TASCOSA ALLIANCE COMPANY

APPLICATION FOR MINOR SOURCE CONSTRUCTION AIR PERMIT

RENEWABLE DIESEL UNIT

Submitted to:

New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505

Prepared for:

HOLLYFRONTIER.
RENEWABLES

Artesia Renewable Diesel Company LLC
501 East Main Street
Artesia, Eddy County, New Mexico
Agency Interest No. To be Assigned

Prepared by:

Tascosa Alliance Company
4915 Cross Creek Court
Arlington, Texas 76017
817.726.6949

Tascosa Project No: 108-15

April 2021

HOLLYFRONTIER
RENEWABLES

Artesia Renewable Diesel Company LLC
501 East Main, Artesia, New Mexico 88210
Tel: 575-748-3311
hollyfrontier.com

April 26, 2021

Mr. Ted Schooley
Permitting Section Chief, Air Quality Bureau
New Mexico Environment Department
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505

Certified Mail/Return Receipt No.
7017 0190 0000 5371 0230

Re: Application for Minor Source Construction Air Permit
for Renewable Diesel Unit
Artesia Renewable Diesel Company LLC
Artesia, Eddy County, New Mexico
New Source Review Permit and Agency Interest Numbers: To be Assigned

Dear Mr. Schooley,

Artesia Renewable Diesel Company LLC ("ARDC"), a wholly owned subsidiary of HollyFrontier Renewables Holding Company LLC, which itself is a subsidiary of the HollyFrontier Corporation ("HFC"), is submitting this application for a construction air permit for a new minor source in Artesia, NM. We are submitting this application in accordance with 20.2.72.200 NMAC. ARDC requests the New Mexico Environment Department ("NMED") issue an air permit to authorize emissions for the Renewable Diesel Unit ("RDU") in Artesia, New Mexico as represented in this application.

As communicated to NMED via an October 5, 2020 email and per NMED's October 6, 2020 verbal reply to that email, this is a minor source air permit application for the RDU. The RDU was added to the adjacent refinery air permit via NSR Permit No. PSD-NM-0195-M38 that was issued to the HollyFrontier Navajo Refining LLC's Artesia Refinery in Artesia, New Mexico ("Navajo Artesia Refinery") on September 20, 2019. After the NMED issues the stand-alone minor source permit for the RDU as requested in this application, an Administrative Revision will be requested to remove the RDU from the Navajo Artesia Refinery air permit. The reasoning for the breakout of the RDU from the Artesia Refinery air permit is provided below.

Background

The RDU, which will be owned and operated by ARDC, will convert soybean oil and other nonpetroleum renewable feedstocks to renewable diesel via a catalytic hydrotreating process. The feedstocks will be provided by the co-located Pretreatment Unit ("PTU") owned and operated by Artesia PTU LLC ("APTU"), and potentially by other suppliers. NMED issued a separate minor source permit, NSR Permit No. 9015, on February 15, 2021 and assigned Agency Interest No. 39767 for the PTU.

Although ARDC and APTU will be located within and adjacent to Navajo Artesia Refinery, and all three entities will be under common control of HFC, the RDU and PTU will carry a Standard Industrial Classification ("SIC") major group different from the SIC major group carried by Navajo Artesia Refinery and, therefore, the PTU and the RDU constitute a separate stationary source, that is, separate from the Navajo Artesia Refinery, as that term is defined in the Clean Air Act and its underlying Prevention of Significant Deterioration (PSD) and Title V operating permit regulations.

the RDU and the PTU will not be engaged in in petroleum refining and will not produce refined petroleum products through fractionation or straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking, or other processes. As a result, the RDU and PTU will not fall within the petroleum refining SIC code of 2911.

Rather, because of the raw materials used and the resulting non-petroleum-based renewable diesel product, the RDU is properly classified in SIC Major Group 28 (Chemicals and Allied Products), with the specific SIC code of 2869 (Industrial Organic Chemicals, Not Elsewhere Classified).[1] This is also consistent with our understanding of the SIC code assigned to other renewable diesel facilities in the United States. Regarding the PTU, this unit will serve as an auxiliary establishment to the RDU (or other renewable diesel units within HFC), because, based on current plans, it will be primarily engaged in producing goods or providing services for other establishments of the same company, rather than for the general public or for other business units. The SIC Manual prescribes that auxiliary establishments are classified on the basis of the primary activity of the operating establishment(s) they serve. The PTU is therefore properly assigned a SIC code based on the primary economic activity of the establishment that it supports, namely, SIC Major Group 28 and SIC code 2869, corresponding to the production of renewable diesel.[2] Thus, the RDU and the PTU are treated as a single stationary source with respect to PSD, Title V operating permit applicability, and minor source air dispersion modeling/ambient air impacts analysis.

The RDU and the PTU – while a single stationary source – will not constitute a major source under PSD and Title V operating permit regulations. As a result, a PSD review and an associated PSD air quality analysis are not required.

In contrast and in accordance with Maximum Achievable Control Technology (MACT) standards in 20.2.78 NMAC and 40 CFR Part 63, RDU processes and units are subject to the 40 CFR Part 63 Subpart FFFF (MACT FFFF –miscellaneous organic chemical manufacturing) standard because these processes and units meet the applicability criteria of MACT FFFF, including the RDU being located at a major source of hazardous air pollutants ("HAP"). While the RDU itself is not a major source of HAP, it is under common control and is contiguous with a major source of HAP (i.e., the Navajo Artesia Refinery). Therefore, the RDU processes and units are considered as being located at a major source of HAP. 40 CFR Part 63 applicability is presented in Section 13 of this application.

Initially, the RDU was added to the Navajo Artesia Refinery's air permit via a Significant Revision that resulted in NMED issuing NSR Permit No. PSD-NM-0195-M38 on September 20, 2019. Since permit issuance, the scope of project expanded to include the PTU, with ARDC being the owner and operator of the RDU, and APTU being the owner and operator of the PTU. As such, the RDU will be removed from the Navajo Artesia Refinery's air permit via an Administrative Revision upon NMED's issuance of the stand-alone RDU minor source permit. The parallel application for the PTU minor source air permit was submitted separately, and NMED has issued the resulting air permit.

[1] Per the SIC Manual published by the United States Office of Management and Budget (1972), SIC code 2869 encompasses establishments "primarily engaged in manufacturing industrial organic chemicals, not elsewhere classified." Products of this industry include diesel-range paraffinic or isoparaffinic hydrocarbons not resulting from petroleum refining, such as the aliphatic and other acyclic organic chemicals that are the primary constituents of renewable diesel.

[2] It is possible that in the future, APTU might enter into contracts to supply treated materials to renewable diesel units outside of the HollyFrontier organization, and should this economic activity become significant enough, the PTU's SIC code assignment may have to be revisited.

By this Minor Source Construction Air Permit application, authorization for air emissions from the following emission units is requested (as repeated in Section 3 of the application form):

1. H-2601 RDU Reactor Heater
2. Y-0026 RDU Cooling Tower
3. FUG-26-RDU RDU Fugitives - Piping components fugitive emissions for streams with VOC vapor pressure greater than the permitting exemption
4. T-0914 Slop Tank

Per 20.2.702.202.B.(2), the following emission units are exempt from permitting due to the handling or storing of VOC having vapor pressure less than 0.2 psia at the handled or stored temperature:

5. T-0901 through T-0913 RDU Product or Feed Tanks; T-0929 through T-0932 Rail Unloading Accumulation Tanks; T-0933 Rail Containment Tank – Feed; T-0934 Rail Containment Tank - Renewable Diesel; and T-0935 Rail Containment Tank - Recovered Oil
6. FUG-26-RDU-LOVP - Piping components fugitive emissions for streams with VOC vapor pressure less than the permitting exemption threshold
7. RLO-26 - Railcar Unloading and Loading Rack

In addition, the following emergency generator engines are exempt from permitting because they will only be operated during the unavoidable loss of commercial utility power and will be operated less than 500 hours per year:

8. G-2601 and G-2602 Emergency Generator

Following this cover letter, a detailed Table of Contents for the application form is provided, in turn, followed by the application form with supplemental information inserted where applicable. The detailed Table of Contents expands the Table of Contents included in the NMED Universal Air Quality Permit Application form (end of Section 1). Supplemental information includes: a process flow diagram (Section 4); a plot plan (Section 5); project emission calculations (Section 6); emission calculation supporting information (Section 7); an area map and a unit location map (Section 8); and public notice documentation (Section 9).

In accordance with 20.2.72.203 NMAC, please find enclosed the following:

a. An original signed and notarized application printed double-sided (head-to-toe) except for the Section 2 tables that are printed head-to-head. The application is two-hole punched and includes numbered tab separators.

   The application includes the appropriate NMED application forms with supporting documentation, and a copy of the public notice provided via mailings, radio and newspaper notices per 20.2.72.203.B NMAC (if applicable).

b. A copy of the application printed double-sided in book form and 3-hole-punched.

c. The filing fee check ($500).

d. Rather than submitting two CD's with all the application electronic files, including a PDF file of the entire application, electronic files will be submitted via secure electronic transfer per Section 1-I of the application.

d. Rather than submitting two CD's with all the application electronic files, including a PDF file of the entire application, electronic files will be submitted via secure electronic transfer per Section 1-I of the application.

We would like to thank you in advance for your review and concurrence with this construction permit application.

If you have any questions regarding the information presented in this application, please do not hesitate to contact Alena Miro at (713) 865-6825 or Alena.Miro@HollyFrontier.com, or Brian Gunzelman of Tascosa Alliance Company, our consultant on this project, at (817) 726-6949 or bgunzelman@tas-all.com.

Sincerely,

Becca Crumpler
HollyFrontier Renewables - Environmental Manager

cc: NMED: Melinda Owens, Title V Program Manager, Air Quality Bureau, New Mexico Environment Department, 525 Camino de los Marquez, Suite 1, Santa Fe, NM 87505, (505) 476-4346, via email to Melinda.Owens@state.nm.us
Joe Kimbrell, Advanced Air Permit Specialist, Major Source Permits Section, Air Quality Bureau, New Mexico Environment Department, 525 Camino de los Marquez, Suite 1, Santa Fe, NM 87505, (505) 476-4347, via email to Joseph.Kimbrell@state.nm.us
HollyFrontier: B. Arrington, T. Wheeler, S. Gokhale, A. Miro
Tascosa: Brian L. Gunzelman, P.E.

Mr. Ted Schooley
New Mexico Environment Department

April 26, 2021

Application Form Table of Contents, Form, and Supplemental Information

Minor Source Construction Air Permit
Renewable Diesel Unit

Artesia Renewable Diesel Company LLC
501 East Main • Artesia, NM 88210
(575) 748-3311 • http://www.hollyfrontier.com

Section 5: Plot Plan Drawn to Scale

Section 6: All Calculations

Section 7: Information Used to Determine Emissions

Section 8: Map(s)

Section 9: Proof of Public Notice

Section 10: Written Description of the Routine Operations of the Facility

Section 11: Source Determination

Section 12: PSD Applicability Determination for All Sources & Special Requirements for a PSD Application

Section 13: Discussion Demonstrating Compliance with Each Applicable State & Federal Regulation

Section 14: Operational Plan to Mitigate Emissions

Section 15: Alternative Operating Scenarios

Section 16: Air Dispersion Modeling

Section 17: Compliance Test History

Section 18: ~~Addendum for Streamline Applications (streamline applications only)~~

Not Applicable. This application is not a streamline application.

Section 19: ~~Requirements for the Title V (20.2.70 NMAC) Program (Title V applications only)~~

Not Applicable. This application is not a Title V application.

Section 20: Other Relevant Information

Section 21: ~~Addendum for Landfill Applications~~

Not Applicable. This application is not a Landfill application.

Section 22: Certification Page

HollyFrontier Navajo Refining LLC
2828 N. Harwood St., Suite 1300
Dallas TX 75201-1507

NEW MEXICO ENVIRONMENT
DEPT OF AIR QUALITY BUREAU
525 CAMINO DE LOS MARQUEZ
SANTA FE NM 87505-1816

Check Date	04/01/2021
Check Amount	$ 500.00
Vendor No	5107815
Payment Document	2000000185
Company Code	1230

Invoice Date	Invoice Number	Description	Invoice Amount	Discount Amount	Net Amount
03/31/2021	033121	RDU Permit Application Filing Fee	500.00	0.00	500.00

Payment document	Check number	Date	Currency	Payment amount
2000000185	3000000036	04/01/2021	USD	**********500.00*

↓ PLEASE FOLD ON PERFORATION AND DETACH HERE ↓

VERIFY THE AUTHENTICITY OF THIS MULTI-TONE SECURITY DOCUMENT. CHECK BACKGROUND AREA CHANGES COLOR GRADUALLY FROM TOP TO BOTTOM.

HollyFrontier Navajo Refining LLC
2828 N. Harwood St., Suite 1300
Dallas TX 75201-1507

32-1/1110

3000000036
04/01/2021

PAY EXACTLY
$******500.00*USD
VOID AFTER 180 DAYS

PAY *** FIVE HUNDRED and 00 /100 USD***

TO THE
ORDER OF NEW MEXICO ENVIRONMENT
DEPT OF AIR QUALITY BUREAU
525 CAMINO DE LOS MARQUEZ
SANTA FE NM 87505-1816

AUTHORIZED SIGNATURE

Bank of America N.A.

⑈3000000036⑈ ⑆111000012⑆ 445143094O⑈

Mail Application To:		**For Department use only:**
New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico, 87505 Phone: (505) 476-4300 Fax: (505) 476-4375 www.env.nm.gov/aqb		AIRS No.:

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. See Section 1-I for submittal instructions for other permits.

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.: 3000000036 in the amount of $500

■ 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.

☐ This facility qualifies to receive assistance from the Small Business Environmental Assistance program (SBEAP) and qualifies for 50% of the normal application and permit fees. Enclosed is a check for 50% of the normal application fee which will be verified with the Small Business Certification Form for your company.

☐ This facility qualifies to receive assistance from the Small Business Environmental Assistance Program (SBEAP) but does not qualify for 50% of the normal application and permit fees. To see if you qualify for SBEAP assistance and for the small business certification form go to https://www.env.nm.gov/aqb/sbap/small_business_criteria.html).

Citation: Please provide the **low level citation** under which this application is being submitted: **20.2.72.200.A 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: To be assigned	Updating Permit/NOI #: N/A
1	Facility Name: Renewable Diesel Unit	Plant primary SIC Code (4 digits): 2869	
		Plant NAIC code (6 digits): 325199	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): 501 E. Main St., Artesia, NM 88210		
2	Plant Operator Company Name: Artesia Renewable Diesel Company LLC	Phone/Fax: (575) 748-3311	
a	Plant Operator Address: P.O. Box 159, Artesia, NM 88211-0159		
b	Plant Operator's New Mexico Corporate ID or Tax ID: Tax ID is CRS # 03-527081-00-0		

3	Plant Owner(s) name(s): Artesia Renewable Diesel Company LLC	Phone/Fax: (575) 748-3311
a	Plant Owner(s) Mailing Address(s): P.O. Box 159, Artesia, NM 88211-0159	
4	Bill To (Company): Artesia Renewable Diesel Company LLC	Phone/Fax: (307) 771-8947 / NA
a	Mailing Address: P.O. Box 159, Artesia, NM 88211-0159	E-mail: Becca.Crumpler@HollyFrontier.com
5	☐ Preparer: ■ Consultant: Brian L. Gunzelman, Tascosa Alliance Company	Phone/Fax: (817) 726-6949 / NA
a	Mailing Address: 4915 Cross Creek Court, Arlington, TX 76017	E-mail: bgunzelman@tas-all.com
6	Plant Operator Contact: Becca.Crumpler	Phone/Fax: (307) 771-8947 / NA
a	Address: P.O. Box 159, Artesia, NM 88211-0159	E-mail: Becca.Crumpler@HollyFrontier.com
7	Air Permit Contact: Becca.Crumpler	Title: Environmental Manager
a	E-mail: Becca.Crumpler@HollyFrontier.com	Phone/Fax: (307) 771-8947 / NA
b	Mailing Address: P.O. Box 159, Artesia, NM 88211-0159	
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):
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: -
7	Has this facility been issued a No Permit Required (NPR)? ☐ Yes ■ No	If yes, the NPR No. is:
8	Has this facility been issued a Notice of Intent (NOI)? ☐ Yes ■ No	If yes, the NOI No. is:
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? ■ Yes ☐ No	If yes, the permit No. is: PSD-NM-0195-M39R3
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? ☐ Yes ■ No	If yes, the register No. is:

Section 1-C: Facility Input Capacity & Production Rate

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

Section 1-D: Facility Location Information

1	Section: 9	Range: 26E	Township: 17S	County: Eddy	Elevation (ft): 3,365
2	UTM Zone: ☐ 12 or ■ 13			Datum: ☐ NAD 27 ■ NAD 83 ☐ WGS 84	
a	UTM E (in meters, to nearest 10 meters): 556,960			UTM N (in meters, to nearest 10 meters): 3,634,440	
b	**AND** Latitude (deg., min., sec.): 32° 50' 47.6"			Longitude (deg., min., sec.): -104° 23' 28.7"	
3	Name and zip code of nearest New Mexico town: Artesia 88210				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): North RDU equipment is located within the Artesia Refinery in the Artesia city limits. South RDU equipment is southeast and adjacent to Artesia city limits.				
5	The facility is 0 (distance) miles southeast (direction) of Artesia (nearest town).				
6	Status of land at facility (check one): ■ Private ☐ Indian/Pueblo ☐ Federal BLM ☐ Federal Forest Service ☐ Other (specify)				
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: Eddy County, Chaves County, Artesia				
8	**20.2.72** NMAC applications **only**: Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see www.env.nm.gov/aqb/modeling/class1areas.html)? ☐ Yes ■ No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers:				
9	Name nearest Class I area: Carlsbad Caverns National Park				
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 71 km				
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: 5 m				
12	Method(s) used to delineate the Restricted Area: Fencing, walls, and gates. "**Restricted Area**" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.				
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? ☐ 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? HollyFrontier Navajo Refining LLC's Artesia Refinery (Permit No. PSD-NM-0195-M39R3) and Artesia PTU LLC's Pretreatment Unit (Permit No. 9015)				

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	($\frac{\text{hours}}{\text{year}}$): 8760		
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$)? Start:	☐AM ☐PM	End:	☐AM ☐PM		
3	Month and year of anticipated start of construction: August 2020					
4	Month and year of anticipated construction completion: October 2021					
5	Month and year of anticipated startup of new or modified facility: October 2021					
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:		
a	If yes, NOV date or description of issue:		NOV Tracking No:
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? ☐ Yes ■ No If Yes, provide the 1c & 1d info below:		
c	Document Title:	Date:	Requirement # (or page # and paragraph #):
d	Provide the required text to be inserted in this permit:		
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 Subject to 40 CFR Part 63 Subpart FFFF because contiguous and under common control with adjacent Navajo Artesia Refinery which is a major HAP source.		
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: Xcel Energy Commercial power is purchased from a commercial utility company, which specifically does not include power generated on site for the sole purpose of the user.		

Section 1-G: Streamline Application

(This section applies to 20.2.72.300 NMAC Streamline applications only)

1	☐ I have filled out Section 18, "Addendum for Streamline Applications." ■ N/A (This is not a Streamline application.)

Section 1-H: Current Title V Information - Required for all applications from TV Sources Not Applicable

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

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC):		Phone:
a	R.O. Title:	R.O. e-mail:	
b	R. O. Address:		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC):		Phone:
a	A. R.O. Title:	A. R.O. e-mail:	
b	A. R. O. Address:		
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship):		
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.):		
a	Address of Parent Company:		
5	Names of Subsidiary Companies ("Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.):		
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations:		

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:

Section 1-I – Submittal Requirements

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

Hard Copy Submittal Requirements:

1) One hard copy **original signed and notarized application package** **printed double sided** **'head-to-toe'** **2-hole punched** as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be head-to-head. Please use **numbered tab separators** in the hard copy submittal(s) as this facilitates the review process. For NOI submittals only, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required. Please include a copy of the check on a separate page.

2) If the application is for a minor NSR, PSD, NNSR, or Title V application, include one working hard **copy** for Department use. This copy should be printed in book form, 3-hole punched, and **must be double sided**. Note that this is in addition to the head-to-to 2-hole punched copy required in 1) above. Minor NSR Technical Permit revisions (20.2.72.219.B NMAC) only need to fill out Sections 1-A, 1-B, 3, and should fill out those portions of other Section(s) relevant to the technical permit revision. TV Minor Modifications need only fill out Sections 1-A, 1-B, 1-H, 3, and those portions of other Section(s) relevant to the minor modification. NMED may require additional portions of the application to be submitted, as needed.

3) The entire NOI or Permit application package, including the full modeling study, should be submitted electronically. Electronic files for applications for NOIs, any type of General Construction Permit (GCP), or technical revisions to NSRs must be submitted with compact disk (CD) or digital versatile disc (DVD). For these permit application submittals, **two** CD copies are required (in sleeves, not crystal cases, please), with additional CD copies as specified below. NOI applications require only a single CD submittal. Electronic files for other New Source Review (construction) permits/permit modifications or Title V permits/permit modifications can be submitted on CD/DVD or sent through AQB's secure file transfer service.

Electronic files sent by (check one):

☐ CD/DVD attached to paper application

■ secure electronic transfer. Air Permit Contact Name Brian L. Gunzelman

Email bgunzelman@tas-all.com

Phone number (817) 726-6949

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

4) Optionally, the applicant may submit the files with the application on compact disk (CD) or digital versatile disc (DVD) following the instructions above and the instructions in 5 for applications subject to PSD review.

5) If **air dispersion modeling** is required by the application type, include the **NMED Modeling Waiver** and/or electronic air dispersion modeling report, input, and output files. The dispersion modeling ***summary report only*** should be submitted as hard copy(ies) unless otherwise indicated by the Bureau.

6) If the applicant submits the electronic files on CD and the application is subject to PSD review under 20.2.74 NMAC (PSD) or NNSR under 20.2.79 NMC include,
   a. one additional CD copy for US EPA,
   b. one additional CD copy for each federal land manager affected (NPS, USFS, FWS, USDI) and,
   c. one additional CD copy for each affected regulatory agency other than the Air Quality Bureau.

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

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

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

2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible

format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc,), submit these items in hard copy format. We must be able to review the formulas and inputs that calculated the emissions.

3) It is preferred that this application form be submitted as 4 electronic files (3 MSWord docs: Universal Application section 1 [UA1], Universal Application section 3-19 [UA3], and Universal Application 4, the modeling report [UA4]) and 1 Excel file of the tables (Universal Application section 2 [UA2]). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.

4) The electronic file names shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: "A-3423-FacilityName". The "A" distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with "A-". Modifications to existing facilities should use the core permit number (i.e. '3423') the Department assigned to the facility as the next 4 digits. Use 'XXXX' for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: "A-3423-9-description", where "9" stands for the section # (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the header information throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision number (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. Do not use special symbols (#, @, etc.) in file names. The footer information should not be modified by the applicant.

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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] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classi-fication Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
H-2601	RDU Reactor Heater	To Be Determined	TBD	TBD	40.3 MMBtu/hr HHV	40.3 MMBtu/hr HHV	NA 2021	NA H-2601	10200701	□ Existing (unchanged) □ To be Removed ■ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
Y-0026	RDU Cooling Tower	To Be Determined	TBD	TBD	2,500 gpm	2,500 gpm	NA 2021	NA Y-0026	38500101	□ Existing (unchanged) □ To be Removed ■ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
FUG-26-RDU	RDU Fugitives	NA	NA	NA	NA	NA	NA 2021	NA FUG-26-RDU	2301000000	□ Existing (unchanged) □ To be Removed ■ New/Additional □ Replacement Unit □ To Be Modified □ To be Replaced		
T-0914	Slop Tank	NA	NA	NA	31,000 bbl	31,000 bbl	NA 2021	NA T-0914	2510010000	□ 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] 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 Activities[1] (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 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No. / Serial No.	Max Capacity / Capacity Units	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) / Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Manufacture /Reconstruction[2] / Date of Installation /Construction[2]	For Each Piece of Equipment, Check One
T-0901	RDU Tank	NA	NA NA	89,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0902	RDU Tank	NA	NA NA	89,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0903	RDU Tank	NA	NA NA	89,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0904	RDU Tank	NA	NA NA	29,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0905	RDU Tank	NA	NA NA	29,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0906	RDU Tank	NA	NA NA	63,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0907	RDU Tank	NA	NA NA	63,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0908	RDU Tank	NA	NA NA	17,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0909	RDU Tank	NA	NA NA	17,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0910	RDU Tank	NA	NA NA	19,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0911	RDU Tank	NA	NA NA	19,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0912	RDU Tank	NA	NA NA	109,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0913	RDU Tank	NA	NA NA	109,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0929	RDU Tank	NA	NA NA	800 gal	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced

Unit Number	Source Description	Manufacturer	Model No. / Serial No.	Max Capacity / Capacity Units	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) / Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Manufacture /Reconstruction[2] / Date of Installation /Construction[2]	For Each Piece of Equipment, Check One
T-0930	RDU Tank	NA	NA NA	800 gal	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0931	RDU Tank	NA	NA NA	800 gal	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0932	RDU Tank	NA	NA NA	800 gal	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0933	RDU Tank	NA	NA NA	30,000 gal	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0934	RDU Tank	NA	NA NA	30,000 gal	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-0935	RDU Tank	NA	NA NA	1,000 bbl	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
FUG-26-RDU-LOVP	RDU Fugitives - Low Vapor Pressure	NA	NA NA	NA NA	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
RLO-26	Railcar Unloading and Loading Rack	NA	NA NA	NA NA	20.2.72.202.B.2 NA	NA 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
G-2601	Emergency Generator	Caterpillar	G3512 TBD	1,468 HP	20.2.72.202.B.3 NA	2020 2021	☐ Existing (unchanged) ☐ To be Removed ■ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
G-2602	Emergency Generator	Caterpillar	G3512 TBD	1,468 HP	20.2.72.202.B.3 NA	2020 2021	☐ 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.

Table 2-C: Emissions Control Equipment

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

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s)[1]	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
None. Not Applicable.						

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

Table 2-D: Maximum Emissions (under normal operating conditions)

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

Maximum Emissions are the emissions at maximum capacity and prior to (in the absence of) pollution control, emission-reducing process equipment, or any other emission reduction. Calculate the hourly emissions using the worst case hourly emissions for each pollutant. For each pollutant, calculate the annual emissions as if the facility were operating at maximum plant capacity without pollution controls for 8760 hours per year, unless otherwise approved by the Department. List Hazardous Air Pollutants (HAP) & Toxic Air Pollutants (TAPs) in Table 2-I. Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		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
Totals																		

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

Table 2-E: Requested Allowable Emissions

Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or $1.41E^{-4}$).

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		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
H-2601	1.330	5.825	2.620	11.473	0.268	1.174	1.463	2.970	0.370	1.622	0.370	1.622	0.370	1.622	--	--	--	--
Y-0026	--	--	--	--	--	--	--	--	0.044	0.192	0.026	0.115	0.00010	0.00043	--	--	--	--
FUG-26-RDU	--	--	--	--	4.721	20.676	--	--	--	--	--	--	--	--	--	--	--	--
T-0914	--	--	--	--	29.600	8.661	--	--	--	--	--	--	--	--	--	--	--	--
Totals	1.330	5.825	2.620	11.473	34.589	30.511	1.463	2.970	0.414	1.814	0.397	1.738	0.370	1.623				

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

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_2S		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
Totals																		

[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).

Table 2-G: Stack Exit and Fugitive Emission Rates for Special Stacks

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

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.

Stack No.	Serving Unit Number(s) from Table 2-A	NOx		CO		VOC		SOx		PM		PM10		PM2.5		□ H_2S or □ 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
Totals:																	

Table 2-H: Stack Exit Conditions

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

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H-Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (ft)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter (ft)
						(acfs)	(dscfs)			
H-2601	H-2601	V	No	138.5	600	301.0	N/A	N/A	25.5	3.88
Y-0026	Y-0026	V (2 fans/stacks)	No	21	90	3,004.0	N/A	N/A	25.8	12.19

Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs

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.

Stack No.	Unit No.(s)	Total HAPs		Provide Pollutant Name Here □ HAP or □ TAP		Provide Pollutant Name Here □ HAP or □ TAP		Provide Pollutant Name Here □ HAP or □ TAP		Provide Pollutant Name Here □ HAP or □ TAP		Provide Pollutant Name Here □ HAP or □ TAP		Provide Pollutant Name Here □ HAP or □ TAP		Provide Pollutant Name Here □ HAP or □ TAP	
		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
Totals:																	

Table 2-J: Fuel

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

Unit No.	Fuel Type (low sulfur Diesel, ultra low sulfur diesel, Natural Gas, Coal, …)	Fuel Source: purchased commercial, pipeline quality natural gas, residue gas, raw/field natural gas, process gas (e.g. SRU tail gas) or other	Specify Units				
			Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
H-2601	Refinery Fuel Gas	Refinery Fuel Gas	827 Btu/scf, HHV	48,730 scf/hr	426.88 MMscf/yr	162 ppmv H2S	NA

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)
T-0914	2510010000	RDU Slop	Water, Residual Feed and Product	8.33	80.0	90	0.74	130	0.74

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			
T-0914	2021	RDU Slop	NA	FX	31,000	4,928	22.86	6.33	WH	WH	Good	3,326,400	2.6

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 M^3 = 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)**
Pretreated Oils	Varies (Pretreated Vegetable Oils, Animal Fats, Etc)	Liquid	Varies	Renewable Diesel	Alkanes	Liquid	Varies

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
None. 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
None. Not Applicable.								

Table 2-P: Greenhouse Gas Emissions

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC are required to complete this Table. Power plants, Title V major sources, and PSD major sources must report and calculate all GHG emissions for each unit. Applicants must report potential emission rates in short tons per year (see Section 6.a for assistance). Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table. For minor source facilities that are not power plants, are not Title V, or are not PSD, there are three options for reporting GHGs 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHG as a second separate unit; OR 3) check the following box ☐ By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

		CO_2 ton/yr	N_2O ton/yr	CH_4 ton/yr	SF_6 ton/yr	PFC/HFC ton/yr[2]									Total GHG Mass Basis ton/yr[4]	Total CO_2e ton/yr[5]
Unit No.	**GWPs[1]**	1	298	25	22,800	footnote 3										
H-2601	mass GHG	22,959	0.233	1.167											22,960.673	
	CO_2e	22,959	69.58	29.19												23,058.04
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
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	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO_2e															
	mass GHG															
	CO2e															
Total	mass GHG	22,959	0.233	1.167											22,961	
	CO_2e	22,959	69.58	29.19												23,058

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

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

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

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

[5] **CO_2e** means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

Section 3

Application Summary

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

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

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

Artesia Renewable Diesel Company LLC ("ARDC"), a wholly owned subsidiary of HollyFrontier Renewables Holding Company LLC, which itself is a subsidiary of the HollyFrontier Corporation ("HFC"), is submitting this application for a construction air permit for a new minor source in Artesia, NM. We are submitting this application in accordance with 20.2.72.200 NMAC. ARDC requests the New Mexico Environment Department ("NMED") issue an air permit to authorize emissions for the Renewable Diesel Unit ("RDU") in Artesia, New Mexico as represented in this application.

As communicated to NMED via an October 5, 2020 email and per NMED's October 6, 2020 verbal reply to that email, this is a minor source air permit application for the RDU. The RDU was added to the adjacent refinery air permit via NSR Permit No. PSD-NM-0195-M38 that was issued to the HollyFrontier Navajo Refining LLC's Artesia Refinery in Artesia, New Mexico ("Navajo Artesia Refinery") on September 20, 2019. After the NMED issues the stand-alone minor source permit for the RDU as requested in this application, an Administrative Revision will be requested to remove the RDU from the Navajo Artesia Refinery air permit. The reasoning for the breakout of the RDU from the Artesia Refinery air permit is provided below.

Background

The RDU, which will be owned and operated by ARDC, will convert soybean oil and other nonpetroleum renewable feedstocks to renewable diesel via a catalytic hydrotreating process. The feedstocks will be provided by the co-located Pretreatment Unit ("PTU") owned and operated by Artesia PTU LLC ("APTU"), and potentially by other suppliers. NMED issued a separate minor source permit, NSR Permit No. 9015, on February 15, 2021 and assigned Agency Interest No. 39767 for the PTU.

Although ARDC and APTU will be located within and adjacent to Navajo Artesia Refinery, and all three entities will be under common control of HFC, the RDU and PTU will carry a Standard Industrial Classification ("SIC") major group different from the SIC major group carried by Navajo Artesia Refinery and, therefore, the PTU and the RDU constitute a separate stationary source, that is, separate from the Navajo Artesia Refinery, as that term is defined in the Clean Air Act and its underlying Prevention of Significant Deterioration (PSD) and Title V operating permit regulations.

The Navajo Artesia Refinery falls within SIC Major Group 29 (Petroleum Refining and Related Industries), and specifically, SIC code 2911 (Petroleum Refining). Unlike the Navajo Artesia Refinery, the RDU and the PTU will not be engaged in in petroleum refining and will not produce refined petroleum products through fractionation or straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking, or other processes. As a result, the RDU and PTU will not fall within the petroleum refining SIC code of 2911.

Rather, because of the raw materials used and the resulting non-petroleum-based renewable diesel product, the RDU is properly classified in SIC Major Group 28 (Chemicals and Allied Products), with the specific SIC code of 2869 (Industrial

Organic Chemicals, Not Elsewhere Classified).[1] This is also consistent with our understanding of the SIC code assigned to other renewable diesel facilities in the United States. Regarding the PTU, this unit will serve as an auxiliary establishment to the RDU (or other renewable diesel units within HFC), because, based on current plans, it will be primarily engaged in producing goods or providing services for other establishments of the same company, rather than for the general public or for other business units. The SIC Manual prescribes that auxiliary establishments are classified on the basis of the primary activity of the operating establishment(s) they serve. The PTU is therefore properly assigned a SIC code based on the primary economic activity of the establishment that it supports, namely, SIC Major Group 28 and SIC code 2869, corresponding to the production of renewable diesel.[2] Thus, the RDU and the PTU are treated as a single stationary source with respect to PSD, Title V operating permit applicability, and minor source air dispersion modeling/ambient air impacts analysis.

The RDU and the PTU – while a single stationary source – will not constitute a major source under PSD and Title V operating permit regulations. As a result, a PSD review and an associated PSD air quality analysis are not required.

In contrast and in accordance with Maximum Achievable Control Technology (MACT) standards in 20.2.78 NMAC and 40 CFR Part 63, RDU processes and units are subject to the 40 CFR Part 63 Subpart FFFF (MACT FFFF –miscellaneous organic chemical manufacturing) standard because these processes and units meet the applicability criteria of MACT FFFF, including the RDU being located at a major source of hazardous air pollutants ("HAP"). While the RDU itself is not a major source of HAP, it is under common control and is contiguous with a major source of HAP (i.e., the Navajo Artesia Refinery). Therefore, the RDU processes and units are considered as being located at a major source of HAP. 40 CFR Part 63 applicability is presented in Section 13 of this application.

Initially, the RDU was added to the Navajo Artesia Refinery's air permit via a Significant Revision that resulted in NMED issuing NSR Permit No. PSD-NM-0195-M38 on September 20, 2019. Since permit issuance, the scope of project expanded to include the PTU, with ARDC being the owner and operator of the RDU, and APTU being the owner and operator of the PTU. As such, the RDU will be removed from the Navajo Artesia Refinery's air permit via an Administrative Revision upon NMED's issuance of the stand-alone RDU minor source permit. The parallel application for the PTU minor source air permit was submitted separately, and NMED has issued the resulting air permit.

By this Minor Source Construction Air Permit application, authorization for air emissions from the following emission units is requested:

1. H-2601 RDU Reactor Heater
2. Y-0026 RDU Cooling Tower
3. FUG-26-RDU RDU Fugitives - Piping components fugitive emissions for streams with VOC vapor pressure greater than the permitting exemption
4. T-0914 Slop Tank

Per 20.2.702.202.B.(2), the following emission units are exempt from permitting due to the handling or storing of VOC having vapor pressure less than 0.2 psia at the handled or stored temperature:

5. T-0901 through T-0913 RDU Product or Feed Tanks; T-0929 through T-0932 Rail Unloading Accumulation Tanks; T-0933 Rail Containment Tank – Feed; T-0934 Rail Containment Tank - Renewable Diesel; and T-0935 Rail Containment Tank - Recovered Oil
6. FUG-26-RDU-LOVP - Piping components fugitive emissions for streams with VOC vapor pressure less than the permitting exemption threshold
7. RLO-26 - Railcar Unloading and Loading Rack

In addition, the following emergency generator engines are exempt from permitting because they will only be operated during the unavoidable loss of commercial utility power and will be operated less than 500 hours per year:

8. G-2601 and G-2602 Emergency Generator

[1] Per the SIC Manual published by the United States Office of Management and Budget (1972), SIC code 2869 encompasses establishments "primarily engaged in manufacturing industrial organic chemicals, not elsewhere classified." Products of this industry include diesel-range paraffinic or isoparaffinic hydrocarbons not resulting from petroleum refining, such as the aliphatic and other acyclic organic chemicals that are the primary constituents of renewable diesel.

[2] It is possible that in the future, APTU might enter into contracts to supply treated materials to renewable diesel units outside of the HollyFrontier organization, and should this economic activity become significant enough, the PTU's SIC code assignment may have to be revisited.

Section 4

Process Flow Sheet

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

A process flow diagram for the Renewable Diesel Unit is included in this section.

From Railcars
T-0929
From Railcars
T-0930
From Railcars
T-0931
From Railcars
T-0932
T-0933 Rail Containment Feed
T-0934 Rail Containment RD
T-0935 Rail Containment Recovered Oil
PTU Product Rail Loading
Renewable Diesel Rail Loading
T-0901 Renewable Diesel
T-0902 Renewable Diesel
T-0903 Renewable Diesel
T-0906 RDU Feed Tank
T-0907 RDU Feed Tank
T-0908 RDU Feed Tank
T-0909 RDU Feed Tank
T-0910 RDU Feed Tank
T-0911 RDU Feed Tank
T-0912 RDU Feed Tank
T-0913 RDU Feed Tank
T-0918 PTU Charge Tank
T-0919 PTU Charge Tank
T-0920 PTU Charge Tank
T-0921 PTU Charge Tank
PTU PE Filtration Section
PTU Degumming Section
PTU Adsorption Section
T-0915 PTU Product
T-0916 PTU Product
T-0917 PTU Product
T-0904 RDU Charge
T-0905 RDU Charge
RDU
T-0914 Slop Tank
T-0922 Caustic Soda
T-0923 Citric Acid
T-0924 Citric Acid
T-0925 Bulk Gums Tank
T-0926 Bulk Gums Tank
T-0927 Bulk Gums Tank
T-0928 Bulk Gums Tank
Sludge Tanks
Centrifuge
Rolloff Containers
Equalization Tanks
Primary DAF
BioReactors
Secondary DAF
Treated Water Tank
POTW Outfall

Section 5

Plot Plan Drawn To Scale

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

A Figure 1 Unit Location Map is provided in the section. It shows the locations of the Renewable Diesel Unit emission units including the locations of the north emission units.

FIGURE 1 UNIT LOCATION MAP

PTU and RDU Source
Artesia, New Mexico

TASCOSA ALLIANCE COMPANY

HOLLYFRONTIER.

Digital Data Courtesy of Google Earth

Section 6

All Calculations

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

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

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

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

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

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

Significant Figures:

A. All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.

B. At least 5 significant figures shall be retained in all intermediate calculations.

C. In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

(1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;

(2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**

(3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.

(4) The final result of the calculation shall be expressed in the units of the standard.

Control Devices: In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device

regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

Emission calculations for all sources are included in this section. Files containing emission calculations for all sources are included with the submitted electronic files.

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 (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO_2e 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 CO_2e 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 CO_2e 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 CO_2 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)

Greenhouse gas potential to emits are included in the calculations in Section 6.

PTU AND RDU SOURCE - PROPOSED EMISSION LIMITS AND PERMITTING APPLICABILITY EVALUATION
ARTESIA PTU LLC and ARTESIA RENEWABLE DIESEL COMPANY LLC
(Revised April 2021)

Sources		Proposed Allowable Emissions (represented maximum emissions for GHG)																
		CO		NO_x		PM		PM_{10}		$PM_{2.5}$		SO_2		VOC		n-Hexane		GHG
Unit	Description	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	CO2e ton/yr
Pretreatment Unit (PTU) Emission Units [f]																		
Y-0093	PTU Cooling Tower	--	--	--	--	0.044	0.192	0.026	0.115	0.00010	0.00043	--	--	--	--	--	--	--
08B26	Filter Aid Tank Vent	--	--	--	--	0.0064	0.0282	0.0064	0.0282	0.0064	0.0282	--	--	--	--	--	--	--
26-1B25AP01	Adsorption Train 1 Vent A	--	--	--	--	0.0064	0.0282	0.0064	0.0282	0.0064	0.0282	--	--	--	--	--	--	--
26-2B25AP01	Adsorption Train 1 Vent B	--	--	--	--	0.0064	0.0282	0.0064	0.0282	0.0064	0.0282	--	--	--	--	--	--	--
26-1B25BP01	Adsorption Train 2 Vent A	--	--	--	--	0.0064	0.0282	0.0064	0.0282	0.0064	0.0282	--	--	--	--	--	--	--
26-2B25BP01	Adsorption Train 2 Vent B	--	--	--	--	0.0064	0.0282	0.0064	0.0282	0.0064	0.0282	--	--	--	--	--	--	--
26-1B26P01	Adsorption Train 1 Vent C	--	--	--	--	0.0064	0.0282	0.0064	0.0282	0.0064	0.0282	--	--	--	--	--	--	--
26-2B26P01	Adsorption Train 2 Vent C	--	--	--	--	0.0064	0.0282	0.0064	0.0282	0.0064	0.0282	--	--	--	--	--	--	--
PTU SILOS	Combined Silos 1-5 Vent	--	--	--	--	0.0579	0.2534	0.0579	0.2534	0.0579	0.2534	--	--	--	--	--	--	--
PTU VOC VENTS	Pretreatment VOC Vents	--	--	--	--	--	--	--	--	--	--	--	--	1.025	4.490	1.025	4.490	--
H-9301	Vapor Combustion Unit	0.156	0.684	0.427	1.870	0.014	0.062	0.014	0.062	0.014	0.062	0.011	0.047	--	--	--	--	1,036
PTU-WWTP	PTU Wastewater Treatment Plant	--	--	--	--	--	--	--	--	--	--	--	--	0.520	2.277	--	--	11,112
FUG-93-PTU	PTU Fugitives	--	--	--	--	--	--	--	--	--	--	--	--	0.169	0.739	0.014	0.060	--
Permit-Exempt PTU Emissions [a]																		
FUG-93-PTU-LOVP	PTU Fugitives - Low Vapor Pressure	--	--	--	--	--	--	--	--	--	--	--	--	0.486	2.127	--	--	--
Subtotal PTU (excluding Exempt Emissions) =			**0.68**		**1.87**		**0.70**		**0.63**		**0.51**		**0.05**		**7.51**		**4.55**	**12,148**
Subtotal PTU (including Exempt Emissions) =		**0.16**	**0.68**	**0.43**	**1.87**	**0.16**	**0.70**	**0.14**	**0.63**	**0.12**	**0.51**	**0.011**	**0.05**	**2.20**	**9.63**	**1.04**	**4.55**	**12,148**
Renewable Diesel Unit (RDU) Emission Units																		
H-2601	RDU Reactor Heater	2.620	11.473	1.330	5.825	0.370	1.622	0.370	1.622	0.370	1.622	1.463	2.970	0.268	1.174	--	--	23,058
Y-0026	RDU Cooling Tower	--	--	--	--	0.044	0.192	0.026	0.115	0.00010	0.00043	--	--	--	--	--	--	--
FUG-26-RDU	RDU Fugitives	--	--	--	--	--	--	--	--	--	--	--	--	4.721	20.676	--	--	--
T-0914	Slop Tank	--	--	--	--	--	--	--	--	--	--	--	--	29.600	8.661	--	--	--
Permit-Exempt RDU Emissions [a]																		
T-0901, T-0902, T-0903	Product Tanks	--	--	--	--	--	--	--	--	--	--	--	--	100.620	6.497	--	--	--
FUG-26-RDU-LOVP	RDU Fugitives - Low Vapor Pressure	--	--	--	--	--	--	--	--	--	--	--	--	2.536	11.109	--	--	--
RLO-26	Railcar Unloading and Loading Rack	--	--	--	--	--	--	--	--	--	--	--	--	9.840	2.040	--	--	--
G-2601	Emergency Generator	6.47	1.62	12.95	3.24	0.11	0.03	0.11	0.03	0.11	0.03	0.063	0.016	3.24	0.81	--	--	331
G-2602	Emergency Generator	6.47	1.62	12.95	3.24	0.11	0.03	0.11	0.03	0.11	0.03	0.063	0.016	3.24	0.81	--	--	331
Subtotal RDU (excluding Exempt Emissions) =			**11.47**		**5.82**		**1.81**		**1.74**		**1.62**		**2.97**		**30.51**		**0.00**	**23,058**
Subtotal RDU (including Exempt Emissions) =		**15.56**	**14.71**	**27.22**	**12.3**	**0.64**	**1.87**	**0.62**	**1.79**	**0.60**	**1.68**	**1.59**	**3.00**	**154.06**	**51.78**	**0.00**	**0.00**	**23,720**
Total Proposed PTU and RDU Source Potential to Emit =			**15.39**		**14.17**		**2.57**		**2.42**		**2.19**		**3.05**		**61.41**		**4.55**	**35,868**
PSD or Title V Major Source Thresholds [b, c, d] =			**100**		**100**		**100**		**100**		**100**		**100**		**100**		**10**	**75,000**
Total source allowable emissions > major threshold? [e]			**No**		**No**		**No**		**No**		**No**		**No**		**No**		**No**	**No**

[a] "Permit-Exempt" indicates these emissions are exempt from air permitting per 20.2.72.202 NMAC. They are calculated conservatively and included in this table for the purpose of the PSD and Title V minor source determination.

[b] Per 40 CFR §52.21(b)(1)(i)(a), the Prevention of Significant Deterioration (PSD) major source threshold for "chemical process plants" is 100 ton/yr of any regulated New Source Review (NSR) pollutant. Chemical process plants are those identified under Major Group 28 of the SIC code.

[c] Per 40 CFR §52.21(b)(49)(iv), GHG is subject to PSD review only if a source is a major source of another regulated NSR pollutant and the source will have potential to emit ≥ 75,000 ton/yr CO_2e.

[d] Per 40 CFR §70.2, with respect to Title V permitting the major source thresholds include 10 ton/yr of any hazardous air pollutant (HAP, such as n-hexane) or 100 ton/yr of any pollutant subject to regulation.

[e] "No" indicates that for each pollutant, the proposed emissions do not trigger PSD Review or Title V permitting.

[f] Proposed allowable emissions for PTU VOC VENTS and H-9301 in this table reflect revised emission limits that will be requested for the PTU permit, NSR Permit No. 9015. They are greater than the existing PTU permit limits. Therefore, they are conservative for the supporting dispersion modeling evaluation and for this permitting applicability evaluation.

POTENTIAL TO EMIT - COMBUSTION DEVICES
ARTESIA RENEWABLE DIESEL COMPANY LLC

Unit	Description	Heat Input Capacity, HHV (MMBtu/hr)	Fuel Gas Heating Value, HHV (Btu/scf)	Annual Operating Hours (hr/yr)	Pollutant	Note	Emission Factor	Unit	Potential to Emit (PTE) Hourly[d] (lb/hr)	Annual[e] (ton/yr)
H-2601	RDU Reactor Heater	40.3	827	8,760	CO	a	0.065	lb/MMBtu	2.620	11.473
					NO_X	a	0.033	lb/MMBtu	1.330	5.825
					PM	b	7.6	lb/MMscf	0.370	1.622
							0.1	gr H_2S/scf	1.310	--
							0.01166	gr S/scf	0.153	--
					Hourly SO_2	c			1.463	--
							0.037	gr H_2S/scf	--	2.259
							0.01166	gr S/scf	--	0.711
					Annual SO_2	c			--	2.970
					VOC	b	5.5	lb/MMscf	0.268	1.174

[a] Emission factors are based on manufacturer guarantees at rated capacity.

[b] Emission factors are from AP-42 Table 1.4-2 (dated 7/98). All PM is assumed to be less than 2.5 microns in diameter per footnote "c" of AP-42 Table 1.4-2.

[c] Hourly SO_2 emissions are calculated based on the NSPS Subpart J limit of 0.1 gr H2S/dscf or 3-hr rolling NSPS Ja limit (both 162 ppmv H_2S) and the annual SO_2 emissions are calculated based on the NSPS Subpart Ja, 365-day calendar roiling average limit of 60 ppmv H_2S (which equates to 0.037 gr H2S/dscf), plus non-H2S species potentially present in Artesia refinery fuel gas as determined based on sampling data.

[d] An example calculation for hourly PM emissions follows:

PM (lb/hr) = (Firing Rate, MMBtu/hr)/(Fuel Heating Value, Btu/scf)*(Emission Factor, lb/MMscf)

PM (lb/hr) = (40.3 MMBtu/hr)/(827 Btu/scf)*(7.6 lb/MMscf)

= 0.370 lb/hr PM

[e] An example calculation for annual PM emissions follows:

PM (ton/yr) = (Hourly PM, lb/hr)*(Annual Operating Hours, hr/yr)/(2,000 lb/ton)

PM (ton/yr) = (0.370 lb/hr)*(8760 hr/yr)/(2,000 lb/ton)

= 1.622 ton/yr PM

GREENHOUSE GAS (GHG) EMISSIONS

Unit	Description	Heat Input Capacity, HHV (MMBtu/yr)	Emission Factors (lb/MMBtu)[d] CO_2	N_2O	CH_4		Annual Emissions (ton/yr) CO_2	N_2O	CH_4
H-2601	RDU Reactor Heater	353,028.0	130.07	0.0013	# 0.0066		22,959	0.233	1.167
							22,959	**0.233**	**1.167**

d. CO2 emission factor for Refinery Fuel Gas is from 40 CFR Part 98 Table C-1. N2O and CH4 emission factors for Refinery Fuel Gas are from 40 CFR Part 98 Table C-2.

POTENTIAL TO EMIT - COOLING TOWER
ARTESIA RENEWABLE DIESEL COMPANY LLC

Input Data:

Cooling Tower	Water Circulation Rate	Drift Eliminator Efficiency	Annual Hours of Operation
	(gal/min)	(% drift)	(hr/yr)
Y-0026	2,500	0.001	8760

TDS (ppmw) [1] 3,500

Emissions:

Cooling Tower	Emissions [2, 3]					
	PM		PM-10		PM2.5	
	(lb/hr)	(tons/yr)	(lb/hr)	(tons/yr)	(lb/hr)	(tons/yr)
Y-0026	0.044	0.192	0.026	0.115	0.00010	0.00043

Sample Calculations:
0.044 PM (lb/hr) = (2500 gal/min) * (60 min/hr) * (8.34 lb/gal) * (3500 lb TDS/MMlb H20) * (MMlb/10^6 lb)* (0.001 % drift)
0.026 PM-10 (lb/hr) = (0.044 lb/hr PM) * (60.161 % PM-10)

Notes:

[1] Maxium total dissolved solids (TDS) in recirculating water is rolling 12-month average limit stipulated in air permit for adjacent Artesia Refinery because same source of water will be used.

[2] Total Particulate Matter (PM) emissions are calculated per AP-42 Section 13.4, dated January 1995.

[3] $PM_{2.5}$ and PM_{10} emissions are calculated in accordance with NMED's Technical Memorandum "Calculating TSP, PM-10 and PM-2.5 from Cooling Towers" dated 9/9/2013. For a TDS of 3,500 ppmw and per the size distribution table in the memorandum (average between 3,000 ppmw and 4,000 ppmw), the percents mass of total particulate emissions represented by $PM_{2.5}$ and PM_{10} are as follows:

% Mass PM_{10} = 60.161 % Mass $PM_{2.5}$ = 0.226

POTENTIAL TO EMIT - EQUIPMENT COMPONENT FUGITIVES
ARTESIA RENEWABLE DIESEL COMPANY LLC

			Valves					Flanges		Pump Seals		Relief Valves	
			Gas		Light Liquid		Heavy Liquid	All		Light Liquid	Heavy Liquid	All	
			Non-Monitored	Monitoring Control [3]	Non-Monitored	Monitoring Control [3]	Non-Monitored	Non-Monitored	AVO Control [3]	Non-Monitored	Non-Monitored	Non-Monitored	Monitoring Control [3]
			0.0099	75%	0.0055	75%	0.00002	0.00024	30%		0.019	0.23	75%
UNIT ID	PROCESS UNIT	Emission Factors [1]	COMPONENT COUNTS										
FUG-26-RDU	Renewable Diesel Unit	Oil and Gas		657		545		2296		2			30
FUG-26-RDU	Fuel Gas - New RDU Components	Oil and Gas	106					141					

1. Emission factors (lb/hr/source) are from "Protocol for Equipment Leak Estimates," EPA-453/R-95-017, Tables 2-1 through 2-4, Nov. 1995 or equivalent factors from guidance.
2. Maximum VOC weight % applies to all stream unless otherwise specified.
3. Control efficiency are from Texas Commission in Environmental Quality "Air Permit Technical Guidance for Chemical Sources, Fugitive Guidance, APDG 6422", Table V, June 2018. Annual monitoring of valves in gas and light liquid service is assumed with a leak defintion of 10,000 ppmv.

The fugitive emissions below are Exempted Activities with respect to 20.2.72 NMAC Construction Permits. Per 20.2.72.202.B.(2) NMAC, the handling of VOC with vapor pressure less than 0.2 psia is an exempt source or activity.

FUG-26-RDU-LOVP	Renewable Diesel Unit - Low Vapor Pressure	Oil and Gas					593	1456			6	9	

POTENTIAL TO EMIT - EQUIPMENT COMPONENT FUGITIVES
ARTESIA RENEWABLE DIESEL COMPANY LLC

	Compressor Seals											
	Gas											
	Non-Monitored	Dual Seal	H_2 Service	Total Emissions, lb/hr					Gas VOC	Other VOC [2]	VOC Emissions	
	0.02	100%	30%									
UNIT ID				Valves	Flanges	Pump Seals	Relief Valves	Compressor Seals	Weight %	Weight %	(lb/hr)	(tons/yr)
FUG-26-RDU	1			2.375	0.556	0.000	1.716	0.019	100%	100%	4.666	20.439
FUG-26-RDU				1.049	0.034	0.000	0.000	0.000	5%		0.054	0.237
FUG-26-RDU-LOVP				0.011	0.352	0.114	2.059	0.000	100%	100%	2.536	11.109

POTENTIAL TO EMIT - STORAGE TANKS

ARTESIA RENEWABLE DIESEL COMPANY LLC

Variable	Description	Units	Value
-	Roof Construction (vertical tanks)	-	Cone
DPb	Breather vent pressure range	psi	0.06
I	Solar insolation factor	Btu/ft^2-day	1810
P_A	Atmospheric Pressure	psia	12.9
T	Annual Average Temperature	°F	62
T_{AX}	Daily Maximum Ambient Temperature	°R	535.3
T_{AN}	Daily Minimum Ambient Temperature	°R	507.5
DT_A	Daily average ambient temperature range	°R	27.8
K_N	Turnover Factor	-	1
K_P	Product Factor	-	1

a. Data for Roswell, NM.

Calculation Formulas
L_S = Standing loss (lb/yr) = 365 V_V W_V K_E K_S
L_W = Working loss (lb/yr) = 0.001 Mv P_{VA} Q K_N K_P
L_T = Total Loss (lb/yr) = L_s + L_w
L_H = Hourly loss (lb/hr) = 0.001 Mv P_{MAX} Q_H K_P

NOTE: Tank emissions are based on the equations found in EPA AP 42 Chapter 7.

		Material Properties					Tank Parameters							
Tank No.	Typical Material Stored	Mv	T_{LA}	Tmax	P_{VA}	P_{MAX}	FX/HZ	D	H/L	CAPACITY	COLOR	α	Q	Q_H
		Vapor Molecular Weight	Daily Average Liquid Surface Temp.	Maximum Liquid Temp.	Average True Vapor Pressure	Maximum Vapor Pressure	Tank Type	Tank Dia.	Tank Height/ Length	Tank Capacity	Tank Color	Paint Solar Absorbance Factor	Annual Throughput	Maximum Hourly Throughput
		(lb/lbmol)	(°R)	(°R)	(psia)	(psia)		(ft)	(ft)	(bbl)			(bbl/yr)	(bbl/hr)
T-0914	RDU Slop	80	550	590	0.74	0.74	FX	75	40	31,000	White	0.17	79,200	500

The tanks below are Exempted Sources with respect to 20.2.72 NMAC Construction Permits. Per 20.2.72.202.B.(2) NMAC, the storing of VOC with vapor pressure less than 0.2 psia is an exempt source or activity.

T-0901	Renewable Diesel	130	550	590	0.016	0.06	FX	125	50	109,000	White	0.17	1,095,000	4,300
T-0902	Renewable Diesel	130	550	590	0.016	0.06	FX	125	50	109,000	White	0.17	1,095,000	4,300
T-0903	Renewable Diesel	130	550	590	0.016	0.06	FX	125	50	109,000	White	0.17	1,095,000	4,300

POTENTIAL TO EMIT - STORAGE TANKS
ARTESIA RENEWABLE DIESEL COMPANY LLC

Tank No.	DT_V	DP_V	H_{RO}	H_{VO}	V_V	W_V	K_E	K_S	L_S	L_W	L_T	L_H
	Daily Vapor T Range	Daily Vapor Pressure Range	Tank Roof Outage	Vapor Space Outage	Vapor Space Volume	Vapor Density	Vapor Expansion Factor	Vented Vapor Saturation Factor	Standing Loss	Working Loss	Total Annual Loss	Maximum Hourly Loss
	(^oR)	(psia)	(ft)	(ft)	(ft^3)	(lb/ft^3)			(ton/yr)	(ton/yr)	(ton/yr)	(lb/hr)
T-0914	28.6	0.2565	0.781	20.8	91,809	1.0E-02	0.068	0.551	6.32	2.34	**8.661**	**29.600**
T-0901	28.6	0.0075	1.302	26.3	322,775	3.5E-04	0.052	0.978	1.04	1.13	2.166	33.540
T-0902	28.6	0.0075	1.302	26.3	322,775	3.5E-04	0.052	0.978	1.04	1.13	2.166	33.540
T-0903	28.6	0.0075	1.302	26.3	322,775	3.5E-04	0.052	0.978	1.04	1.13	2.166	33.540
											6.497	**100.620**

POTENTIAL TO EMIT (EXEMPT ACTIVITY) - RAILCAR UNLOADING AND LOADING RACK [a]
ARTESIA RENEWABLE DIESEL COMPANY LLC

The loading rack emissions are an Exempt Source with respect to 20.2.72 NMAC Construction Permits. Per 20.2.72.202.B.(2) NMAC, the handling of VOC with vapor pressure less than 0.2 psia is an exempt source or activity.

Loading Rack	Loading Rack Description	Material Loaded	M	S	T_{max}	T_{avg}	P_{max}	P_{avg}	Control Efficiency	Loading Throughputs		Uncontrolled Loading Loss		Uncontrolled VOC Emissions		Controlled VOC Emissions	
			Molecular Weight	Saturation Factor	Max Loading Temp.	Annual Average Loading Temp.	Vapor Pressure at Max Loading Temp.	Vapor Pressure at Annual Average Loading Temp.		Hourly	Annual						
			lb/lbmol		°F	°F	psia	psia	%	bbl/hr	bbl/yr	Max Hourly lb/Mgal	Avg Annual lb/Mgal	lb/hr	ton/yr	lb/hr	ton/yr
RLO-26	Railcar Unloading and Loading Rack	Crude Oil, Pretreated Oil, and Renewable Diesel	130	0.6	100	61	0.060	0.016	0%	2,250	3,285,000	0.1041	0.0296	9.840	2.040	**9.840**	**2.040**

Notes:

a. Loading emissions are calculated per AP-42, Section 5.2, dated June 2008 per the sample calculation below.

Sample Calculations:

Loading Loss (lb/Mgal) = 12.46 * S * P * M / T (AP-42 Section 5.2)
Average Loading Loss = 12.46 * 0.60 * 0.016 * 130 / (61+ 460) = 0.0296 lb/Mgal

Annual VOC Emissions = (Annual Throughput, bbl/yr) * 42 gal/bbl * (Mgal/1000 gal) * (Average Loading Loss, lb/Mgal) * (ton/2000 lbs) * (1 - Control Efficiency)
Annual VOC Emissions = (3,285,000 bbl/yr) * (42 gal/bbl) * (Mgal/1000 gal) * (0.0296 lb/Mgal) * (ton/2000 lbs) * (1 - 0.00) = 2.040 ton/yr

POTENTIAL TO EMIT (EXEMPT ACTIVITY) - EMERGENCY GENERATOR ENGINES
ARTESIA RENEWABLE DIESEL COMPANY LLC

The engine emissions are Exempt Sources with respect to 20.2.72 NMAC Construction Permits. Per 20.2.72.202.B.(3) NMAC, standby generators which are operated only during the unavoidable loss of commercial utility power and are operated less than 500 hours per year (and for which recordkeeping is maintained to document same) are an exempt source.

Engine	Description	Engine Type	Rating HP	BSFC Btu/hp-hr	Op. Hours hr/yr	Pollutant	Emission Factors [a] Factor	Emission Factors [a] Unit	Emissions lb/hr	Emissions ton/yr
G-2601	Emergency Generator	Caterpillar G3512 Manufacture 2020	1,468	7700	500	CO	2.0	g/HP-hr	**6.47**	**1.62**
						NOx	4.0	g/HP-hr	**12.95**	**3.24**
						$PM/PM_{10}/PM_{2.5}$	0.00999	lb/MMBtu	**0.11**	**0.03**
						SO2	2	gr/ccf	**0.063**	**0.016**
						VOC	1.0	g/HP-hr	**3.24**	**0.81**
G-2602	Emergency Generator	Caterpillar G3512 Manufacture 2020	1,468	7700	500	CO	2.0	g/HP-hr	**6.47**	**1.62**
						NOx	4.0	g/HP-hr	**12.95**	**3.24**
						$PM/PM_{10}/PM_{2.5}$	0.00999	lb/MMBtu	**0.11**	**0.03**
						SO2	2	gr/ccf	**0.063**	**0.016**
						VOC	1.0	g/HP-hr	**3.24**	**0.81**

[a] CO, NOx, and VOC emission factors are applicable standards from 40 CFR Part 60 Subpart JJJJ (NSPS JJJJ) Table 1 for emergency engines ≥ 130 HP.
PM emission factor is from AP-42 Table 3.2-2 for Four-Stroke Lean-Burn Engines (dated 7/00).
SO2 emission are calculated based on an estimated maximum sulfur content in natural gas of 2 grains total sulfur per 100 standard cubic feet (ccf).

Sample Calculations:

CO = (Emission Factor, g/HP-hr)*(Rating, HP)/(453.6 g/lb) = (2.00 g/HP-hr)*(1,468 HP)/(453.6 g/lb) = 6.47 lb/hr

(hourly emissions, lb/hr)*(annual op hours, hr/yr)/(2,000 lb/ton) = (6.47 lb/hr)*(500 hr/yr)/(2,000 lb/ton) = 1.62 ton/yr

SO2 = (S Content, gr/ccf)*(ccf/100 scf)*(scf/1020 Btu)/(7,000 gr/lb)*(BSFC, Btu/hp-hr)*(Rating, hp)/*(64.06 lb SO2/32 lb S) =
(2.0 gr S/ccf)*(ccf/100scf)*(scf/1020 Btu)/(7,000 gr/lb)*(7,700 Btu/hp-hr)*(1,468 hp)*(64.06 lb SO2/32 lb S) = 0.063 lb/hr

GREENHOUSE GAS (GHG) EMISSIONS

Engine	Heat Input to VCU (MMBtu/yr)	Emission Factors (lb/MMBtu) [b] CO_2	N_2O	CH_4	Annual Emissions (ton/yr) [c] CO_2	N_2O	CH_4		CO_2e
G-2601	5,651.8	116.98	0.00022	0.0022	330.56	6.2E-04	6.2E-03		3.3E+02
G-2602	5,651.8	116.98	0.00022	0.0022	330.56	6.2E-04	6.2E-03		3.3E+02
					661.12	**0.001**	**0.012**		**661.804**

[b] CO2 emission factor for Natural Gas is from 40 CFR Part 98 Table C-1. N2O and CH4 emission factors for Natural Gas are from 40 CFR Part 98 Table C-2.

[c] CO2e emissions are calculated based on Global Warming Potentials of 1, 298, and 25 for CO2, N2O, and CH4 per Table A-1 of 40 CFR Part 98.

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.

Supporting documentation for the Section 6 emission calculations is provided in this section.

TABLE 1.4-2. EMISSION FACTORS FOR CRITERIA POLLUTANTS AND GREENHOUSE GASES FROM NATURAL GAS COMBUSTION[a]

Pollutant	Emission Factor ($lb/10^6$ scf)	Emission Factor Rating
CO_2[b]	120,000	A
Lead	0.0005	D
N_2O (Uncontrolled)	2.2	E
N_2O (Controlled-low-NO_X burner)	0.64	E
PM (Total)[c]	7.6	D
PM (Condensable)[c]	5.7	D
PM (Filterable)[c]	1.9	B
SO_2[d]	0.6	A
TOC	11	B
Methane	2.3	B
VOC	5.5	C

[a] Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. To convert from $lb/10^6$ scf to $kg/10^6$ m^3, multiply by 16. To convert from $lb/10^6$ scf to 1b/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. TOC = Total Organic Compounds. VOC = Volatile Organic Compounds.

[b] Based on approximately 100% conversion of fuel carbon to CO_2. $CO_2[lb/10^6 \text{ scf}] = (3.67)(CON)(C)(D)$, where CON = fractional conversion of fuel carbon to CO_2, C = carbon content of fuel by weight (0.76), and D = density of fuel, 4.2×10^4 $lb/10^6$ scf.

[c] All PM (total, condensible, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors presented here may be used to estimate PM_{10}, $PM_{2.5}$ or PM_1 emissions. Total PM is the sum of the filterable PM and condensible PM. Condensible PM is the particulate matter collected using EPA Method 202 (or equivalent). Filterable PM is the particulate matter collected on, or prior to, the filter of an EPA Method 5 (or equivalent) sampling train.

[d] Based on 100% conversion of fuel sulfur to SO_2. Assumes sulfur content is natural gas of 2,000 grains/10^6 scf. The SO_2 emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO_2 emission factor by the ratio of the site-specific sulfur content (grains/10^6 scf) to 2,000 grains/10^6 scf.

Table 13.4-1 (Metric And English Units). PARTICULATE EMISSIONS FACTORS FOR WET COOLING TOWERS[a]

Tower Type[d]	Total Liquid Drift[b]				PM-10[c]		
	Circulating Water Flow[b]	g/daL	lb/10^3 gal	EMISSION FACTOR RATING	g/daL[e]	lb/10^3 gal	EMISSION FACTOR RATING
Induced Draft (SCC 3-85-001-01, 3-85-001-20, 3-85-002-01)	0.020	2.0	1.7	D	0.023	0.019	E
Natural Draft (SCC 3-85-001-02, 3-85-002-02)	0.00088	0.088	0.073	E	ND	ND	—

[a] References 1-17. Numbers are given to 2 significant digits. ND = no data. SCC = Source Classification Code.

[b] References 2,5-7,9-10,12-13,15-16. Total liquid drift is water droplets entrained in the cooling tower exit air stream. Factors are for % of circulating water flow (10^{-2} L drift/L [10^{-2} gal drift/gal] water flow) and g drift/daL (lb drift/10^3 gal) circulating water flow. 0.12 g/daL = 0.1 lb/10^3 gal; 1 daL = 10^1 L.

[c] See discussion in text on how to use the table to obtain PM-10 emission estimates. Values shown above are the arithmetic average of test results from References 2,4,8, and 11-14, and they imply an effective TDS content of approximately 12,000 parts per million (ppm) in the circulating water.

[d] See Figure 13.4-1 and Figure 13.4-2. Additional SCCs for wet cooling towers of unspecified draft type are 3-85-001-10 and 3-85-002-10.

[e] Expressed as g PM-10/daL (lb PM-10/10^3 gal) circulating water flow.

parameter for the cooling tower water (such as conductivity, calcium, chlorides, or phosphate) to that parameter for the make-up water. This estimated cooling tower TDS can be used to calculate the PM-10 emission factor as above. If neither of these methods can be used, the arithmetic average PM-10 factor given in Table 13.4-1 can be used. Table 13.4-1 presents the arithmetic average PM-10 factor calculated from the test data in References 2, 4, 8, and 11 - 14. Note that this average corresponds to an effective cooling tower recirculating water TDS content of approximately 11,500 ppm for induced draft towers. (This can be found by dividing the total liquid drift factor into the PM-10 factor.)

As an alternative approach, if TDS data are unavailable for an induced draft tower, a value may be selected from Table 13.4-2 and then be combined with the total liquid drift factor in Table 13.4-1 to determine an apparent PM-10 factor.

As shown in Table 13.4-2, available data do not suggest that there is any significant difference between TDS levels in counter and cross flow towers. Data for natural draft towers are not available.

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TECHNICAL MEMORANDUM

DATE: September 9, 2013

TO: All Permitting Staff

FROM: Daren Zigich

THROUGH: Ted Schooley, Permit Program Manager
Ned Jerabek, Major Source Section Manager

SUBJECT: Calculating TSP, PM-10 and PM-2.5 from Cooling Towers

The goal of this memo is to offer a Department approved step-by-step approach for calculating particulate emissions from cooling towers. While the Department encourages using this approach, other approaches, that do not use a droplet settling ratio may be approved on a case-by-case basis.

Due to the variability of methods used by permittees to estimate particulate emissions from cooling towers, a consistent, defensible approach is warranted. For example, some permittees have used a droplet settling ratio from Reference 3 to lower the total potential emissions rate of total particulate matter (PM_{total}). This is unacceptable due to the following:

1. Particulate settling is not appropriate since any verification testing would be completed inside the cooling tower fan stack. All particulate mass that can be measured by an EPA reference method and are emitted to the atmosphere shall be counted as particulate emissions. Particle size distribution can then be used to modify the emission rate of each regulated particulate size.
2. The Department is not aware of information that verifies the droplet settling data is representative for arid climates where evaporation rates are high.
3. The droplet size distribution and % mass data from Reference 1 only consider droplets up to 600 microns. Reference 3 states that settling only exists for droplets greater than 450 microns. Reference 1 lists the % mass of droplets greater than 450 microns to be less than 1 percent of the total mass.

4. Reference 2 test data shows that towers with significant drift droplet diameters greater than 600 microns usually suffer from poor installation of the drift eliminator or from poor water distribution due to issues with the tower packing. Large droplets may indicate that the assumed or guaranteed drift eliminator efficiency is not being met. Providing emissions credit for poor installation, operation or maintenance runs counter to general Department practice.
5. References 1 and 2 make no reference to and assign no credit for the settling theory stated in Reference 3.

For the above reasons, the Reference 3 settling ratio is not an acceptable emissions reduction approach.

Acceptable Calculation Method

Cooling tower particulate emissions are a function of the Drift rate and the concentration of dissolved solids present in the water. The Drift rate is normally listed as a percentage of the circulating water flow rate of the cooling tower.

Step 1 – Establish maximum water circulation rate (Q_{circ}) for the cooling tower. This is usually dependent on the capacity of the circulation pumps and the plant cooling system and should be reported as gallons per minute (gpm). The circulation rate is the sum of the circulation rates for each cell in the tower and thus represents the total flow for the tower.

Step 2 – Establish Drift rate (Q_{drift}) of the cooling tower. This information is dependent on the drift eliminator design and is usually supplied by the tower manufacturer. If manufacturer data is unavailable, the standard drift of 0.02 percent, listed in AP-42, should be used.

Step 3 – Establish maximum Total Dissolved Solids concentration (TDS) in the circulating cooling water. This is dependent on the facility's operations. TDS should be reported as parts per million (ppm) or mg/l.

Step 4 – Calculate total potential hourly particulate emissions (PM_{total}) in pounds per hour (lbs/hr).

$$PM_{total} = TDS(mg/l) \times \frac{1(lbs/mg)}{453{,}600} \times 3.785(l/gal) \times Q_{circ}(gpm) \times \frac{Q_{drift}(\%Q_{circ})}{100} \times 60(min/hr)$$

Example: TDS = 3000 ppm or mg/l, Q_{circ} = 50,000 gpm, Q_{drift} = 0.004%

$PM_{total} = 3000 \times (1/453{,}600) \times 3.785 \times 50{,}000 \times (0.004/100) \times 60$

PM_{total} = 3.0 lbs/hr

Step 5 – Estimate particulate size distribution of the PM_{total} to determine potential emissions of TSP/PM, PM_{10} and $PM_{2.5}$.

The current estimating technique used in References 1 and 2 employs a formula for determining a potential particulate size (i.e. diameter) for a given set of variables. The variables are:

d_d = Drift droplet diameter, microns
C_{TDS} = Concentration of TDS in the circulating water, ppm x 10^{-6}
ρ_w = Density of Drift droplet, g/cm^3
ρ_{salt} = Density of particle, g/cm^3

The equation for determining particle size/diameter (d_p), in microns is:

$$d_p = \frac{d_d}{(\rho_{salt} / \rho_w C_{TDS})^{1/3}}$$

The tables below list particle size related to droplet size for various concentrations (1000 ppm to 12,000 ppm) of TDS in the circulating cooling water. The density of the water droplet (ρ_w) is assumed to be 1.0 g/cm3 (based on density of pure water) and the average density of the TDS salts is assumed to be 2.5 g/cm3. This assumed density is selected based on the average density of common TDS constituents, $CaCO_3$, $CaSO_4$, $CaCl_2$ NaCl, Na_2SO_4, and Na_2CO_3. If actual circulating water constituents are available, that data may be used to estimate the dissolved solids average density.

To determine the droplet size that generates particulate matter of the applicable regulated diameters, TSP/PM (defined as 30 microns or less per NM AQB definition[1]), PM10 and PM2.5, find the column in the table that matches the maximum circulating water TDS concentration and read the values associated with the PM2.5, PM10 and TSP/PM boxes. Boxed values are not exactly equal to the applicable sizes, but are the values greater than and closest to the applicable sizes, given the listed water droplet values from Reference 1.

The far right column of each table provides mass distribution data from Reference 1. The values indicate what percent of the total particulate mass emission, calculated in Step 4, is associated with the applicable particulate size. Read the value that is on the same line (same color) as the applicable particulate size associated with the specified TDS concentration column.

Note: Although the relationship between droplet size and percent mass is not linear, a linear interpolation of the tabulated data is acceptable between two adjacent rows (particle size) to determine an estimate of percent mass for a specific particle size (i.e. PM30, PM10 and PM2.5). Particle sizes for droplets with a non-listed TDS ppm concentration may be calculated using the equation in Step 5.

Example: Continuing from Step 4,

PM_{total} = 3.0 lbs/hr
C_{TDS} = 3000 ppm

From Table:

$PM_{2.5}$:	d_d = 30	%Mass = 0.226%
PM_{10}:	d_d = 110	%Mass = 70.509%
TSP/PM:	d_d = 270	%Mass = 96.288%

The mass emission of each applicable particulate size is:

$PM_{2.5} = PM_{total}(\%Mass/100) = 3.0(0.00226) = 0.007$ lbs/hr
$PM_{10} = 3.0(.70509) = 2.115$ lbs/hr
TSP/PM = 3.0(.96288) = 2.889 lbs/hr

[1]Definition of TSP for purposes of permitting emission sources, 11/2/09, see P:\AQB-Permits-Section\NSR-TV-Common\Permitting-Guidance-Documents – Index & Links document

Size Distribution

1000 ppm (TDS)		2000 ppm		3000 ppm		% Mass
d_d	d_p	d_d	d_p	d_d	d_p	≤
10	0.7387304	10	0.930527	10	1.0650435	0
20	1.4774608	20	1.8610539	20	2.130087 PM2.5	0.196
30	2.2161912	30	2.7915809 PM2.5	30	3.1951306 PM2.5	0.226
40	2.9549216 PM2.5	40	3.7221079	40	4.2601741	0.514
50	3.693652	50	4.6526349	50	5.3252176	1.816
60	4.4323825	60	5.5831618	60	6.3902611	5.702
70	5.1711129	70	6.5136888	70	7.4553046	21.348
90	6.6485737	90	8.3747427	90	9.5853917	49.812
110	8.1260345	110	10.235797 PM10	110	11.715479 PM10	70.509
130	9.6034953	130	12.096851	130	13.845566	82.023
150	11.080956 PM10	150	13.957905	150	15.975653	88.012
180	13.297147	180	16.749485	180	19.170783	91.032
210	15.513339	210	19.541066	210	22.365914	92.468
240	17.72953	240	22.332647	240	25.561045	94.091
270	19.945721	270	25.124228	270	28.756175	94.689
300	22.161912	300	27.915809	300	31.951306 TSP/PM30	96.288
350	25.855564	350	32.568444 TSP/PM30	350	37.276523	97.011
400	29.549216	400	37.221079	400	42.601741	98.34
450	33.242868 TSP/PM30	450	41.873714	450	47.926958	99.071
500	36.93652	500	46.526349	500	53.252176	99.071
600	44.323825	600	55.831618	600	63.902611	100

Size Distribution

4000 ppm (TDS)		5000 ppm		6000 ppm		% Mass
d_d	d_p	d_d	d_p	d_d	d_p	≤
10	1.1721197	10	1.2625337	10	1.3415607	0
20	2.3442393	20	2.5250675 PM2.5	20	2.6831215 PM2.5	0.196
30	3.516359 PM2.5	30	3.7876012	30	4.0246822	0.226
40	4.6884787	40	5.0501349	40	5.366243	0.514
50	5.8605984	50	6.3126686	50	6.7078037	1.816
60	7.032718	60	7.5752024	60	8.0493645	5.702
70	8.2048377	70	8.8377361	70	9.3909252	21.348
90	10.549077 PM10	90	11.362804 PM10	90	12.074047 PM10	49.812
110	12.893316	110	13.887871	110	14.757168	70.509
130	15.237556	130	16.412938	130	17.44029	82.023
150	17.581795	150	18.938006	150	20.123411	88.012
180	21.098154	180	22.725607	180	24.148093	91.032
210	24.614513	210	26.513208	210	28.172776	92.468
240	28.130872	240	30.300809 TSP/PM30	240	32.197458 TSP/PM30	94.091
270	31.647231 TSP/PM30	270	34.088411	270	36.22214	94.689
300	35.16359	300	37.876012	300	40.246822	96.288
350	41.024188	350	44.18868	350	46.954626	97.011
400	46.884787	400	50.501349	400	53.66243	98.34
450	52.745385	450	56.814018	450	60.370234	99.071
500	58.605984	500	63.126686	500	67.078037	99.071
600	70.32718	600	75.752024	600	80.493645	100

Size Distribution

7000 ppm (TDS)		8000 ppm		9000 ppm		% Mass
d_d	d_p	d_d	d_p	d_d	d_p	≤
10	1.4122241	10	1.4764371	10	1.5354962	0
20	2.8244482 PM2.5	20	2.9528742 PM2.5	20	3.0709923 PM2.5	0.196
30	4.2366724	30	4.4293112	30	4.6064885	0.226
40	5.6488965	40	5.9057483	40	6.1419846	0.514
50	7.0611206	50	7.3821854	50	7.6774808	1.816
60	8.4733447	60	8.8586225	60	9.2129769	5.702
70	9.8855688	70	10.33506 PM10	70	10.748473 PM10	21.348
90	12.710017 PM10	90	13.287934	90	13.819465	49.812
110	15.534465	110	16.240808	110	16.890458	70.509
130	18.358914	130	19.193682	130	19.96145	82.023
150	21.183362	150	22.146556	150	23.032442	88.012
180	25.420034	180	26.575867	180	27.638931	91.032
210	29.656707	210	31.005179 TSP/PM30	210	32.245419 TSP/PM30	92.468
240	33.893379 TSP/PM30	240	35.43449	240	36.851908	94.091
270	38.130051	270	39.863801	270	41.458396	94.689
300	42.366724	300	44.293112	300	46.064885	96.288
350	49.427844	350	51.675298	350	53.742365	97.011
400	56.488965	400	59.057483	400	61.419846	98.34
450	63.550085	450	66.439668	450	69.097327	99.071
500	70.611206	500	73.821854	500	76.774808	99.071
600	84.733447	600	88.586225	600	92.129769	100

Size Distribution

10,000 ppm (TDS)		11,000 ppm		12,000 ppm		% Mass
d_d	d_p	d_d	d_p	d_d	d_p	≤
10	1.5903253	10	1.6416091	10	1.6898701	0
20	3.1806507 PM2.5	20	3.2832181 PM2.5	20	3.3797403 PM2.5	0.196
30	4.770976	30	4.9248272	30	5.0696104	0.226
40	6.3613013	40	6.5664363	40	6.7594806	0.514
50	7.9516267	50	8.2080453	50	8.4493507	1.816
60	9.541952	60	9.8496544	60	10.139221 PM10	5.702
70	11.132277 PM10	70	11.491263 PM10	70	11.829091	21.348
90	14.312928	90	14.774482	90	15.208831	49.812
110	17.493579	110	18.0577	110	18.588572	70.509
130	20.674229	130	21.340918	130	21.968312	82.023
150	23.85488	150	24.624136	150	25.348052	88.012
180	28.625856	180	29.548963	180	30.417663 TSP/PM30	91.032
210	33.396832 TSP/PM30	210	34.47379 TSP/PM30	210	35.487273	92.468
240	38.167808	240	39.398618	240	40.556883	94.091
270	42.938784	270	44.323445	270	45.626494	94.689
300	47.70976	300	49.248272	300	50.696104	96.288
350	55.661387	350	57.456317	350	59.145455	97.011
400	63.613013	400	65.664363	400	67.594806	98.34
450	71.56464	450	73.872408	450	76.044156	99.071
500	79.516267	500	82.080453	500	84.493507	99.071
600	95.41952	600	98.496544	600	101.39221	100

References

1. Calculating Realistic PM10 Emissions from Cooling Towers, Abstract No. 216 Session No. AS-1b, J. Reisman and G. Frisbie, Greyston Environmental Consultants, Inc.
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Air

EPA

Protocol for Equipment Leak Emission Estimates

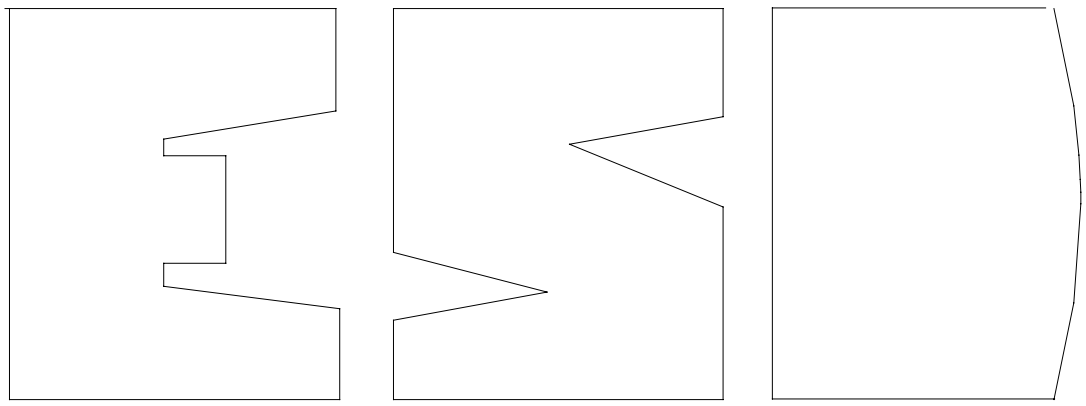


TABLE 2-4. OIL AND GAS PRODUCTION OPERATIONS AVERAGE EMISSION FACTORS (kg/hr/source)

Equipment Type	Service[a]	Emission Factor (kg/hr/source)[b]
Valves	Gas	4.5E-03
	Heavy Oil	8.4E-06
	Light Oil	2.5E-03
	Water/Oil	9.8E-05
Pump seals	Gas	2.4E-03
	Heavy Oil	NA
	Light Oil	1.3E-02
	Water/Oil	2.4E-05
Others[c]	Gas	8.8E-03
	Heavy Oil	3.2E-05
	Light Oil	7.5E-03
	Water/Oil	1.4E-02
Connectors	Gas	2.0E-04
	Heavy Oil	7.5E-06
	Light Oil	2.1E-04
	Water/Oil	1.1E-04
Flanges	Gas	3.9E-04
	Heavy Oil	3.9E-07
	Light Oil	1.1E-04
	Water/Oil	2.9E-06
Open-ended lines	Gas	2.0E-03
	Heavy Oil	1.4E-04
	Light Oil	1.4E-03
	Water/Oil	2.5E-04

[a]Water/Oil emission factors apply to water streams in oil service with a water content greater than 50%, from the point of origin to the point where the water content reaches 99%. For water streams with a water content greater than 99%, the emission rate is considered negligible.

[b]These factors are for total organic compound emission rates (including non-VOC's such as methane and ethane) and apply to light crude, heavy crude, gas plant, gas production, and off shore facilities. "NA" indicates that not enough data were available to develop the indicated emission factor.

[c]The "other" equipment type was derived from compressors, diaphrams, drains, dump arms, hatches, instruments, meters, pressure relief valves, polished rods, relief valves, and vents. This "other" equipment type should be applied for any equipment type other than connectors, flanges, open-ended lines, pumps, or valves.

Air Permit Technical Guidance for Chemical Sources

Fugitive Guidance

APDG 6422

Air Permits Division Texas Commission on Environmental Quality

June 2018

Table V: Control Efficiencies for LDAR

Equipment/Service	28M	28RCT	28VHP	28MID	28LAER	28CNTQ	28CNTA	28PI	28AVO[9]
Valves[1]									97%
Gas/Vapor	75%	97%	97%	97%	97%			30%	
Light Liquid	75%	97%	97%	97%	97%			30%	
Heavy Liquid[5]	0%[6]	0%[6]	0%[6]	0%[6]	30%[6, 8]			30%[8]	
Pumps[1]									93%
Light Liquid	75%	75%	85%	93%	93%			30%	
Heavy Liquid[5]	0%	0%[7]	0%[7]	0%[8, 10]	30%[8]			30%[8]	
Flanges/Connectors[1]	30%	30%	30%	30%				30%	97%
Gas/Vapor					97%	97%	75%		
Light Liquid					97%	97%	75%		
Heavy Liquid[8]					30%	30%	30%		
Compressors[1]	75%	75%	85%	95%	95%			30%	95%
Relief Valves[1, 2] (Gas/Vapor)	75%	97%	97%	97%	97%			30%	97%
Sampling Connection[3] (pounds per hour per sample taken)	0%	0%	0%	0%	0%			0%	0%
Open Ended Lines[1, 4]									

It should be noted in the application and added to the permit conditions if any of the footnotes are applicable. For example, if components in heavy liquid service are monitored, then the application should include the monitored concentration and the concentration of saturation, in ppmv and such monitoring will be added as a separate condition.

Endnotes Table V

1 **Control efficiencies apply only to components that are actually monitored. Control efficiencies do not apply to components that are difficult or unsafe-to-monitor on the standard schedule. However, difficult-to-monitor gas or light liquid valves under the 28RCT, 28VHP, 28MID, or 28LAER programs that are monitored once per year may apply a 75% reduction credit.**

2 **100% control may be taken if a relief valve vents to an operating control device or if it is equipped with a rupture disc and a pressure-sensing device between the valve and disc to monitor for disc integrity. For new facilities, BACT guidelines generally require that all relief valves vent to a control device. When there are safety reasons that the relief valve cannot achieve 100% control, the relief valve can be monitored under the LDAR programs for the credit listed. This monitoring must be performed regardless of whether the relief valve is considered accessible, difficult-to-monitor or unsafe-to-monitor. Relief valves that do not achieve 100% control should not be built in locations that are unsafe-to-monitor.**

3 **Sampling connection control efficiencies are covered under other equipment and services. Sampling emissions are based on the number of samples taken per year as opposed to the number of connections. Fugitives for a closed loop sampling system are based on the component count.**

4 **Good design criteria for special chemicals handling and most LDAR programs require open-ended lines to be equipped with an appropriately sized cap, blind flange, plug, or a second valve. If so equipped, open-ended lines may be given a 100% control credit. Regardless of the lines given 100% credit, these lines should be mentioned in permit applications. Exceptions to the LDAR program criteria may be made for safety reasons with the approval of TCEQ management.**

[5] **Monitoring components in heavy liquid service using an instrument is not required by any of the 28 Series LDAR programs. If monitored with an instrument, the applicant must demonstrate that the VOC being monitored has sufficient vapor pressure to allow for reduction credit. Monitoring near or below background concentration is unreasonable and additional credit is not given for monitoring generic VOC below 500 ppmv. Credit will be given in cases where a specific compound is monitored below 500 ppmv when sufficient demonstration has been made of the ability to monitor at the specified concentration and there is no concern about the monitoring concentration being close to the background concentration. No credit may be taken if the concentration at saturation is below the leak definition of the monitoring program (i.e. (0.044 psia/14.7 psia) x 10^6 = 2,993 ppmv versus leak definition = 10,000 ppmv).**

[6] **If the concentration at saturation is greater than the leak definition. Contact the TCEQ to determine whether valves in heavy liquid service may be given a 97% credit if monitored at 500 ppmv**

[7] **If the concentration at saturation is greater than the leak definition. Contact the TCEQ to determine whether pumps in heavy liquid service may be given a 85% reduction credit if monitored at 2,000 ppmv.**

[8] **Ultra heavy liquid with a vapor pressure < 0.0147 psia at operating temperature may receive higher emission reduction credit (matching the credit of 28AVO) provided a 28PI inspection program is performed on these components.**

[9] **Audio, Visual and Olfactory (AVO) – AVO credit is based on the chemical constituent, not vapor pressure or service type. This program (28AVO) is approved for chlorine, ammonia, hydrogen sulfide, hydrogen fluoride, mercaptans, and hydrogen cyanide only.**

[10] **If the concentration at saturation is greater than the leak definition. Contact the TCEQ to determine whether pumps in heavy liquid service may be given a 93% credit if monitored at 500 ppmv.**

5.2 Transportation And Marketing Of Petroleum Liquids[1-3]

5.2.1 General

The transportation and marketing of petroleum liquids involve many distinct operations, each of which represents a potential source of evaporation loss. Crude oil is transported from production operations to a refinery by tankers, barges, rail tank cars, tank trucks, and pipelines. Refined petroleum products are conveyed to fuel marketing terminals and petrochemical industries by these same modes. From the fuel marketing terminals, the fuels are delivered by tank trucks to service stations, commercial accounts, and local bulk storage plants. The final destination for gasoline is usually a motor vehicle gasoline tank. Similar distribution paths exist for fuel oils and other petroleum products. A general depiction of these activities is shown in Figure 5.2-1.

5.2.2 Emissions And Controls

Evaporative emissions from the transportation and marketing of petroleum liquids may be considered, by storage equipment and mode of transportation used, in four categories:

1. Rail tank cars, tank trucks, and marine vessels: loading, transit, and ballasting losses.
2. Service stations: bulk fuel drop losses and underground tank breathing losses.
3. Motor vehicle tanks: refueling losses.
4. Large storage tanks: breathing, working, and standing storage losses. (See Chapter 7, "Liquid Storage Tanks".)

Evaporative and exhaust emissions are also associated with motor vehicle operation, and these topics are discussed in AP-42 *Volume II: Mobile Sources*.

5.2.2.1 Rail Tank Cars, Tank Trucks, And Marine Vessels -

Emissions from these sources are from loading losses, ballasting losses, and transit losses.

5.2.2.1.1 Loading Losses -

Loading losses are the primary source of evaporative emissions from rail tank car, tank truck, and marine vessel operations. Loading losses occur as organic vapors in "empty" cargo tanks are displaced to the atmosphere by the liquid being loaded into the tanks. These vapors are a composite of (1) vapors formed in the empty tank by evaporation of residual product from previous loads, (2) vapors transferred to the tank in vapor balance systems as product is being unloaded, and (3) vapors generated in the tank as the new product is being loaded. The quantity of evaporative losses from loading operations is, therefore, a function of the following parameters:

- Physical and chemical characteristics of the previous cargo;
- Method of unloading the previous cargo;
- Operations to transport the empty carrier to a loading terminal;
- Method of loading the new cargo; and
- Physical and chemical characteristics of the new cargo.

The principal methods of cargo carrier loading are illustrated in Figure 5.2-2, Figure 5.2-3, and Figure 5.2-4. In the splash loading method, the fill pipe dispensing the cargo is lowered only part way into the cargo tank. Significant turbulence and vapor/liquid contact occur during the splash

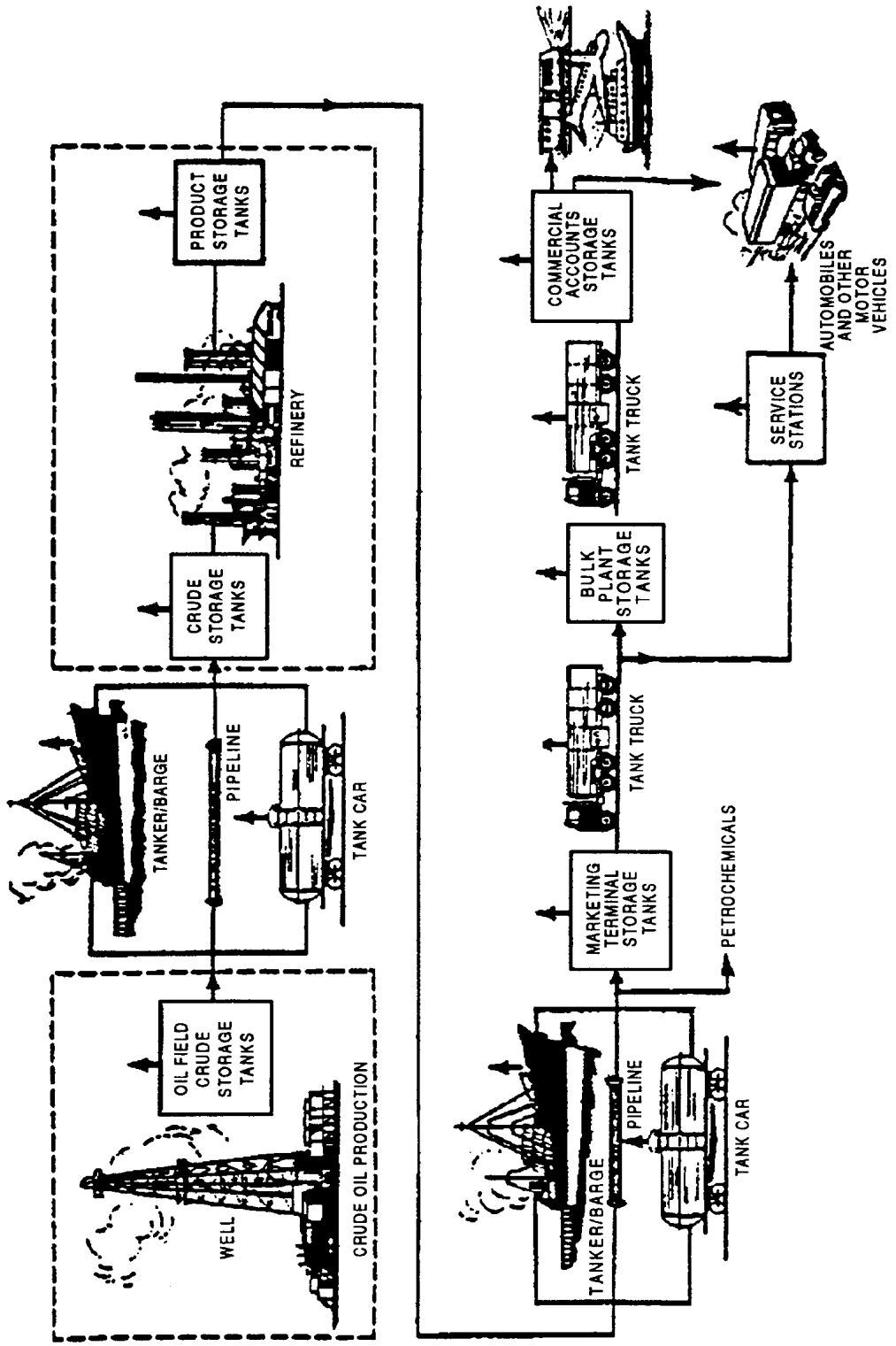


Figure 5.2-1. Flow sheet of petroleum production, refining, and distribution systems. (Points of organic emissions are indicated by vertical arrows.)

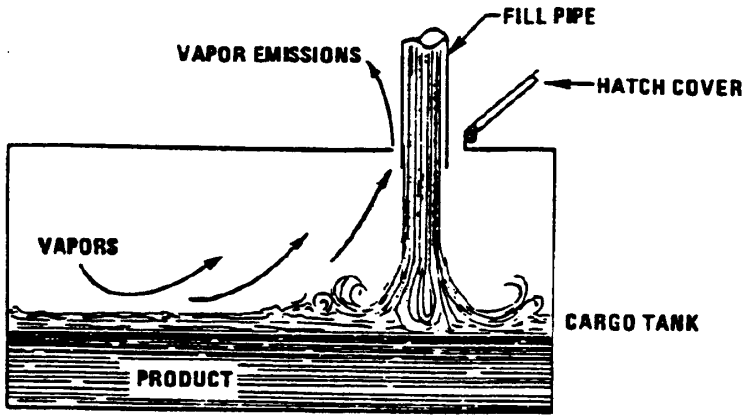


Figure 5.2-2. Splash loading method.

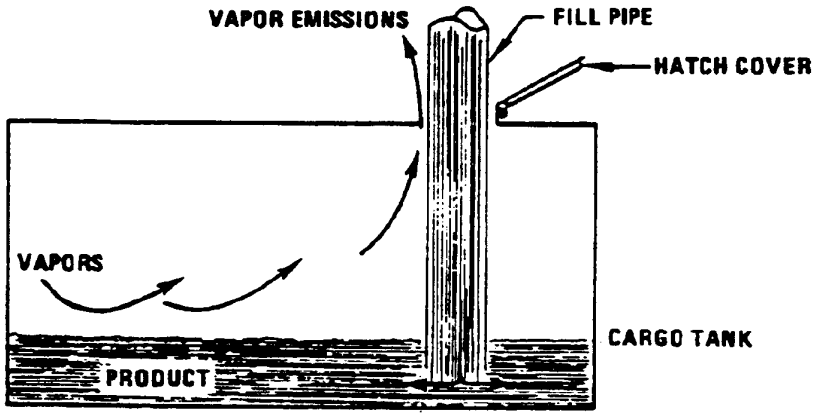


Figure 5.2-3. Submerged fill pipe.

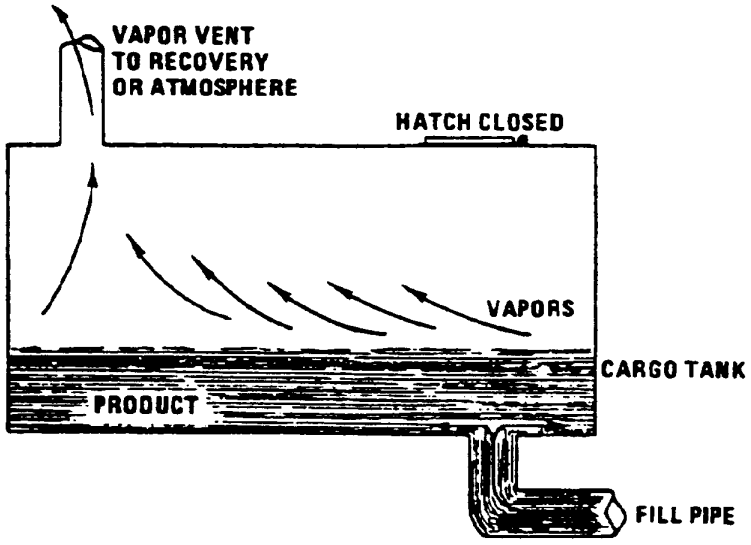


Figure 5.2-4. Bottom loading.

loading operation, resulting in high levels of vapor generation and loss. If the turbulence is great enough, liquid droplets will be entrained in the vented vapors.

A second method of loading is submerged loading. Two types are the submerged fill pipe method and the bottom loading method. In the submerged fill pipe method, the fill pipe extends almost to the bottom of the cargo tank. In the bottom loading method, a permanent fill pipe is attached to the cargo tank bottom. During most of submerged loading by both methods, the fill pipe opening is below the liquid surface level. Liquid turbulence is controlled significantly during submerged loading, resulting in much lower vapor generation than encountered during splash loading.

The recent loading history of a cargo carrier is just as important a factor in loading losses as the method of loading. If the carrier has carried a nonvolatile liquid such as fuel oil, or has just been cleaned, it will contain vapor-free air. If it has just carried gasoline and has not been vented, the air in the carrier tank will contain volatile organic vapors, which will be expelled during the loading operation along with newly generated vapors.

Cargo carriers are sometimes designated to transport only one product, and in such cases are practicing "dedicated service". Dedicated gasoline cargo tanks return to a loading terminal containing air fully or partially saturated with vapor from the previous load. Cargo tanks may also be "switch loaded" with various products, so that a nonvolatile product being loaded may expel the vapors remaining from a previous load of a volatile product such as gasoline. These circumstances vary with the type of cargo tank and with the ownership of the carrier, the petroleum liquids being transported, geographic location, and season of the year.

One control measure for vapors displaced during liquid loading is called "vapor balance service", in which the cargo tank retrieves the vapors displaced during product unloading at bulk plants or service stations and transports the vapors back to the loading terminal. Figure 5.2-5 shows a tank truck in vapor balance service filling a service station underground tank and taking on displaced gasoline vapors for return to the terminal. A cargo tank returning to a bulk terminal in vapor balance service normally is saturated with organic vapors, and the presence of these vapors at the start of submerged loading of the tanker truck results in greater loading losses than encountered during nonvapor balance, or "normal", service. Vapor balance service is usually not practiced with marine vessels, although some vessels practice emission control by means of vapor transfer within their own cargo tanks during ballasting operations, discussed below.

Emissions from loading petroleum liquid can be estimated (with a probable error of ±30 percent)[4] using the following expression:

$$L_L = 12.46 \frac{SPM}{T} \quad (1)$$

where:

L_L = loading loss, pounds per 1000 gallons ($lb/10^3$ gal) of liquid loaded

S = a saturation factor (see Table 5.2-1)
P = true vapor pressure of liquid loaded, pounds per square inch absolute (psia) (see Section 7.1, "Organic Liquid Storage Tanks")
M = molecular weight of vapors, pounds per pound-mole (lb/lb-mole) (see Section 7.1, "Organic Liquid Storage Tanks")
T = temperature of bulk liquid loaded, °R (°F + 460)

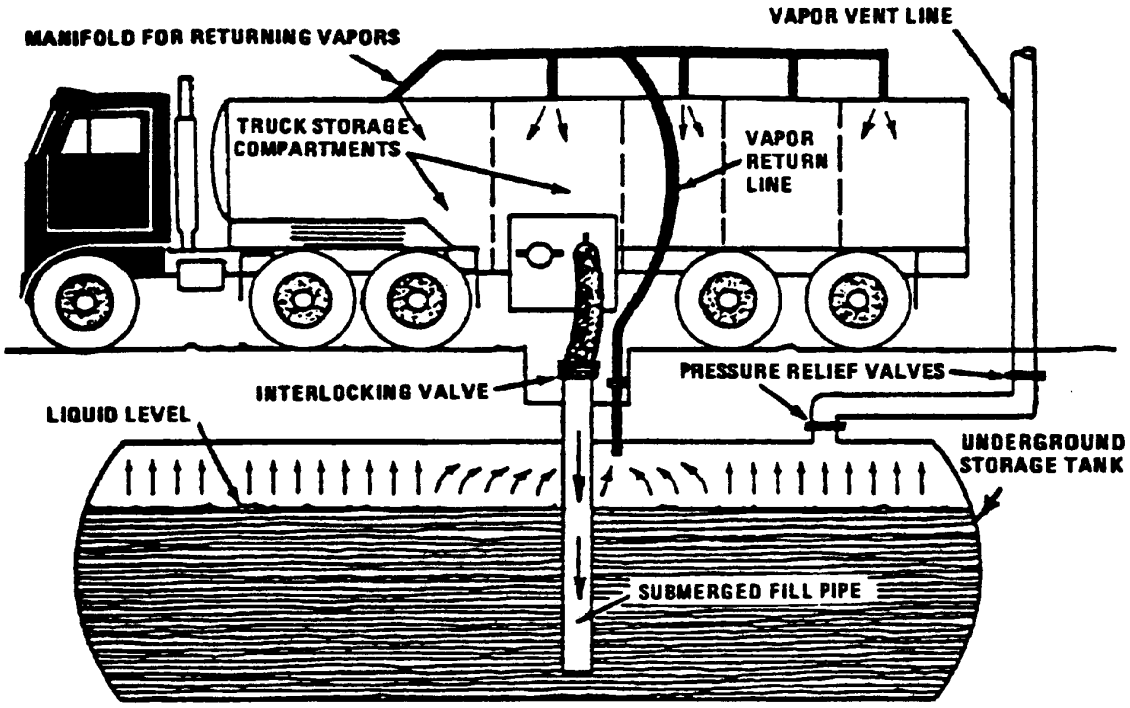


Figure 5.2-5. Tank truck unloading into a service station underground storage tank and practicing "vapor balance" form of emission control.

Table 5.2-1. SATURATION (S) FACTORS FOR CALCULATING PETROLEUM LIQUID LOADING LOSSES

Cargo Carrier	Mode Of Operation	S Factor
Tank trucks and rail tank cars	Submerged loading of a clean cargo tank	0.50
	Submerged loading: dedicated normal service	0.60
	Submerged loading: dedicated vapor balance service	1.00
	Splash loading of a clean cargo tank	1.45
	Splash loading: dedicated normal service	1.45
	Splash loading: dedicated vapor balance service	1.00
Marine vessels[a]	Submerged loading: ships	0.2
	Submerged loading: barges	0.5

[a] For products other than gasoline and crude oil. For marine loading of gasoline, use factors from Table 5.2-2. For marine loading of crude oil, use Equations 2 and 3 and Table 5.2-3.

The saturation factor, S, represents the expelled vapor's fractional approach to saturation, and it accounts for the variations observed in emission rates from the different unloading and loading methods. Table 5.2-1 lists suggested saturation factors.

Emissions from controlled loading operations can be calculated by multiplying the uncontrolled emission rate calculated in Equation 1 by an overall reduction efficiency term:

$$\left(1 - \frac{\text{eff}}{100}\right)$$

The overall reduction efficiency should account for the capture efficiency of the collection system as well as both the control efficiency and any downtime of the control device. Measures to reduce loading emissions include selection of alternate loading methods and application of vapor recovery equipment. The latter captures organic vapors displaced during loading operations and recovers the vapors by the use of refrigeration, absorption, adsorption, and/or compression. The recovered product is piped back to storage. Vapors can also be controlled through combustion in a thermal oxidation unit, with no product recovery. Figure 5.2-6 demonstrates the recovery of gasoline vapors from tank trucks during loading operations at bulk terminals. Control efficiencies for the recovery units range from 90 to over 99 percent, depending on both the nature of the vapors and the type of control equipment used.[5-6] However, not all of the displaced vapors reach the control device, because of leakage from both the tank truck and collection system. The collection efficiency should be assumed to be 99.2 percent for tanker trucks passing the MACT-level annual leak test (not more than 1 inch water column pressure change in 5 minutes after pressurizing to 18 inches water followed by pulling a vacuum of 6 inches water).[7] A collection efficiency of 98.7 percent (a 1.3 percent leakage rate) should be assumed for trucks passing the NSPS-level annual test (3 inches pressure change) A collection efficiency of 70 percent should be assumed for trucks not passing one of these annual leak tests[6].

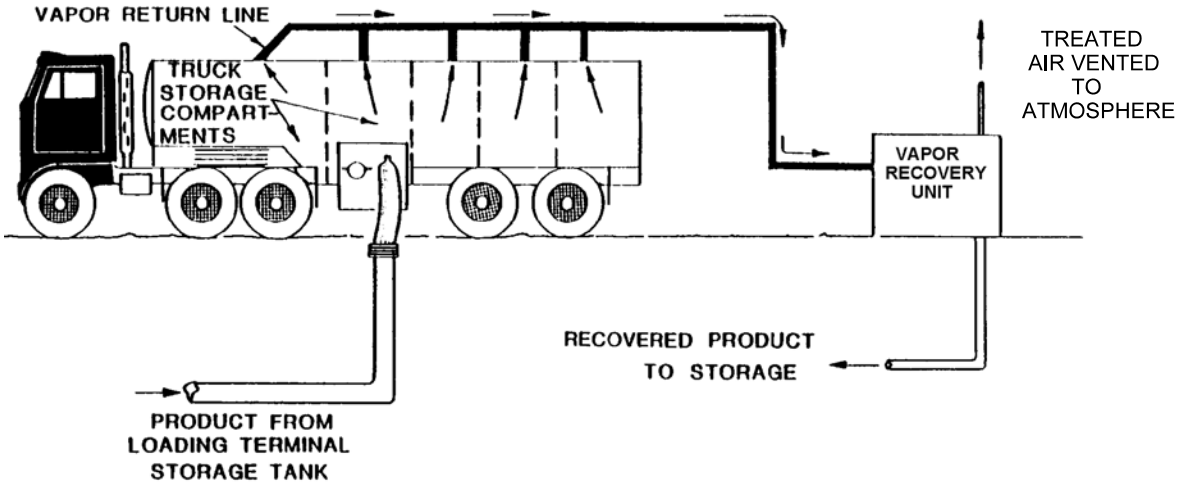


Figure 5.2-6. Tank truck loading with vapor recovery.

Sample Calculation -

Loading losses (L_L) from a gasoline tank truck in dedicated vapor balance service and practicing vapor recovery would be calculated as follows, using Equation 1:

Design basis -

Cargo tank volume is 8000 gal
Gasoline Reid vapor pressure (RVP) is 9 psia
Product temperature is 80°F
Vapor recovery efficiency is 95 percent
Vapor collection efficiency is 98.7 percent (NSPS-level annual leak test)

Loading loss equation -

$$L_L = 12.46 \frac{SPM}{T}\left(1 - \frac{eff}{100}\right)$$

where:

S = saturation factor (see Table 5.2-1) - 1.00
P = true vapor pressure of gasoline = 6.6 psia
M = molecular weight of gasoline vapors = 66
T = temperature of gasoline = 540°R
eff = overall reduction efficiency (95 percent control x 98.7 percent collection) = 94 percent

$$L_L = 12.46 \frac{(1.00)(6.6)(66)}{540}\left(1 - \frac{94}{100}\right)$$

$$= 0.60 \text{ lb}/10^3 \text{ gal}$$

Total loading losses are:

$$(0.60 \text{ lb}/10^3 \text{ gal})(8.0 \times 10^3 \text{ gal}) = 4.8 \text{ pounds (lb)}$$

Measurements of gasoline loading losses from ships and barges have led to the development of emission factors for these specific loading operations.[8] These factors are presented in Table 5.2-2 and should be used instead of Equation 1 for gasoline loading operations at marine terminals. Factors are expressed in units of milligrams per liter (mg/L) and pounds per 1000 gallons (lb/10^3 gal).

Table 3.2-2. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE LEAN-BURN ENGINES[a]
(SCC 2-02-002-54)

Pollutant	Emission Factor (lb/MMBtu)[b] (fuel input)	Emission Factor Rating
Criteria Pollutants and Greenhouse Gases		
NO_x[c] 90 - 105% Load	4.08 E+00	B
NO_x[c] <90% Load	8.47 E-01	B
CO[c] 90 - 105% Load	3.17 E-01	C
CO[c] <90% Load	5.57 E-01	B
CO_2[d]	1.10 E+02	A
SO_2[e]	5.88 E-04	A
TOC[f]	1.47 E+00	A
Methane[g]	1.25 E+00	C
VOC[h]	1.18 E-01	C
PM10 (filterable)[i]	7.71 E-05	D
PM2.5 (filterable)[i]	7.71 E-05	D
PM Condensable[j]	9.91 E-03	D
Trace Organic Compounds		
1,1,2,2-Tetrachloroethane[k]	<4.00 E-05	E
1,1,2-Trichloroethane[k]	<3.18 E-05	E
1,1-Dichloroethane	<2.36 E-05	E
1,2,3-Trimethylbenzene	2.30 E-05	D
1,2,4-Trimethylbenzene	1.43 E-05	C
1,2-Dichloroethane	<2.36 E-05	E
1,2-Dichloropropane	<2.69 E-05	E
1,3,5-Trimethylbenzene	3.38 E-05	D
1,3-Butadiene[k]	2.67E-04	D
1,3-Dichloropropene[k]	<2.64 E-05	E
2-Methylnaphthalene[k]	3.32 E-05	C
2,2,4-Trimethylpentane[k]	2.50 E-04	C
Acenaphthene[k]	1.25 E-06	C

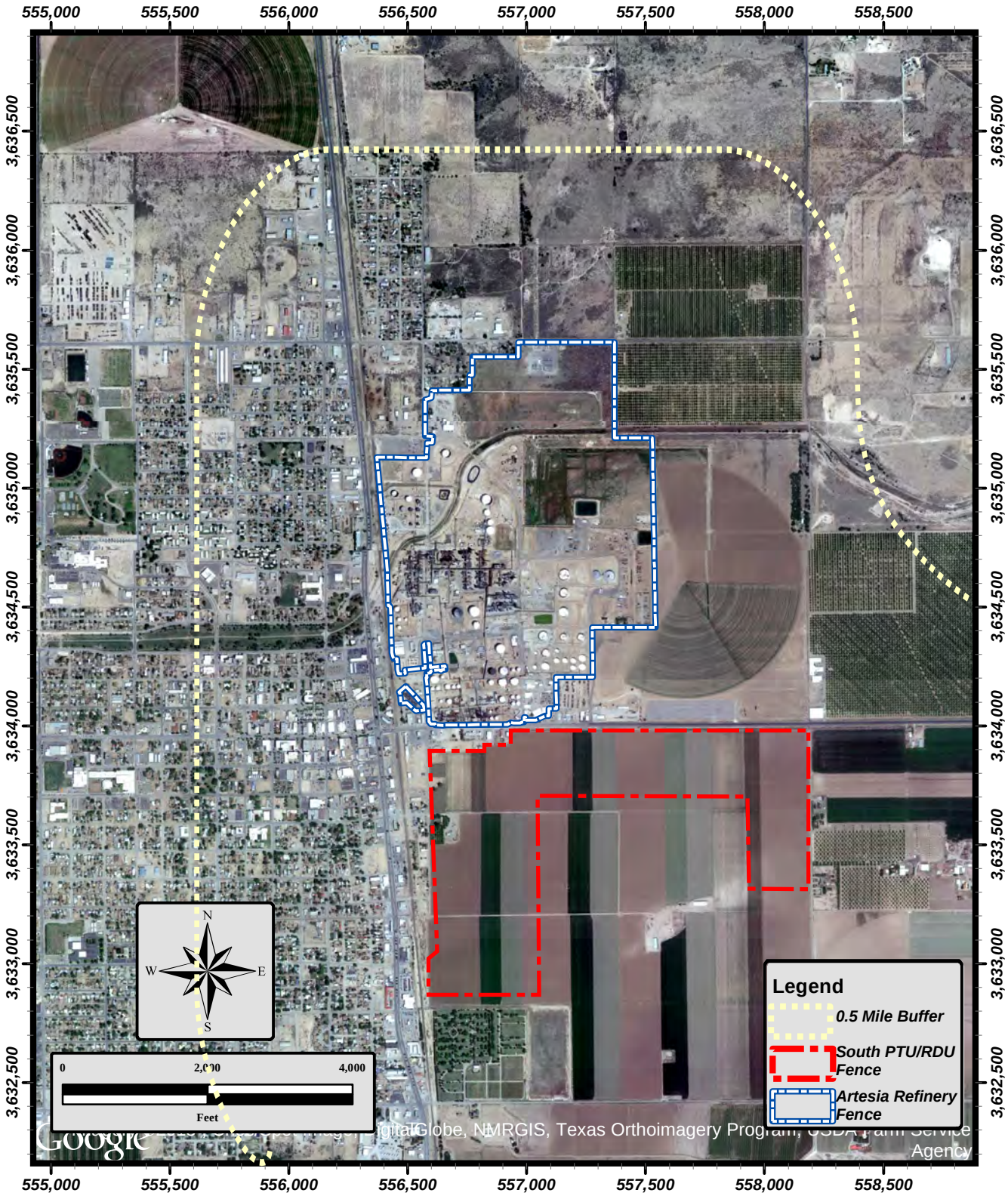
Section 8

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 Figure 2 Area Map and Figure 3 South Equipment Layout are provided in this section. The Figure 2 Area Map shows the fence lines for the Renewable Diesel Unit, which includes the Artesia Refinery fence line to the north and the South PTU/RDU fence line to the south. The Figure 3 South Equipment Layout shows the locations of the Renewable Diesel Unit emission units in the South PTU/RDU property. The Figure 1 Unit Location Map, provided in Section 5, shows the locations of the Renewable Diesel Unit emission units to the north within the Artesia Refinery fence line.



Grid Presented is UTM Zone 13, NAD 1983

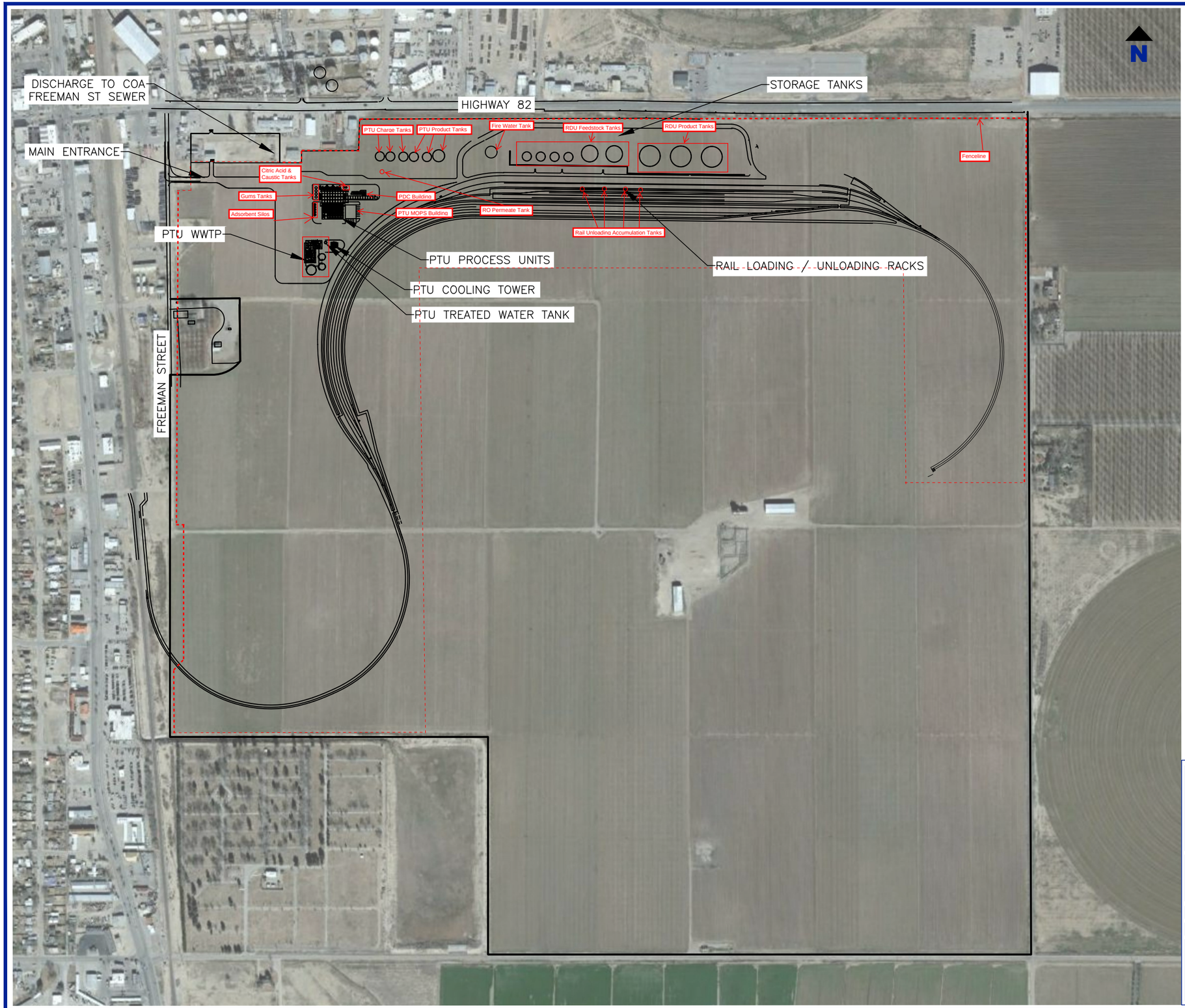
TASCOSA ALLIANCE COMPANY

HOLLYFRONTIER.

FIGURE 2 AREA MAP

PTU and RDU Source
Artesia, New Mexico

from USGS Quadrangle Artesia, New Mexico
Ground Condition Depicted May 2014
Digital Data Courtesy of Google Earth



LEGEND

NOTES

ACTUAL LOCATIONS MAY VARY DEPENDING ON SITE CONDITIONS.

0 600 1,200 1,800 FT.

Renewable Diesel Unit
Figure 3 South Equipment Layout
Artesia, New Mexico

Drawing
Artesia Full PTU RDU Plot Plan

Date	March 11, 2021	Scale	AS SHOWN	Map No.	7
File Name	HFNR RDU Aerial Map	Project No.	122.01368.00026		

SLR

Drawing path: N:\Portland\Figures\HollyFrontier\Artesia\HFNR RDU Aerial Map.dwg

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.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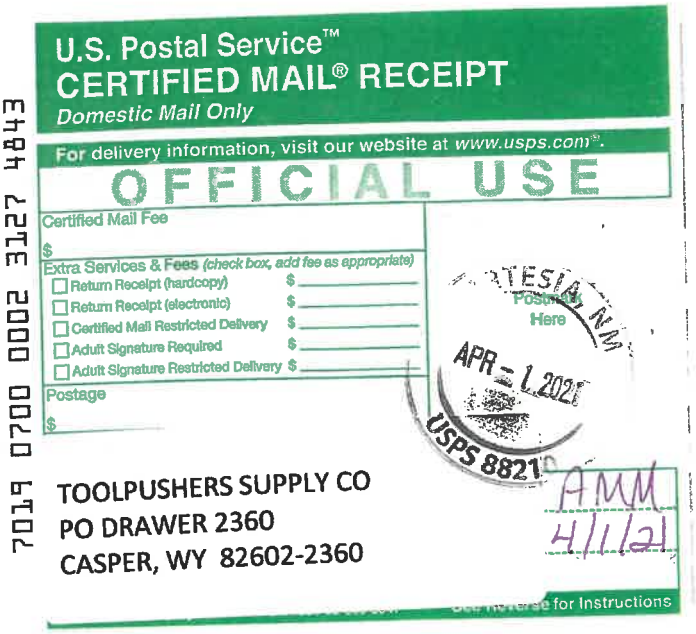
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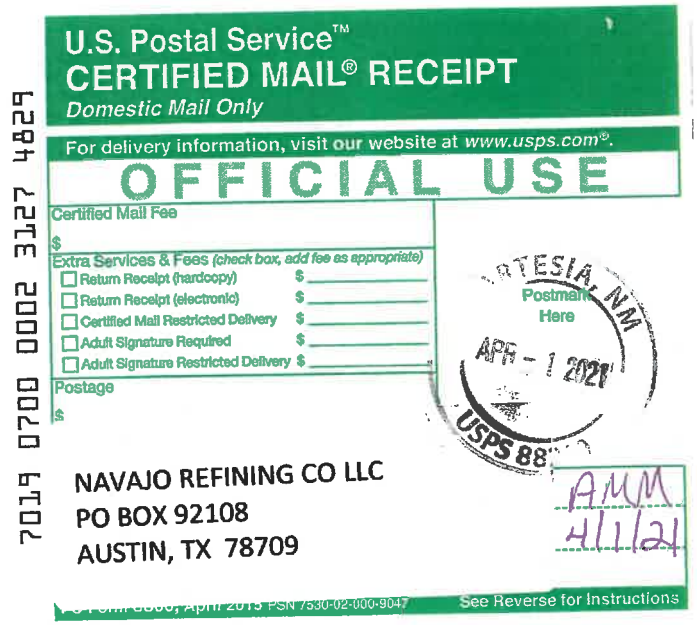
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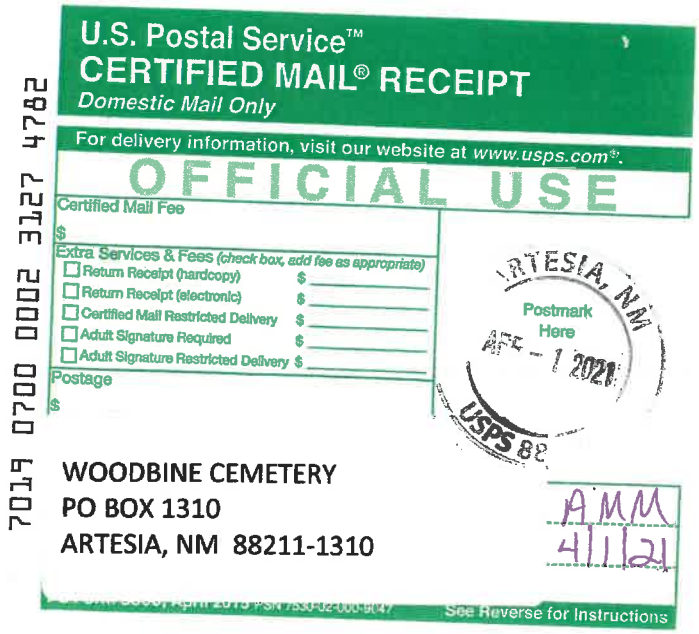
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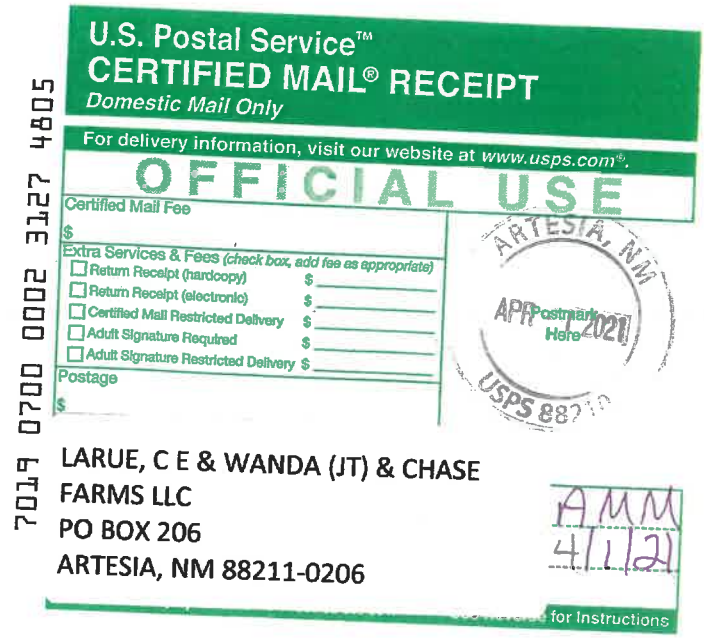
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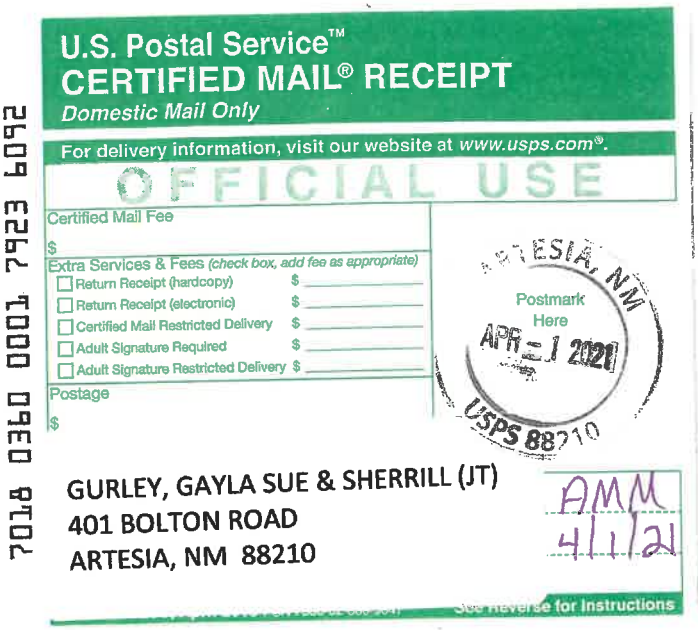
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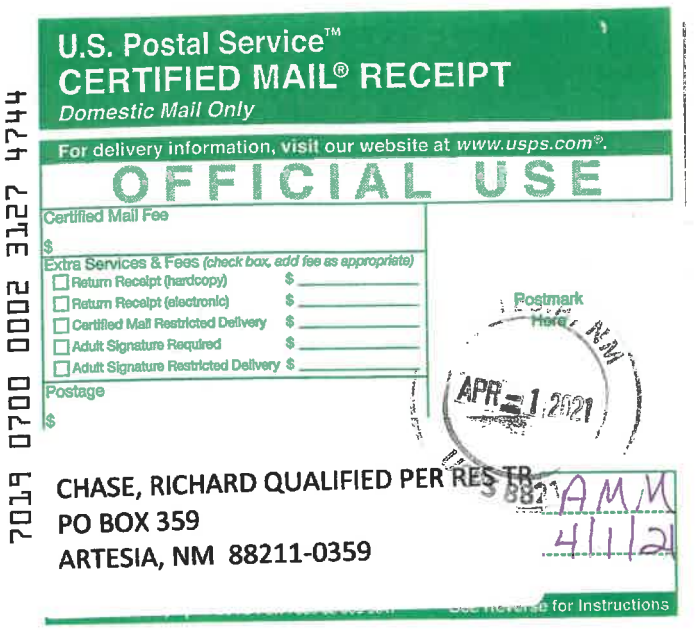
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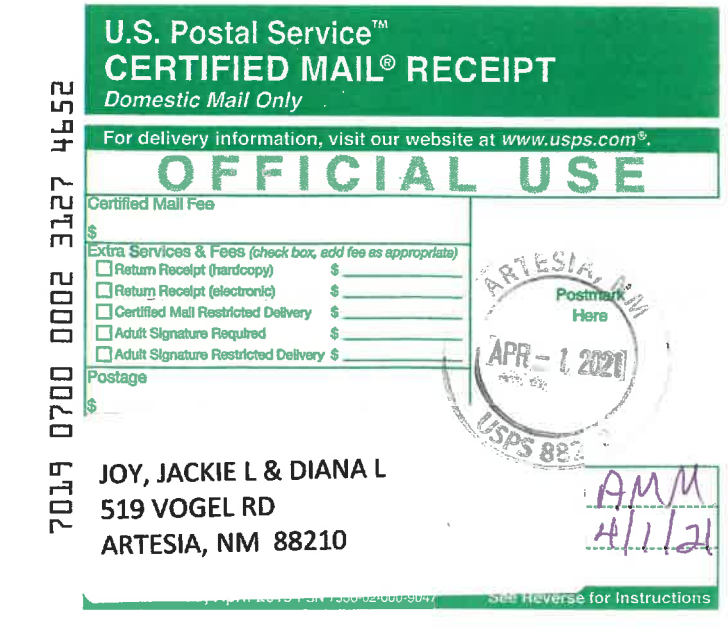
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JOY, JACKIE L & DIANA L
519 VOGEL RD
ARTESIA, NM 88210
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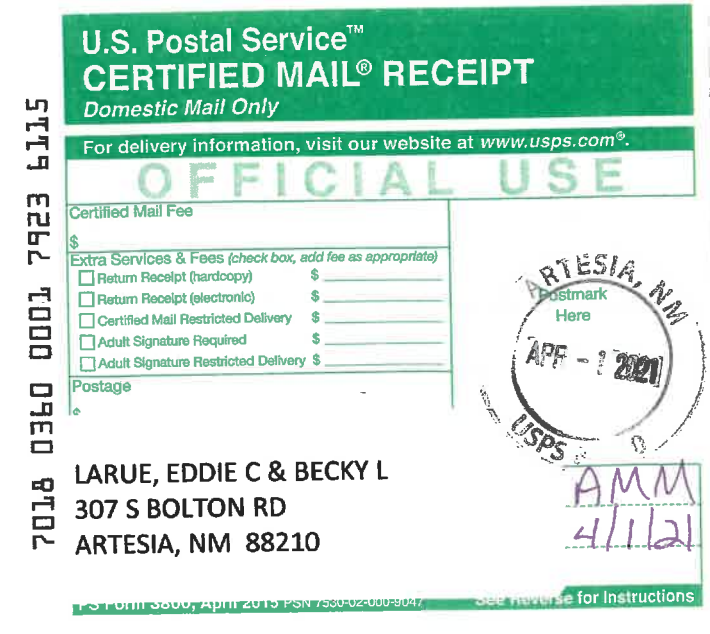
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ARTESIA, NM 88211-0100

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EHW LLC & VUKSICH, JENNIE WARD &
SIMS, SARA WARD (N-JT)
101 S 4TH ST
ARTESIA, NM 88210

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HOLLYFRONTIER NAVAJO REFINING LLC
501 E MAIN ST
ARTESIA, NM 88210

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CITY OF ARTESIA
511 W TEXAS AVENUE
ARTESIA, NM 88210

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4/1/21

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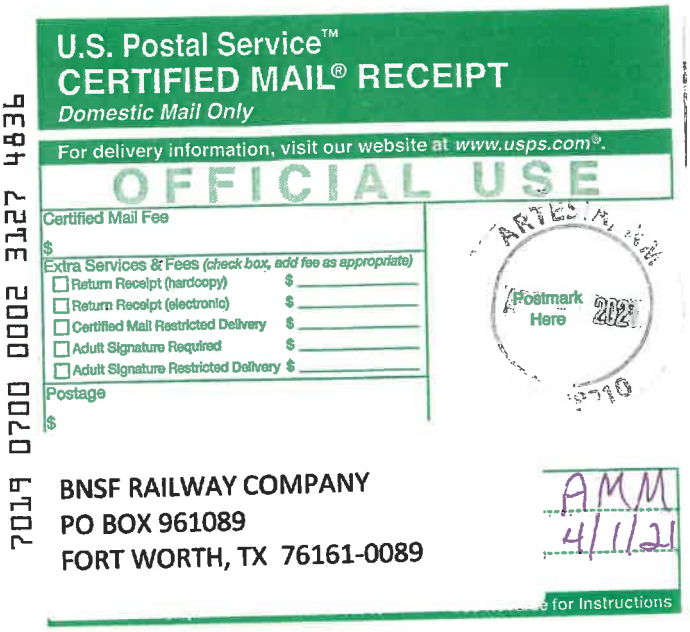

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BNSF RAILWAY COMPANY
PO BOX 961089
FORT WORTH, TX 76161-0089

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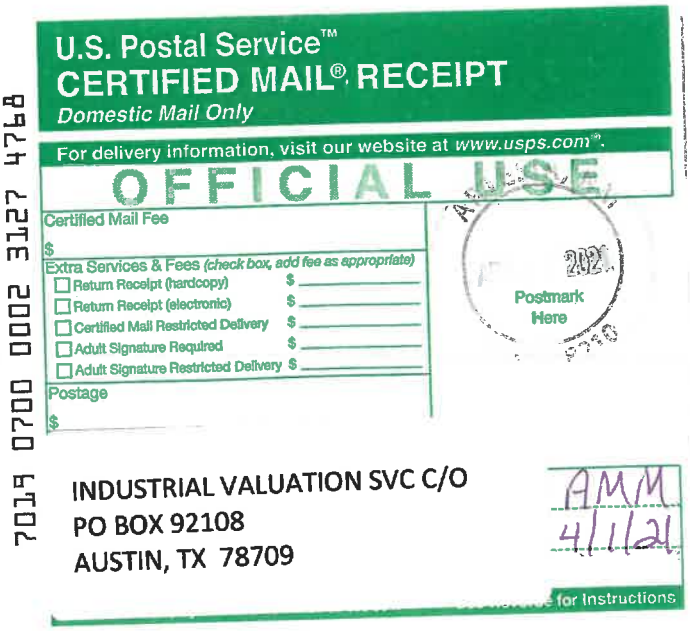
CHASE FARMS
CHASE, RICHARD L
PO BOX 658
ARTESIA, NM 88211-0658

AMM
4/1/21

for Instructions



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INDUSTRIAL VALUATION SVC C/O
PO BOX 92108
AUSTIN, TX 78709

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4/1/21

for Instructions

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MAR 30 2021
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Ms. Aubrey Hobson
City of Artesia – City Clerk
511 W. Texas Avenue
Artesia, NM 88210

AMM
3/30/21

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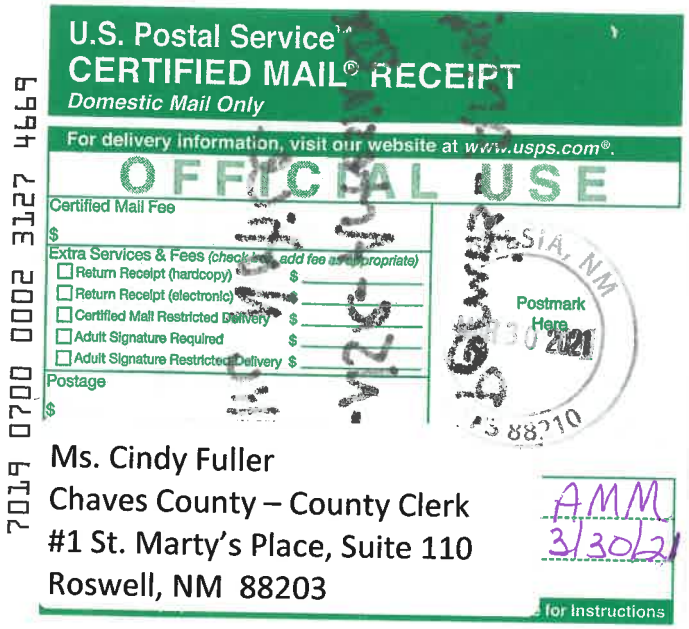
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7019 0700 0002 3127 4669
Ms. Cindy Fuller
Chaves County – County Clerk
#1 St. Marty's Place, Suite 110
Roswell, NM 88203
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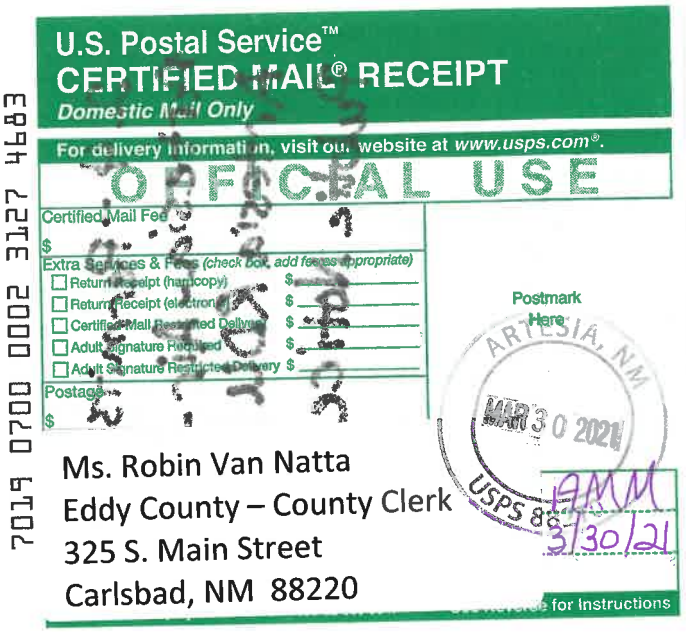
3/30/21
for Instructions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ARTESIA, NM
MAR 30 2021
USPS
7019 0700 0002 3127 4683
Ms. Robin Van Natta
Eddy County – County Clerk
325 S. Main Street
Carlsbad, NM 88220
for instructions

3/30/21

Municipalities, Counties, and Tribes Provided Notice by Certified Mail

Entity	Contact/Office	Mailing Address
City of Artesia	Ms. Aubrey Hobson, City Clerk	511 W. Texas Avenue Artesia, NM 88210
Eddy County	Ms. Robin Van Natta Eddy County - County Clerk	325 S. Main Street Carlsbad, NM 88220
Chavez County	Ms. Cindy Fuller Chaves County - County Clerk	#1 St. Marty's Place, Suite 110 Roswell, NM 88203

UPC	ACRES	SITUS	OWNERID	OWNERNAME	OWNERADDRE
					PO BOX 658
4-153-098-510-493	4.30	N BOLTON ROAD	C20160267350	CHASE FARMS LLC	ARTESIA, NM 88211-0658
					PO DRAWER 2360
4-153-098-184-518	0.09	701 E MAIN STREET	C20160007473	TOOLPUSHERS SUPPLY CO	CASPER, WY 82602-2360
					PO DRAWER 2360
4-153-098-195-518	0.07	E MAIN STREET	C20160008358	TOOLPUSHERS SUPPLY CO	CASPER, WY 82602-2360
					PO BOX 1438
4-153-098-215-518	0.07	715 E MAIN STREET	C20160022537	MURDOCK MACHINE SHOP INC	ARTESIA, NM 88211-1438
					PO BOX 1438
4-153-098-217-518	0.07	715 E MAIN STREET	C20160022537	MURDOCK MACHINE SHOP INC	ARTESIA, NM 88211-1438
					PO BOX 1438
4-153-098-220-518	0.09	715 E MAIN STREET	C20160022537	MURDOCK MACHINE SHOP INC	ARTESIA, NM 88211-1438
					PO BOX 1438
4-153-098-223-518	0.11	715 E MAIN STREET	C20160022537	MURDOCK MACHINE SHOP INC	ARTESIA, NM 88211-1438
					PO BOX 92108
4-153-098-255-456	9.05	E MAIN STREET	C20160261966	NAVAJO REFINING CO LLC	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-140-518	0.09	501 E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-143-518	0.07	501 E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-145-518	0.07	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-148-518	0.07	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
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4-153-098-150-518	0.07	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
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4-153-098-153-518	0.07	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
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4-153-098-155-518	0.07	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-158-518	0.07	501 E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-160-518	0.07	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-163-518	0.07	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-165-518	0.07	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-168-518	0.07	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
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4-153-098-170-518	0.07	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-173-518	0.09	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-176-518	0.09	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-240-517	1.01	801 E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
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4-153-098-083-522	1.57	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-330-456	39.98	901 E MAIN STREET	C20160261966	NAVAJO REFINING CO LLC	AUSTIN, TX 78709
					PO BOX 92108
4-153-098-137-518	0.09	E MAIN STREET	C20160023105	NAVAJO REFINING COMPANY LP	AUSTIN, TX 78709
					INDUSTRIAL VALUATION SVC C/O
					PO BOX 92108
4-153-098-173-445	21.27	E MAIN STREET	C20160023132	HOLLYFRONTIER	AUSTIN, TX 78709
					PO BOX 1310
4-153-099-070-455	38.37	106 E HERMOSA DRIVE	OWN778S38	CEMETERY, WOODBINE CEMETERY	ARTESIA, NM 88211-1310
					PO BOX 206
4-154-100-072-056	32.03	1700 E HERMOSA DRIVE	C20160263293	LARUE, C E & WANDA (JT) & CHASE FARMS LI	ARTESIA, NM 88211-0206
					PO BOX 658
4-154-100-146-239	125.09	1802 S VOGEL ROAD	C20160007060	CHASE FARMS LLC	ARTESIA, NM 88211-0658
					401 BOLTON ROAD
4-154-099-012-131	0.87	401 S BOLTON ROAD	OWN763S1215	GURLEY, GAYLA SUE & SHERRILL (JT)	ARTESIA, NM 88210
					CHASE, KARLA NM QUAL PER RES TRST
					PO BOX 359
4-154-099-067-165	15.16	505 S BOLTON ROAD	C20160104845	CHASE, RICHARD QUALIFED PER RES TR	ARTESIA, NM 88211-0359
					PO BOX 66
4-154-099-020-203	2.59	513 S BOLTON ROAD	C20160006870	VILLA, BARBARA MITCHELL & ROBERT F	ARTESIA, NM 88211-0066
					CHASE, KARLA NM QUAL PER RES TRST
					PO BOX 359
4-154-099-101-220	18.26	505 S BOLTON ROAD	C20160104845	CHASE, RICHARD QUALIFED PER RES TR	ARTESIA, NM 88211-0359
					PO BOX 66
4-154-099-020-223	1.09	601 S BOLTON ROAD	C20160006942	VILLA, BARBARA M & ROBERT F	ARTESIA, NM 88211-0066

					PO BOX 66
4-154-099-020-245	1.74	600 S BOLTON ROAD	C20160006941	REHBERG, ROBERT F	ARTESIA, NM 88211-0066
					519 VOGEL RD
4-154-099-133-439	116.19	1101 S BOLTON ROAD	C20160119163	JOY, JACKIE L & DIANA L	ARTESIA, NM 88210-9767
					307 S BOLTON RD
4-154-099-012-102	1.18	307 S BOLTON ROAD	C20160258413	LARUE, EDDIE C & BECKY L	ARTESIA, NM 88210
					PO BOX 658
4-154-099-156-165	8.35	505 S BOLTON ROAD	C20160006817	CHASE FARMS	ARTESIA, NM 88211-0658
					519 VOGEL RD
4-154-099-146-071	87.75	1706 E MAIN STREET	C20160022748	JOY, JACKIE L & DIANA	ARTESIA, NM 88210-9767
					PO BOX 92108
4-153-098-457-387	73.33	E OF 1103 E MAIN STREET	C20160261966	NAVAJO REFINING CO LLC	AUSTIN, TX 78709
					PO BOX 100
4-153-100-432-110	13.24	1399 E HERMOSA DRIVE	OWN730S77	YATES, CHARLOTTE G TRUST	ARTESIA, NM 88211-0100
					101 S 4TH ST
4-153-100-397-048	62.52	E OF 204 E HERMOSA DRIVE	OWN806S141	EHW LLC & VUKSICH, JENNIE WARD & SIMS,	ARTESIA, NM 88210
					101 S 4TH ST
4-153-100-155-100	116.37	204 E HERMOSA DRIVE	OWN806S142	EHW LLC & VUKSICH, JENNIE WARD & SIMS,	ARTESIA, NM 88210
					501 E MAIN ST
4-152-099-528-293	0.75	E OF 811 S FIRST STREET	OWN667S40	HOLLY FRONTIER NAVAJO REFINING LLC	ARTESIA, NM 88210
4-153-099-164-455	21.58	400 E HERMOSA DRIVE	C20170008929	CITY OF ARTESIA	
					501 E MAIN ST
4-153-099-068-075	32.16	N OF 304-1 E GRAND AVENUE	OWN667S22	HOLLY FRONTIER NAVAJO REFINING LLC	ARTESIA, NM 88210
					501 E MAIN STREET
4-153-099-264-264	490.94	S FROM 901 & 1103 E MAIN S	OWN763S1445	HOLLY FRONTIER NAVAJO REFINING LLC	ARTESIA, NM 88210
					501 E MAIN ST
4-153-099-068-202	36.19	S OF 304-2 E GRAND AVENUE	OWN662S19	HOLLY FRONTIER NAVAJO REFINING LLC	ARTESIA, NM 88210
					501 E MAIN ST
4-152-099-526-250	0.63	S OF 510 S FREEMAN AVENUI	OWN667S41	HOLLY FRONTIER NAVAJO REFINING LLC	ARTESIA, NM 88210
					PO BOX 961089
4-153-099-006-479	1.15	FIRST STREET	C20160023100	BNSF RAILWAY COMPANY	FORT WORTH, TX 76161-0089
					PO BOX 961089
4-152-099-521-369	10.45		C20160023111	BNSF RAILWAY COMPANY	FORT WORTH, TX 76161-0089
					PO BOX 961089
4-152-099-499-133	12.06		C20160023111	BNSF RAILWAY COMPANY	FORT WORTH, TX 76161-0089
					CHASE, RICHARD L
					PO BOX 658
4-154-098-132-382	161.13	110 N BOLTON ROAD RURAL	C20160006100	CHASE FARMS	ARTESIA, NM 88211-0658

HOLLYFRONTIER.

April 1, 2021

LARUE, C E & WANDA (JT) & CHASE FARMS LLC
PO BOX 206
ARTESIA, NM 88211

Certified Mail/Return Receipt No.
7019 0700 0002 3127 4805

Re: Public Notice
Application for Minor Source Construction Air Permit
for Renewable Diesel Unit
Artesia Renewable Diesel Company LLC
Artesia, Eddy County, New Mexico

Dear Ms. Neighbor,

Artesia Renewable Diesel Company LLC announces its application submittal to the New Mexico Environment Department for construction of its Renewable Diesel Unit. The expected date of application submittal to the Air Quality Bureau is April 12, 2021.

The exact location for the proposed facility known as, Renewable Diesel Unit, is at 501 E. Main Street, in Artesia, Eddy County, New Mexico within, adjacent to, and just south of the existing Artesia Refinery. .

The proposed construction consists of a cooling tower, a process heater, piping fugitive components, and storage tanks.

The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and tons per year (tpy) and may change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	0.7	1.9
PM_{10}	0.7	1.8
$PM_{2.5}$	0.6	1.7
Sulfur Dioxide (SO_2)	1.5	2.2
Nitrogen Oxides (NO_x)	27.3	12.3
Carbon Monoxide (CO)	15.6	14.8
Volatile Organic Compounds (VOC)	154.1	51.8
Total sum of all Hazardous Air Pollutants (HAPs)	< 1	< 1
Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emissions as Total CO_2e	n/a	23,720

The standard and maximum operating schedule of the facility will be continuous, 7 days a week and a maximum of 52 weeks per year.

Owner and operator of the facility is Artesia Renewable Diesel Company LLC, P.O. Box 159, Artesia, NM 88211-0159.

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html. Other comments and questions may be submitted verbally.

Please refer to the company name and facility name, or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

Attención

Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-476-5557.

Sincerely,

Kawika Tupou
Environmental Manager
HollyFrontier Navajo Refining LLC
501 E. Main Street
Artesia, NM 88210

cc: City of Artesia: Aubrey Hobson, City Clerk
Eddy County: Robin Van Natta, County Clerk
Chaves County: Cindy Fuller, County Clerk
NMED: Melinda Owens, via email to Melinda.Owens@state.nm.us
Joe Kimbrell, via email to Joseph.Kimbrell@state.nm.us
HollyFrontier: P. Miller, T. Wheeler, S. Gokhale, A. Miro
Tascosa: Brian L. Gunzelman, P.E.

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HOLLYFRONTIER.

March 30, 2021

Ms. Aubrey Hobson
City of Artesia - City Clerk
511 W. Texas Avenue
Artesia, NM 88210

Certified Mail/Return Receipt No.
7018 0360 0001 7923 6160

Re: Public Notice
Application for Minor Source Construction Air Permit
for Renewable Diesel Unit
Artesia Renewable Diesel Company LLC
Artesia, Eddy County, New Mexico

Dear Ms. Hobson,

Artesia Renewable Diesel Company LLC announces its application submittal to the New Mexico Environment Department for construction of its Renewable Diesel Unit. The expected date of application submittal to the Air Quality Bureau is April 12, 2021.

The exact location for the proposed facility known as, Renewable Diesel Unit, is at 501 E. Main Street, in Artesia, Eddy County, New Mexico within, adjacent to, and just south of the existing Artesia Refinery. .

The proposed construction consists of a cooling tower, a process heater, piping fugitive components, and storage tanks.

The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and tons per year (tpy) and may change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	0.7	1.9
PM_{10}	0.7	1.8
$PM_{2.5}$	0.6	1.7
Sulfur Dioxide (SO_2)	1.5	2.2
Nitrogen Oxides (NO_x)	27.3	12.3
Carbon Monoxide (CO)	15.6	14.8
Volatile Organic Compounds (VOC)	154.1	51.8
Total sum of all Hazardous Air Pollutants (HAPs)	< 1	< 1
Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emissions as Total CO_2e	n/a	23,720

The standard and maximum operating schedule of the facility will be continuous, 7 days a week and a maximum of 52 weeks per year.

Owner and operator of the facility is Artesia Renewable Diesel Company LLC, P.O. Box 159, Artesia, NM 88211-0159.

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html. Other comments and questions may be submitted verbally.

Please refer to the company name and facility name, or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

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Sincerely,

Alena Miro for

Kawika Tupou
Environmental Manager
HollyFrontier Navajo Refining LLC
501 E. Main Street
Artesia, NM 88210

cc: Eddy County: Robin Van Natta, County Clerk
Chaves County: Cindy Fuller, County Clerk
NMED: Melinda Owens, via email to Melinda.Owens@state.nm.us
Joe Kimbrell, via email to Joseph.Kimbrell@state.nm.us
HollyFrontier: P. Miller, T. Wheeler, S. Gokhale, A. Miro
Tascosa: Brian L. Gunzelman, P.E.

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HOLLYFRONTIER.

March 30, 2021

Ms. Cindy Fuller
Chaves County - County Clerk
#1 St. Marty's Place, Suite 110
Roswell, NM 88203

Certified Mail/Return Receipt No.
7019 0700 0002 3127 4669

Re: Public Notice
Application for Minor Source Construction Air Permit
for Renewable Diesel Unit
Artesia Renewable Diesel Company LLC
Artesia, Eddy County, New Mexico

Dear Ms. Fuller,

Artesia Renewable Diesel Company LLC announces its application submittal to the New Mexico Environment Department for construction of its Renewable Diesel Unit. The expected date of application submittal to the Air Quality Bureau is April 12, 2021.

The exact location for the proposed facility known as, Renewable Diesel Unit, is at 501 E. Main Street, in Artesia, Eddy County, New Mexico within, adjacent to, and just south of the existing Artesia Refinery. .

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Nitrogen Oxides (NO_x)	27.3	12.3
Carbon Monoxide (CO)	15.6	14.8
Volatile Organic Compounds (VOC)	154.1	51.8
Total sum of all Hazardous Air Pollutants (HAPs)	< 1	< 1
Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emissions as Total CO_2e	n/a	23,720

The standard and maximum operating schedule of the facility will be continuous, 7 days a week and a maximum of 52 weeks per year.

Owner and operator of the facility is Artesia Renewable Diesel Company LLC, P.O. Box 159, Artesia, NM 88211-0159.

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html. Other comments and questions may be submitted verbally.

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Sincerely,

Alena Miro for

Kawika Tupou
Environmental Manager
HollyFrontier Navajo Refining LLC
501 E. Main Street
Artesia, NM 88210

cc: Eddy County: Robin Van Natta, County Clerk
City of Artesia: Aubrey Hobson, City Clerk
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HOLLYFRONTIER.

March 30, 2021

Ms. Robin Van Natta
Eddy County - County Clerk
325 S. Main Street
Carlsbad, NM 88220

Certified Mail/Return Receipt No.
7019 0700 0002 3127 4683

Re: Public Notice
Application for Minor Source Construction Air Permit
for Renewable Diesel Unit
Artesia Renewable Diesel Company LLC
Artesia, Eddy County, New Mexico

Dear Ms. Van Natta,

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General Posting of Notices – Certification

I, Suzanne Garcia, the undersigned, certify that on **March 30, 2021,** posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in the **City of Artesia** in **Eddy** County, State of New Mexico on the following dates:

1. Artesia Renewal Diesel Unit Entrance (March 30, 2021)
2. Artesia City Hall (March 30, 2021)
3. Artesia Public Library (March 30, 2021)
4. Artesia Post Office (March 30, 2021)

Signed this 1st day of April, 2021.

Suzanne Garcia
Signature

04/01/2021
Date

Suzanne Garcia
Printed Name

Administrative Assistant Lead
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}

KSVP-AM Invoice

Pecos Valley Broadcasting Co.
317 West Quay Avenue
Artesia, New Mexico 88210-2194

Invoice ID: 21040034
Invoice Date: 4/6/2021
Account ID: 3060
Order ID: 3060-003
Account Rep: House Accounts

Amount Due: $26.97

Amount Paid: _____

HOLLY FRONTIER/NAVAJO REFINING LLC
P. O. BOX 159
ARTESIA, NM 88211/0159

Pay by mail: PVBC, 317 W. Quay Ave, Artesia, NM 88210

Pay by credit card: Call 575-746-2751 Press 2

Sponsor: Holly Frontier/Navajo Refining LLC
Holly Frontier/Navajo Refining LLC

Date	Time	Length	Description	CopyID / ISCI Code	Cost
4/6/2021	05:48 PM	3:00	Spot	NMED Air Quality Permit of Modification	25.00
			1 Total Items	Total Cost:	$25.00
				+ 7.8958 Gross:	$1.97
				Net Total:	$26.97

Tana Steinback

OFFICIAL SEAL
Tana Steinback
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 2-13-22

AFFIDAVIT OF PERFORMANCE: I certify that, in accordance with the Official Station Logs, announcements were broadcast as shown on this invoice.

Amount Due: **$26.97**

NOTICE

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Submittal of Public Service Announcement – Certification

I, _____Tana Steinback_____, the undersigned, certify that on **April 5, 2021**, submitted a public service announcement to **KSVP-AM 990/KSVP-FM 93.7** that serves the City\Town\Village of **Artesia**, **Eddy** County, New Mexico, in which the source is or is proposed to be located and that **KSVP-AM 990/KSVP-FM 93.7 RESPONDED THAT IT WOULD AIR THE ANNOUNCEMENT}.**

Signed this 7th day of April, 2021,

Tana Steinback
Signature

4/7/221
Date

____Tana Steinback_____
Printed Name

___Traffic/Office Manager_____
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}

Legal Notice

STATE OF NEW MEXICO
FIFTH JUDICIAL DISTRICT COURT
EDDY COUNTY

IN THE MATTER OF THE ESTATE OF
FAIRY LEE BLACK, DECEASED.
No. D-503-PB-2020-00075

NOTICE TO CREDITORS

NOTICE IS HEREBY GIVEN that Chad Randall Black has been appointed Personal Representative of the Estate of Fairy Lee Black, Deceased. All persons having claims against this estate are required to present their claims within four (4) months after the date of the first publication of this Notice or the claims will be forever barred. Claims must be presented to Chad Randall Black, Personal Representative, c/o Holloman Law, LLC, P. O. Box 3408, Hobbs, New Mexico 88241-3408, or filed with the District Court, Eddy County Courthouse, Carlsbad, New Mexico.
DATED: March 18, 2021

HOLLOMAN LAW, LLC

By: /s/Scotty Holloman_____
SCOTTY HOLLOMAN
P. O. Box 3408
Hobbs, New Mexico 88241-2508
575/441-0056
Scotty.holloman@outlook.com
Attorneys for Personal Representative

Published in the Artesia Daily Press, Artesia, N.M., March. 25, April 1, 8, 2021 Legal No. 25708.

Legal Notice

NOTICE

Artesia Renewable Diesel Company LLC announces their application submittal to the New Mexico Environment Department for an air quality permit for construction of its Renewable Diesel Unit. The expected date of application submittal to the Air Quality Bureau is April 12, 2021.

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Published in the Artesia Daily Press, Artesia, N.M., April 8, 2021 Legal No. 25711.

Legal Notice

FIFTH JUDICIAL DISTRICT
COUNTY OF EDDY
STATE OF NEW MEXICO

IN THE MATTER OF THE ESTATE OF)
Nila Martin, DECEASED.)
No. D-503-PB-2021-00008

NOTICE TO CREDITORS

SHARON SNOWDEN has been appointed personal representative of the estate of Nila Martin deceased. All persons having claims against this estate are required to present their claims within four months after the date of the first publication of this notice or the claims will be forever barred. Claims must be presented either to the personal representative, c/o Joel Carson II Law Offices LLC (Joel M. Carosn II) P.O. Box 1720, Artesia, New Mexico, 88211, or filled with the District Court of Eddy County, New Mexico.

Dated: March 22, 2021

/s/
Sharon Snowden

Joel M. Carson II
Joel Carson II Law Offices LLC
P.O. Box 1720
Artesia, New Mexico 88211-1720
(575/736-6101)

Attorneys for Personal Representative,
Sharon Snowden

Published in the Artesia Daily Press, Artesia, N.M., April 8, 15, 22, 2021 Legal No. 25714.

Legal Notice

NOTICE

Salt Creek Midstream, LLC. announces its intent to apply to the New Mexico Environment Department for an air quality General Construction Permit, (GCP-Oil and Gas). The name of this facility is Nailed It B Compressor Station. The expected date of the submittal of our Registration for an air quality permit to the Air Quality Bureau is April 9, 2021. This notice is a requirement according to New Mexico air quality regulations.

The exact initial location of the facility is/will be UTM Zone 13, UTM Easting 610,812 m, UTM Northing 3,541,241 m. The location of this site is 21.0 miles southeast of Malaga in Eddy County. The standard operating schedule of this facility will be continuous.

Air emissions of any regulated air contaminant will be less than or equal to:

	Tons per year (TPY)
1. Nitrogen Oxides (NOx)	95
2. Carbon Monoxide (CO)	95
3. Volatile Organic Compounds (VOC) (stack)	95
4. Particulate Matter (PM10)	25
5. Particulate Matter (PM2.5)	25
6. Sulfur Dioxide (SO2)	95
7. Hydrogen Sulfide (H2S)	25
8. Any one (1) Hazardous Air Pollutant (HAP)	<10
9. Sum of all Hazardous Air Pollutants (HAPs)	<25

The owner and/or operator of the Plant is:

Salt Creek Midstream, LLC
6 Desta Drive, Suite 6400 Midland, TX 79705

If you have any questions or comments about construction or operation of above facility, and want your comments to be made as a part of the permit review process, you must submit your comments in writing to the address below:

New Mexico Environment Department
Air Quality Bureau Permit Section
525 Camino de los Marquez, Suite 1
Santa Fe, New Mexico, 87505
Phone (505) 476-4300
Fax (505) 476-4375

Other comments and questions may be submitted verbally.

Please refer to the company name and site name, as used in this notice or send a copy of this notice along with your comments, since the Department may not have received the permit Registration at the time of this notice.

Attención

Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-476-5557.

Notice of Non-Discrimination

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Kathryn Becker, Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@state.nm.us. You may also visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.

Published in the Artesia Daily Press, Artesia, N.M., April 8, 2021 Legal No. 25712.

Legal Notice

CEMETERY BOARD MEETING

NOTICE IS GIVEN that the City of Artesia Woodbine Cemetery Board will meet on Monday, April 12, 2021 at 9:00 am in the council chambers at City Hall, 511 West Texas Avenue, Artesia, NM.

NOTICE IS FURTHER GIVEN that the purpose of this meeting is a quarterly meeting of the Board. Agendas can be obtained at City Hall or www.artesianm.gov

NOTICE IS FURTHER GIVEN that said meeting is a public meeting and all employees and members of the public are invited to attend the same.

BY ORDER OF THE CITY OF ARTESIA WOODBINE CEMETERY BOARD.

Mary Esquibel
Cemetery Sexton

Published in the Artesia Daily Press, Artesia, N.M., April 8, 2021 Legal No. 25718.

Legal Notice

Artesia General Hospital, 702 N 13th Street, Artesia, NM 88210: Artesia General Hospital is issuing a request for proposal for the provision of Emergent Patient Transport Services in accordance with Proposal: Patient Transport--Contracted Services for Emergent Patient Transport. Interested parties may obtain a copy of the RFP by contacting Erica Moore, Executive Assistant, Artesia General Hospital, 702 N. 13th Street, Artesia NM 88210, via email at emoore@artesiageneral.com, or by calling (575) 736-8214 no later than April 26, 2021. Proposals must be submitted to Erica Moore at the above address by 4 p.m. May 5, 2021. Artesia General Hospital reserves the right to request additional information, reject any or all proposals and to waive any or all technicalities when it is in the best interest of Artesia General Hospital.

Published in the Artesia Daily Press, Artesia, N.M., April 8, 15, 22, 2021 Legal No. 25716.

Legal Notice

FIFTH JUDICIAL DISTRICT
COUNTY OF EDDY
STATE OF NEW MEXICO

IN THE MATTER OF THE ESTATE OF)
Preston Ray Kelly, DECEASED.)
No. D-503-PB-2021-00028

NOTICE TO CREDITORS

ELVA DARLENE KELLY has been appointed personal representative of the estate of Preston Ray Kelly deceased. All persons having claims against this estate are required to present their claims within four months after the date of the first publication of this notice or the claims will be forever barred. Claims must be presented either to the personal representative, c/o Joel Carson II Law Offices LLC (Joel M. Carosn II) P.O. Box 1720, Artesia, New Mexico, 88211, or filled with the District Court of Eddy County, New Mexico.

Dated: March 22, 2021

/s/
Elva Darlene Kelly

Joel M. Carson II
Joel Carson II Law Offices LLC
P.O. Box 1720
Artesia, New Mexico 88211-1720
(575/736-6101)

Attorneys for Personal Representative,
Elva Darlene Kelly

Published in the Artesia Daily Press, Artesia, N.M., April 8, 15, 22, 2021 Legal No. 25713.

Legal Notice

STATE OF NEW MEXICO
COUNTY OF EDDY
FIFTH JUDICIAL DISTRICT

No. D-503-PB-2020-00084

IN THE MATTER OF THE ESTATE OF
SANDERS T. WELCH aka SANDERS THOMAS WELCH,
Deceased.

NOTICE OF HEARING ON PETITION FOR PETITION FOR ADJUDICATION OF INTESTACY AND FORMAL APPOINTMENT OF PERSONAL REPRESENTATIVE

TO: Michael I. Welch, Julia Terri Welch and the unknown heirs of SANDERS T. WELCH aka SANDERS THOMAS WELCH, Deceased, and all unknown persons who have or claim any interest in the estate of SANDERS T. WELCH aka SANDERS THOMAS WELCH, Deceased ("Decedent")

NOTICE IS HEREBY GIVEN that Michael I. Welch has filed with the above-named Court a Petition for Adjudication of Intestacy and Formal Appointment of Personal Representative, which requests the Court to enter an Order that determines Decedent died intestate; determines the heirs of Decedent; appoints Michael I. Welch personal representative and provides for such other and further relief as may be proper.

Hearing has been set to consider the Petition at 2:30 pm on April 29, 2021, at the Eddy County Courthouse, Carlsbad, New Mexico, before the Honorable Eileen Riordan, District Judge.

The attorneys for Petitioner are Holloman Law, LLC, P. O. Box 3408, Hobbs, New Mexico 88241-3408.

HOLLOMAN LAW, LLC

By:_/s/Scotty Holloman_____
SCOTTY HOLLOMAN
Attorneys for Petitioner
P. O. Box 3408
Hobbs, New Mexico 88241-3408
575/441-0056
scotty.holloman@outlook.com

Published in the Artesia Daily Press, Artesia, N.M., March. 25, April 1, 8, 2021 Legal No. 25707.

Affidavit of Publication

No. 25711

State of New Mexico Publisher

County of Eddy:

Danny Scott

being duly sworn says that he is the **Publisher**

of the Artesia Daily Press, a daily newspaper of General circulation, published in English at Artesia, said county and state, and that the hereto attached

Legal Ad

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/day on the same day as follows:

First Publication	April 8, 2021
Second Publication	
Third Publication	
Fourth Publication	
Fifth Publication	
Sixth Publication	
Seventh Publication	

Subscribed and sworn before me this

22nd day of April 2021

OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 5/12/2023

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Legal Notice

NOTICE

Artesia Renewable Diesel Company LLC announces their application submittal to the New Mexico Environment Department for an air quality permit for construction of its Renewable Diesel Unit. The expected date of application submittal to the Air Quality Bureau is April 12, 2021.

The exact location for the proposed facility known as, Renewable Diesel Unit, is at 501 E. Main Street, in Artesia, Eddy County, New Mexico within, adjacent to, and just south of the existing Artesia Refinery.

The proposed construction consists of a cooling tower, a process heater, piping fugitive components, and storage tanks.

The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and tons per year (tpy) and may change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	0.7	1.9
PM 10	0.7	1.8
PM 2.5	0.6	1.7
Sulfur Dioxide (SO2)	1.5	2.2
Nitrogen Oxides (NOx)	27.3	12.3
Carbon Monoxide (CO)	15.6	14.8
Volatile Organic Compounds (VOC)	154.1	51.8
Total sum of all Hazardous Air Pollutants (HAPs)	< 1	< 1
Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emissions as Total CO2e	n/a	23,720

The standard and maximum operating schedule of the facility will be continuous 7days a week and a maximum of 52 weeks per year.

Owner and operator of the facility is Artesia Renewable Diesel Company LLC, P.O. Box 159, Artesia, NM 88211-0159.

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html. Other comments and questions may be submitted verbally.

With your comments, please refer to the company name and facility name, or send a copy of this notice along with your comments. This information is necessary since the Department may have not yet received the permit application. Please include a legible return mailing address. Once the Department has completed its preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

Attención

Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las

Affidavit of Publication

No.

State of New Mexico } Publisher

County of Eddy:

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Display Ad

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Subscribed and sworn before me this

22nd day of April 2021

OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 5/12/2023

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

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Artesia Renewable Diesel Company LLC announces their application submittal to the New Mexico Environment Department for an air quality permit for construction of its Renewable Diesel Unit. The expected date of application submittal to the Air Quality Bureau is April 12, 2021.

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Total sum of all Hazardous Air Pollutants (HAPs)	< 1	< 1
Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emissions as Total CO2e	n/a	23,720

The standard and maximum operating schedule of the facility will be continuous 7days a week and a maximum of 52 weeks per year.

Owner and operator of the facility is Artesia Renewable Diesel Company LLC, P.O. Box 159, Artesia, NM 88211-0159.

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html. Other comments and questions may be submitted verbally.

With your comments, please refer to the company name and facility name, or send a copy of this notice along with your comments. This information is necessary since the Department may have not yet received the permit application. Please include a legible return mailing address. Once the Department has completed its preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

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Brian Gunzelman

From: Jason Jarrell <jjarrell@artesianm.gov>
Sent: Wednesday, March 31, 2021 5:07 PM
To: Miro, Alena
Subject: [EXTERNAL Email]: RE: navajo property parcels
Attachments: owners_100ft_selection_2021.xlsx

Follow Up Flag: Follow up
Flag Status: Flagged

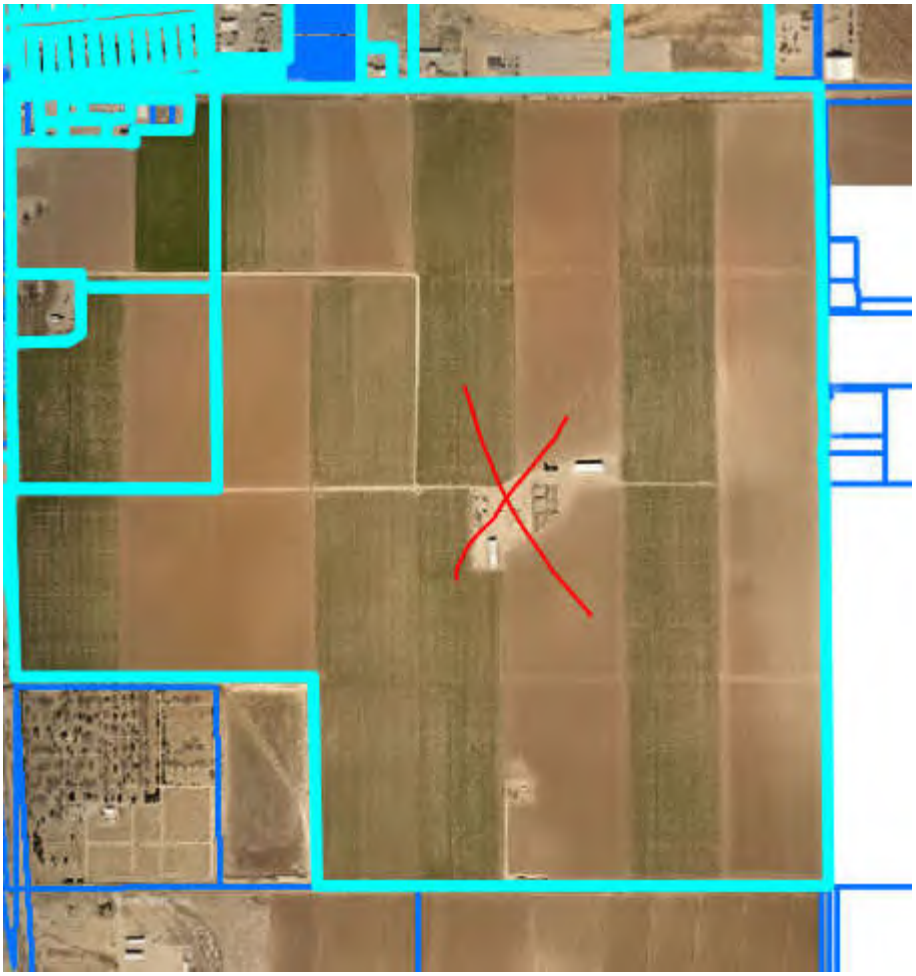
Hi Alena,

Attached is the list of owners that was selected within 100ft..

Jason Jarrell
GIS Admin
City of Artesia, NM

From: Miro, Alena <Alena.Miro@HollyFrontier.com>
Sent: Wednesday, March 31, 2021 1:54 PM
To: Jason Jarrell <jjarrell@artesianm.gov>
Subject: RE: navajo property parcels

Yes sir, the one with the red X in the middle.



Alena Miro
Senior Environmental Engineer
713-865-6825

From: Jason Jarrell <jjarrell@artesianm.gov>
Sent: Wednesday, March 31, 2021 1:08 PM
To: Miro, Alena <Alena.Miro@HollyFrontier.com>
Subject: navajo property parcels

Hi Alena,

Do you mean the one large parcel with a couple of barns in the middle?

Jason Jarrell
GIS Admin
City of Artesia, NM

From: Miro, Alena <Alena.Miro@HollyFrontier.com>
Sent: Wednesday, March 31, 2021 12:29 PM

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 description below is a summary of the operations for the Renewable Diesel Unit ("RDU") which along with Artesia PTU LLC's Pretreatment Unit ("PTU") will comprise a minor single stationary source with respect to PSD and Title V operating permit regulations. The parallel application for the PTU minor source air permit was submitted separately and NMED issued the resulting air permit.

The RDU will convert soybean oil and other nonpetroleum renewable feedstocks to renewable diesel via a catalytic hydrotreating process. The feedstocks will be provided by the co-located PTU, and potentially by other suppliers. Renewable feedstock will be received at a railcar unloading/loading facility, heated in the railcars if needed, pretreated in the PTU to remove impurities, and routed to RDU charge tanks. From the charge tanks, the renewable feed will be routed to the process unit (i.e., reactor section, separator sections, and stripper section) for conversion to renewable diesel product. The renewable diesel product will be stored in product tanks prior to railcar loading and transport to the customer. Naphtha will be produced as a byproduct and will be exported by pipeline to the Navajo Artesia Refinery.

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)**:**

Air emissions units associated with the Renewable Diesel Unit are:

1. H-2601 RDU Reactor Heater
2. Y-0026 RDU Cooling Tower
3. FUG-26-RDU RDU Fugitives - Piping components fugitive emissions for streams with VOC vapor pressure greater than the permitting exemption
4. T-0914 Slop Tank

Per 20.2.702.202.B.(2), the following emission units are exempt from permitting due to the handling or storing of VOC having vapor pressure less than 0.2 psia at the handled or stored temperature:

5. T-0901 through T-0913 RDU Product or Feed Tanks; T-0929 through T-0932 Rail Unloading Accumulation Tanks; T-0933 Rail Containment Tank – Feed; T-0934 Rail Containment Tank - Renewable Diesel; and T-0935 Rail Containment Tank - Recovered Oil
6. FUG-26-RDU-LOVP - Piping components fugitive emissions for streams with VOC vapor pressure less than the permitting exemption
7. RLO-26 - Railcar Unloading and Loading Rack

In addition, the following emergency generator engines are exempt from permitting because they will only be operated during the unavoidable loss of commercial utility power and will be operated less than 500 hours per year.

8. G-2601 and G-2602 Emergency Generator

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):

As indicated in Section 3, this is a minor source air permit application for the RDU. A separate application has been submitted to the NMED for a minor source permit for the Pretreatment Unit ("PTU"). The RDU is currently included in NSR Permit No. PSD-NM-0195-M39R1 due to the addition thereof via PSD-NM-0195-M38, that was issued to the HollyFrontier Navajo Refining LLC's Artesia Refinery in Artesia, New Mexico ("Navajo Artesia Refinery") on September 20, 2019. After the NMED issues this standalone minor source permit for the RDU, an administrative Revision will be requested to remove the RDU from the Navajo Artesia Refinery air permit.

As shown in the "PTU and RDU Source – Proposed Emission Limits and Permitting Applicability Evaluation" provided at the beginning of Section 6, the RDU and the PTU – while a single stationary source – will not constitute a major source under PSD and Title V operating permit regulations. As a result, a PSD review and an associated PSD air quality analysis are not required.

Background

The RDU, which will be owned and operated by ARDC, will convert soybean oil and other nonpetroleum renewable feedstocks to renewable diesel via a catalytic hydrotreating process. The feedstocks will be provided by the co-located Pretreatment Unit ("PTU") owned and operated by Artesia PTU LLC ("APTU"), and potentially by other suppliers. NMED issued a separate minor source permit, NSR Permit No. 9015, on February 15, 2021 and assigned Agency Interest No. 39767 for the PTU.

Although ARDC and APTU will be located within and adjacent to Navajo Artesia Refinery, and all three entities will be under common control of HFC, the RDU and PTU will carry a Standard Industrial Classification ("SIC") major group different from the SIC major group carried by Navajo Artesia Refinery and, therefore, the PTU and the RDU constitute a separate stationary source, that is, separate from the Navajo Artesia Refinery, as that term is defined in the Clean Air Act and its underlying Prevention of Significant Deterioration (PSD) and Title V operating permit regulations.

The Navajo Artesia Refinery falls within SIC Major Group 29 (Petroleum Refining and Related Industries), and specifically, SIC code 2911 (Petroleum Refining). Unlike the Navajo Artesia Refinery, the RDU and the PTU will not be engaged in in petroleum refining and will not produce refined petroleum products through fractionation or straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking, or other processes. As a result, the RDU and PTU will not fall within the petroleum refining SIC code of 2911.

Rather, because of the raw materials used and the resulting non-petroleum-based renewable diesel product, the RDU is properly classified in SIC Major Group 28 (Chemicals and Allied Products), with the specific SIC code of 2869 (Industrial

Organic Chemicals, Not Elsewhere Classified).[3] This is also consistent with our understanding of the SIC code assigned to other renewable diesel facilities in the United States. Regarding the PTU, this unit will serve as an auxiliary establishment to the RDU (or other renewable diesel units within HFC), because, based on current plans, it will be primarily engaged in producing goods or providing services for other establishments of the same company, rather than for the general public or for other business units. The SIC Manual prescribes that auxiliary establishments are classified on the basis of the primary activity of the operating establishment(s) they serve. The PTU is therefore properly assigned a SIC code based on the primary economic activity of the establishment that it supports, namely, SIC Major Group 28 and SIC code 2869, corresponding to the production of renewable diesel.[4] Thus, the RDU and the PTU are treated as a single stationary source with respect to PSD, Title V operating permit applicability, and minor source air dispersion modeling/ambient air impacts analysis.

The RDU and the PTU – while a single stationary source – will not constitute a major source under PSD and Title V operating permit regulations. As a result, a PSD review and an associated PSD air quality analysis are not required.

In contrast and in accordance with Maximum Achievable Control Technology (MACT) standards in 20.2.78 NMAC and 40 CFR Part 63, RDU processes and units are subject to the 40 CFR Part 63 Subpart FFFF (MACT FFFF –miscellaneous organic chemical manufacturing) standard because these processes and units meet the applicability criteria of MACT FFFF, including the RDU being located at a major source of hazardous air pollutants ("HAP"). While the RDU itself is not a major source of HAP, it is under common control and is contiguous with a major source of HAP (i.e., the Navajo Artesia Refinery). Therefore, the RDU processes and units are considered as being located at a major source of HAP. 40 CFR Part 63 applicability is presented in Section 13 of this application.

Initially, the RDU was added to the Navajo Artesia Refinery's air permit via a Significant Revision that resulted in NMED issuing NSR Permit No. PSD-NM-0195-M38 on September 20, 2019. Since permit issuance, the scope of project expanded to include the PTU, with ARDC being the owner and operator of the RDU, and APTU being the owner and operator of the PTU. As such, the RDU will be removed from the Navajo Artesia Refinery's air permit via an Administrative Revision upon NMED's issuance of the stand-alone RDU minor source permit. The parallel application for the PTU minor source air permit was submitted separately, and NMED has issued the resulting air permit.

[3] Per the SIC Manual published by the United States Office of Management and Budget (1972), SIC code 2869 encompasses establishments "primarily engaged in manufacturing industrial organic chemicals, not elsewhere classified." Products of this industry include diesel-range paraffinic or isoparaffinic hydrocarbons not resulting from petroleum refining, such as the aliphatic and other acyclic organic chemicals that are the primary constituents of renewable diesel.

[4] It is possible that in the future, APTU might enter into contracts to supply treated materials to renewable diesel units outside of the HollyFrontier organization, and should this economic activity become significant enough, the PTU's SIC code assignment may have to be revisited.

Section 12

Section 12.A
PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

A PSD applicability determination for all sources. For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the EPA New Source Review Workshop Manual to determine if the revision is subject to PSD review.

A. This facility is:

- ■ **a minor PSD source before and after this modification (if so, delete C and D below).**
- □ **a major PSD source before this modification. This modification will make this a PSD minor source.**
- □ **an existing PSD Major Source that has never had a major modification requiring a BACT analysis.**
- □ **an existing PSD Major Source that has had a major modification requiring a BACT analysis**
- □ **a new PSD Major Source after this modification.**

B. **This facility is one of the listed 20.2.74.501 Table I – PSD Source Categories.**
Per the "PTU and RDU Source – Proposed Emission Limits and Permitting Applicability Evaluation" provided at the beginning of Section 6, the PTU and the RDU are treated as a single source with respect to Prevention of Significant Deterioration (PSD) and Title V permitting applicability. The emissions below reflect the proposed allowable emissions for the PTU and RDU source. The proposed allowable emissions conservatively show the sum of the source allowable emissions are less than the applicable PSD major source threshold and Title V permitting threshold of 100 ton/yr for each regulated pollutant. Therefore, the PTU and RDU source is not a major source with respect to PSD or Title V.

a. **CO:** 15.39 **TPY**
b. **NOx:** 14.17 **TPY**
c. **PM:** 2.57 **TPY**
d. **PM10:** 2.42 **TPY**
e. **PM2.5:** 2.19 **TPY**
f. **SOx:** 3.05 **TPY**
g. **VOC:** 61.41 **TPY**
h. **Fluorides:** 0 **TPY**
i. **Lead:** 0 **TPY**
j. **Sulfur compounds (listed in Table 2):** 0 **TPY**
k. **GHG:** 35,868 **TPY**

C. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 – PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.

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 RELEVENT 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/

Table for STATE REGULATIONS:

STATE REGU-LATIONS 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, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. Title V applications, see exemption at 20.2.3.9 NMAC The TSP NM ambient air quality standard was repealed by the EIB effective November 30, 2018.
20.2.7 NMAC	Excess Emissions	Yes	Facility	The entire facility or individual pieces of equipment will be subject to emissions limits in a permit or numerical emissions standards in a federal or state regulation. Therefore, this applies.
20.2.23 NMAC	Fugitive Dust Control	No		The facility is not in an area subject to a mitigation plan pursuant to 40 CFR 51.930. http://164.64.110.134/parts/title20/20.002.0023.html As of January 2019, the only areas of the State subject to a mitigation plan per 40 CFR 51.930 are in Doña Ana and Luna Counties.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No		This facility does not have new gas burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit Note: "New gas burning equipment" means gas burning equipment, the construction or modification of which is commenced after February 17, 1972.
20.2.34 NMAC	Oil Burning Equipment: NO_2	No		This facility does not have oil burning equipment.
20.2.38 NMAC	Hydrocarbon Storage Facility	No		The facility is not a petroleum production or processing facility.
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No		The facility does not include a sulfur recovery plant.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	H-2601 G-2601 G-2602	This regulation that limits opacity to 20% applies to Stationary Combustion Equipment, such as engines, boilers, heaters, and flares unless your equipment is subject to another state regulation that limits particulate matter.
20.2.70 NMAC	Operating Permits	No		The potential to emit (PTE) of the PTU and RDU stationary source will be less than the major source thresholds when the PTU Vapor Combustion Unit (H-9301) is required under the PTU air permit and therefore becomes federally enforceable. The major source potential to emit thresholds are: - 100 ton/yr or more of any regulated air pollutant other than HAPs. - 10 ton/yr or more for a single HAP; and - 25 or more ton/yr for combined HAP's. In addition, the facility in not subject to a 20.2.79 NMAC nonattainment permit and is not subject to a federal regulation that requires a Title V permit.
20.2.71 NMAC	Operating Permit Fees	No		The facility is not subject to 20.2.70 NMAC because it is not required to have an Operating Permit.
20.2.72 NMAC	Construction Permits	Yes	Facility	The facility is required to obtain a permit because Tank T-0914 is subject to a 20.2.77 NMAC New Source Performance Standard (which references 40 CFR Part 60).
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	The facility will have a construction permit issued under 20.2.72 NMAC. Therefore, the facility will submit **Emissions Inventory Reporting per** 20.2.73.300 NMAC.

STATE REGU-LATIONS 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.)
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No		Per Section 12, the facility will not be a new PSD major source or a major modification to an existing PSD major source.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This applies because this application is being submitted pursuant to 20.2.72 NMAC. Therefore, the facility is subject to the 20.2.75.10 filing fee ($500), the 20.2.75.11 permit fee (to be invoiced by NMED based on the application and the regulatory point-based fee schedule), and the 20.2.75.11.E annual fee ($1,500).
20.2.77 NMAC	New Source Performance	Yes	T-0914 Facility	The T-0914 Slop Tanks is subject to limited requirements of 40 CFR Part 60 Subpart Kb. The RDU distillation and reactor operations are subject to 40 CFR Part 60 Subpart NNN and RRR, respectively.
20.2.78 NMAC	Emission Standards for HAPS	No		The facility does not include emission units subject to the requirements of 40 CFR Part 61.
20.2.79 NMAC	Permits – Nonattainment Areas	No		This facility is located in an area classified as attainment for all criteria pollutants. Therefore, it is not an existing nonattainment major source pursuant to 20.2.79.7.V NMAC.
20.2.80 NMAC	Stack Heights	No		The proposed stack heights do not exceed the “good engineering practice (GEP)” stack height as defined in 40 CFR Part 51.100(ii).
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	Facility	The facility includes emission units subject to the requirements of 40 CFR Part 63.

Table for Applicable FEDERAL REGULATIONS:

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	Defined as applicable at 20.2.72.203.A.(4) NMAC.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	Facility	40 CFR Part 60 Subpart A applies due to 40 CFR Part 63 Subparts NNN and RRR applying.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No		The H-2601 Reactor Hater is not subject to 40 CFR Part 60 Subpart Dc because it is not a steam generating unit.
NSPS 40 CFR 60, Subpart Ja	Standards of Performance for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After May 14, 2007	No		The facility is not a petroleum refinery.
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	T-0914	This facility has storage tanks with a capacity greater than or equal to 75 cubic meters (m^3, 19,810 gal) that are used to store organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984. However other than Tank T-0914, the tanks store organic liquids with maximum true vapor pressure less than 3.5 kPa (0.5 psia). Therefore, the other tanks are not subject to 40 CFR Part 60 Subpart Kb. Tank T-0914 is subject to limited 40 CFR Part 60 Subpart Kb requirements because it has a capacity greater than 151 m^3 (39,890 gal, 950 bbl) and will store organic liquids with true vapor pressure greater than 3.5 kPa (0.5 psia) but less than 5.2 kPa (0.75 psia).
NSPS 40 CFR 60, Subpart NNN	Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	Yes	Facility	The RDU distillation operations are subject to 40 CFR Part 60 Subpart NNN.
NSPS 40 CFR 60, Subpart RRR	Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	Yes	Facility	The RDU reactor operations are subject to 40 CFR Part 60 Subpart RRR.

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR 60, Subpart VVa	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006	No		The facility does not produce, as intermediates or final products, any of the chemicals listed synthetic organic chemicals in §60.489.
NESHAP 40 CFR 61 Subpart A	General Provisions	No		Does not apply because there are no emission units at the facility that are subject to 40 CFR Part 61.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for **Equipment Leaks** (Fugitive Emission Sources)	No		The equipment component fugitives are not subject to 40 CFR Part 61 Subpart V because they are not in volatile hazardous air pollutant (VHAP) service. VHAP service means a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent by weight of VHAP (i.e., benzene or vinyl chloride).
MACT 40 CFR 63, Subpart A	General Provisions	Yes	Facility	40 CFR Part 63 Subpart A applies due to 40 CFR Part 63 Subpart FFFF and Subpart DDDDD applying.
MACT 40 CFR 63 Subpart F	National Emissions Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) for Process Vents, Storage Vessels, Transfer Operations, and Wastewater	No		The facility is not subject to 40 CFR Part 63 Subpart F because it does not manufacture as a primary product a Table 1-listed chemical and it does not react or manufacture a Table 2-listed organic HAP.
MACT 40 CFR 63 Subpart Q	National Emissions Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	No		The facility is not subject to 40 CFR Part 63 Subpart Q because chromium-based water treatment chemicals are not used in the Y-0026 RDU Cooling Tower.
MACT 40 CFR 63 Subpart CC	National Emissions Standards for Hazardous Air Pollutants from Petroleum Refineries	No		The facility is not a petroleum refinery.

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
MACT 40 CFR 63 Subpart FFFF	National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing	Yes	Facility	Units at the facility are subject to 40 CFR Part 63 Subpart FFFF due to the Renewable Diesel Unit being located within and adjacent to the Navajo Artesia Refinery which is a major HAP source and under common control, and some Renewable Diesel Unit streams contain a specified organic HAP.
MACT 40 CFR 63 Subpart GGGG	National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production	No		The facility is not subject to 40 CFR Part 63 Subpart GGGG because it does not produce vegetable oil by removing oil from oilseeds through direct contact with an organic solvent.
MACT 40 CFR 63 Subpart DDDDD (5D)	National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources	Yes	H-2601	The H-2601 RDU Reactor Heater is subject to 40 CFR Part 63 Subpart 5D because it is a process heater located at a major source of HAP. It is located at a major source of HAP because the Renewable Diesel Unit is located within and adjacent to the Navajo Artesia Refinery which is a major HAP source and is under common control. The H-2601 RDU Reactor Heater is a new process heater unit designed to burn gas 1 fuels and is therefore subject to the associated requirements.
MACT 40 CFR 63 Subpart VVVVVV (6V)	National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources	No		The facility is not subject to 40 CFR Part 63 Subpart 6V because it is not a chemical manufacturing process unit and HAP (listed in Table 1 of this rule) are not present.
MACT 40 CFR 63 Subpart BBBBBBB (7B)	National Emission Standards for Area Sources: Chemical Preparations Industry	No		The facility is not subject to 40 CFR Part 63 Subpart 7B because the facility raw materials and products do not contain target HAP's (chromium, lead, manganese, and nickel).
40 CFR 64	**Compliance Assurance Monitoring**	No		The facility is not subject to Compliance Assurance Monitoring (CAM) because CAM applies only to Title V Major Sources and the facility is not a Title V major source.
40 CFR 68	**Chemical Accident Prevention**	No		The facility does not have more than a threshold quantity of a regulated substance in a process, as determined under §68.115.
Title VI – 40 CFR 82	Protection of **Stratospheric Ozone**		N/A	The facility may maintain and service building air condition units that may contain affected refrigerants. Therefore, Subpart F of Part 82, which regulates maintenance work on air condition systems may be applicable. 40 CFR 82 applies if: **(82.150)** if you service, maintain, or repair appliances, dispose of appliances, refrigerant reclaimers, **if you are an owner or operator of an appliance**, if you are a manufacturer of appliances or of recycling and recovery equipment, if you are an approved recycling and recovery equipment testing organization, and/or if you sell or offer for sell or purchase class I or class I refrigerants. **Note:** Owners and operators of appliances subject to 40 CFR 82.150 Recycling and Emissions Reduction have recordkeeping and reporting requirements even if the owner/operator is not performing the actual work. **Note:** Disposal definition in 82.152: Disposal means the process leading to and including: (1) The discharge, deposit, dumping or placing of any discarded appliance into or on any land or water; (2) The disassembly of any appliance for discharge, deposit, dumping or placing of its discarded component parts into or on

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
				any land or water; or (3) The disassembly of any appliance for reuse of its component parts. "Major maintenance, service, or repair means" any maintenance, service, or repair that involves the removal of any or all of the following appliance components: compressor, condenser, evaporator, or auxiliary heat exchange coil; or any maintenance, service, or repair that involves uncovering an opening of more than four (4) square inches of "flow area" for more than 15 minutes.

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 PTU and RDU Source has been evaluated and it has been determined that emissions during malfunction, startup, or shutdown will not exceed the emission limits proposed for normal/routine operations.

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: https://www.env.nm.gov/aqb/permit/aqb_pol.html. 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.

The Renewable Diesel Unit will operate as described in Section 10 of this application. No alternative operating scenarios are proposed.

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.	X
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.	
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.

In support of the air permit application that resulted in NMED's issuance of NSR Permit No. 9015 for the PTU, Navajo submitted, via email, a modeling protocol to the NMED Air Quality Bureau Modeling Manager on October 9, 2020. The NMED Air Quality Bureau approved, via email, the modeling protocol on October 21, 2020. The follow-on modeling demonstration addressed the combined PTU and RDU source. Since that demonstration, changes to the modeling have been implemented to address the anticipated as-built configuration of the PTU and RDU. The modeling demonstration that is being submitted with this application includes those changes. Accordingly, NMED's Universal Application 4 Air Dispersion Modeling Report has been completed and is included on the following pages. It demonstrates the PTU and RDU source will not cause or contribute to a violation of National or New Mexico Ambient Air Quality Standards (NAAQS or NMAAQS).

Universal Application 4

Air Dispersion Modeling Report

Refer to and complete Section 16 of the Universal Application form (UA3) to assist your determination as to whether modeling is required. If, after filling out Section 16, you are still unsure if modeling is required, e-mail the completed Section 16 to the AQB Modeling Manager for assistance in making this determination. If modeling is required, a modeling protocol would be submitted and approved prior to an application submittal. The protocol should be emailed to the modeling manager. A protocol is recommended but optional for minor sources and is required for new PSD sources or PSD major modifications. Fill out and submit this portion of the Universal Application form (UA4), the "Air Dispersion Modeling Report", only if air dispersion modeling is required for this application submittal. This serves as your modeling report submittal and should contain all the information needed to describe the modeling. No other modeling report or modeling protocol should be submitted with this permit application.

16-A: Identification

1	Name of facility:	Pretreatment Unit and Renewable Diesel Unit
2	Name of company:	Artesia PTU LLC and Artesia Renewable Diesel Company LLC
3	Current Permit number:	Not applicable, new minor source
4	Name of applicant's modeler:	Miriam Hacker, Aspen Outlook LLC (subcontractor to Tascosa Alliance Company)
5	Phone number of modeler:	(720) 839-5461
6	E-mail of modeler:	miriamhacker@aspenoutlook.com

16-B: Brief

1	Was a modeling protocol submitted and approved?	Yes☒	No☐
2	Why is the modeling being done?	New Facility	
3	Describe the permit changes relevant to the modeling.		
	The modeling demonstration that is being submitted with this application includes changes to the modeling demonstration previously submitted to, and approved by, the NMED Air Quality Bureau in issuing NSR Permit No. 9015 for Artesia PTU LLC's Pretreatment Unit on February 15, 2021. Changes to the modeling have been implemented to address the anticipated as-built configuration of a new minor source, the Pretreatment Unit (PTU) and Renewable Diesel Unit (RDU) source. This follow-on application is for the Artesia Renewable Diesel Company LLC's RDU. The modeling evaluation is for the complete source (i.e., the combined PTU and RDU source). The PTU and RDU together constitute a single stationary source because the two facilities will be under common control of HollyFrontier Corporation, will be on contiguous or adjacent properties, and will fall within the same Standard Industrial Classification (SIC) major group (i.e., SIC Major Group 28 - Chemicals and Allied Products.		

	Non-VOC emission units, included in the modeling to be constructed, include cooling towers, solid material handling systems/vents, a vapor combustion unit, and a process heater. Accordingly, the NMED-required dispersion modeling in support of the new RDU minor source application demonstrates the PTU and RDU source emissions will not cause or contribute to a violation of National or New Mexico Ambient Air Quality Standards (NAAQS or NMAAQS) or applicable PSD Increments for carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than 10 microns in diameter (PM_{10}), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), or sulfur dioxide (SO_2)..		
4	What geodetic datum was used in the modeling?	NAD83	
5	How long will the facility be at this location?	Permanent	
6	Is the facility a major source with respect to Prevention of Significant Deterioration (PSD)?	Yes☐	No☒
7	Identify the Air Quality Control Region (AQCR) in which the facility is located	155	
8	List the PSD baseline dates for this region (minor or major, as appropriate). Minor Baseline Dates		
	NO2	March 16, 1988	
	SO2	July 28, 1978	
	PM10	February 20, 1979	
	PM2.5	November 13, 2013	
9	Provide the name and distance to Class I areas within 50 km of the facility (300 km for PSD permits).		
	None		
10	Is the facility located in a non-attainment area? If so describe below	Yes☐	No☒
11	Describe any special modeling requirements, such as streamline permit requirements.		
	None		

16-C: Modeling History of Facility Note Applicable. New minor source.

1 Describe the modeling history of the facility, including the air permit numbers, the pollutants modeled, the National Ambient Air Quality Standards (NAAQS), New Mexico AAQS (NMAAQS), and PSD increments modeled. (Do not include modeling waivers).

Pollutant	Latest permit and modification number that modeled the pollutant facility-wide.	Date of Permit	Comments
CO			
NO_2			
SO_2			
H_2S			
PM2.5			
PM10			
Lead			
Ozone (PSD only)			

	NM Toxic Air Pollutants (20.2.72.402 NMAC)			

16-D: Modeling performed for this application

For each pollutant, indicate the modeling performed and submitted with this application.
Choose the most complicated modeling applicable for that pollutant, i.e., culpability analysis assumes ROI and cumulative analysis were also performed.

1	Pollutant	ROI	Cumulative analysis	Culpability analysis	Waiver approved	Pollutant not emitted or not changed.
	CO	☒	☐	☐	☐	☐
	NO_2	☒	☐	☐	☐	☐
	SO_2	☒	☐	☐	☐	☐
	H_2S	☐	☐	☐	☐	☒
	PM2.5	☒	☐	☐	☐	☐
	PM10	☒	☐	☐	☐	☐
	Lead	☐	☐	☐	☐	☒
	Ozone	☐	☐	☐	☐	☒
	State air toxic(s) (20.2.72.402 NMAC)	☐	☐	☐	☐	☒

16-E: New Mexico toxic air pollutants modeling Note Applicable.

1 List any New Mexico toxic air pollutants (NMTAPs) from Tables A and B in 20.2.72.502 NMAC that are modeled for this application.

2 List any NMTAPs that are emitted but not modeled because stack height correction factor. Add additional rows to the table below, if required.

Pollutant	Emission Rate (pounds/hour)	Emission Rate Screening Level (pounds/hour)	Stack Height (meters)	Correction Factor	Emission Rate/ Correction Factor

16-F: Modeling options

1	Was the latest version of AERMOD used with regulatory default options? If not explain below.	Yes☒	No☐

16-G: Surrounding source modeling Not Applicable – no cumulative modeling

1	Date of surrounding source retrieval	
2	If the surrounding source inventory provided by the Air Quality Bureau was believed to be inaccurate, describe how the sources modeled differ from the inventory provided. If changes to the surrounding source inventory were made, use the table below to describe them. Add rows as needed.	
	AQB Source ID	Description of Corrections

16-H: Building and structure downwash

1	How many buildings are present at the facility?	48 (includes buildings in adjacent Artesia Refinery because a portion of the RDU is embedded within the refinery)	
2	How many above ground storage tanks are present at the facility?	61 (includes tanks in adjacent Artesia Refinery because a portion of the RDU is embedded within the refinery)	
3	Was building downwash modeled for all buildings and tanks? If not explain why below.	Yes☒	No☐
4	Building comments	None	

16-I: Receptors and modeled property boundary

1	"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 a 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. A Restricted Area is required in order to exclude receptors from the facility property. If the facility does not have a Restricted Area, then receptors shall be placed within the property boundaries of the facility. Describe the fence or other physical barrier at the facility that defines the restricted area.						
	An existing security fence surrounds the Artesia Refinery in which a portion of the RDU will be built. A security fence will be constructed around the new PTU/RDU property to be located to the south of the refinery. Receptors have been placed along the fence lines.						
2	Receptors must be placed along publicly accessible roads in the restricted area. Are there public roads passing through the restricted area?					Yes☐	No☒
3	Are restricted area boundary coordinates included in the modeling files?					Yes☒	No☐
4	Describe the receptor grids and their spacing. The table below may be used, adding rows as needed.						
	Grid Type	Shape	Spacing	Start distance from restricted area or center of facility	End distance from restricted area or center of facility	Comments	

	Very Fine	Around fence line	25 – 50 m	NA	NA	Fence line receptors
	Fine	Square	100 m	0 m	1 km	
	Medium	Square	250 m	1 km	3 km	
	Large Medium	Square	500 m	3 km	5 km	
	Large	Square	1000 m	5 km	10 km	
	Course	Square	5000 m	10 km	50 km	
5	Describe receptor spacing along the fence line.					
	Very Fine. A "very fine" grid of 25 - 50-meter spacing was be placed along the fence lines.					
6	Describe the PSD Class I area receptors.					
	Not Applicable					

16-J: Sensitive areas

1	Are there schools or hospitals or other sensitive areas near the facility? If so describe below. This information is optional (and purposely undefined) but may help determine issues related to public notice.	Yes☐	No☒
	The Artesia Refinery (in which a portion of the RDU is embedded) is located adjacent to, and on the east side of, the town of Artesia. The public school nearest to the refinery is Roselawn Elementary School (about 0.2 mile to the west). The hospital nearest to the refinery is Artesia General Hospital (about 0.7 mile to the west). The south property, encompassing the PTU and a portion of the RDU, is located adjacent to, and on the east side of, the town of Artesia. The public school nearest to the south property is Central Elementary School (about 0.4 mile to the west). The hospital nearest to the south property is also Artesia General Hospital which is located closer to the refinery fence line than it is to the south property fence line.		
3	The modeling review process may need to be accelerated if there is a public hearing. Are there likely to be public comments opposing the permit application?	Yes☐	No☒

16-K: Modeling Scenarios

1	Identify, define, and describe all modeling scenarios. Examples of modeling scenarios include using different production rates, times of day, times of year, simultaneous or alternate operation of old and new equipment during transition periods, etc. Alternative operating scenarios should correspond to all parts of the Universal Application and should be fully described in Section 15 of the Universal Application (UA3).
	Only potential to emit full-time operation scenario was run.
2	Which scenario produces the highest concentrations? Why?
	NA

3	Were emission factor sets used to limit emission rates or hours of operation? (This question pertains to the "SEASON", "MONTH", "HROFDY" and related factor sets, not to the factors used for calculating the maximum emission rate.)	Yes☐	No☒
4	If so, describe factors for each group of sources. List the sources in each group before the factor table for that group. (Modify or duplicate table as necessary. It's ok to put the table below section 16-K if it makes formatting easier.) Sources:		

5

Hour of Day	Factor	Hour of Day	Factor								
1		13									
2		14									
3		15									
4		16									
5		17									
6		18									
7		19									
8		20									
9		21									
10		22									
11		23									
12		24									

If hourly, variable emission rates were used that were not described above, describe them below.

6	Were different emission rates used for short-term and annual modeling? If so describe below.	Yes☐	No☒

16-L: NO_2 Modeling

1	Which types of NO_2 modeling were used? Check all that apply.	
	☐	ARM2
	☒	100% NO_X to NO_2 conversion
	☐	PVMRM
	☐	OLM
	☐	Other:

2	Describe the NO_2 modeling.		
	100% NOx to NO2 conversion		
3	Were default NO_2/NO_X ratios (0.5 minimum, 0.9 maximum or equilibrium) used? If not describe and justify the ratios used below.	Yes☐	No☒
	Not applicable		
4	Describe the design value used for each averaging period modeled.		
	1-hour: High first high Annual: One Year Annual Average		

16-M: Particulate Matter Modeling

1	Select the pollutants for which plume depletion modeling was used.			
	☒	PM2.5		
	☒	PM10		
	☐	None		
2	Describe the particle size distributions used. Include the source of information. For the cooling towers and as reflected in the air permit applications, the PM 2.5 and PM10 emission rates are calculated based on NMED's Technical Memorandum "Calculating TSP, PM-10 and PM-2.5 from Cooling Towers" dated 9/9/2013.			
	Only concentrations were modeled (no deposition). Not applicable.			
3	Does the facility emit at least 40 tons per year of NO_X or at least 40 tons per year of SO_2? Sources that emit at least 40 tons per year of NO_X or at least 40 tons per year of SO_2 are considered to emit significant amounts of precursors and must account for secondary formation of PM2.5.		Yes☐	No☒
4	Was secondary PM modeled for PM2.5?		Yes☐	No☒
5	If MERPs were used to account for secondary PM2.5 fill out the information below. If another method was used describe below.			
	NO_X (ton/yr)	SO_2 (ton/yr)	$[PM2.5]_{annual}$	$[PM2.5]_{24\text{-}hour}$
	A secondary PM2.5 analysis is only required for modifications that increase emissions of NOx and/or SO2 by more than 40 tpy. This proposed modification does not increase emissions of NOx or SO2 by more than 40 tpy, therefore a secondary PM2.5 analysis is not required.			

16-N: Setback Distances

1	Portable sources or sources that need flexibility in their site configuration requires that setback distances be determined between the emission sources and the restricted area boundary (e.g. fence line) for both the initial location and future locations. Describe the setback distances for the initial location.
	Not applicable – No setback distance was applied.
2	Describe the requested, modeled, setback distances for future locations, if this permit is for a portable stationary source. Include a haul road in the relocation modeling.
	Not applicable.

16-O: PSD Increment and Source IDs

1	The unit numbers in the Tables 2-A, 2-B, 2-C, 2-E, 2-F, and 2-I should match the ones in the modeling files. Do these match? If not, provide a cross-reference table between unit numbers if they do not match below.		Yes☒	No☐
	Unit Number in UA-2	Unit Number in Modeling Files		

2	The emission rates in the Tables 2-E and 2-F should match the ones in the modeling files. Do these match? If not, explain why below.	Yes☒	No☐
3	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled?	Yes☐	No☒

4	Which units consume increment for which pollutants? Not applicable – predicted impacts are less than significance.				
	Unit ID	NO_2	SO_2	PM10	PM2.5

5	PSD increment description for sources. (for unusual cases, i.e., baseline unit expanded emissions after baseline date).	Not applicable.

6	Are all the actual installation dates included in Table 2A of the application form, as required? This is necessary to verify the accuracy of PSD increment modeling. If not please explain how increment consumption status is determined for the missing installation dates below.	Yes☒	No☐

16-P: Flare Modeling Not applicable

1	For each flare or flaring scenario, complete the following			
	Flare ID (and scenario)	Average Molecular Weight	Gross Heat Release (cal/s)	Effective Flare Diameter (m)

16-Q: Volume and Related Sources Not Applicable

1	Were the dimensions of volume sources different from standard dimensions in the Air Quality Bureau (AQB) Modeling Guidelines? If not please explain how increment consumption status is determined for the missing installation dates below.	Yes☐	No☐

2 Describe the determination of sigma-Y and sigma-Z for fugitive sources.
3 Describe how the volume sources are related to unit numbers. Or say they are the same.
4 Describe any open pits.
5 Describe emission units included in each open pit.

16-R: Background Concentrations Not Applicable

1	Were NMED provided background concentrations used? Identify the background station used below. If non-NMED provided background concentrations were used describe the data that was used.	Yes☐	No☒
	CO: Choose an item.		
	NO_2: Choose an item.		
	PM2.5: Choose an item.		
	PM10: Choose an item.		
	SO_2: Choose an item.		
	Other:		
	Comments:		
2	Were background concentrations refined to monthly or hourly values? If so describe below.	Yes☐	No☐

16-S: Meteorological Data

1	Was NMED provided meteorological data used? If so select the station used. Artesia	Yes☒	No☐
2	If NMED provided meteorological data was not used describe the data set(s) used below. Discuss how missing data were handled, how stability class was determined, and how the data were processed.		

16-T: Terrain

1	Was complex terrain used in the modeling? If not, describe why below.	Yes☒	No☐
2	What was the source of the terrain data?		
	USGS NED 1: n33w104 n33w105 n33w106 n34w104 n34w105 n34w106		

16-U: Modeling Files

	Describe the modeling files:		
1	File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)
	Artesia PTU-RDU 0421 SO2 2015 Rev1	SO2	ROI/SIA
	Artesia PTU-RDU 0421 CO 2015 Rev1	CO	ROI/SIA
	Artesia PTU-RDU 0421 PM2.5 2015 Rev1	PM2.5	ROI/SIA
	Artesia PTU-RDU 0421 PM10 2015 Rev1	PM10	ROI/SIA
	Artesia PTU-RDU 0421 NO2 2015 Rev1	NO2	ROI/SIA

16-V: PSD New or Major Modification Applications Not Applicable

1	A new PSD major source or a major modification to an existing PSD major source requires additional analysis. Was preconstruction monitoring done (see 20.2.74.306 NMAC and PSD Preapplication Guidance on the AQB website)?	Yes☐	No☐
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes☐	No☐
3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption.		
4	Describe the additional impacts analysis required at 20.2.74.304 NMAC.		
5	If required, have ozone and secondary PM2.5 ambient impacts analyses been completed? If so describe below.	Yes☐	No☐

16-W: Modeling Results

1	If ambient standards are exceeded because of surrounding sources, a culpability analysis is required for the source to show that the contribution from this source is less than the significance levels for the specific pollutant. Was culpability analysis performed? If so describe below.	Yes☐	No☒
2	Identify the maximum concentrations from the modeling analysis. Rows may be modified, added and removed from the table below as necessary.		

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (m)
CO, 8-hr, Significance	1.6	NA	NA	NA	1.6	500	0.32%	556825.02	3633943.93	1027.65
CO, 1-hr, Significance	2.7	NA	NA	NA	2.7	2,000	0.13%	556781.9	3633910.4	1027.76
NO2, Annual, Significance	0.75	NA	NA	NA	0.75	1	75.11%	556825.02	3633943.93	1027.65
NO2, 24-hr, Significance	2.8	NA	NA	NA	2.8	5	55.22%	556825.30	3633944.77	1027.65
NO2, 1-hr, Significance	7.3	NA	NA	NA	7.3	7.52	96.93%	556781.90	3633910.40	1027.76
PM2.5, Annual, Significance	0.18	NA	NA	NA	0.18	0.2	91.32%	556825.02	3633943.93	1027.65
PM2.5, 24-hr, Significance	0.63	NA	NA	NA	0.63	1.2	52.64%	556786.02	3633953.56	1027.62
PM10, Annual, Significance	0.2	NA	NA	NA	0.2	1	19.57%	556825.02	3633943.93	1027.65
PM10, 24-hr, Significance	0.6	NA	NA	NA	0.6	5	12.12%	556784.30	3633943.93	1027.65
SO2, Annual, Significance	0.05	NA	NA	NA	0.05	1	4.88%	556825.02	3633943.93	1027.65

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (m)
SO2, 24-hr, Significance	0.34	NA	NA	NA	0.34	5	6.71%	557053.19	3633996.91	1027.07
SO2, 3-hr, Significance	1.06	NA	NA	NA	1.06	25	4.25%	556944.00	3634011.50	1027.43
SO2, 1-hr, Significance	1.44	NA	NA	NA	1.44	7.8	18.41%	556906.45	3633943.93	1027.74

16-X: Summary/conclusions

	A statement that modeling requirements have been satisfied and that the permit can be issued.
1	The dispersion modeling performed in support of the minor source air permit applications demonstrates the proposed source, comprising the Pretreatment Unit and Renewable Diesel Unit, does not cause or contribute to an exceedance of the Significant Impact Level's (SIL's) for all applicable pollutants: CO, NO_2, PM_{10} , $PM_{2.5}$, and SO_2. Based on the data presented in the previous tables showing impacts below all applicable SIL's, and the demonstration of adherence to EPA and NMED modeling guidance, modeling requirements have been satisfied and the permit can be issued.

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 Renewable Diesel Unit will be a new facility. Therefore, a compliance test history is not applicable.

Compliance Test History Table **(Modify this sample table to suit your facility)**

Unit No.	Test Description	Test Date
	None	

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.

The requested permitting action is completely described in Section 3.

Section 22: Certification

Company Name: Artesia Renewable Diesel Company LLC

I, Blake Arrington, 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 26 day of April, 2021, upon my oath or affirmation, before a notary of the State of Wyoming.

*Signature

Date: 4/26/2021

Blake Arrington
Printed Name

Vice President, Renewables Operations
Title

Scribed and sworn before me on this 26 day of April, 2021.

My authorization as a notary of the State of Wyoming expires on the 29 day of September, 2021.

Notary's Signature

Date: 4/26/2021

Anna Frogge
Notary's Printed Name

ANNA FROGGE - NOTARY PUBLIC
COUNTY OF LARAMIE STATE OF WYOMING
MY COMMISSION EXPIRES SEP 29, 2021

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