO2e			0.0%	2,400.65	10,514.84			0.0%	2,400.65	10,514.84	40 CFR 98

Notes:

- 1 - CO safety factor added based on variability found during emission testing.
- 2- SO2 safety factor is based on actual red diesel fuel sulfur content compared to the sulfur content of on road diesel at the time of the original application.
- 3 - PM=TSP=PM-10=PM-2.25 (consevation assumption)
- 4 - CO reduction is per MACT ZZZZ requirements.
- 5 - Global warming potentials based on Table A-1 to Subpart A of Part 98—Global Warming Potentials

GWP ⁵	
CO2	1
CH4	25
N2O	298

Sample Calculation for NOx

47.50 g/hp-hr * 2300 hp / 453.59 g/lb * 8760 hr/yr / 2000 lb/ton = 208.05 tpy

Tank Detail Sheet

Equipment Source Name	S-3M1	Potential Battery Throughput	22,333 bbl/yr
Source Description	Diesel Tank		22,333 bbl/yr/tank
Quantity	1		938,000 gal/yr
Tank Capacity	3,000 bbl		61 avg. bbl/day
Tank Height	24.0 ft		61 avg. bbl/day/tank
Tank Diameter	30.5 ft		3 bbl/hr/tank
Control Efficiency	0%	Turnovers/year	7.4 per tank
Construction Date	July 1997	Potential Operation	8,760 hr/yr
		Diesel Density	7.05 lb/gal
		Sulfur Content	0.50%

Potential Working and Breathing Emissions Per Tank ¹

Pollutant	Uncontrolled		Controlled		Source of Emission Factor
	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	
VOC	39.40	0.03	39.40	0.03	AP-42 Chapter 7.1
H2S	0.20	0.00	0.20	0.000	Engineering Calculation
Benzene	0.36	0.00	0.36	0.00	AP-42 Chapter 7.1
Toluene	2.24	0.00	2.24	0.002	AP-42 Chapter 7.1
Ethylbenzene	4.26	0.00	4.26	0.003	AP-42 Chapter 7.1
Xylenes	2.00	0.00	2.00	0.001	AP-42 Chapter 7.1
n-Hexane	0.33	0.00	0.33	0.00	AP-42 Chapter 7.1
2,2,4-Trimethylpentane	0.04	0.00	0.04	0.000	Engineering Calculation
Total HAPs	9.22	0.01	9.22	0.01	

- Notes:**
- 1 - Uncontrolled working and breathing emissions were calculated using AP-42 Chapter 7.1 methodology.
 - 2 - 2,2,4-Trimethylpentane emissions are calculated using an engineering assumption of 0.1 wt%.
 - 3 - H2S emissions are calculated using a conservative estimate that assumes total VOC losses are multiplied by the maximum weight percentage of sulfur in the diesel.

Fugitive Emissions Detail Sheet

Equipment Source NameF-1

Source DescriptionFugitives

Potential Operatio8760

hr/yr

Emission ControlsNone

Potential Emissions

Pollutant	Gas - Analysis	Gas - Emissions		Liquid - Analysis	Light Liquid - Emissions		Heavy Liquid - Emissions		Total Emissions	
	Wt%	lb/hr	tpy	Wt%	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
VOC	0.00%	0.00	0.00	100%	0.51	2.23	0.052	0.227	0.56	2.45
H2S	0.00%	0.00	0.00	0.50%	0.00	0.01	0.000	0.001	0.00	0.01
Benzene	0.00%	0.00	0.00	2.64%	0.01	0.06	0.00	0.01	0.01	0.06
Cyclohexane	0.00%	0.00	0.00	0.76%	0.00	0.02	0.00	0.00	0.00	0.02
Toluene	0.00%	0.00	0.00	8.14%	0.04	0.18	0.00	0.02	0.05	0.20
Ethylbenzene	0.00%	0.00	0.00	1.41%	0.01	0.03	0.00	0.00	0.01	0.03
Xylenes	0.00%	0.00	0.00	8.05%	0.04	0.18	0.00	0.02	0.05	0.20
Cumene	0.00%	0.00	0.00	0.12%	0.00	0.00	0.00	0.00	0.00	0.00
1,2,4-Trimethylbenzene	0.00%	0.00	0.00	2.44%	0.01	0.05	0.00	0.01	0.01	0.06
2,2,4-Trimethylpentane	0.00%	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Naphthalene	0.00%	0.00	0.00	0.24%	0.00	0.01	0.00	0.00	0.00	0.01
Methanol	0.00%	0.00	0.00	0.03%	0.00	0.00	0.00	0.00	0.00	0.00
Tert-Butyl Alcohol	0.00%	0.00	0.00	0.01%	0.00	0.00	0.00	0.00	0.00	0.00
n-Hexane	0.00%	0.00	0.00	2.83%	0.01	0.06	0.00	0.01	0.02	0.07
Total HAPs		0.00	0.00		0.14	0.59	0.01	0.06	0.15	0.65

Equipment Type	Gas			
	EF ¹ (kg/hr/source)	Source Count	VOC (lb/hr)	VOC (tpy)
Valve	2.68E-02	0	0.00	0.00
Pump Seals	N/A	N/A	N/A	N/A
Compressor Seals	6.36E-01	0	0.00	0.00
Pressure Relief Valves	1.60E-01	0	0.00	0.00
Connectors	2.50E-04	0	0.00	0.00
Open-Ended Lines	2.30E-03	0	0.00	0.00
Sampling Connections	1.50E-02	0	0.00	0.00
VOC Emissions			0.00	0.00

Equipment Type	Light Liquid			
	EF ¹ (kg/hr/source)	Source Count	VOC (lb/hr)	VOC (tpy)
Valve	1.09E-02	10	0.24	1.05
Pump Seals	1.14E-01	1	0.25	1.10
Compressor Seals	N/A	N/A	N/A	N/A
Pressure Relief Valves	N/A	N/A	N/A	N/A
Connectors	2.50E-04	30	0.02	0.07
Open-Ended Lines	2.30E-03	0	0.00	0.00
Sampling Connections	1.50E-02	0	0.00	0.00
VOC Emissions			0.51	2.23

Equipment Type	Heavy Liquid			
	EF ¹ (kg/hr/source)	Source Count	VOC (lb/hr)	VOC (tpy)
Valve	2.30E-04	2	0.001	0.004
Pump Seals	2.10E-02	1	0.046	0.203
Compressor Seals	N/A	N/A	N/A	N/A
Pressure Relief Valves	N/A	N/A	N/A	N/A
Connectors	2.50E-04	8	0.004	0.019
Open-Ended Lines	2.30E-03	0	0.000	0.000
Sampling Connections	1.50E-02	0	0.000	0.000
VOC Emissions			0.052	0.227

Notes:

1 - Component leak rates taken from EPA's Oil and Gas Production Operations average equipment leak emission factors (EPA 453/R-95-017 dated November 1995) Table 2-2.

Sample Calculation:

0.00023 kg/hr-source * 2 Sources * 2.20462 lb/kg * 100 % VOC Wt% * 8760 hr/yr /2000 lb/ton = 0.004 tpy

Liquid Analysis (Fugitives)	
Chemical	Liquid Weight %
Benzene	2.64%
Cyclohexane	0.76%
<i>Toluene</i>	8.14%
<i>Ethylbenzene</i>	1.41%
Xylenes	8.05%
Cumene	0.12%
1,2,4-Trimethylbenzene	2.44%
Naphthalene	0.24%
Methanol	0.03%
Tert-Butyl Alcohol	0.01%
n-Hexane	2.83%
<i>Totals</i>	

Title V Permit Renewal Application Permit
Number: P-183-R3M2 (2019, May)

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.

Included in this section are the following:

- Copies of manufacturing emissions data
- Page(s) from AP-42 that were used to calculate emissions
- Page(s) from 40 CFR 98 Subpart C that were used to calculate emissions
- BTECS_V1.4.2 Model for AP-42 Chapter 7 Tank Emissions
- EPA document "Protocol for Equipment Leak Emission Estimates"

*BTECS = Barr Tank Emission Calculation Spreadsheet v.1.3.2, which is a tool developed by Barr Engineering to calculate tank emissions in accordance with AP-42 Chapter 7.1 (June 2020) methodology.

Table 3.4-3. SPECIATED ORGANIC COMPOUND EMISSION FACTORS FOR LARGE UNCONTROLLED STATIONARY DIESEL ENGINES^a

EMISSION FACTOR RATING: E

Pollutant	Emission Factor (lb/MMBtu) (fuel input)
Benzene ^b	7.76 E-04
Toluene ^b	2.81 E-04
Xylenes ^b	1.93 E-04
Propylene	2.79 E-03
Formaldehyde ^b	7.89 E-05
Acetaldehyde ^b	2.52 E-05
Acrolein ^b	7.88 E-06

^aBased on 1 uncontrolled diesel engine from Reference 7. Source Classification Code 2-02-004-01. Not enough information to calculate the output-specific emission factors of lb/hp-hr. To convert from lb/MMBtu to ng/J, multiply by 430.

^bHazardous air pollutant listed in the *Clean Air Act*.

This content is from the eCFR and is authoritative but unofficial.

Displaying title 40, up to date as of 9/18/2024. Title 40 was last amended 9/17/2024. [?](#)**Title 40 —Protection of Environment****Chapter I —Environmental Protection Agency****Subchapter C —Air Programs****Part 98 —Mandatory Greenhouse Gas Reporting****Subpart C —General Stationary Fuel Combustion Sources**● **Table C-1 to Subpart C of Part 98—Default CO₂ Emission Factors and High Heat Values for Various Types of Fuel****DEFAULT CO₂ EMISSION FACTORS AND HIGH HEAT VALUES FOR VARIOUS TYPES OF FUEL**

Fuel type	Default high heat value	Default CO₂ emission factor
Coal and coke	mmBtu/short ton	kg CO ₂ /mmBtu
Anthracite	25.09	103.69
Bituminous	24.93	93.28
Subbituminous	17.25	97.17
Lignite	14.21	97.72
Coal Coke	24.80	113.67
Mixed (Commercial sector)	21.39	94.27
Mixed (Industrial coking)	26.28	93.90
Mixed (Industrial sector)	22.35	94.67
Mixed (Electric Power sector)	19.73	95.52
Natural gas	mmBtu/scf	kg CO ₂ /mmBtu
(Weighted U.S. Average)	1.026×10^{-3}	53.06
Petroleum products—liquid	mmBtu/gallon	kg CO ₂ /mmBtu
Distillate Fuel Oil No. 1	0.139	73.25
Distillate Fuel Oil No. 2	0.138	73.96
Distillate Fuel Oil No. 4	0.146	75.04
Residual Fuel Oil No. 5	0.140	72.93
Residual Fuel Oil No. 6	0.150	75.10
Used Oil	0.138	74.00
Kerosene	0.135	75.20
Liquefied petroleum gases (LPG) ¹	0.092	61.71
Propane ¹	0.091	62.87



 Displaying title 40, up to date as of 9/18/2024. Title 40 was last amended 9/17/2024. 

 There are Federal Register documents that will modify this content. See the 'Cross Reference' blocks in the text of this content for more information.

Title 40 —Protection of Environment
Chapter I —Environmental Protection Agency
Subchapter C —Air Programs
Part 98 —Mandatory Greenhouse Gas Reporting
Subpart C —General Stationary Fuel Combustion Sources

 **Table C-2 to Subpart C of Part 98—Default CH₄ and N₂O Emission Factors for Various Types of Fuel**

CROSS REFERENCE

[Link to an amendment published at 89 FR 42220, May 14, 2024.](#)

Fuel type	Default CH ₄ emission factor (kg CH ₄ /mmBtu)	Default N ₂ O emission factor (kg N ₂ O/mmBtu)
Coal and Coke (All fuel types in Table C-1)	1.1 × 10 ⁻⁰²	1.6 × 10 ⁻⁰³
Natural Gas	1.0 × 10 ⁻⁰³	1.0 × 10 ⁻⁰⁴
Petroleum Products (All fuel types in Table C-1)	3.0 × 10 ⁻⁰³	6.0 × 10 ⁻⁰⁴
Fuel Gas	3.0 × 10 ⁻⁰³	6.0 × 10 ⁻⁰⁴
Other Fuels—Solid	3.2 × 10 ⁻⁰²	4.2 × 10 ⁻⁰³
Blast Furnace Gas	2.2 × 10 ⁻⁰⁵	1.0 × 10 ⁻⁰⁴
Coke Oven Gas	4.8 × 10 ⁻⁰⁴	1.0 × 10 ⁻⁰⁴
Biomass Fuels—Solid (All fuel types in Table C-1, except wood and wood residuals)	3.2 × 10 ⁻⁰²	4.2 × 10 ⁻⁰³
Wood and wood residuals	7.2 × 10 ⁻⁰³	3.6 × 10 ⁻⁰³
Biomass Fuels—Gaseous (All fuel types in Table C-1)	3.2 × 10 ⁻⁰³	6.3 × 10 ⁻⁰⁴
Biomass Fuels—Liquid (All fuel types in Table C-1)	1.1 × 10 ⁻⁰³	1.1 × 10 ⁻⁰⁴



Note: Those employing this table are assumed to fall under the IPCC definitions of the “Energy Industry” or “Manufacturing Industries and Construction”. In all fuels except for coal the values for these two categories are identical. For coal combustion, those who fall within the IPCC “Energy Industry” category may employ a value of 1g of CH₄/mmBtu.

[78 FR 71952, Nov. 29, 2013, as amended at 81 FR 89252, Dec. 9, 2016]



Protocol for Equipment Leak Emission Estimates

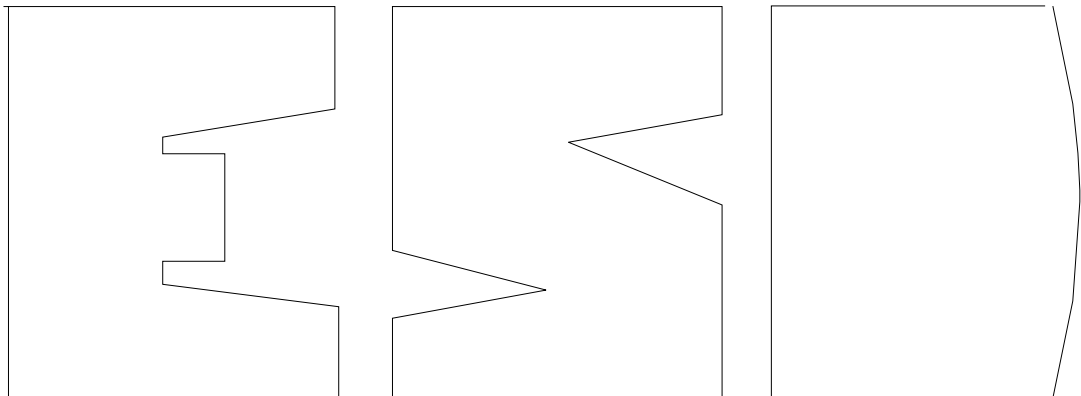
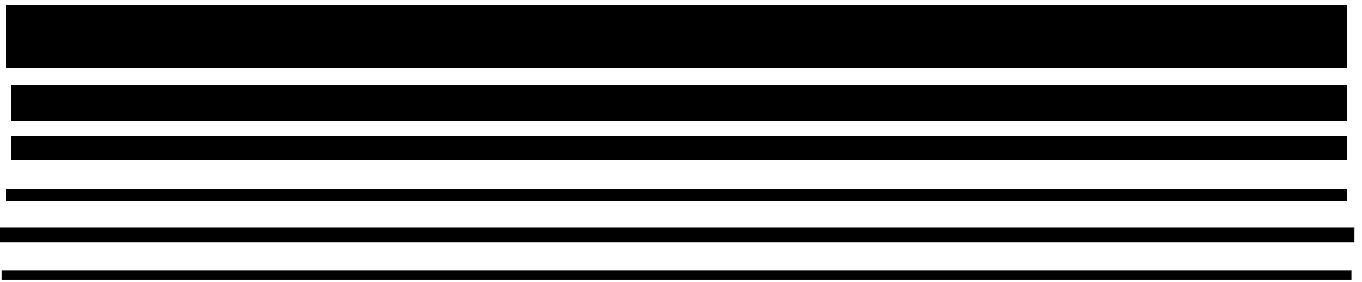


TABLE 2-2. REFINERY AVERAGE EMISSION FACTORS^a

Equipment type	Service	Emission factor (kg/hr/source) ^b
Valves	Gas	0.0268
	Light liquid	0.0109
	Heavy liquid	0.00023
Pump seals ^c	Light liquid	0.114
	Heavy liquid	0.021
Compressor seals	Gas	0.636
Pressure relief valves	Gas	0.16
Connectors	All	0.00025
Open-ended lines	All	0.0023
Sampling connections	All	0.0150

^aSource: Reference 2.

^bThese factors are for non-methane organic compound emission rates.

^cThe light liquid pump seal factor can be used to estimate the leak rate from agitator seals.

ULTRAMAR DIAMOND SHAMROCK
C O R P O R A T I O N

Matthew H. Hodges
Senior Environmental Coordinator
Technical Services

January 20, 1999

OVERNIGHT EXPRESS

Mr. John S. Hall
Environmental Engineer
Operating Permit Unit
Air Pollution Control Division
2048 Galisteo
Santa Fe, NM 87505

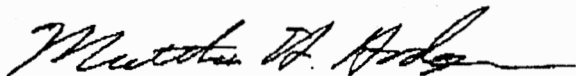
**Re: Operating Permit Application No. P183
Application Revisions**

Dear Mr. Hall:

The following is in response to your letter dated January 6, 1999, in which revised emission factors were requested per the most recent NSR permit amendment. Attached for your review are a) the specification sheet of emissions from the manufacturer, and b) a spreadsheet reflecting emissions in the permit. Please note that the emissions in the permit have been increased over those in the manufacturer's spec sheet: UDS revised to the permitted emissions to account for manufacturer tolerances and temperature effects. This information reflects the correct engine timing of 18 degrees.

Please contact me at (210) 592-4620 if you have any further questions.

Sincerely,



Matthew H. Hodges

Attachments

cc: Ronnie Slaughter
Mark Cunningham
Route: Les Norton
Marten Mosis
Aaron Villarreal
File: EV-14-PP-HOPE-42

M. Hodges
1/20/99 9:34

HOPE Pumpstation Engine Emissions Non-Standard Turbocharger Model 3606 Engine					
TEMP (C)	37.8				
LOAD SPEED (rpm)	100% 1000	90% 900	75% 909	23% 603	Tolerances
NOx					
(lb/hr)	47.46	47.47	37.77	20.42	15%
(TPY)	207.86	207.92	165.42	89.44	
CO					
(lb/hr)	7.76	8.68	7.76	4.42	30%
(TPY)	34.01	38.03	34.01	19.36	
VOC					
(lb/hr)	0.27	2.66	1.70	0.90	30%
(TPY)	1.16	11.63	7.43	3.94	
SO2					
(lb/hr)	7.81	6.98	5.92	1.96	n/a
(TPY)	34.21	30.57	25.93	8.58	
PM10					
(lb/hr)	0.06	0.05	0.04	0.02	40%
(TPY)	0.25	0.23	0.19	0.07	

Notes:

Sulfur emissions are dependant on sulfur content in fuel. Fuel/Sulfur wt% = 0.5

All emission rates account for tolerances

CO emission accounting for tolerances and temperature are as shown above; however, due to the variability in CO emissions found during testing, UDS is permitting this engine for 15.0 lb/hr, 65.7 TPY. This increased rate does not trigger any additional regulations or threaten ambient air quality and will account for the emission higher than what Caterpillar has specified.

*Still want Nov 1 start date,
3 month payment @ 10%*

*Trans 7/17/98
M1 Hodges - 4.05
R1 11/14 - 11/15*

HOLT.



SAN ANTONIO • AUSTIN • BROWNSVILLE • CORPUS CHRISTI • EDINBURG • LAREDO • VICTORIA • WESLACO

July 17, 1998

Ultramar Diamond Shamrock
San Antonio, Texas
fax- 210/ 592-2311

Reference: Diamond Shamrock Hope Pump Station- 3606 S/N 8RB00655
Non- Standard Turbocharger and Aftercooler

Attention: Matt Hodges

Mr. Hodges,

In response to your request on why the proposed changes, stated below, to the Diamond Shamrock engine will reduce emissions is as follows:

Proposed changes to above referenced 3606:

- 1.) Non-Standard turbocharger
- 2.) 3608 Aftercooler Core
- 3.) 32 degree ACOC thermostats
- 4.) New retarded timing

NOx output is decreased by lowering both the combustion temperatures and the pressures of the engine. The non-standard turbocharger will flow more air through the engine and therefore will boost the engine higher. This will increase the cylinder pressure and allows more significant retarded timing (retarding the timing decreases cylinder pressures). Delaying the start of the injection process, again by retarding the timing, has the effect of reducing peak temperatures and therefore reducing NOx. The 3608 aftercooler core will increase the cooling of the inlet manifold air which will again reduce the combustion temperatures and therefore will reduce NOx. The 32 degree ACOC (aftercooler/ oil-cooler) thermostats will provide the coolest possible water to the aftercooler again reducing combustion temperatures. The non-standard aftercooler will be retrofitted to the 3606 again providing lower air inlet temperatures to the intake manifold,

therefore reducing the combustion temperatures. The new aftercooler group for the 3606 is the 7E-3100 treated water aftercooler group. On the 3606, the aftercooler covers cylinders 4, 5, and 6. The previous aftercooler was not as large as the 7E-3100 and was mounted on cylinder 5 and cylinder 6.

Emission data provided earlier, of which I have attached a copy, is reflective of these changes. Data compiled is as per SAE J1995 Jan 90 and ISO 3046 standard conditions of 100 kpa, and 25 degrees C. Based on limited data, 1439 meters altitude will increase NOx <1.0%. Ambient air temperature will affect the emission data as follows:

NOx	0.35% increase per degree C above 25 degrees C
CO	2.0% increase per degree C above 25 degrees C
Particulate	1.0% increase per degree C above 25 degrees C
HC	No effect on Hydrocarbons

As is stated in the attached data, the not to exceed values for permitting purposes can be determined by increasing the individual pollutants by the stated tolerances. This will take into account the engine-to-engine variability and test variability. This emissions data is Not Guaranteed and Caterpillar is in no way accountable for any penalties associated with these not to exceed emissions values.

Note that the other minor constituents of the emissions will increase due to these changes. While NOx is reduced by lowering the combustion temperatures, both soot and Hydrocarbons are burned off by increasing the combustion temperatures.

I trust that this information meets your requirements. Please call at 210/ 648-8411 if you need further assistance or have questions regarding this information.

Regards,



Tom Angotti
Holt Power System, Engineering Manager

attachment
copy: Robert Little/ Holt Power Systems

Diamond Shamrock
 ZA97J Non-standard turbocharger

CATERPILLAR INC

11-Jun-98

	Distillate			
Timing	18.0 Degrees			
No of cylinders:	6			
	Nitrogen 0 %			
	Fuel: 7.001 lb/gal.			
	Sulfur: 0.05 %			
Load	100	90	75	23
SPEED rpm	1000	900	909	603
BRAKE POWER bkw	1716	1544	1287	397
BRAKE POWER bhp	2301	2071	1726	532
BMEP kPa	1858	1858	1533	713
	(base based on fuel LHV 42780 kj/kg)			
	Tolerances			

NITROGEN OXIDES

	10.5	11.7	11.1	19.5	+/- 15%
g/bkW-hr (77F)					
lb/hr	39.72	39.73	31.61	17.09	
g/kg fuel	50.80	56.90	53.35	86.95	
ppm at 15% O2 (2)	677	758	711	1158	
g/N cu m @ 5% O2	3.681	4.123	3.866	6.301	
mg/N cu m @ 15% O2	1.366	1.530	1.435	2.338	

CARBON MONOXIDE

	1.32	1.64	1.76	3.24	+/- 30%
g/bkW-hr					
lb/hr	4.99	5.58	4.99	2.84	
g/kg fuel	6.39	8.00	8.43	14.43	
ppm at 15% O2	138	173	182	312	
g/N cu m @ 5% O2	0.463	0.579	0.611	1.046	
mg/N cu m @ 15% O2	0.172	0.215	0.227	0.388	

HYDROCARBONS

	0.054	0.60	0.46	0.79	+/- 30%
g/bkW-hr					
lb/hr	0.204	2.043	1.305	0.692	
g/kg fuel	0.261	2.925	2.203	3.519	
ppm at 15% O2	10	111	83	133	
g/N cu m @ 5% O2	0.019	0.212	0.160	0.255	
mg/N cu m @ 15% O2	0.007	0.079	0.059	0.095	

SULFUR DIOXIDE (3)

g/bkW-hr	0.206	0.205	0.209	0.224
lb/hr	0.781	0.698	0.592	0.196
g/kg fuel	0.999	0.999	0.999	0.999
ppm at 15% O2	9.44	9.44	9.44	9.44
g/N cu m @ 5% O2	0.072	0.072	0.072	0.072
mg/N cu m @ 15% O2	0.027	0.027	0.027	0.027

PARTICULATES

	0.01	0.01	0.01	0.01	+/- 40%
g/bkW-hr					
lb/hr	0.038	0.034	0.028	0.011	
g/kg fuel	0.048	0.049	0.048	0.053	
grains/dscf (4)	0.0005	0.0005	0.0005	0.0006	
g/N cu m @ 5% O2	0.004	0.004	0.003	0.004	
mg/N cu m @ 15% O2	0.001	0.001	0.001	0.001	

Notes:

1. NOx emissions are at 77 F and 75 grains/lb air humidity except as noted.
2. ppm is by volume dry at 15% O2
3. Sulfur dioxide emissions are proportional to fuel sulfur.
4. Particulate in grains/std cubic foot of exhaust, dry @ 77 F 29.92 in Hg 15% O2
 Particulates not valid for Method 5 with back half wash.
5. Emissions are nominal (typical).
6. g/N cubic m is grams per normal cubic meter (dry) at 5% oxygen

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jah

24 December, 1997

SUBJECT: Emissions Data for Air Quality Permit Applications for 1600 Diesel Engines on MDO

This letter is with respect to your inquiry for Guaranteed Emissions Data for 1600 series distillate engines (single units). The data attached is NOMINAL data and is derived from tests done at Caterpillar Inc. using instrumentation designed specifically for diesel engines. Other instrumentation used to check or confirm these measurements on site must be such that the probes do not disrupt the exhaust gas flow, are made for the high gas flow velocities in diesel exhaust stacks, and entry ports for test probes must be sealed.

The particulate values given are based on gravimetric measurements using instrumentation developed at Caterpillar Inc. These methods are consistent with draft procedure ISO 8178. The values are also valid for measurements with US EPA Method 5.

For air quality permit application purposes, the attached data must be increased by 15% on NOx, 30% on CO and hydrocarbons, and 40% on particulate. Increasing the individual pollutants by the stated amounts will take into account engine-to-engine variability and test variability.

Note that the sulfur dioxide emission levels are dependent on the amount of sulfur present in the fuel.

Emissions are valid for 25°C (77°F) ambient temperature and 10.7 grams water/kg air (75 grains/lb) humidity. Distillate fuel must have minimum of 40 Cetane.

Over 90% of the NOx emissions is NO (Nitric Oxide). A small amount oxidizes to NO2 before being exhausted. NO slowly oxidizes to NO2 in the atmosphere, which is the more harmful form.

The hydrocarbon values are non-methane. Volatile organic compounds (VOC) are equivalent to hydrocarbons. 100% of the particulate emissions are PM10, or particulate matter less than 10 micron size.

Joseph A. Labbe
Large Engine Center
3701 State Road 26 East
Lafayette, IN 47903

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PAGE.04

** TOTAL PAGE.04 **

** TOTAL PAGE.012 **

NuStar Logistics, L.P.
Hope Pump Station
Detailed Storage Tank Emission Calculations

Identification		Tank Identification	
Tank Number:	S-3M1		
Location:	NuStar Hope Pump Station		
Type of Tank:	Vertical Fixed Roof Tank		

Meteorological Data		Month	January	February	March	April	May	June	July	August	September	October	November	December	Annual Avg.	Notes
T _{AX}	Ambient Daily Maximum Temperature (°F)		55.60	61.30	68.40	77.00	86.10	93.70	93.90	91.90	86.00	76.00	64.00	55.30	75.77	AP-42 Chapter 7.1, Organic Liquid Storage Tanks, June 2020, Table 7.1-7. Values for Roswell, NM.
T _{AM}	Ambient Daily Minimum Temperature (°F)		27.80	32.50	38.50	46.10	56.40	64.50	68.50	67.00	59.50	47.90	35.20	27.70	47.63	AP-42 Chapter 7.1, Organic Liquid Storage Tanks, June 2020, Table 7.1-7. Values for Roswell, NM.
T _{AA}	Ambient Daily Average Temperature (°F)		41.70	46.90	53.45	61.55	71.25	79.10	81.20	79.45	72.75	61.95	49.60	41.50	61.70	AP-42 Chapter 7.1, Organic Liquid Storage Tanks, June 2020, Table 7.1-7. Values for Roswell, NM.
V	Monthly Average Wind Speed (mph)		7.60	8.70	9.60	10.50	10.10	10.10	8.50	7.60	7.80	7.80	7.60	7.40	8.61	AP-42 Chapter 7.1, Organic Liquid Storage Tanks, June 2020, Table 7.1-7. Values for Roswell, NM.
P _A	Atmospheric Pressure (psia)		12.88	12.88	12.88	12.88	12.88	12.88	12.88	12.88	12.88	12.88	12.88	12.88	12.88	AP-42 Chapter 7.1, Organic Liquid Storage Tanks, June 2020, Table 7.1-7. Values for Roswell, NM.
I	Monthly Solar Insolation (Btu/ft ² -day)		1,013.00	1,323.00	1,744.00	2,125.00	2,301.00	2,434.00	2,302.00	2,085.00	1,822.00	1,452.00	1,127.00	939.00	1,722.25	AP-42 Chapter 7.1, Organic Liquid Storage Tanks, June 2020, Table 7.1-7. Values for Roswell, NM.

Stored Liquid Characteristics ⁽¹⁾															
i			T _{LA}	T _{LO}	T _{LS}	T _B	P _{VA}	P _{VO}	P _{VS}	M _L	M _V	Z _L	Z _{VO}	Basis for Vapor Pressure Calculations. Component vapor pressures shown are partial pressures as determined using the vapor pressure methodology shown, the liquid mole fraction as determined by Eq. 40-4, and Eq. 40-3.	
Component	Stored Product or Component in Mixture	Month	Average liquid surface temperature (°F)	Average minimum liquid surface temperature (°F)	Average maximum liquid surface temperature (°F)	Liquid Bulk Temperature for Use in Calculations (°F)	True vapor pressure at T _{LA} (psia)	True vapor pressure at T _{LO} (psia)	True vapor pressure at T _{LS} (psia)	Liquid Molecular Weight (lb/lbmol)	Vapor Molecular Weight (lb/lbmol)	Liquid Wt. Percent of Components Within Liquid	Vapor Weight Percent Eq. 40-6		
Mixture/Product	No. 2 Fuel Oil	January	43.25	36.74	49.76	42.46	0.0037	0.0029	0.0046	188.00	130.00	--	--	Equation 1-25. A = 12.1 and B = 8907.	
	Hexane (n)						0.0008	0.0007	0.0010	86.18	86.18	0.03%	14.39%	Equation 1-26 (Antoine's equation). A = 6.87, B = 1171.5, C = 224.37.	
	Isooctane						0.0000	0.0000	0.0001	114.23	114.23	0.01%	1.00%	Equation 1-26 (Antoine's equation). A = 6.81, B = 1257.8, C = 220.74.	
	Benzene						0.0001	0.0001	0.0001	78.11	78.11	0.00%	1.14%	Equation 1-26 (Antoine's equation). A = 6.9, B = 1211, C = 220.79.	
	Toluene						0.0003	0.0003	0.0004	92.14	92.14	0.08%	6.16%	Equation 1-26 (Antoine's equation). A = 7.01, B = 1377.6, C = 222.64.	
	Xylene (m)						0.0002	0.0002	0.0003	106.17	106.17	0.24%	4.65%	Equation 1-26 (Antoine's equation). A = 7, B = 1462.3, C = 215.11.	
	Ethylbenzene						0.0001	0.0000	0.0001	106.17	106.17	0.05%	1.18%	Equation 1-26 (Antoine's equation). A = 6.95, B = 1419.3, C = 212.61.	
	Isopropyl benzene						0.0000	0.0000	0.0000	120.19	120.19	0.06%	0.55%	Equation 1-26 (Antoine's equation). A = 6.92, B = 1455.8, C = 207.2.	
	Trimethylbenzene (1,2,4)						0.0001	0.0000	0.0001	120.19	120.19	0.35%	1.40%	Equation 1-26 (Antoine's equation). A = 7.04, B = 1573.3, C = 208.56.	
	Naphthalene						0.0000	0.0000	0.0000	128.17	128.17	0.29%	0.12%	Equation 1-26 (Antoine's equation). A = 7.14, B = 1831.6, C = 211.82.	
	Biphenyl						0.0000	0.0000	0.0000	154.21	154.21	0.12%	0.00%	Equation 1-26 (Antoine's equation). A = 7.24, B = 1998.7, C = 202.73.	
Mixture/Product	No. 2 Fuel Oil	February	48.93	41.89	55.97	47.89	0.0045	0.0035	0.0057	188.00	130.00	--	--	Equation 1-25. A = 12.1 and B = 8907.	
	Hexane (n)						0.0009	0.0008	0.0011	86.18	86.18	0.03%	13.83%	Equation 1-26 (Antoine's equation). A = 6.87, B = 1171.5, C = 224.37.	
	Isooctane						0.0000	0.0000	0.0001	114.23	114.23	0.01%	0.97%	Equation 1-26 (Antoine's equation). A = 6.81, B = 1257.8, C = 220.74.	
	Benzene						0.0001	0.0001	0.0001	78.11	78.11	0.00%	1.11%	Equation 1-26 (Antoine's equation). A = 6.9, B = 1211, C = 220.79.	
	Toluene						0.0004	0.0003	0.0005	92.14	92.14	0.08%	6.10%	Equation 1-26 (Antoine's equation). A = 7.01, B = 1377.6, C = 222.64.	
	Xylene (m)						0.0003	0.0002	0.0003	106.17	106.17	0.24%	4.73%	Equation 1-26 (Antoine's equation). A = 7, B = 1462.3, C = 215.11.	
	Ethylbenzene						0.0001	0.0001	0.0001	106.17	106.17	0.05%	1.20%	Equation 1-26 (Antoine's equation). A = 6.95, B = 1419.3, C = 212.61.	
	Isopropyl benzene						0.0000	0.0000	0.0000	120.19	120.19	0.06%	0.57%	Equation 1-26 (Antoine's equation). A = 6.92, B = 1455.8, C = 207.2.	
	Trimethylbenzene (1,2,4)						0.0001	0.0001	0.0001	120.19	120.19	0.35%	1.46%	Equation 1-26 (Antoine's equation). A = 7.04, B = 1573.3, C = 208.56.	
	Naphthalene						0.0000	0.0000	0.0000	128.17	128.17	0.29%	0.13%	Equation 1-26 (Antoine's equation). A = 7.14, B = 1831.6, C = 211.82.	
	Biphenyl						0.0000	0.0000	0.0000	154.21	154.21	0.12%	0.00%	Equation 1-26 (Antoine's equation). A = 7.24, B = 1998.7, C = 202.73.	
Mixture/Product	No. 2 Fuel Oil	March	56.12	48.42	63.82	54.76	0.0057	0.0044	0.0073	188.00	130.00	--	--	Equation 1-25. A = 12.1 and B = 8907.	
	Hexane (n)						0.0011	0.0009	0.0014	86.18	86.18	0.03%	13.15%	Equation 1-26 (Antoine's equation). A = 6.87, B = 1171.5, C = 224.37.	
	Isooctane						0.0001	0.0000	0.0001	114.23	114.23	0.01%	0.95%	Equation 1-26 (Antoine's equation). A = 6.81, B = 1257.8, C = 220.74.	
	Benzene						0.0001	0.0001	0.0001	78.11	78.11	0.00%	1.07%	Equation 1-26 (Antoine's equation). A = 6.9, B = 1211, C = 220.79.	
	Toluene						0.0005	0.0004	0.0006	92.14	92.14	0.08%	6.03%	Equation 1-26 (Antoine's equation). A = 7.01, B = 1377.6, C = 222.64.	
	Xylene (m)						0.0003	0.0003	0.0004	106.17	106.17	0.24%	4.82%	Equation 1-26 (Antoine's equation). A = 7, B = 1462.3, C = 215.11.	
	Ethylbenzene						0.0001	0.0001	0.0001	106.17	106.17	0.05%	1.22%	Equation 1-26 (Antoine's equation). A = 6.95, B = 1419.3, C = 212.61.	
	Isopropyl benzene						0.0000	0.0000	0.0000	120.19	120.19	0.06%	0.59%	Equation 1-26 (Antoine's equation). A = 6.92, B = 1455.8, C = 207.2.	
	Trimethylbenzene (1,2,4)						0.0001	0.0001	0.0001	120.19	120.19	0.35%	1.55%	Equation 1-26 (Antoine's equation). A = 7.04, B = 1573.3, C = 208.56.	
	Naphthalene						0.0000	0.0000	0.0000	128.17	128.17	0.29%	0.14%	Equation 1-26 (Antoine's equation). A = 7.14, B = 1831.6, C = 211.82.	
	Biphenyl						0.0000	0.0000	0.0000	154.21	154.21	0.12%	0.01%	Equation 1-26 (Antoine's equation). A = 7.24, B = 1998.7, C = 202.73.	

Identification
 Tank Number:
 Location:
 Type of Tank:

S-3M1
NuStar Hope Pump Station
Vertical Fixed Roof Tank

Date printed: 11/24/2024

NuStar Logistics, L.P.
Hope Pump Station
Detailed Storage Tank Emission Calculations

Tank Identification														
Identification														
Tank Number:		S-3M1												
Location:		NuStar Hope Pump Station												
Type of Tank:		Vertical Fixed Roof Tank												
Mixture/Product	No. 2 Fuel Oil	November	51.33	44.50	58.16	50.45	0.0048	0.0038	0.0061	188.00	130.00	--	--	Equation 1-25. A = 12.1 and B = 8907.
	Hexane (n)						0.0010	0.0008	0.0012	86.18	86.18	0.03%	13.60%	Equation 1-26 (Antoine's equation). A = 6.87, B = 1171.5, C = 224.37.
	Isocutane						0.0001	0.0000	0.0001	114.23	114.23	0.01%	0.96%	Equation 1-26 (Antoine's equation). A = 6.81, B = 1257.8, C = 220.74.
	Benzene						0.0001	0.0001	0.0001	78.11	78.11	0.00%	1.09%	Equation 1-26 (Antoine's equation). A = 6.9, B = 1211, C = 220.79.
	Toluene						0.0004	0.0003	0.0005	92.14	92.14	0.08%	6.08%	Equation 1-26 (Antoine's equation). A = 7.01, B = 1377.6, C = 222.64.
	Xylene (m)						0.0003	0.0002	0.0004	106.17	106.17	0.24%	4.76%	Equation 1-26 (Antoine's equation). A = 7, B = 1462.3, C = 215.11.
	Ethylbenzene						0.0001	0.0001	0.0001	106.17	106.17	0.05%	1.20%	Equation 1-26 (Antoine's equation). A = 6.95, B = 1419.3, C = 212.61.
	Isopropyl benzene						0.0000	0.0000	0.0000	120.19	120.19	0.06%	0.57%	Equation 1-26 (Antoine's equation). A = 6.92, B = 1455.8, C = 207.2.
	Trimethylbenzene (1,2,4)						0.0001	0.0001	0.0001	120.19	120.19	0.35%	1.49%	Equation 1-26 (Antoine's equation). A = 7.04, B = 1573.3, C = 208.56.
	Naphthalene						0.0000	0.0000	0.0000	128.17	128.17	0.29%	0.14%	Equation 1-26 (Antoine's equation). A = 7.14, B = 1831.6, C = 211.82.
	Biphenyl						0.0000	0.0000	0.0000	154.21	154.21	0.12%	0.01%	Equation 1-26 (Antoine's equation). A = 7.24, B = 1998.7, C = 202.73.
Mixture/Product	No. 2 Fuel Oil	December	42.94	36.55	49.33	42.20	0.0036	0.0029	0.0045	188.00	130.00	--	--	Equation 1-25. A = 12.1 and B = 8907.
	Hexane (n)						0.0008	0.0007	0.0009	86.18	86.18	0.03%	14.42%	Equation 1-26 (Antoine's equation). A = 6.87, B = 1171.5, C = 224.37.
	Isocutane						0.0000	0.0000	0.0001	114.23	114.23	0.01%	1.00%	Equation 1-26 (Antoine's equation). A = 6.81, B = 1257.8, C = 220.74.
	Benzene						0.0001	0.0001	0.0001	78.11	78.11	0.00%	1.14%	Equation 1-26 (Antoine's equation). A = 6.9, B = 1211, C = 220.79.
	Toluene						0.0003	0.0003	0.0004	92.14	92.14	0.08%	6.16%	Equation 1-26 (Antoine's equation). A = 7.01, B = 1377.6, C = 222.64.
	Xylene (m)						0.0002	0.0002	0.0003	106.17	106.17	0.24%	4.65%	Equation 1-26 (Antoine's equation). A = 7, B = 1462.3, C = 215.11.
	Ethylbenzene						0.0001	0.0000	0.0001	106.17	106.17	0.05%	1.18%	Equation 1-26 (Antoine's equation). A = 6.95, B = 1419.3, C = 212.61.
	Isopropyl benzene						0.0000	0.0000	0.0000	120.19	120.19	0.06%	0.55%	Equation 1-26 (Antoine's equation). A = 6.92, B = 1455.8, C = 207.2.
	Trimethylbenzene (1,2,4)						0.0001	0.0000	0.0001	120.19	120.19	0.35%	1.39%	Equation 1-26 (Antoine's equation). A = 7.04, B = 1573.3, C = 208.56.
	Naphthalene						0.0000	0.0000	0.0000	128.17	128.17	0.29%	0.12%	Equation 1-26 (Antoine's equation). A = 7.14, B = 1831.6, C = 211.82.
	Biphenyl						0.0000	0.0000	0.0000	154.21	154.21	0.12%	0.00%	Equation 1-26 (Antoine's equation). A = 7.24, B = 1998.7, C = 202.73.

Monthly Total Emissions Report ⁽¹⁾															
	Month	January	February	March	April	May	June	July	August	September	October	November	December	Annual Total	Notes
L _s	Standing Losses (lb)	1.16	1.35	2.05	2.77	3.75	4.53	4.36	3.92	3.15	2.35	1.51	1.12	32.02	Calculated Using Equation 1-2
V _v	Vapor Space Volume (ft ³)	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58		Calculated Using Equation 1-3
W _v	Vapor Density (lb/ft ³)	0.0001	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001		Calculated Using Equation 1-22
K _e	Vapor Space Expansion Factor	0.0472	0.0508	0.0553	0.0590	0.0576	0.0571	0.0504	0.0481	0.0490	0.0493	0.0489	0.0463		Calculated Using Equation 1-5
K _s	Vented Vapor Saturation Factor	0.9976	0.9971	0.9963	0.9951	0.9933	0.9914	0.9909	0.9914	0.9931	0.9952	0.9969	0.9976		Calculated Using equation 1-21
V _v	Tank Vapor Space Volume (ft ³)	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58	8,986.58		Calculated Using Equation 1-3
D	Tank Diameter (ft)	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50		See "Tank Identification and Physical Characteristics" table above
H _{VO}	Vapor Space Outage (ft)	12.300	12.300	12.300	12.300	12.300	12.300	12.300	12.300	12.300	12.300	12.300	12.300		Calculated Using Equation 1-16
H _s	Tank Shell Height (ft)	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00		See "Tank Identification and Physical Characteristics" table above
H _L	Average Liquid Height (ft)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00		See "Tank Identification and Physical Characteristics" table above
H _{RO}	Roof Outage (ft)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30		Calculated Using Equation 1-17 or 1-19
H _{RO}	Roof Outage - Cone Roof (ft)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30		Calculated Using 1-17
H _{CR}	Cone Roof Height (ft)	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90		See "Tank Identification and Physical Characteristics" table above
W _v	Vapor Density (lb/ft ³)	0.0001	0.0001	0.0001	0.0002	0.0002	0.0003	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001		Calculated Using Equation 1-22
M _v	Vapor Molecular Weight (lb/lbmol)	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00		See "Stored Liquid Characteristics" table above
P _{va}	Vapor Pressure at Daily Average Liquid Surface temperature (psia)	0.0037	0.0045	0.0057	0.0076	0.0104	0.0133	0.0141	0.0133	0.0107	0.0074	0.0048	0.0036		See "Stored Liquid Characteristics" table above
T _{LA}	Daily Average Liquid Surface Temperature (°R)	502.92	508.60	515.79	524.48	534.45	542.50	544.40	542.32	535.21	523.85	511.00	502.61		Calculated Using Equation 1-27
ΔT _a	Daily Average Ambient Temperature Range (°R)	27.80	28.80	29.90	30.90	29.70	29.20	25.40	24.90	26.50	28.10	28.80	27.60		Calculated Using Equation 1-11
R	Ideal Gas Constant R (psia-ft ³)/(lbmol-°R)	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731		Per AP-42 Chapter 7.1
T _B	Liquid Bulk Temperature (°R)	502.13	507.56	514.43	522.81	532.65	540.60	542.60	540.68	533.79	522.71	510.12	501.87		Calculated Using Equation 1-31
T _v	Average Vapor Temperature (°R)	503.72	509.63	517.16	526.14	536.25	544.41	546.20	543.95	536.64	524.98	511.88	503.34		Calculated Using Equation 1-32
α _s	Tank Shell Paint Solar Absorptance	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25		From Table 7.1-6
α _{Ro}	Tank Roof Paint Solar Absorptance	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25		From Table 7.1-6
I	Daily Total Solar Insolation Factor (Btu/ft ² -day)	1,013.00	1,323.00	1,744.00	2,125.00	2,301.00	2,434.00	2,302.00	2,085.00	1,822.00	1,452.00	1,127.00	939.00		From Table 7.1-7
K _e	Vapor Space Expansion Factor	0.0472	0.0508	0.0553	0.0590	0.0576	0.0571	0.0504	0.0481	0.0490	0.0493	0.0489	0.0463		Calculated Using Equation 1-5
ΔT _v	Daily Vapor Temperature Range (°R)	26.03	28.14	30.81	33.23	33.05	33.23	29.70	28.38	28.50	28.15	27.30	25.56		Calculated Using Equation 1-6
ΔP _v	Daily Vapor Pressure Range (psia)	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00		Calculated Using Equation 1-9
ΔP _B	Breather Vent Pressure Setting Range (psia)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06		Calculated Using Equation 1-10
P _{va}	Vapor Pressure at Daily Average Liquid Surface temperature (psia)	0.0037	0.0045	0.0057	0.0076	0.0104	0.0133	0.0141	0.0133	0.0107	0.0074	0.0048	0.0036		See "Stored Liquid Characteristics" table above
P _{vM}	Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia)	0.0029	0.0035	0.0044	0.0058	0.0080	0.0103	0.0113	0.0107	0.0085	0.0059	0.0038	0.0029		See "Stored Liquid Characteristics" table above
P _{vM}	Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia)	0.0046	0.0057	0.0073	0.0099	0.0134	0.0171	0.0176	0.0164	0.0133	0.0093	0.0061	0.0045		See "Stored Liquid Characteristics" table above
T _{LA}	Daily Average Liquid Surface Temperature (°R)	502.92	508.60	515.79	524.48	534.45	542.50	544.40	542.32	535.21	523.85	511.00	502.61		Calculated Using Equation 1-27
T _{LM}	Daily Minimum Liquid Surface Temperature (°R)	496.41	501.56	508.09	516.17	526.19	534.19	536.97	535.23	528.09	516.81	504.17	496.22		Calculated Using Figure 7.1-17
T _{LM}	Daily Maximum Liquid Surface Temperature (°R)	509.43	515.64	523.49	532.79	542.71	550.81	551.83	549.42	542.33	530.89	517.83	509.00		Calculated Using Figure 7.1-17
ΔT _a	Daily Ambient Temperature Range (°R)	27.80	28.80	29.90	30.90	29.70	29.20	25.40	24.90	26.50	28.10	28.80	27.60		Calculated Using Equation 1-11
K _s	Vented Vapor Saturation Factor	0.9976	0.9971	0.9963	0.9951	0.9933	0.9914	0.9909	0.9914	0.9931	0.9952	0.9969	0.9976		Calculated Using Equation 1-21
P _{va}	Vapor Pressure at Daily Average Liquid Surface temperature (psia)	0.0037	0.0045	0.0057	0.0076	0.0104	0.0133	0.0141	0.0133	0.0107	0.0074	0.0048	0.0036		See "Stored Liquid Characteristics" table above
H _{VO}	Vapor Space Outage (ft)	12.3000	12.3000	12.3000	12.3000	12.3000	12.3000	12.3000	12.3000	12.3000	12.3000	12.3000	12.3000		Calculated Using Equation 1-16
L _w	Working Losses (lb/month)	0.94	1.02	1.42	1.80	2.50	3.06	3.33	3.15	2.48	1.83	1.18	0.93	23.64	Calculated Using Equation 1-35
M _v	Vapor Molecular Weight (lb/lbmol)	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00		See "Stored Liquid Characteristics" table above
P _{va}	Vapor Pressure at Daily Avg. Liquid Surface Temp. (psia)	0.0037	0.0045	0.0057	0.0076	0.0104	0.0133	0.0141	0.0133	0.0107	0.0074	0.0048	0.0036		See "Stored Liquid Characteristics" table above
Q	Throughput (gal/month)	79,665.75	71,956.16	79,665.75	77,095.89	79,665.75	77,095.89	79,665.75	79,665.75	77,095.89	79,665.75	77,095.89	79,665.75		Specified monthly throughput
N	Annual Turnovers	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46	7.46		Calculated Using Equation 1-36
K _{th}	Turnover Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		Per notes to Equation 1-35

NuStar Logistics, L.P.
 Hope Pump Station
 Detailed Storage Tank Emission Calculations

Tank Identification																
Identification	S-3M1															
Tank Number:	NuStar Hope Pump Station															
Location:	Vertical Fixed Roof Tank															
Type of Tank:																
H _{LX}	Maximum Liquid Height (ft)	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	See "Tank Identification and Physical Characteristics" table above
D	Tank Diameter (ft)	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	See "Tank Identification and Physical Characteristics" table above
K _p	Working Loss Product Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Per notes to Equation 1-35
K _s	Vent Setting Correction Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Calculated using equations 1-40 and 1-41
L _T	Total Losses (lb/month)	2.09	2.37	3.47	4.57	6.25	7.59	7.69	7.07	5.63	4.17	2.69	2.05	55.66	55.66	Calculated Using Equation 2-1
L _T	Total VOC Losses (lb/month)	2.09	2.37	3.47	4.57	6.25	7.59	7.69	7.07	5.63	4.17	2.69	2.05	55.66	55.66	Sum of VOC Component Emissions
L _T	Total HAP Losses (lb/month)	0.61	0.68	0.97	1.24	1.64	1.94	1.96	1.81	1.48	1.14	0.76	0.60	14.83	14.83	Sum of HAP Component Emissions
L _{T1}	Benzene Losses (lb/month)	0.02	0.03	0.04	0.05	0.06	0.07	0.07	0.07	0.05	0.04	0.03	0.02	0.55	0.55	Calculated using Equations 40-1 through 40-9
L _{T1}	Biphenyl Losses (lb/month)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Calculated using Equations 40-1 through 40-9
L _{T1}	Ethylbenzene Losses (lb/month)	0.02	0.03	0.04	0.06	0.08	0.10	0.10	0.09	0.07	0.05	0.03	0.02	0.69	0.69	Calculated using Equations 40-1 through 40-9
L _{T1}	Hexane (n) Losses (lb/month)	0.30	0.33	0.46	0.57	0.72	0.83	0.83	0.77	0.65	0.52	0.37	0.30	6.64	6.64	Calculated using Equations 40-1 through 40-9
L _{T1}	Isooctane Losses (lb/month)	0.02	0.02	0.03	0.04	0.05	0.06	0.06	0.06	0.05	0.04	0.03	0.02	0.50	0.50	Calculated using Equations 40-1 through 40-9
L _{T1}	Isopropyl benzene Losses (lb/month)	0.01	0.01	0.02	0.03	0.04	0.05	0.05	0.05	0.04	0.03	0.02	0.01	0.35	0.35	Calculated using Equations 40-1 through 40-9
L _{T1}	Naphthalene Losses (lb/month)	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.00	0.00	0.10	0.10	Calculated using Equations 40-1 through 40-9
L _{T1}	Toluene Losses (lb/month)	0.13	0.14	0.21	0.27	0.36	0.43	0.44	0.40	0.33	0.25	0.16	0.13	3.25	3.25	Calculated using Equations 40-1 through 40-9
L _{T1}	Trimethylbenzene (1,2,4) Losses (lb/month)	0.03	0.03	0.05	0.08	0.11	0.14	0.14	0.13	0.10	0.07	0.04	0.03	0.95	0.95	Calculated using Equations 40-1 through 40-9
L _{T1}	Xylene (m) Losses (lb/month)	0.10	0.11	0.17	0.22	0.31	0.38	0.39	0.36	0.28	0.20	0.13	0.10	2.75	2.75	Calculated using Equations 40-1 through 40-9

Maximum Hourly Emissions Report ⁽²⁾																
	Month	January	February	March	April	May	June	July	August	September	October	November	December	Max Month	Notes	
L _{MAX}	Maximum Hourly Emissions (lb/hr)	11.06	13.33	16.78	21.97	29.60	37.34	39.40	37.15	30.26	21.55	14.41	10.95	39.40	TCEQ APDG 6250 - Equation 1	
M _v	Vapor Molecular Weight (lb/lb-mole)	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	130.00	See "Stored Liquid Characteristics" table above	
P _{sat}	Vapor Pressure at Daily Average Liquid Surface temperature (psia)	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	See "Stored Liquid Characteristics" table above	
R	Ideal Gas Constant R (psia-ft ³ /lbmol-°R)	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	Constant	
T _{LA}	Daily Average Liquid Surface Temperature (°R)	--	--	--	--	--	--	--	--	--	--	--	--	--	Calculated Using Equation 1-27	
FR _{MAX}	Maximum Filling Rate for Tank (gal/hr)	938,000.00	938,000.00	938,000.00	938,000.00	938,000.00	938,000.00	938,000.00	938,000.00	938,000.00	938,000.00	938,000.00	938,000.00	938,000.00	See "Tank Identification and Physical Characteristics" table above	
L _T	Total Losses (lb/hr)	11.06	13.33	16.78	21.97	29.60	37.34	39.40	37.15	30.26	21.55	14.41	10.95	39.40	Calculated Using Equation 2-1	
L _{T1}	Total VOC Losses (lb/hr)	11.06	13.33	16.78	21.97	29.60	37.34	39.40	37.15	30.26	21.55	14.41	10.95	39.40	Sum of VOC Component Emissions	
L _{T1}	Total HAP Losses (lb/hr)	3.23	3.82	4.69	5.97	7.78	9.56	10.02	9.51	7.93	5.87	4.09	3.20	10.02	Sum of HAP Component Emissions	
L _{T1}	Benzene Losses (lb/hr)	0.13	0.15	0.18	0.22	0.29	0.35	0.36	0.34	0.29	0.22	0.16	0.13	0.36	Calculated using Equations 40-1 through 40-9	
L _{T1}	Biphenyl Losses (lb/hr)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Calculated using Equations 40-1 through 40-9	
L _{T1}	Ethylbenzene Losses (lb/hr)	0.13	0.16	0.20	0.27	0.37	0.47	0.50	0.47	0.38	0.27	0.17	0.13	0.50	Calculated using Equations 40-1 through 40-9	
L _{T1}	Hexane (n) Losses (lb/hr)	1.59	1.84	2.21	2.72	3.42	4.09	4.26	4.07	3.48	2.68	1.96	1.58	4.26	Calculated using Equations 40-1 through 40-9	
L _{T1}	Isooctane Losses (lb/hr)	0.11	0.13	0.16	0.20	0.26	0.32	0.33	0.31	0.26	0.20	0.14	0.11	0.33	Calculated using Equations 40-1 through 40-9	
L _{T1}	Isopropyl benzene Losses (lb/hr)	0.06	0.08	0.10	0.13	0.19	0.24	0.26	0.24	0.19	0.13	0.08	0.06	0.26	Calculated using Equations 40-1 through 40-9	
L _{T1}	Naphthalene Losses (lb/hr)	0.01	0.02	0.02	0.04	0.05	0.07	0.08	0.07	0.05	0.03	0.02	0.01	0.08	Calculated using Equations 40-1 through 40-9	
L _{T1}	Toluene Losses (lb/hr)	0.68	0.81	1.01	1.30	1.72	2.13	2.24	2.12	1.75	1.28	0.88	0.67	2.24	Calculated using Equations 40-1 through 40-9	
L _{T1}	Trimethylbenzene (1,2,4) Losses (lb/hr)	0.15	0.20	0.26	0.36	0.52	0.69	0.73	0.68	0.53	0.35	0.21	0.15	0.73	Calculated using Equations 40-1 through 40-9	
L _{T1}	Xylene (m) Losses (lb/hr)	0.51	0.63	0.81	1.08	1.48	1.89	2.00	1.88	1.51	1.06	0.69	0.51	2.00	Calculated using Equations 40-1 through 40-9	

Notes:
 (1) Equations, figures, and tables are from AP-42 Chapter 7.1 Organic Liquid Storage Tanks, June 2020.
 (2) Calculations follow the methodology specified in TCEQ Air Permit Reviewer Guides (APDG) 6250 and 6419. Notes in this table which do not begin with "TCEQ APDG" are to the AP-42 referenced in footnote (1).

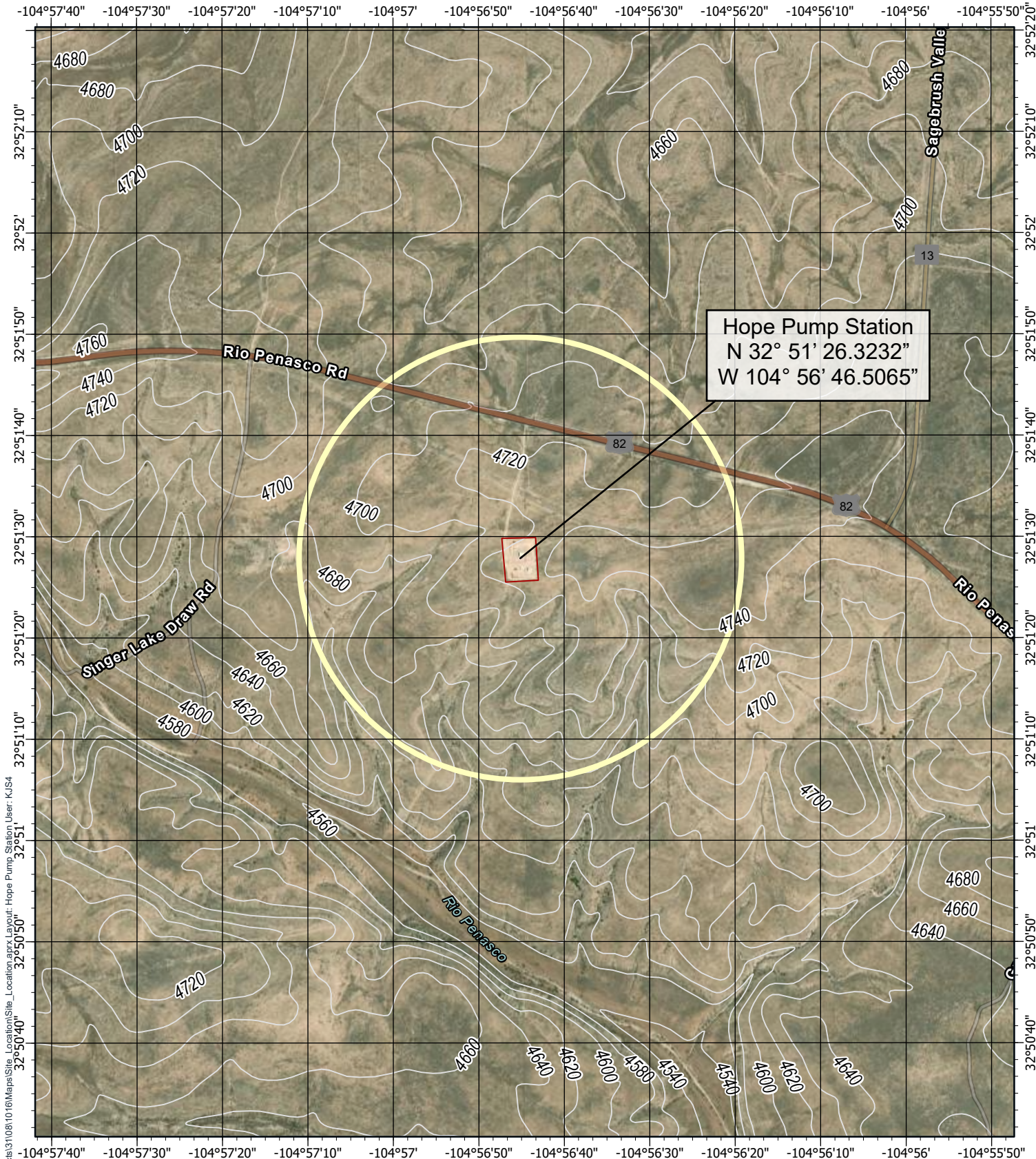
Section 8

Map(s)

A map such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

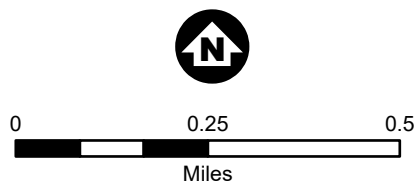
The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public access
A graphical scale	

A map is provided on the following page.



Barr Footer: ArcGISPro, 8/30/2024 12:16 PM File: h:\Projects\311081016\Mapa\Site_Location\Site_Location.aprx Layout: Hope Pump Station User: KJS4

- Site Boundary (restricted access)
 - 1/2 Mile Buffer
 - Elevation Contour
- Source: USGS, 2024



Scale: 1:15,840
1 inch = 1/4 mile

Site Overview
Hope Pump Station
 NuStar Logistics, L.P.
 Chaves County, NM

FIGURE 1



Section 9

Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)

(This proof is required by: 20.2.72.203.A.14 NMAC “Documentary Proof of applicant’s public notice”)

☒ I have read the AQB “Guidelines for Public Notification for Air Quality Permit Applications”

This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant’s Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

New Permit and **Significant Permit Revision** public notices must include all items in this list.

Technical Revision public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

1. ☐ A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
 2. ☐ A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.)
 3. ☐ A copy of the property tax record (20.2.72.203.B NMAC).
 4. ☐ A sample of the letters sent to the owners of record.
 5. ☐ A sample of the letters sent to counties, municipalities, and Indian tribes.
 6. ☐ A sample of the public notice posted and a verification of the local postings.
 7. ☐ A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
 8. ☐ A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
 9. ☐ A copy of the classified or legal ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
 10. ☐ A copy of the display ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
 11. ☐ A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.
-

No pre-application public notice is required for a Title V renewal under 20.2.70 NMAC.

Section 10

Written Description of the Routine Operations of the Facility

A written description of the routine operations of the facility. Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

The Hope Pump Station services NuStar's refined products pipeline from Valero's refinery in Sunray, Texas. The pipeline handles gasoline, turbine fuel, diesel, ethanol, Jet-A and liquefied petroleum gas. The emission units at the Hope Pump Station are a diesel-driven pump engine (E-1), a diesel storage tank (S-3M1), and equipment fugitives (F-1). This station is not equipped with breakout storage tanks. The pipeline throughput is an average (based on annual throughput) of 72,000 barrels per day for all products combined.

Section 11

Source Determination

Source submitting under 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, Single Source Determination Guidance, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

A. Identify the emission sources evaluated in this section (list and describe): Hope Pump Station; Please see Table 2-A for a list of emission sources.

B. Apply the 3 criteria for determining a single source:

SIC Code: Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, OR surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

☒ **Yes** ☐ **No**

Common Ownership or Control: Surrounding or associated sources are under common ownership or control as this source.

☒ **Yes** ☐ **No**

Contiguous or Adjacent: Surrounding or associated sources are contiguous or adjacent with this source.

☒ **Yes** ☐ **No**

C. Make a determination:

- ☒ The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "YES" boxes should be checked. If in "A" above you evaluated other sources as well, you must check **AT LEAST ONE** of the boxes "NO" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.
- ☐ The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

Section 12

Section 12.A

PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

Not applicable as this is a Title V renewal.

Section 13

Determination of State & Federal Air Quality Regulations

This section lists each state and federal air quality regulation that may apply to your facility and/or equipment that are stationary sources of regulated air pollutants.

Not all state and federal air quality regulations are included in this list. Go to the Code of Federal Regulations (CFR) or to the Air Quality Bureau’s regulation page to see the full set of air quality regulations.

Required Information for Specific Equipment:

For regulations that apply to specific source types, in the ‘Justification’ column **provide any information needed to determine if the regulation does or does not apply. For example**, to determine if emissions standards at 40 CFR 60, Subpart IIII apply to your three identical stationary engines, we need to know the construction date as defined in that regulation; the manufacturer date; the date of reconstruction or modification, if any; if they are or are not fire pump engines; if they are or are not emergency engines as defined in that regulation; their site ratings; and the cylinder displacement.

Required Information for Regulations that Apply to the Entire Facility:

See instructions in the ‘Justification’ column for the information that is needed to determine if an ‘Entire Facility’ type of regulation applies (e.g. 20.2.70 or 20.2.73 NMAC).

Regulatory Citations for Regulations That Do Not, but Could Apply:

If there is a state or federal air quality regulation that does not apply, but you have a piece of equipment in a source category for which a regulation has been promulgated, you must **provide the low level regulatory citation showing why your piece of equipment is not subject to or exempt from the regulation. For example** if you have a stationary internal combustion engine that is not subject to 40 CFR 63, Subpart ZZZZ because it is an existing 2 stroke lean burn stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, your citation would be 40 CFR 63.6590(b)(3)(i). **We don’t want a discussion of every non-applicable regulation, but if it is possible a regulation could apply, explain why it does not. For example**, if your facility is a power plant, you do not need to include a citation to show that 40 CFR 60, Subpart OOO does not apply to your non-existent rock crusher.

Regulatory Citations for Emission Standards:

For each unit that is subject to an emission standard in a source specific regulation, such as 40 CFR 60, Subpart OOO or 40 CFR 63, Subpart HH, include the low level regulatory citation of that emission standard. Emission standards can be numerical emission limits, work practice standards, or other requirements such as maintenance. **Here are examples:** a glycol dehydrator is subject to the general standards at 63.764C(1)(i) through (iii); an engine is subject to 63.6601, Tables 2a and 2b; a crusher is subject to 60.672(b), Table 3 and all transfer points are subject to 60.672(e)(1)

Federally Enforceable Conditions:

All federal regulations are federally enforceable. All Air Quality Bureau State regulations are federally enforceable except for the following: affirmative defense portions at 20.2.7.6.B, 20.2.7.110(B)(15), 20.2.7.11 through 20.2.7.113, 20.2.7.115, and 20.2.7.116; 20.2.37; 20.2.42; 20.2.43; 20.2.62; 20.2.63; 20.2.86; 20.2.89; and 20.2.90 NMAC. Federally enforceable means that EPA can enforce the regulation as well as the Air Quality Bureau and federally enforceable regulations can count toward determining a facility’s potential to emit (PTE) for the Title V, PSD, and nonattainment permit regulations.

INCLUDE ANY OTHER INFORMATION NEEDED TO COMPLETE AN APPLICABILITY DETERMINATION OR THAT IS RELEVANT TO YOUR FACILITY’S NOTICE OF INTENT OR PERMIT.

EPA Applicability Determination Index for 40 CFR 60, 61, 63, etc: <http://cfpub.epa.gov/adi/>

Example of a Table for State Regulations:

State Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQs	Yes	Facility	20.2.3 NMAC is a State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. NM/NAAQS will continue to be met for this site. As this is a Title V application, air dispersion modeling is not included with this application.
20.2.7 NMAC	Excess Emissions	Yes	Facility	NuStar will continue to comply with the requirements of this rule and will report any excess emissions under 20.2.7 NMAC.
20.2.23 NMAC	Fugitive Dust Control	No	Facility	This is a permitted facility; therefore, this regulation does not apply.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	-	This regulation does not apply as the facility has no new or existing gas burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit.
20.2.34 NMAC	Oil Burning Equipment: NO ₂	No	-	This regulation does not apply as the facility has no oil burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No	-	This regulation does not apply as the facility is not a “New Natural Gas Processing Plant.”
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC.
20.2.38 NMAC	Hydrocarbon Storage Facility	No	-	This regulation does not apply as the facility is not operated in conjunction with a petroleum processing facility.
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No	-	This regulation does not apply as the facility is not equipped with a sulfur recovery plant.
20.2.50 NMAC	Oil and Gas Sector – Ozone Precursor Pollutants	No	-	This regulation does not apply as this facility does not meet the definition of a well site, tank battery, gathering and boosting station, natural gas processing plant, or transmission compressor station, up to the point of the local distribution company custody transfer station.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	E-1, G-1	Engines E-1 and G-1 are considered Stationary Combustion Equipment.
20.2.70 NMAC	Operating Permits	Yes	Facility	This facility is a major source for NO _x
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	Yes, this facility is subject to 20.2.70 NMAC and is in turn subject to 20.2.71 NMAC.
20.2.72 NMAC	Construction Permits	Yes	Facility	This facility is subject to 20.2.72 NMAC and NSR Permit number: 1922-M1.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	All Title V major sources meet the applicability requirements of 20.2.73.300 NMAC.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	-	This regulation does not apply as the facility is a minor source for PSD purposes.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This facility is subject to 20.2.72 NMAC and is in turn subject to 20.2.75 NMAC. As this application is a Title V renewal application, 20.2.75 is not applicable for this submittal.

<u>State Regulation Citation</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.77 NMAC	New Source Performance	Yes	S-3M1	This is a stationary source which is subject to the requirements of 40 CFR Part 60.
20.2.78 NMAC	Emission Standards for HAPS	No	-	This regulation does not apply as there is not an applicable standard prescribed under 40 CFR 61 or any subpart thereof.
20.2.79 NMAC	Permits – Nonattainment Areas	No	-	This regulation does not apply since the source is located in an attainment area.
20.2.80 NMAC	Stack Heights	No	-	This regulation does not apply as the facility is not equipped with any stacks that exceed Good Engineering Practice (GEP).
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	E-1, G-1	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63.

Example of a Table for Applicable Federal Regulations (Note: This is not an exhaustive list):

<u>Federal Regulation Citation</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
40 CFR 50	NAAQS	Yes	Facility	Defined as applicable at 20.2.70.7.E.11, Any national ambient air quality standard.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	S-3M1	Emission unit is subject to NSPS Subpart Kb.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units	No	-	This regulation does not apply since there are no steam generating units at the facility.

<u>Federal Regulation Citation</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
NSPS 40 CFR 60.40b Subpart Db	Electric Utility Steam Generating Units	No	-	This regulation does not apply since there are no steam generating units at the facility.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No	-	Not applicable as the facility is not equipped steam generating units for which construction, modification or reconstruction is commenced after June 9, 1989.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	No	-	Not applicable because emission unit S-3M1 was constructed after July 23, 1984.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Yes	S-3M1	Emission unit S-3M1 has a capacity greater than or equal to 75 cubic meters (m³) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984. Emission limits and controls do not apply because the vapor pressure of the stored material is less than the 0.5 psia threshold. Only recordkeeping requirements apply. NuStar will continue to comply with the applicable requirements of Subpart Kb.
NSPS 40 CFR 60.330 Subpart GG	Stationary Gas Turbines	No	-	This regulation does not apply as the facility is not equipped with "Stationary Gas Turbines."
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from Onshore Gas Plants	No	-	This regulation does not apply as the facility is not an "Onshore Gas Plant."
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing ; SO ₂ Emissions	No	-	This regulation does not apply as the facility is not a "gas processing plant."
NSPS 40 CFR Part	Standards of Performance for	No	-	This facility is not subject to this regulation. No construction, modification, or reconstruction has occurred at the facility since the August 23, 2011 applicability date of this regulation.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
60 Subpart OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015			
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	No	-	Not applicable as construction, modification, or reconstruction has not commenced at the facility after September 8, 2015.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	-	Not applicable as no facility stationary compression ignition combustion engines commenced construction/modification/reconstruction after the June 12, 2006 applicability date of this regulation.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	No	-	Not applicable as the facility is not equipped with stationary spark ignition combustion engines commenced construction/modification/reconstruction after June 12, 2006.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	-	Not applicable since the facility does not contain an electric generating unit.
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	-	Not applicable since the facility does not contain an electric utility generating unit.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	-	Not applicable since facility is not a MSW landfill.
NESHAP	General Provisions	No	-	This regulation does not apply as there is not an applicable standard prescribed under 40 CFR 61 or any subpart thereof.

<u>Federal Regulation Citation</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
40 CFR 61 Subpart A				
NESHAP 40 CFR 61 Subpart E	National Emission Standards for Mercury	No	-	Not applicable as the provisions of this subpart are applicable to those stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources)	No	-	This regulation does not apply as the facility does not operate in VHAP service.
MACT 40 CFR 63, Subpart A	General Provisions	Yes	E-1, G-1	This regulation applies since Units E-1 and G-1 are subject to MACT ZZZZ.
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	No	-	The facility does not have any units that are subject to this regulation and is not an oil and natural gas production facility.
MACT 40 CFR 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities	No	-	This regulation does not apply as the facility is not an “Natural Gas Transmission and Storage Facility”.
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No	-	Not applicable since the facility does not contain a boiler or process heater.
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No	-	Not applicable since facility does not contain a steam generating unit.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	Yes	E-1, G-1	This regulation applies to Unit E-1. The engine is an existing CI engine rated at 2300-hp and located in an area source of HAPS. This regulation applies to Unit G-1. The engine is an existing CI engine rated at 66-hp and located at an area source of HAPS.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
40 CFR 64	Compliance Assurance Monitoring	No	-	Emission unit E-1 is a major source itself but the emission control device only reduces CO emissions. The unit is a major source by itself for NOx. Therefore, this unit is not subject to this regulation.
40 CFR 68	Chemical Accident Prevention	No	-	Facility is regulated under DOT Office of Pipeline Safety Regulations (49 CFR 192, 193 and 195); therefore, it is not subject to this regulation. As established at 40 CFR 68.3, the term “stationary source” does not apply to the transportation of any regulated substance or any other extremely hazardous substance under the provisions of this part, provided that such transportation is regulated under 49 CFR parts 192, 193, or 195 (DOT Office of Pipeline Safety Regulations).
Title IV – Acid Rain 40 CFR 72	Acid Rain	No	-	This regulation is not applicable as the facility is not an Acid Rain source.
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	No	-	This regulation is not applicable as the facility is not an Acid Rain source.
Title IV-Acid Rain 40 CFR 75	Continuous Emissions Monitoring	No	-	This regulation does not apply as the facility is not an Acid Rain source and does not generate commercial electric power or electric power for sale.
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program	No	-	This regulation does not apply as the facility is not an Acid Rain source.
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	No	-	This regulation establishes requirements for protection of the stratospheric ozone. The regulation is not applicable because the facility does not “service”, “maintain” or “repair” class I or class II appliances nor “disposes” of the appliances [40 CFR Part 82.1(a)].

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:

Section 14

Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

- ☒ **Title V Sources** (20.2.70 NMAC): By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies** defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- ☐ **NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) & **Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown** defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- ☒ **Title V** (20.2.70 NMAC), **NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) & **Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.
-

The facility does not have routine or predictable emissions during startup or shut down that vary from the requested normal operating emission limits. Excess short-term, much less than an hour, emissions from the engine during startup will have a very short transitory time frame that will be offset by the lack of emissions during engine downtime.

Section 15

Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Alternative Operating Scenarios: Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

Construction Scenarios: When a permit is modified authorizing new construction to an existing facility, NMED includes a condition to clearly address which permit condition(s) (from the previous permit and the new permit) govern during the interval between the date of issuance of the modification permit and the completion of construction of the modification(s). There are many possible variables that need to be addressed such as: Is simultaneous operation of the old and new units permitted and, if so for example, for how long and under what restraints? In general, these types of requirements will be addressed in Section A100 of the permit, but additional requirements may be added elsewhere. Look in A100 of our NSR and/or TV permit template for sample language dealing with these requirements. Find these permit templates at: www.env.nm.gov/air-quality/permitting-section-procedures-and-guidance/. Compliance with standards must be maintained during construction, which should not usually be a problem unless simultaneous operation of old and new equipment is requested.

In this section, under the bolded title “Construction Scenarios”, specify any information necessary to write these conditions, such as: conservative-realistic estimated time for completion of construction of the various units, whether simultaneous operation of old and new units is being requested (and, if so, modeled), whether the old units will be removed or decommissioned, any PSD ramifications, any temporary limits requested during phased construction, whether any increase in emissions is being requested as SSM emissions or will instead be handled as a separate Construction Scenario (with corresponding emission limits and conditions, etc.

There are no alternative scenarios for this facility.

Section 16

Air Dispersion Modeling

- 1) Minor Source Construction (20.2.72 NMAC) and Prevention of Significant Deterioration (PSD) (20.2.74 NMAC) ambient impact analysis (modeling): Provide an ambient impact analysis as required at 20.2.72.203.A(4) and/or 20.2.74.303 NMAC and as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines found on the Planning Section's modeling website. If air dispersion modeling has been waived for one or more pollutants, attach the AQB Modeling Section modeling waiver approval documentation.
- 2) SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions during routine or predictable startup, shutdown, or maintenance (SSM) using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. 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 modeling requirements.
- 3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

What is the purpose of this application?	Enter an X for each purpose that applies
New PSD major source or PSD major modification (20.2.74 NMAC). See #1 above.	
New Minor Source or significant permit revision under 20.2.72 NMAC (20.2.72.219.D NMAC). See #1 above. Note: Neither modeling nor a modeling waiver is required for VOC emissions.	
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3 above.	X
Relocation (20.2.72.202.B.4 or 72.202.D.3.c NMAC)	
Minor Source Technical Permit Revision 20.2.72.219.B.1.d.vi NMAC for like-kind unit replacements.	
Other: i.e. SSM modeling. See #2 above.	
This application does not require modeling since this is a No Permit Required (NPR) application.	
This application does not require modeling since this is a Notice of Intent (NOI) application (20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4), 20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau's Modeling Guidelines.	

Check each box that applies:

- ☐ See attached, approved modeling **waiver for all** pollutants from the facility.
- ☐ See attached, approved modeling **waiver for some** pollutants from the facility.
- ☐ Attached in Universal Application Form 4 (UA4) is a **modeling report for all** pollutants from the facility.
- ☐ Attached in UA4 is a **modeling report for some** pollutants from the facility.
- ☒ No modeling is required.

Air dispersion modeling is not required as this is a Title V renewal. Modeling was performed for NSR Permit 1922-M1.

Section 17

Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

To show compliance with existing NSR permits conditions, you must submit a compliance test history. The table below provides an example.

Compliance Test History Table

Unit No.	Test Description	Test Date
E-1	Three 20-minute test runs were performed on the unit and measurements were made for the determination of NOx, CO, O2. These components were tested in accordance with US EPA Title 40 CFR Part 60 methods 7E, 10, 3A, and 9. Permit No. P183-R3.	1/25/2018
E-1	Three 20-minute test runs were performed on the unit and measurements were made for the determination of NOx, CO, O2. These components were tested in accordance with US EPA Title 40 CFR Part 60 methods 7E, 10, 3A, and 9. Permit No. P183-R3	4/10/2018
E-1	Universal stack test: three 20-minute tests were performed using method 3A for O2/CO2 concentration, method 7E, 10, and 19. Permit No. 183R3M2; 40 CFR Subpart ZZZZ.	10/4/2018
E-1	Three 20-minute test runs were performed on the unit and measurements were made for the determination of NOx, CO, O2. These components were tested in accordance with US EPA Title 40 CFR Part 60 methods 7E, 10, 3A, and 9.	1/10/2019
E-1	Emission test following all procedures set for thin the 40 CFR 60, Appendix A, EPA Method 9 for the visible determination of the opacity of emissions.	7/23/2019
E-1	Three 20-minute test runs were performed on the unit and measurements were made for the determination of NOx, CO, O2. These components were tested in accordance with US EPA Title 40 CFR Part 60 methods 7E, 10, 3A, and 9.	10/8/2019
E-1	Three 20-minute test runs were performed on the unit and measurements were made for the determination of NOx, CO, O2. These components were tested in accordance with US EPA Title 40 CFR Part 60 methods 7E, 10, 3A, and Alt-082.	1/24/2020
E-1	Three 1-hour tests were performed using method 3A for O2/CO2 concentration, method 7E, 10, and 19. Permit No. 183-R3M2; 40 CFR Subpart ZZZZ.	7/22/2020
E-1	Three 20-minute test runs were performed on the unit and measurements were made for the determination of NOx, CO, O2. These components were tested in accordance with US EPA Title 40 CFR Part 60 methods 7E, 10, 3A, and 9.	10/21/2020
E-1	Three 20-minute test runs were performed on the unit and measurements were made for the determination of NOx, CO, O2. These components were tested in accordance with US EPA Title 40 CFR Part 60 methods 7E, 10, 3A, and 9.	1/21/2021
E-1	Three 20-minute test runs were performed on the unit and measurements were made for the determination of NOx, CO, O2. These components were tested in accordance with US EPA Title 40 CFR Part 60 methods 7E, 10, 3A, and 9.	4/6/2021
E-1	Three 1-hour tests were performed using method 3A for O2/CO2 concentration, method 7E, 10, and 19. Permit No. P183-R4; 40 CFR Subpart ZZZZ.	7/14/2021

E-1	Emission test following all procedures set forth in the US EPA Alternative Method 082 for the visible determination of the opacity of emissions.	7/14/2021
E-1	Three 20-minute test runs were performed on the unit and measurements were made for the determination of NOx, CO, O2. These components were tested in accordance with US EPA Title 40 CFR Part 60 methods 7E, 10, 3A, and 9.	10/5/2021
E-1	Three 20-minute test runs were performed on the unit and measurements were made for the determination of NOx, CO, O2. These components were tested in accordance with US EPA Title 40 CFR Part 60 methods 7E, 10, 3A, and 9.	1/18/2022
E-1	Three 20-minute test runs were performed on the unit and measurements were made for the determination of NOx, CO, O2. These components were tested in accordance with US EPA Title 40 CFR Part 60 methods 7E, 10, 3A, and 9.	4/13/2022
E-1	Three 1-hour tests were performed using method 3A for O2/CO2 concentration, method 7E, 10, and 19. Permit No. P183-R4; 40 CFR Subpart ZZZZ.	7/12/2022
E-1	Emission test following all procedures set for thin the 40 CFR 60, Appendix A, EPA Method 9 for the visible determination of the opacity of emissions.	7/12/2022
E-1	Three 20-minute tests were performed using method 3A for O2/CO2 concentration, method 7E, 10, and 19. Permit No. P183-R4; 40 CFR Subpart ZZZZ.	10/18/2022
E-1	Three 1-hour tests were performed using method 3A for O2/CO2 concentration, method 7E, 10, and 19. Permit No. P183-R4; 40 CFR Subpart ZZZZ.	1/18/2023
E-1	Emission test following all procedures set for thin the 40 CFR 60, Appendix A, EPA Method 9 for the visible determination of the opacity of emissions.	1/18/2023
E-1	Three 20-minute tests were performed using method 3A for O2/CO2 concentration, method 7E, 10, 19, and Alternative Method 082 for opacity. Permit No. P183-R4; 40 CFR Subpart ZZZZ.	4/4/2023
E-1	Three 1-hour tests were performed using method 3A for O2/CO2 concentration, method 7E, 10, and 19. Permit No. P183-R4; 40 CFR Subpart ZZZZ.	9/12/2023
E-1	Emission test following all procedures set for thin the 40 CFR 60, Appendix A, EPA Method 9 for the visible determination of the opacity of emissions.	9/12/2023
E-1	Emission test following all procedures set for thin the 40 CFR 60, Appendix A, EPA Method 9 for the visible determination of the opacity of emissions.	9/12/2023
E-1	Three 20-minute tests were performed using method 3A for O2/CO2 concentration, method 7E, 10, 19, and 9 for opacity. Permit No. P183-R4; 40 CFR Subpart ZZZZ.	10/17/2023
E-1	Three 20-minute tests were performed using method 3A for O2/CO2 concentration, method 7E, 10, 19, and 9/ALT-082 for opacity. Permit No. P183-R4; 40 CFR Subpart ZZZZ.	1/30/2024
E-1	Three 20-minute tests were performed using method 3A for O2/CO2 concentration, method 7E, 10, 19, and 9 for opacity. Permit No. P183-R4; 40 CFR Subpart ZZZZ.	4/9/2024
E-1	Three 1-hour tests were performed using method 3A for O2/CO2 concentration, method 7E, 10, 19, and 9 for opacity. Permit No. P183-R4; 40 CFR Subpart ZZZZ.	7/2/2024
E-1	Emission test following all procedures set for thin the 40 CFR 60, Appendix A, EPA Method 9 for the visible determination of the opacity of emissions.	10/22/2024

Section 19

Requirements for Title V Program

Do not print this section unless this is a Title V application.

Who Must Use this Attachment:

- * Any major source as defined in 20.2.70 NMAC.
 - * Any source, including an area source, subject to a standard or other requirement promulgated under Section 111 - Standards of Performance for New Stationary Sources, or Section 112 Hazardous Air Pollutants, of the 1990 federal Clean Air Act ("federal Act"). Non-major sources subject to Sections 111 or 112 of the federal Act are exempt from the obligation to obtain an 20.2.70 NMAC operating permit until such time that the EPA Administrator completes rulemakings that require such sources to obtain operating permits. In addition, sources that would be required to obtain an operating permit solely because they are subject to regulations or requirements under Section 112(r) of the federal Act are exempt from the requirement to obtain an Operating Permit.
 - * Any Acid Rain source as defined under title IV of the federal Act. The Acid Rain program has additional forms. See www.env.nm.gov/air-quality/air-quality-title-v-operating-permits-guidance-page/. Sources that are subject to both the Title V and Acid Rain regulations are encouraged to submit both applications simultaneously.
 - * Any source in a source category designated by the EPA Administrator ("Administrator"), in whole or in part, by regulation, after notice and comment.
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19.1 - 40 CFR 64, Compliance Assurance Monitoring (CAM) (20.2.70.300.D.10.e NMAC)

Any source subject to 40CFR, Part 64 (Compliance Assurance Monitoring) must submit all the information required by section 64.7 with the operating permit application. The applicant must prepare a separate section of the application package for this purpose; if the information is already listed elsewhere in the application package, make reference to that location. Facilities not subject to Part 64 are invited to submit periodic monitoring protocols with the application to help the AQB to comply with 20.2.70 NMAC. Sources subject to 40 CFR Part 64, must submit a statement indicating your source's compliance status with any enhanced monitoring and compliance certification requirements of the federal Act.

No sources at this facility meet the applicability requirements of 40 CFR 64 and therefore are not subject to that subpart.

19.2 - Compliance Status (20.2.70.300.D.10.a & 10.b NMAC)

Describe the facility's compliance status with each applicable requirement at the time this permit application is submitted. This statement should include descriptions of or references to all methods used for determining compliance. This statement should include descriptions of monitoring, recordkeeping and reporting requirements and test methods used to determine compliance with all applicable requirements. Refer to Section 2, Tables 2-N and 2-O of the Application Form as necessary. (20.2.70.300.D.11 NMAC) For facilities with existing Title V permits, refer to most recent Compliance Certification for existing requirements. Address new requirements such as CAM, here, including steps being taken to achieve compliance.

As described in Section 13 and based on information and belief formed after reasonable inquiry, NuStar believes that Hope Pump Station complies with each requirement applicable to the facility.

19.3 - Continued Compliance (20.2.70.300.D.10.c NMAC)

Provide a statement that your facility will continue to be in compliance with requirements for which it is in compliance at the time of permit application. This statement must also include a commitment to comply with other applicable requirements as they come into effect during the permit term. This compliance must occur in a timely manner or be consistent with such schedule expressly required by the applicable requirement.

NuStar will continue to comply with requirements in effect at the time of this application. In the event that NuStar should discover new information affecting the compliance status of the facility, NuStar will make notifications and take corrective actions as appropriate.

19.4 - Schedule for Submission of Compliance (20.2.70.300.D.10.d NMAC)

You must provide a proposed schedule for submission to the department of compliance certifications during the permit term. This certification must be submitted annually unless the applicable requirement or the department specifies a more frequent period. A sample form for these certifications will be attached to the permit.

NuStar will submit an annual certification of compliance using the form supplied by the NMED.

19.5 - Stratospheric Ozone and Climate Protection

In addition to completing the four (4) questions below, you must submit a statement indicating your source's compliance status with requirements of Title VI, Section 608 (National Recycling and Emissions Reduction Program) and Section 609 (Servicing of Motor Vehicle Air Conditioners).

-
1. Does your facility have any air conditioners or refrigeration equipment that uses CFCs, HCFCs or other ozone-depleting substances? ☒ Yes ☐ No
 2. Does any air conditioner(s) or any piece(s) of refrigeration equipment contain a refrigeration charge greater than 50 lbs? ☐ Yes ☒ No
(If the answer is yes, describe the type of equipment and how many units are at the facility.)
 3. Do your facility personnel maintain, service, repair, or dispose of any motor vehicle air conditioners (MVACs) or appliances ("appliance" and "MVAC" as defined at 82.152)? ☐ Yes ☒ No
 4. Cite and describe which Title VI requirements are applicable to your facility (i.e. 40 CFR Part 82, Subpart A through G.)
-

NuStar owns appliances containing CFCs and is therefore subject to Subpart F, Recycling and Emission Reduction, of 40 CFR Part 82. NuStar uses only certified technicians for the maintenance, service, repair and disposal of appliances and maintains the appropriate records for this requirement.

19.6 - Compliance Plan and Schedule

Applications for sources, which are not in compliance with all applicable requirements at the time the permit application is submitted to the department, must include a proposed compliance plan as part of the permit application package. This plan shall include the information requested below:

A. Description of Compliance Status: (20.2.70.300.D.11.a NMAC)

A narrative description of your facility's compliance status with respect to all applicable requirements (as defined in 20.2.70 NMAC) at the time this permit application is submitted to the department.

B. Compliance plan: (20.2.70.300.D.11.B NMAC)

A narrative description of the means by which your facility will achieve compliance with applicable requirements with which it is not in compliance at the time you submit your permit application package.

C. Compliance schedule: (20.2.70.300.D.11.c NMAC)

A schedule of remedial measures that you plan to take, including an enforceable sequence of actions with milestones, which will lead to compliance with all applicable requirements for your source. This schedule of compliance must be at least as stringent as that contained in any consent decree or administrative order to which your source is subject. The obligations of any consent decree or administrative order are not in any way diminished by the schedule of compliance.

D. Schedule of Certified Progress Reports: (20.2.70.300.D.11.d NMAC)

A proposed schedule for submission to the department of certified progress reports must also be included in the compliance schedule. The proposed schedule must call for these reports to be submitted at least every six (6) months.

E. Acid Rain Sources: (20.2.70.300.D.11.e NMAC)

If your source is an acid rain source as defined by EPA, the following applies to you. For the portion of your acid rain source subject to the acid rain provisions of title IV of the federal Act, the compliance plan must also include any additional requirements under the acid rain provisions of title IV of the federal Act. Some requirements of title IV regarding the schedule and methods the source will use to achieve compliance with the acid rain emissions limitations may supersede the requirements of title V and 20.2.70 NMAC. You will need to consult with the Air Quality Bureau permitting staff concerning how to properly meet this requirement.

NOTE: The Acid Rain program has additional forms. See www.env.nm.gov/air-quality/air-quality-title-v-operating-permits-guidance-page/. Sources that are subject to both the Title V and Acid Rain regulations are **encouraged** to submit both applications **simultaneously**.

Based on information and belief formed after reasonable inquiry and as described in Section 19.2, and with this filing, NuStar states that Hope Pump Station complies with applicable requirements. No compliance plan, compliance schedule, or compliance reports are required.

In addition, based on information and belief formed after reasonable inquiry NuStar states that Hope Pump Station is not an acid rain source as defined at 40 CFR 72.6.

19.7 - 112(r) Risk Management Plan (RMP)

Any major sources subject to section 112(r) of the Clean Air Act must list all substances that cause the source to be subject to section 112(r) in the application. The permittee must state when the RMP was submitted to and approved by EPA.

N/A. There are no sources at the facility subject to section 112(r) of the Clean Air Act.

19.8 - Distance to Other States, Bernalillo, Indian Tribes and Pueblos

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 NMAC)?

(If the answer is yes, state which apply and provide the distances.)

Neighboring States: No
Bernalillo County: No

City of El Paso: No
Indian Lands: Mescalero Apache Indian Reservation: <30 miles.

19.9 - Responsible Official

Provide the Responsible Official as defined in 20.2.70.7.AD NMAC:

R.O.: Wes Gore
R.O. Title: Senior Director Operations
R.O. Address: 2829 Texaco Rd. Corpus Christi, Texas 78402
R.O. Phone: 361-249-9402
R.O. Email: Wes.gore@sunoco.com

Section 20

Other Relevant Information

Other relevant information. Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

No other relevant information is being submitted at this time

Section 22: Certification

Company Name: Nustar Logistics, L.P.

I, Wes Gore, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this 16th day of December, 2024, upon my oath or affirmation, before a notary of the State of

Texas

Wes Gore
*Signature

12/16/24
Date

Wes Gore
Printed Name

Senior Director-Operations
Title

Scribed and sworn before me on this 16th day of December, 2024.

My authorization as a notary of the State of Texas expires on the

31st day of August, 2026

Tiffany Callihan
Notary's Signature

12/16/24
Date

Tiffany Callihan
Notary's Printed Name

*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.

