

State of New Mexico  
Energy, Minerals and Natural Resources Department

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**Michelle Lujan Grisham**  
Governor

**Sarah Cottrell Propst**  
Cabinet Secretary

**Todd E. Leahy, JD, PhD**  
Deputy Secretary

**Adrienne Sandoval**, Director  
Oil Conservation Division



**BY ELECTRONIC MAIL ONLY**

June 9, 2022

Kawika Tupou  
HollyFrontier Navajo Refining LLC  
501 East Main Street  
Artesia, NM 88210  
[Kawika.Tupou@HollyFrontier.com](mailto:Kawika.Tupou@HollyFrontier.com)

**RE: HollyFrontier Lovington Refinery – Notice of an Administratively Complete Discharge Permit Application**

Dear Mr. Tupou:

The New Mexico Energy, Minerals and Natural Resource Department's Oil Conservation Division (OCD) has reviewed your amended discharge permit application, dated May 25, 2022, for HollyFrontier Navajo Refining LLC (Navajo), Lovington Refinery. OCD has determined that the amended discharge permit application is administratively complete.

Given OCD's determination, Navajo must provide public notice within 30 days of receipt of this letter (i.e., July 9, 2022) in accordance with the requirements of 20.6.2.3108(B) NMAC to the general public in the locale of the Refinery by each of the methods listed below:

1. Prominently posting a synopsis of the public notice at least 2 feet by 3 feet in size, in English and in Spanish, outside of the Refinery's main administrative office at 7406 South Main Street, Lovington, NM 88210 and at the Lea County District Courthouse at 100 Main Street, Lovington, NM 88260 for 30 days;
2. Providing written notice of the discharge by mail or electronic mail, to owners of record of all properties within a 1/3 mile distance from the boundary of the property where the discharge site is located; if there are no properties other than properties owned by the discharger within a 1/3 mile distance from the boundary of property where the discharge site is located, Navajo shall provide notice to owners of record of the next nearest adjacent properties not owned by the discharger;

Mr. Tupou  
June 9, 2022  
Page 2 of 2

3. Providing notice by certified mail, return receipt requested, to the City of Lovington, owner of the discharge site; and
4. Publishing a synopsis of the notice in English and in Spanish, in a display ad at least three inches by four inches not in the classified or legal advertisements section, in the Hobbs News-Sun.

As per 20.6.2.3108(F) NMAC, the notice must also include the address and phone number within OCD by which interested persons may obtain information, submit comments, and request to be placed on a facility-specific mailing list for future notices; the notice must also include a statement that OCD will accept comments and statements of interest regarding the application and will create a facility-specific mailing list for persons who wish to receive future notices. The following OCD contact information must be included in the notice:

Leigh Barr - Administrative Permitting Supervisor  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505  
(505) 670-5684  
OCD.DischargePermits@state.nm.us

Within 15-days of completion of the public notice requirements in 20.6.2.3108(B) NMAC, Navajo must submit to the OCD proof of the notice, including affidavit of mailing(s) and the list of property owner(s), proof of publication, and an affidavit of posting, as appropriate.

If you have any questions, please do not hesitate to contact me by phone at (505) 670-5684 or by email at [LeighP.Barr@state.nm.us](mailto:LeighP.Barr@state.nm.us). On behalf of the OCD, I wish to thank you and your staff for your cooperation during this process.

Regards,

*Leigh Barr*

Leigh P. Barr  
Administrative Permitting Supervisor



May 25, 2022

Certified Mail Return Receipt  
7019 0700 0002 3127 5963

Ms. Leigh Barr  
Oil Conservation Division  
New Mexico Energy, Minerals & Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: Groundwater Discharge Plan - Permit Application for a Discharge Permit –  
Response to Notice of Administratively Incomplete Discharge Permit Renewal  
Application

Dear Ms. Barr:

HollyFrontier Navajo Refining LLC (Navajo) submitted a Groundwater Discharge Plan as its application for a Discharge Permit for the Navajo Refinery in Lovington, New Mexico, on April 6, 2022. The Oil Conservation Division (OCD) provided comments to Navajo on April 25, 2022. The enclosed revised Groundwater Discharge Plan constitutes Navajo's formal response to the comments received.

A Response and Cross-Reference Table containing Navajo's response to the comments received from the OCD, and the location of the revisions within the Groundwater Discharge Plan, is provided in Attachment 1.

Should you have questions or requests for additional information, please contact Kawika Tupou at (575) 746-5487 or [Kawika.Tupou@hollyfrontier.com](mailto:Kawika.Tupou@hollyfrontier.com). Thank you for your consideration in this matter.

Sincerely,

Parrish Miller  
Vice President and Refinery Manager  
HollyFrontier Navajo Refining LLC

CC: Mike Holder, HFC  
Kawika Tupou, HFNR

Attachment 1 – Response and Cross-Reference Table

HollyFrontier Navajo Refining LLC  
501 East Main, Artesia, NM 88210  
575-748-3311 | [HFSinclair.com](http://HFSinclair.com)

**ATTACHMENT 1  
RESPONSE AND CROSS-REFERENCE TABLE**

**Response and Cross Reference Table**

<b>Comment Number</b>	<b>OCD Comment</b>	<b>Navajo Response</b>	<b>Location of Revision/Information in Application</b>
1	The provided latitude and longitude do not identify the actual location of the refinery. OCD believes the correct coordinates are 32.879790° N and -103.301777° W. Please verify and correct.	The Lovington Refinery location coordinates have been confirmed to be 32.879790° N and -103.301777° W. These coordinates have been updated in Section 2.1.	Section 2.1
2	Figure 2-1 shows an unidentified pit/pond near MW-27. Provide the purpose, capacity/volume, and if the pit/pond is lined or unlined? Also, show where the API is located in Figure 2-1.	Figure 2-1 has been modified to include the locations of the API Separator and the lined 2,000,000-gallon Firewater Pond, located near MW-27. There is no potential discharge of constituents of concern from the firewater pond; therefore, this pond is not discussed in the text of the Groundwater Discharge Plan.	Figure 2-1
3	Update the appropriate sections of the discharge permit application to reference the 2021 Annual Facility-Wide Groundwater Monitoring Report.	Updated applicable sections of the discharge permit application to reference the 2021 Annual Facility-Wide Groundwater Monitoring Report submitted on April 18, 2022 (after the Groundwater Discharge Plan was submitted to OCD on April 6, 2022).	Sections 3.1, 3.6, 3.8, 4.4.1, and 4.4.2

**Response and Cross Reference Table (cont.)**

Comment Number	OCD Comment	Navajo Response	Location of Revision/Information in Application
4	<p>In Section 6, add discussion on the steps Navajo has taken to prevent improper line hook-ups at tank truck loading and unloading stations and measures to prevent operator error by opening the wrong valve or starting up a wrong pump.</p>	<p>Section 6.1.1 has been modified to include loading/unloading standard operating procedures followed at the Refinery.</p> <p>The full standard operating procedures have been provided as Appendix 6-2.</p>	<p>Section 6.1.1, Appendix 6-2</p>
5	<p>In Section 6.1.1, the following is stated, “Visual inspections are performed on an on-going basis for sewer caps, berms, spill response equipment, the API Separator, and signs of leakage and corrosion on and around tanks, loading and unloading stations, and above ground valving and piping.” Define the meaning of “on-going” (e.g., daily, weekly, monthly, etc.) for these inspections.</p>	<p>Visual inspections are performed on a daily basis by employees on shift in the areas provided in Section 6.1.1. Responsible employees are aware of potential problems that could occur in different areas of the Refinery and are trained to visually (and informally) inspect areas for issues when the employee is present in the applicable Refinery areas.</p> <p>Additionally, monthly written inspection is performed for the API Separator, berms, sewer caps, the spill trailer, and the Pipeline, Processing, and Wastewater and Crude Tank Farms. Section 6.1.1 has been revised to clarify the timing of inspections.</p> <p>Appendix 6-1 has been revised to include additional example inspection forms.</p>	<p>Section 6.1.1, Appendix 6-1</p>

**Response and Cross Reference Table (cont.)**

<b>Comment Number</b>	<b>OCD Comment</b>	<b>Navajo Response</b>	<b>Location of Revision/Information in Application</b>
6	In Section 9, the Lovington Daily Leader is specified as the newspaper Navajo will use to publish their public notice. OCD does not believe this newspaper meets the “general circulation” requirement. OCD contacted the Lovington Daily Leader and determined the newspaper is circulated only via an online subscription service. OCD requests the public notice be published in the Hobbs News-Sun.	Sections 9.4 and 9.5 have been revised to list the Hobbs News-Sun as the newspaper in which the public notice will be published.	Sections 9.4 and 9.5
7	In Appendix 9-1, change the OCD contact email address from <a href="mailto:leighP.Barr@state.nm.us">leighP.Barr@state.nm.us</a> to <a href="mailto:OCD.DischargePermits@state.nm.us">OCD.DischargePermits@state.nm.us</a> .	The OCD contact email address has been revised in both the English and Spanish versions of the Public Notice to include the provided email address – <a href="mailto:OCD.DischargePermits@state.nm.us">OCD.DischargePermits@state.nm.us</a> .	Appendix 9-1
8	The certification page in Section 12 was not signed. Include a signed certification page.	A signed certification page has been included in this submittal.	Section 12

Note: OCD Comments are copied verbatim from the April 25, 2022, letter to Navajo from Ms. Leigh P. Barr at OCD.

**Acronyms:**

API – American Petroleum Institute

Bbl - Barrel

Gpm – Gallons Per Minute

HWMU – Hazardous Waste Management Unit

OCD – Oil Conservation District

NMAC – New Mexico Administrative Code

# Groundwater Discharge Plan

Prepared for



HollyFrontier Navajo Refinery LLC  
Lovington Refinery  
Lovington, New Mexico

Prepared by



505 East Huntland Dr., Suite 250  
Austin, Texas 78752

**April 6, 2022; Revised May 25, 2022**

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**LIST OF ACRONYMS AND ABBREVIATIONS**

Amsl	Above Mean Sea Level
API	American Petroleum Institute
ASTs	Aboveground Storage Tanks
bb1	barrel
bgs	below ground surface
CAA	Central Accumulation Areas
CAP	Corrective Action Program
CGWSLs	Critical Groundwater Screening Level
COC	Chemical of concern
DRO	Diesel range organics
EDB	1,2-dibromomethane
FWGMWP	Facility Wide Groundwater Monitoring Workplan
Gpd	Gallons per day
Gpm	Gallons Per Minute
GRO	Gasoline range organics
HEP	Holly Energy Partners
HFC	HollyFrontier Corporation
HUC	Hydrologic Unit Code
LNAPL	light non-aqueous phase liquid
mg/L	milligrams per liter
MQL	Method Quantitation Limit
MSGP	Multi Sector General Permit
MSRC	Marine Spill Response Corporation
MTBE	Methyl Tert-Butyl Ether
Navajo	HollyFrontier Navajo Refining LLC
NHD	National Hydrography Dataset
NM	New Mexico
NMAC	New Mexico Administrative Code
NMED	New Mexico Environmental Department
NMPM	New Mexico Principal Meridian
NOAA	National Oceanic and Atmospheric Administration

**LIST OF ACRONYMS AND ABBREVIATIONS (CONT.)**

NPDES	National Pollutant Discharge Elimination System
NRC	National Response Center
NWGLDE	National Work Group of Leak Detection Evaluations
OCD	New Mexico Energy, Minerals & Natural Resources Department, Oil Conservation District
OSRO	Oil Spill Response Organization
PD	Probability of Detection
PF	Probability of False Alarm
POTW	Publicly Owned Treatment Works
RCRA	Resource Conservation and Recovery Act
SAA	Satellite Accumulation Areas
SPCC Plan	Spill Prevention Control and Countermeasure Plan
SVOC	Semivolatile Organic Compounds
TBA	tert-butyl alcohol
TDS	Total Dissolved Solids
The Refinery	Navajo Refinery in Lovington, New Mexico
TPH	Total Petroleum Hydrocarbons
USACE	United States Army Core of Engineers
U.S. EPA	United States Environmental Protection Agency
USGS	United States Geological Survey
USPS	United States Postal Service
VOC	Volatile Organic Compounds
WQCC	Water Quality Control Commission
WWTP	Wastewater Treatment Plant
40 CFR	Title 40 of the Code of Federal Regulations

Groundwater Discharge Plan  
HollyFrontier Navajo Refining LLC – Lovington, New Mexico

April 6, 2022

**Cross-References of Groundwater Discharge Plan Contents to  
OCD Groundwater Discharge Application/Plan Format Guidelines**

<b>OCD Groundwater Discharge Application/Plan Format Guidelines</b>	<b>Location in Groundwater Discharge Plan</b>
Facility Description	Section 2, Figures 2-1, and 2-2
Site Characteristics	Section 3, Figure 3-1
Potential and Intentional Discharges	Section 4, Tables 4-1, and 4-2
Collection and Storage Systems	Section 5
Inspection, Maintenance, and Reporting	Section 6, Appendix 6-1
Proposed Modifications	Section 7
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Certification	Section 12

### Regulatory Cross-References of Groundwater Discharge Plan Contents to New Mexico Administrative Code Requirements

Applicable New Mexico Administrative Code (NMAC) Section	Information Requirement	Location in Groundwater Discharge Plan
20.6.2.3106(D)(1)	Quantity, quality, and flow characteristics of the discharge	Sections 4.1, 4.3, and Tables 4-1 and 4-2
20.6.2.3106(D)(2)	Location of the discharge and of any bodies of water, watercourses, and ground water discharge sites within one miles of the outside perimeter of the discharge site, and existing or proposed wells to be used for monitoring	Section 3.4, Figure 3-1
20.6.2.3106(D)(3)	Depth to and TDS concentration of groundwater most likely to be affected by discharge	Section 3.8
20.6.2.3106(D)(4)	Flooding potential of the site	Section 3.7
20.6.2.3106(D)(5)	Location and design of site and method to be available for sampling and for measurements or calculations of flow	Sections 3.8 and 4.4
20.6.2.3106(D)(6)	Depth and description of lithology	Section 3.5
20.6.2.3106(D)(7)	Information demonstrating that discharges will not be above standards	Sections 3.5 and 3.6
20.6.2.3107(A)(1)	The installation, use, and maintenance of effluent monitoring devices	Section 6
20.6.2.3107(A)(2)	The installation, use, and maintenance of effluent monitoring devices for the groundwater most likely to be affected by the discharge	Sections 3.8, 4.4, 6.2, and 6.3
20.6.2.3107(A)(3)	Monitoring in the vadose zone	Section 3.8
20.6.2.3107(A)(4)	Continuation of monitoring after cessation of operations	Section 11
20.6.2.3107(A)(5)	Periodic submission to the secretary or results obtained pursuant to any monitoring requirements in the discharge permit and the methods used to obtain these results	Section 4.4

**Regulatory Cross-References of Groundwater Discharge Plan Contents to  
New Mexico Administrative Code Requirements (Cont.)**

<b>Applicable New Mexico Administrative Code (NMAC) Section</b>	<b>Information Requirement</b>	<b>Location in Groundwater Discharge Plan</b>
20.6.2.3107(A)(7)	The discharger to retain for a period of at least five years any monitoring data required in the discharge permit	Section 3.8
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20.6.2.3107(A)(9)	Procedures for detecting failure of the discharge system	Sections 6.1 and 6.2
20.6.2.3107(A)(10)	Contingency Plan to address failure of the discharge permit or system	Section 8
20.6.2.3107(A)(11)	Closure Plan	Section 11
20.6.2.3108(A)	Administrative Completeness and Public Notice	Section 9
20.6.2.3108(B)(1)	Providing specific notice to the general public for every 640 acres or less of a discharge site, a 2x3 feet poster will be posted for the public	Section 9.1
20.6.2.3108(B)(2)	Providing written notice of where discharge is located to all neighbors within 1/3 mile	Section 9.2
20.6.2.3108(B)(3)	Providing notice to owner if applicant is not owner	Section 9.3
20.6.2.3108(B)(4)	Publishing synopsis that is 3x4 inches in a newspaper of general circulation in the location of discharge	Section 9.4
20.6.2.3108(D)	Submit proof of public notice to the department after the public notice period	Section 9.5
20.6.2.3108(F)(1) - (F)(5)	Name and address of proposed discharger	Section 9.6, Appendix 9-1
20.6.2.3114	Fees	Section 1.2

## 1 INTRODUCTION

HollyFrontier Navajo Refining LLC (Navajo) hereby submits this Groundwater Discharge Plan as its application for a Discharge Permit for the Navajo Refinery in Lovington, New Mexico (NM)(the Refinery).<sup>1</sup> Despite having no intentional discharges, the Lovington Facility is required to submit a Groundwater Discharge Plan to the New Mexico Energy, Minerals & Natural Resources Department, Oil Conservation Division (OCD, Agency) pursuant to Section 20.6.2.3106(B) of the New Mexico Administrative Code (NMAC) due to the possibility of potential discharges at the Lovington Facility.

### 1.1 APPLICATION CONTENTS AND STRUCTURE

This Application Discharge Plan was developed based on the requirements set forth in the following forms and regulations:

- 20.6.2.3106 NMAC – Application for Discharge Permits, Renewals, and Applications
- 20.6.2.3107 NMAC – Monitoring, Reporting, and Other Requirements
- 20.6.2.3108 NMAC – Public Notice and Participation
- 20.6.2.3109 NMAC – Secretary Approval, Disapproval, Modification, or Termination of Discharge Permits, and Requirements for Abatement Plans
- OCD Form (unnumbered): *Ground Water Discharge Application/Plan Format Guidelines* (Revised September 2021)
- OCD Guidance: *Discharge Plan Application and Guidance Document for Refineries, Natural Gas Plants, Well Pad Tank Batteries, Gas Compressor Stations, Crude Oil Pump Stations, and Oil and Gas Service Companies* (Revised September 2021)

A regulatory cross-reference table indicating the sections of the Application that provide information required by the regulations is provided in the Checklist for Administrative Completeness and Regulatory Cross Reference Tables included as part of the Table of Contents of this Application.

### 1.2 FILING AND PERMIT FEES

In accordance with 20.6.2.3114(F) NMAC, Navajo has submitted the applicable permit application filing fee (\$100) under separate cover and understands that a permit fee of \$8,400 will be assessed upon approval of the Application.

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<sup>1</sup>For ease of reference, this Groundwater Discharge Plan, which serves as Navajo’s application for a discharge permit, will be referred to hereafter as “the Application.”

## 2 FACILITY DESCRIPTION

The Refinery is located at 7406 South Main Street in the City of Lovington, Lea County, New Mexico, 88260 in Section 15, Township 16 South, Range 36 East, New Mexico Principal Meridian (NMPM), Lea County. The Refinery occupies approximately 150 acres of land about five miles south of the city of Lovington, NM. Figure 2-1 is an aerial map showing the location of the Refinery, and the following other features required to be depicted in the Application, if applicable:

- location of fences
- pits
- berms
- tanks
- loading areas
- storage facilities
- disposal facilities
- processing facilities
- wastewater treatment facilities
- monitoring wells
- facility/property boundaries

A large-scale topographic map is provided as Figure 2-2.

### 2.1 FACILITY INFORMATION

Owner/Operator of Facility:	<u>HollyFrontier Navajo Refining LLC</u>
Facility Name:	<u>Lovington Refinery</u>
Facility Address:	<u>7406 South Main Street, Lovington, NM 88260</u>
Mailing Address:	<u>P.O. Box 159</u>
City, State, and U.S. Zip Code:	<u>Artesia, New Mexico 88211-0159</u>
Facility Phone Number:	<u>575-396-5821</u>
Latitude:	<u>32.879790° N (decimal degrees)</u>
Longitude:	<u>-103.301777° W (decimal degrees)</u>
Facility OGRID Number:	<u>15694</u>
NAICS Code:	<u>324110</u>
SIC Code:	<u>2911</u>

**2.2 FACILITY CONTACT**

Primary Contact: Kawika Tupou, Environmental Manager  
Work Phone: 575-746-5487  
Email: Kawika.Tupou@HollyFrontier.com

**2.3 FACILITY USE**

The Refinery is located within the Permian oil field, surrounded by grazing land and oilfield production, oilfield injection wells, and the City of Lovington. The facility is located on leased property owned by the City of Lovington.

The Refinery is a crude/vacuum distillation facility that processes crude oil into intermediate products that are transported to the Navajo Artesia Refinery by means of intermediate pipelines owned by Holly Energy Partners (HEP). These products are upgraded into finished products at the Navajo Artesia Refinery.

The Refinery has a maximum total storage capacity of 52,015,026 gallons (1,238,453 bbl.), with an average storage volume of 5,024,880 gallons (119,640 bbl.). The facility stores crude oil, gas oil<sup>1</sup>, and diesel fuel in 23 oil storage tanks and temporarily stores hazardous wastes in two central accumulation areas. Crude oil is received at the facility from tank trucks at the loading racks and via pipelines and is stored in bulk oil storage tanks prior to refining. Finished and intermediate products are stored on-site in bulk oil storage tanks prior to shipment off-site via tank trucks or pipeline.

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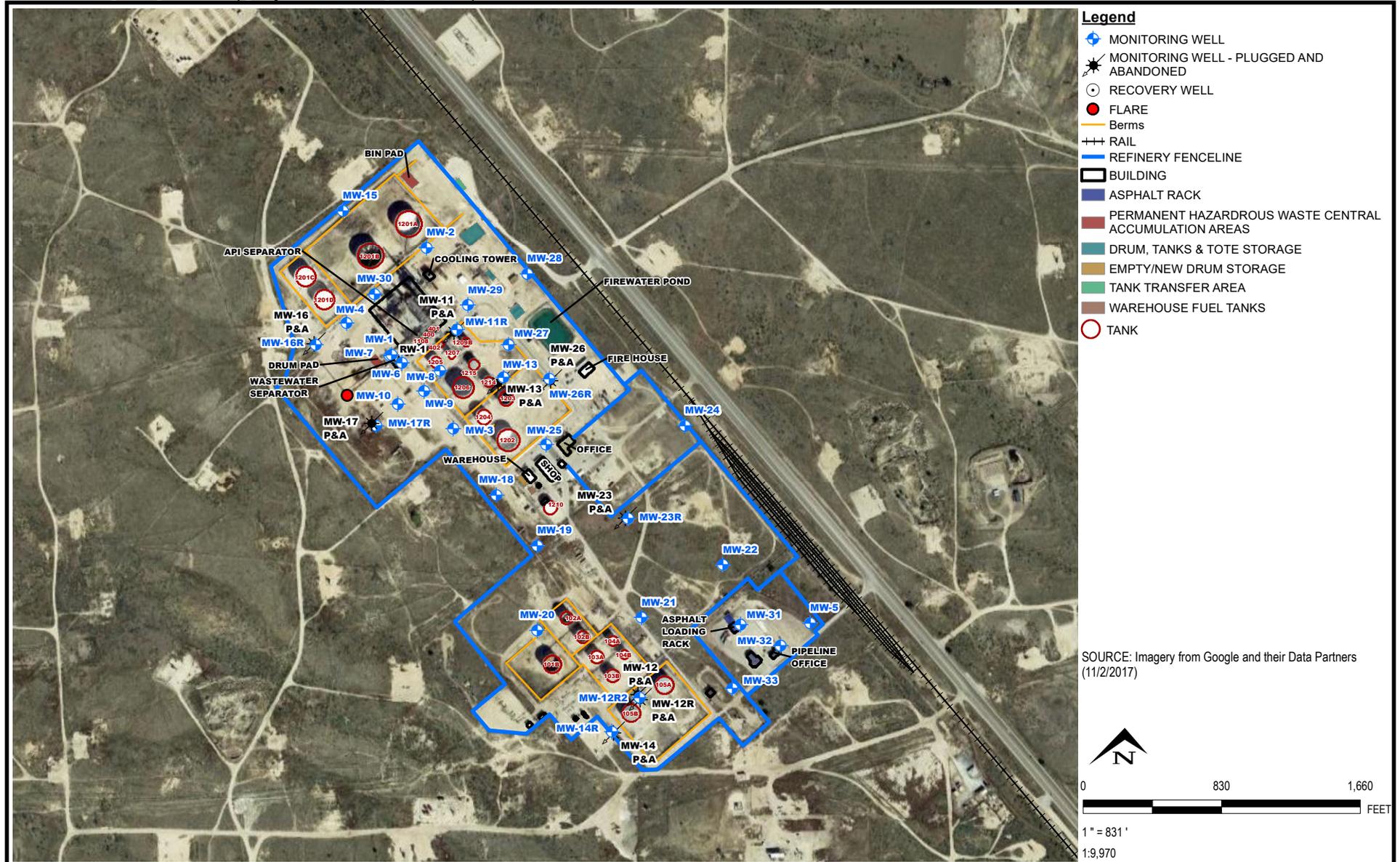
<sup>1</sup> Gas oil is a highly viscous intermediate product of crude oil distillation that is used in subsequent refining processes.

## FIGURES FOR FACILITY DESCRIPTION

### Figures

- 2-1 Facility Site Plan
- 2-2 Topographic Map

S:\1-PROJECTS\HOLLY ENERGY PARTNERS\Navajo\_Lovington\464485\MXD\464485\_2-1.mxd -- Saved By: MJAGOE on 5/16/2022, 14:54:02 PM

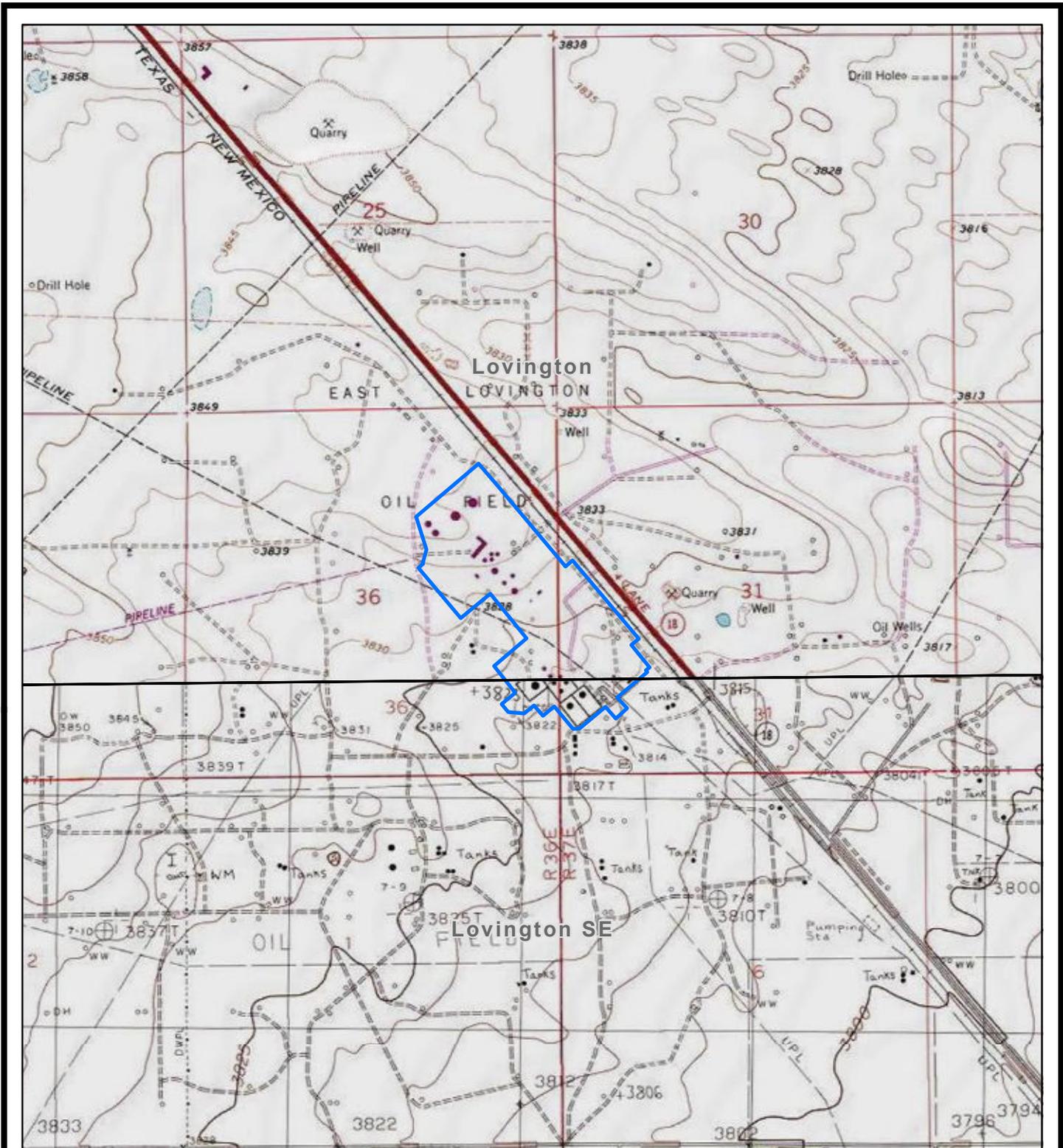



505 East Huntland Drive  
Suite #250  
Austin, TX 78752  
Phone: 512.329.6080

TRC - GIS

PROJECT:	<b>HOLLYFRONTIER NAVAJO REFINING LLC AP-110, LOVINGTON REFINERY, LOVINGTON, NM</b>
TITLE:	<b>REFINERY SITE PLAN</b>

DRAWN BY:	M. JAGOE
CHECKED BY:	M. WALTHER
APPROVED BY:	S. CONSTABLE
DATE:	MAY 2022
PROJ. NO.:	464885
FILE:	464485_2-1.mxd
<b>FIGURE 2-1</b>	



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

**Legend**

REFINERY FENCELINE



<p><b>TRC</b> 505 East Huntland Drive Suite #250 Austin, TX 78752 Phone: 512.329.6080</p> <p>TRC - GIS</p>	PROJECT: <p><b>HOLLYFRONTIER NAVAJO REFINING LLC AP-110, LOVINGTON REFINERY, LOVINGTON, NM</b></p>	DRAWN BY: M. JAGOE CHECKED BY: M. WALTHER APPROVED BY: S. CONSTABLE DATE: MARCH 2022
	TITLE: <p><b>TOPOGRAPHIC MAP</b></p>	PROJ. NO.: 464885 FILE: 464485_2-2.mxd

**FIGURE 2-2**

S:\1-PROJECTS\HOLLY\_ENERGY\_PARTNERS\Navajo\_Lovington\464485\MXD\464485\_2-2.mxd -- Saved By: MJAGOE on 3/29/2022, 15:38:00 PM

### 3 SITE CHARACTERISTICS

The following sections provide available geologic and hydrogeologic information regarding the Refinery and satisfy the Water Quality Control Commission (WQCC) regulations (20.6.2.3106(G) NMAC), which require that applications include and address “all of the information necessary” for evaluation of a new discharge permit, including information on geology and hydrology.

#### 3.1 RELEVANT INVESTIGATION AND DOCUMENTS

Extensive subsurface investigations have been completed for the Refinery. The methods and results of the most recent and pertinent assessments are contained in the following reports, which were submitted to the OCD:

- *2021 Annual Facility-Wide Groundwater Monitoring Report* (TRC, April 2022)
- *Revised Facility Wide Groundwater Monitoring Workplan* (TRC, November 2017) (“FWGMWP”)

#### 3.2 TOPOGRAPHY AND VEGETATION

The Refinery is located approximately five miles south of Lovington in Lea County, New Mexico. The Refinery is located on flat terrain generally sloping to the southeast, with an elevation of 3,841 feet above mean sea level (amsl).

The vegetation surrounding the city is typified by grasslands, desert vegetation, and irrigated farmlands, which include annual and permanent pastures. The immediate area surrounding the Refinery is industrialized, comprised mostly of oil fields.

#### 3.3 SURFICIAL SOILS

Surficial soil at the Refinery is predominantly comprised of approximately 83 percent (%) Kimbrough series and 17% Stegall series. The Kimbrough series consists of soils that are shallow, well drained calcareous, gravelly soils that formed in moderately fine textured eolian sediment of the Blackwater Draw Formation of Pleistocene age. The Stegall series consists of soils that are deep, well drained, and moderately slowly permeable petrocalcic horizon. They both have low runoff.

#### 3.4 NEARBY WATER FEATURES

Figure 3-1 shows the locations of streams, springs or other watercourses, and water wells within one mile of the site. There are no locations of intentional ground water discharge from the Refinery within one mile of the outside perimeter of the site. The existing groundwater monitoring wells around the Refinery are shown in Figure 2 (Well Location Map) of the 2017 FWGMWP and Figure 2-1 of this Application.

### **3.5 GEOLOGY**

The City of Lovington is located on the northwest shelf of the Permian Basin. In this region, the deposits comprise of Quaternary alluvium conformably overlying Tertiary clastic and carbonate rocks. These Tertiary deposits unconformably overlie Mesozoic-age clastic and carbonate rocks.

#### **3.5.1 Quaternary Alluvium**

The Quaternary alluvium in the Refinery area is dominantly comprised of clays, silts, and fine sand. Though northern Lea County is part of the Pecos River Basin, there is no connecting drainage to the Pecos River Valley. These “valley fill” deposits extend in the east-southeast direction approximately 20 miles wide, separated by low hills. The depressions and hills pass directly into dune areas and sandier soils near the New Mexico-Texas State line. A few depressions are present, most of which have bottom areas of less than 5 acres. The alluvial sediments are primarily sand, silt, and clay. Quaternary alluvial deposits present in the southern part of the area near Monument, that is approximately 15 miles from the Refinery, are hydraulically connected to the Ogallala Formation.

#### **3.5.2 Ogallala Formation**

The Ogallala Formation crops out over most of the High Plains area. It unconformably overlies the pre-Ogallala erosional surface developed on Cretaceous and Triassic rocks. The Ogallala Formation is erosionally truncated against the underlying Cretaceous and Triassic rocks in the northern and western part of Lea County and increases in thickness to about 350 feet along parts of the Mescalero Ridge. The Ogallala was deposited by meandering streams flowing across a post-Mesozoic erosional surface. The sediments of the Ogallala Formation primarily are unconsolidated sand, silt, clay, and gravel.

In the area of the Refinery, the Ogallala Formation is present at depths generally 102 to 122 feet below ground surface and consists of fine-grained sand.

#### **3.5.3 Permian Artesian Group**

The Permian Artesian Group is comprised of the following five formations from shallowest to deepest: the Tansill, Yates, Seven Rivers, Queen and Grayburg Formations. The Tansill and Yates Formations outcrop at the surface east of the Pecos River and are not present in the vicinity of the Refinery.

In the area of the Refinery, older rocks crop out in only two places. Rocks of Late Triassic age along Mescalero Ridge and rocks of Early Cretaceous age on the west side of the northernmost of the Four Lakes. Rocks of Precambrian and Permian age are present only in the subsurface.

### **3.6 HYDROGEOLOGY**

The uppermost groundwater zone at the Refinery is the Ogallala (or High Plains) Aquifer and is currently present at depths ranging from 102 to 122 feet below ground surface at the Refinery. The natural groundwater flow across the refinery is towards the southeast, but active

pumping from three onsite water supply wells creates a cone of depression at the central portion of the refinery that induces flow to the northwest, north, and northeast within the southern portion of the refinery. This cone of depression provides hydraulic capture at the southern boundary of the refinery (natural downgradient boundary). The typical groundwater flow regime is shown on the attached Figure 2, the groundwater potentiometric surface map for October 2020 that was provided to the OCD in the *2021 Annual Groundwater Monitoring Report*.

Groundwater elevations have been steadily decreasing over time and have decreased more than 10 feet over the last 10 years. As an example, groundwater elevations measured in monitoring well MW 6 have declined 14.93 feet from June 2009 to September 2021. The depth to water in all monitoring wells has decreased since 2009 as a result of extended drought conditions and increased regional pumping of the Ogallala aquifer. The Refinery has actively been replacing monitoring wells that are going dry, but the current depths are difficult for conventional environmental drilling techniques (i.e., without mud).

The Ogallala Formation is the principal aquifer and contains various saturated zones. Deposits of Triassic, Cretaceous, and Quaternary age generally yield small amounts of water. The Ogallala Formation has not been subdivided in northern Lea County because of the indistinctive beds. (Ash, 1961, p. 21). The alluvial sediments, present near the Refinery, are primarily sand, silt, and clay. Quaternary alluvial deposits present near Monument, approximately 15 miles from the Refinery, are hydraulically connected to the Ogallala Formation (Nicholson and Clebsch, 1961). The Ogallala Formation is an unconfined aquifer and ranges in thickness from 0 to 350 feet below ground surface (bgs) and averages approximately 200 feet bgs. Near the Refinery, it ranges from 75 to 225 feet bgs and averages about 150 feet. Near the Refinery, groundwater flow direction is generally to the southeast. Groundwater samples are collected during semi-annual sampling events and are submitted for laboratory analysis by prescribed analytical methods in accordance with the FWGMWP (total dissolved solids [TDS] by Method 2540).

One area within the saturated zone of the Ogallala near the Refinery contain light non-aqueous phase liquid (LNAPL) and dissolved-phase hydrocarbon constituents, as reported in the *2021 Annual Groundwater Monitoring Report*. With a few exceptions, concentrations of dissolved-phase hydrocarbon constituents in the saturated zone are stable within the historical range of concentrations.

### **3.7 SURFACE WATER DRAINAGE**

The two nearest downgradient surface water features are located in Hobbs, Lea County, New Mexico, approximately 12 miles southeast of the Refinery. These surface water features are the headwaters of Johnson Draw and Seminole Draw which are both located within drainage basins associated with the Refinery. The drainage basins associated with the Refinery, (Hydrologic Unit Code [HUC] 120800030402 (Johnson Draw), HUC 120800030403 (Unnamed), HUC 120800030404 (Upper Seminole Draw), and HUC 120800030405 (Middle Seminole Draw), are within the upper reaches of the Colorado River Basin and generally exhibit a southeasterly surface water flow direction, which is consistent with the surrounding region. Johnson Draw and Seminole Draw are indicated as intermittent streams on the United States Geological Survey (USGS)

topographical maps and the National Hydrography Dataset (NHD). Although the United States Army Corps of Engineers (USACE) – Albuquerque District has identified Johnson Draw and Seminole Draw as tributaries of navigable waters, no navigable waters of the U.S. have been identified within the region of the Refinery. The elevation gradient of the area is relatively flat between the Refinery and the two streams, ranging from approximately 3,840 feet amsl to 3,640 feet amsl at Seminole Draw and 3,650 feet amsl at Johnson Draw.

Based on National Oceanic and Atmospheric Administration (NOAA) data, there have not been historical flood events at the Refinery. Precipitation events within the region are relatively infrequent, with the rainiest period generally occurring between June and August. The average annual precipitation for this region is 1.48 inches.

### 3.8 GROUNDWATER

Routine groundwater monitoring is currently conducted at the Refinery in accordance with the current FWGMWP. The groundwater monitoring program consists of semi-annual groundwater gauging of monitoring wells, semi-annual groundwater sampling of monitoring wells, quarterly sampling of refinery water supply wells, and annual reporting. Groundwater samples are submitted to an independent commercial laboratory for analysis of chemicals of concern (COCs) as specified in the current FWGMWP, including volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH) gasoline range organics (GRO), TPH diesel range organics (DRO), dissolved metals, total mercury, anions, alkalinity, and/or TDS.

TDS were detected in the groundwater near the center of the Refinery at concentrations in exceedance of the WQCC standards. The average TDS concentration is approximately 1,440 mg/L at a depth of approximately 100 feet bgs. Laboratory analytical data reports and tabulated results of groundwater samples collected on a semi-annual or quarterly basis are provided in the annual groundwater reports, with the most recent being Appendix C of the *2021 Annual Groundwater Monitoring Report* that was submitted to the OCD in April 2022. Groundwater monitoring data is maintained at the Refinery for a period of at least five years.

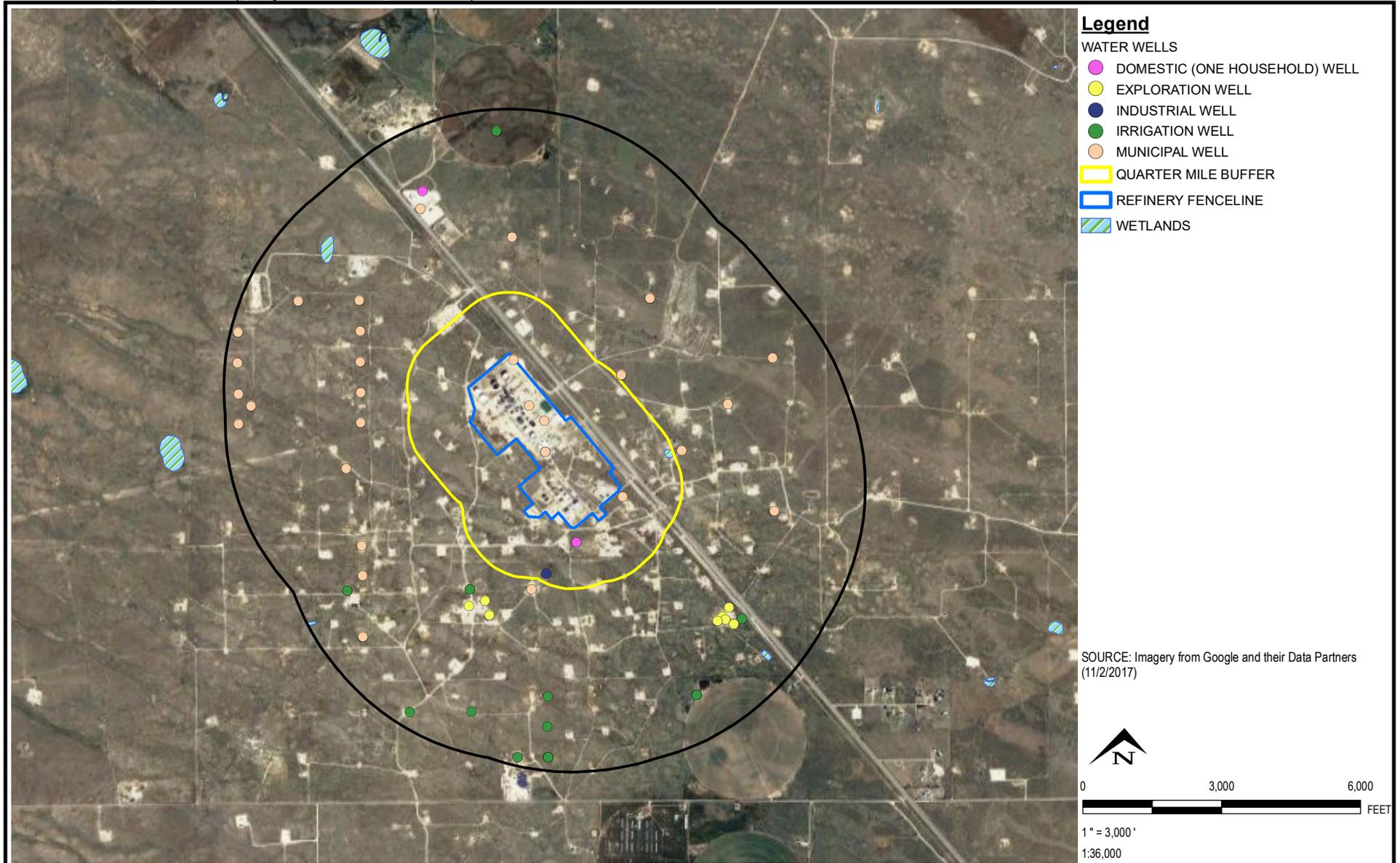
The *2021 Annual Groundwater Monitoring Report* indicated that groundwater elevations measured during both semi-annual gauging events indicate groundwater elevations are decreasing and groundwater flows radially (southeast, south, and north/northwest) towards a cone of depression near the three refinery water supply wells located within the central portion of the Refinery (wells WW-East, WW-North, and WW-South) preventing migration of constituents off-site, but also enabling on-site migration of constituents from potential off-site sources (e.g., active oil production and injection wells). This cone of depression is consistent with previous events, and is induced by groundwater pumping from the three on-site refinery water supply wells for refinery process use and non-potable restroom and safety shower use. The natural groundwater flow direction at the refinery (i.e., not influenced by pumping) is to the southeast, as observed in the northern portion of the Refinery.

## FIGURES FOR SITE CHARACTERISTIC

### Figures

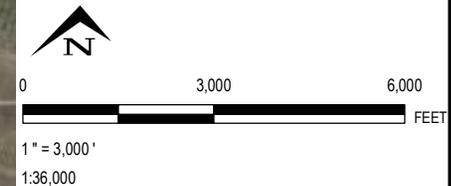
3-1 Facility Water Sources

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- Legend**
- WATER WELLS
- DOMESTIC (ONE HOUSEHOLD) WELL
  - EXPLORATION WELL
  - INDUSTRIAL WELL
  - IRRIGATION WELL
  - MUNICIPAL WELL
  - QUARTER MILE BUFFER
  - REFINERY FENCELINE
  - WETLANDS

SOURCE: Imagery from Google and their Data Partners (11/2/2017)




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TRC - GIS

PROJECT:	<b>HOLLYFRONTIER NAVAJO REFINING LLC AP-110, LOVINGTON REFINERY, LOVINGTON, NM</b>
TITLE:	<b>REFINERY WATER SOURCES</b>

DRAWN BY:	M. JAGOE
CHECKED BY:	
APPROVED BY:	
DATE:	MARCH 2022
PROJ. NO.:	464885
FILE:	464485_3-1.mxd
<b>FIGURE 3-1</b>	

## **4 POTENTIAL OR INTENTIONAL DISCHARGES**

This section of the Application addresses potential (unplanned) discharges to ensure that they do not adversely impact human health or the environment. There are no intentional (planned) discharges from the Refinery at the time of the submittal of this Groundwater Discharge Plan in March 2022.

### **4.1 STORAGE AND COLLECTION SYSTEMS**

Materials stored at the Refinery that may present a risk to human health or the environment if unintentionally discharged include crude oil, gas oil, and diesel fuel. The Refinery has a total maximum storage capacity of 52,015,026 gallons (1,238,453 bbl.), with an average storage volume of 5,024,880 gallons (119,640 bbl.). The daily throughput averages 2,937,102 gallons (69,931 bbl.) of intermediates transferred to the Navajo Artesia Refinery from the Refinery. Crude oil is received at the Refinery from tank trucks at the loading racks and via pipelines and is stored in bulk oil storage tanks prior to refining. Finished and intermediate products are stored on-site in bulk oil storage tanks prior to shipment off-site via tank trucks or pipeline.

A detailed summary of materials stored in aboveground storage tanks (ASTs) and information about the materials and containers, including if liquid or solid, type of container, estimated volume storage, primary and secondary containment, and whether containment is lined or unlined, is provided as Table 4-1. The location of each tank can be found on Figure 2-1.

The Refinery does not operate or maintain any Hazardous Waste Management Units subject to Resource Conservation and Recovery Act (RCRA) permitting requirements. Hazardous wastes generated at the Refinery are stored in one of two permanent central accumulation areas (CAAs) pending offsite disposal. These CAAs include the Drum Pad (located adjacent to the Bundle Cleaning Pad) and the Bin Pad (located near Tank 1201A) and are shown on Figure 2-1. The Refinery also maintains various satellite accumulation areas (SAAs) for the collection of small quantities of hazardous wastes near the point of generation prior to transfer to a CAA. Additional information on hazardous wastes at the Refinery is provided in Section 4.3.2.

### **4.2 INTENTIONAL DISCHARGES**

There are no intentional discharges from the Refinery. Any discharge at the Refinery would be unintentional and could consist of any of the process materials listed in the section above or in Table 4-1. More information on potential unintentional discharges is provided in the next section.

### **4.3 POTENTIAL DISCHARGES**

The potential for a spill to migrate outside of the Refinery property is reduced since the Refinery has berms constructed around the entire Refinery and provides secondary containment protection through a process wastewater collection system as well as providing secondary containment dikes around the bulk storage tanks. The berms surrounding the Refinery are designed to contain the 100-year flood. In the event that a release occurs at the Refinery, it would most probably be collected and recovered before reaching the berms that surround the Refinery, and has

no chance of reaching navigable water given that the nearest navigable water is more than 12 miles away.

#### **4.3.1 Typical Hazardous Waste Streams**

Hazardous wastes generated at the Refinery are presented in Table 4-2. These wastes are segregated from each other and managed at one of two permanent CAAs operated in accordance with the provisions of 40 CFR 262.17, or at one of the SAAs used for collection of hazardous wastes prior to transfer to a CAA, operated in accordance with the provision of 40 CFR 262.15. These regulations require that containers of hazardous waste of 55 gallons or more be shipped offsite for disposal within 90-days. Additional accumulation areas may be designated and used on a temporary and as-needed basis. Designation of temporary CAAs typically occurs during scheduled maintenance activities and turnarounds, when activities may necessitate the use of additional waste management and accumulation areas.

The hazardous wastes listed in Table 4-2 may be present at the Refinery at any time, though the type and quantity may vary due to routine fluctuations in Refinery operations. Navajo performs analysis of the generated wastes and maintains waste profiles and analytical data on all waste streams present at the Refinery. Samples are collected using any of the specific methods provided in 40 CFR 261, Appendix I. Because of the fluctuation of the types and volumes of wastes present, this data has not been included in this Application. This data is maintained by the Refinery's Environmental Department and can be made available upon request.

#### **4.3.2 Loading/Unloading**

Tank truck loading and unloading stations are utilized at the Refinery. A spill could occur at these locations as a result of overfilling a tank truck, valve or line drainage, tank truck rupture, improper line hook-up, or transfer line over-pressurization. Leakage from host connections at the loading and unloading stations also represents a potential for spillage, although this spillage would be a minimal loss occurring during transfer operations.

#### **4.3.3 Transfer Lines**

Transfer line failure could occur as a result of corrosion, over-pressurization, mechanical failure, or operator error. Operator error could occur by opening the wrong valve or starting the wrong pump. The potential spill volume is highly variable. The majority of the transfer lines are located above ground. An estimated 1% of the hydrocarbon lines at the Refinery are below ground. Within the paved and curbed process areas, spilled oil would drain to the oily sewer and be recovered in the wastewater treatment system. In tank farm areas, spilled oil would be contained within the diked area and collected by vacuum truck. In other areas of the plant property, control of a spill would consist of containment and clean-up at the source.

#### **4.3.4 Typical Non-Hazardous Waste Streams**

Additional non-hazardous materials that may be present at the Refinery include paper, wood, plastics, and other general materials generated by industrial activities.

#### **4.3.5 Stormwater**

Accumulated stormwater might be discharged or spilled from the storage facility into diked storage areas, undiked storage areas (including parking areas), and loading and unloading areas. Additional information on the associated drainage information is provided in Section 5.2.

The Refinery is exempt from the National Pollutant Discharge Elimination System (NPDES) Multi Sector General Permit (MSGP) based on no stormwater discharge leaving the Refinery. The Refinery is surrounded by berms, which contain any stormwater run-off. Documentation from Navajo dated November 13, 1995, documents that the berms are designed to contain the 100-year storm event, effectively preventing stormwater discharge from the Refinery. The berms are maintained and regularly monitored for deterioration and any potential breach of the berms.

#### **4.3.6 Wastewater**

Wastewater at the Refinery is directed to the City of Lovington Publicly Owned Treatment Works (POTW). Drainage waters at the Refinery are collected into a ditch which directs drainage to the American Petroleum Institute (API) Separator to separate any oil from the water. Oil that is recovered from the API separator is subsequently returned to the refining process, while the wastewater is discharged to the City of Lovington POTW. The Refinery previously operated a wastewater separator located in the northwest portion of the Refinery, as shown on Figure 2-1. Navajo emptied, cleaned, and sealed the wastewater separator system in 2003 following indication of potential releases prior to 2003.

#### **4.3.7 Cooling Tower**

The cooling tower is located at the northern portion of the Refinery, and uses “makeup water” (reverse osmosis permeate supplemented with freshwater) to remove heat from the Refinery. Spill concerns are minimal within the cooling tower area. The cooling systems are closed loop recirculating systems. While cooling system treatment chemicals may be added for scaling, corrosion, and fouling control, chemicals will be managed and handled according to best management practices and manufacturer’s instructions. If cooling water was released, potential impacts to groundwater would be minimal as the cooling water is not in contact with process materials. In accordance with 20.6.2.1203 NMAC, spills or releases of oil or other water contaminants will be reported using OCD Form C-141.

#### **4.3.8 Disposal**

Hazardous and non-hazardous wastes are shipped off-site via truck to appropriately permitted and approved RCRA Subtitle C and Subtitle D facilities. Navajo maintains and conducts a program for review and approval of waste disposal transporters and vendors to ensure wastes are properly disposed.

### **4.4 GROUNDWATER MONITORING**

The current FWGWMP consists of semi-annual groundwater gauging of wells, semi-annual or annual groundwater sampling of monitoring wells, quarterly sampling of Refinery water

supply wells, and annual reporting to determine and monitor groundwater flow direction and gradient, monitor the nature and extent of dissolved-phase COCs in groundwater, and to monitor the presence and extent of LNAPL. Section 3 (Site Characteristics) identifies figures featuring the locations of existing water wells and groundwater monitoring wells at the Refinery. The Refinery gives prior notice to OCD with respect to the monitoring schedule for each monitoring event. Results of all monitoring and analysis activities are reported on an annual basis (in the *Annual Facility-Wide Groundwater Monitoring Report*) to OCD by April 15<sup>th</sup> of each year.

#### 4.4.1 Sample Collection and Analysis

Sampling frequency and target analytes for each monitoring well were selected based on historical COC detections, exceedances of WQCC groundwater standards, COC concentration trends, and well location relative to the refinery boundaries and refinery water supply wells. Select groundwater samples will be analyzed for VOCs, SVOCs, total mercury, dissolved metals, anions, TPH GRO and DRO, alkalinity, and/or TDS as specified in the FWGMWP. Laboratory analytical data reports and tabulated results of groundwater samples collected on a semi-annual or annual basis are provided in the annual groundwater reports, with the most recent being Appendix C of the *2021 Annual Facility-Wide Groundwater Monitoring Report* that was submitted to the OCD in April 2022.

#### 4.4.2 Groundwater Contamination

The following COCs were detected in groundwater at concentrations in exceedance of the WQCC standards:

- Anions for chloride and fluoride
- TDS
- Manganese

There is no WQCC associated with TPH GRO and TPH DRO, but they were detected above the method quantitation limit (MQL). No indicator VOCs or SVOCs associated with TPH mixtures were detected above their respective WQCC Standards.

No constituents attributable to Refinery sources or operations, as discussed in the *December 2013 Refinery Investigation Report*, exceeded WQCC Standards in wells located along the southeastern refinery boundary, which is the natural downgradient portion of the Refinery. Additional groundwater information is provided in the *2021 Annual Facility-Wide Groundwater Monitoring Report*.

## TABLES FOR POTENTIAL OR INTENTIONAL DISCHARGES

### Tables

- 4-1 Storage Tanks and Containers
- 4-2 Typical Wastes

Table 4-1. Storage Tanks

Tank Number	Tank Contents	Solid/ Liquid	Tank Capacity (Gallons)	Secondary Containment Type	Lined/Unlined Secondary Containment
T101B	Naphtha	Liquid	2,965,284	Earthen Berm	Unlined
T102A	Kerosene	Liquid	1,504,062	Earthen Berm	Unlined
T102B	Casinghead Gasoline	Liquid	1,504,062	Earthen Berm	Unlined
T103A	Kerosene	Liquid	1,270,626	Earthen Berm	Unlined
T103B	Distillate Fuel Oil No. 2	Liquid	1,270,626	Earthen Berm	Unlined
T104A	Kerosene	Liquid	635,964	Earthen Berm	Unlined
T104B	Gas Oil	Liquid	635,964	Earthen Berm	Unlined
T105A	Asphalt	Liquid	2,519,538	Earthen Berm	Unlined
T105B	Asphalt	Liquid	2,519,538	Earthen Berm	Unlined
T400	Caustic	Liquid	46,620	Earthen Berm	Unlined
T401	Caustic	Liquid	46,620	Earthen Berm	Unlined
T402	Caustic	Liquid	104,958	Earthen Berm	Unlined
T1108	Boiler Feed Water	Liquid	26,250	Earthen Berm	Unlined
T1201A	Crude Oil	Liquid	6,489,000	Earthen Berm	Unlined
T1201B	Crude Oil	Liquid	6,489,000	Earthen Berm	Unlined
T1201C	Wastewater	Liquid	3,501,120	Earthen Berm	Unlined
T1201D	Wastewater	Liquid	3,211,068	Earthen Berm	Unlined
T1202	Naphtha	Liquid	4,541,460	Earthen Berm	Unlined
T1203	Gas Oil	Liquid	2,259,600	Earthen Berm	Unlined
T1204	Diesel	Liquid	1,842,120	Earthen Berm	Unlined
T1205	Gas Oil	Liquid	1,289,400	Earthen Berm	Unlined
T1206	Gas Oil	Liquid	4,081,560	Earthen Berm	Unlined
T1207	Light Slop Oil	Liquid	453,600	Earthen Berm	Unlined
T1209B	API Slop	Liquid	21,000	Earthen Berm	Unlined
T1210	Fresh Water	Liquid	1,093,890	Earthen Berm	Unlined
T1214	Heavy Slop	Liquid	846,048	Earthen Berm	Unlined
T1215	Heavy Slop	Liquid	846,048	Earthen Berm	Unlined

API = American Petroleum Institute

**Table 4-2. Typical Wastes**

<b>Waste Type/Name<sup>1</sup></b>	<b>Hazard</b>	<b>Location of Generation or Storage</b>	<b>Approximate Maximum Quantity</b>
API Separator Sludge	K051, Hexavalent Chromium, Lead	CAA	40 gal (Drums)
Benzene- Containing Wastes	D018, Benzene	CAA	15,000 lbs. (Vac Boxes)
Crude Oil Storage Tank Sediment	K169, Benzene	CAA	32,000 lbs. (Drums/Vac Boxes)
Heat Exchanger Bundle Cleaning Sludge	K050, Hexavalent Chromium	CAA	25,000 lbs. (Drums/Vac Boxes)
Primary Oil/Water/Solids Separation Sludge	F037, Benzene, Benzo(a)pyrene, Chrysene, Lead, Chromium	CAA	5,000 lbs.(Drums)
Slop Oil Emulsion Solids	K049, Hexavalent Chromium, Lead	CAA	40 gals (Drums)
Refinery Sewer Sludge	F037, Benzene, Benzo(a)pyrene, Chrysene, Lead, Chromium	Sewer cleanouts, sumps, bundle cleaning pads	80 gals (Drums)
Tank Sludge, Scale, Sediments, and Soil Containing Benzene	D001, D018, Benzene	Tanks used to store unleaded gasoline, isomerates, and reformates	400 gal (Vac Boxes)
Ignitable waste, not otherwise specified	D001, Ignitability	CAA	40 gal (Drums)
Corrosive waste, not otherwise specified	D002, Corrosivity	CAA	400 gal (Vac Boxes)
Reactive waste, not otherwise specified	D003, Reactivity	CAA	40 gal (Drums)
Toxic waste (arsenic), not otherwise specified	D004, Arsenic	CAA	40 gal (Drums)
Toxic waste (mercury), not otherwise specified	D009, Mercury	CAA	< ¼ Cup
Toxic waste (benzene), not otherwise specified	D018, Benzene	CAA	5,000 lbs.(Drums)

<sup>1</sup>Hazardous Wastes are not comingled at the Refinery.

API = American Petroleum Institute

CAA = Central Accumulation Area

Gal = Gallons

Lbs = Pounds

PPE = Personal Protective Equipment

## **5 COLLECTION AND STORAGE SYSTEMS**

### **5.1 POTENTIAL POLLUTANT SOURCES**

The collection and storage systems where potential discharges of water contaminants associated with industrial activities at the Refinery could occur, and the associated discharge points, are summarized in this section.

#### **5.1.1 Bulk Oil Storage Facilities**

The largest single source of a potential oil spill is the bulk storage facilities. The most probable cause of an oil spill would be overflow from a tank due to overfilling. Tank line rupture and bottom failure also represent potential sources of tank leakage.

Facility bulk oil and oil products storage tanks and associated facilities are situated within secondary containment constructed of compacted earthen, concrete, or plastic containment walls. Where secondary containment structures are not installed, a ditch collection system serves as secondary containment to divert any drainage or incidental spill to the API oil water separator. The containment areas are designed to contain 133% of the volume of the single largest tank. Containment areas also achieve the EPA preferred volume of the largest tank plus the volume of a 25-year, 24-hour storm event with sufficient freeboard. Diked areas are unlined but are sufficiently impervious to contain spilled oil.

#### **5.1.2 Mobile or Portable Storage Containers**

Mobile or portable storage containers (e.g., 55-gallon drums, 250-gallon totes, and 330-gallon totes) are positioned or located so as to prevent spilled oil from reaching navigable waters. A secondary means of containment, such as dikes or catchment basins, are provided to accommodate the largest single compartment or tank, plus sufficient freeboard. These portable tanks are located in areas that are not subject to periodic flooding or washout.

#### **5.1.3 Oil-Filled Operational Equipment**

There are numerous transformers located throughout the Refinery that are considered to be oil-filled equipment. In general, these transformers do not have sized secondary containment. The failure of any transformer would trigger an immediate response due to the loss of electrical power in that area of the facility. The Refinery maintains sufficient manpower, equipment, and resources onsite to control and remove any quantity of oil discharged from oil-filled equipment that may be harmful to the environment.

#### **5.1.4 Truck Loading/Unloading Stations**

Tank truck loading and unloading stations are utilized at the Refinery. A spill could occur at these locations as a result of overfilling a tank truck, valve or line drainage, tank truck rupture, improper line hook-up, or transfer line over-pressurization. Leakage from hose connections at the loading and unloading stations also represents a potential for spillage, although this spillage would be minimal loss occurring during transfer operations. These stations are equipped with a concrete curb containment area that drains into a collection area.

### 5.1.5 Transfer Lines

Transfer line failure could occur as a result of corrosion, over-pressurization, mechanical failure, or operator error. Operator error could occur by opening the wrong valve or starting the wrong pump. The potential spill volume is highly variable. The majority (99%) of the transfer lines are located above ground. Within paved and curbed process areas, spilled oil would drain to the oily sewer and be recovered in the wastewater treatment system. In tank farm areas, spilled oil would be contained within the diked area and collected by a Navajo or a third-party vacuum truck.

## 5.2 DRAINAGE

Drainage of stormwater and any collected releases across the Refinery is managed in such a way as to prevent the discharge of any contaminants to water and to prevent the release of any contaminants offsite. Bulk storage tanks, mobile or portable storage containers, and loading/unloading areas are diked to capture any unintentional releases. Any discharges or stormwater flow from undiked process areas is directed to the onsite API separator for oil separation. Recovered oil is subsequently returned to the refining process. Discharge from the API is routed to the local POTW.

### 5.2.1 Diked Storage Area Drainage

Drainage of accumulated storm water or other liquids which may be discharged or spilled into the diked storage area are typically controlled as follows:

- Some compacted earthen and concrete containment walls (where provided) are equipped with manual open and close type block valves. Flapper-type drain valves are not used to drain diked areas.
- Dike drains are secured in the closed position.
- Natural dissipation (evaporation) is the primary method of removal of uncontaminated storm water. The desert environment will facilitate natural dissipation. The accumulation, however, will not be allowed to significantly impact containment capacity or the operations of facilities within the containment area.
- Accumulated water is visually inspected for oil, oil product, and/or chemical contamination and is allowed to naturally dissipate only if no contamination is observed.
- In the event that removal of oil-contaminated liquids from a containment area is required, the use of a vacuum truck, pump, or other means will be evaluated for the removal. Oil-contaminated liquids will be transferred to the API separator for oil separation and wastewater discharge to the City of Lovington POTW.

### 5.2.2 Undiked Storage Area Drainage

The undiked storage area (including parking areas) is contained as follows:

- The undiked process area drains to a ditch which directs drainage to the API separator for oil separation before wastewater is discharged into the City of Lovington POTW collection system.
- The undiked process area, as well as the diked storage areas, are visually inspected during daily operating surveillance at a minimum of once per shift.
- In the event that an incidental spill or discharge is discovered in any undiked area, actions to contain and remove the spilled liquids will commence immediately upon discovery.

### 5.2.3 Loading/Unloading Area Drainage

The loading area (asphalt loading rack) is equipped with a concrete curb containment area that drains into a collection area. Accumulated water is inspected for asphalt and any asphalt is skimmed from the surface before water is vacuumed out into a vacuum truck and either transported to the API Separator or disposed offsite at an approved disposal facility.

### 5.2.4 Stormwater Drainage

Stormwater collected in containment areas is drained according to the following procedures:

- *Primary*: Natural Dissipation of storm water. The accumulation, however, will not be allowed to significantly impact containment capacity or the operations of facilities within the containment area.
- *Secondary*: Removal of stormwater by drainage through the containment area block valves after the water has successfully passed a visual inspection for contamination. If no contamination is observed, stormwater will be allowed to naturally dissipate.
- *Emergency Conditions Only*: Drainage of contaminated liquids will be handled with vacuum trucks, portable pumps, or other means. These liquids are sent to the API separator for separation and wastewater disposal to the City of Lovington POTW.

Uncontained stormwater flow in process areas is routed to ditches that direct the flow to the onsite API separator. Additional undiked areas are inspected on a regular basis to ensure unintentional discharges do not leave the site in the case of a rain event.

## **6 INSPECTION, MAINTENANCE, AND REPORTING**

### **6.1 INSPECTIONS**

The Refinery has a discharge detection program which consists of both manual (personnel) and automated detection systems.

#### **6.1.1 Detection by Personnel**

##### **Inspections**

Visual inspections are performed daily by employees on shift for sewer caps, berms, spill response equipment, the API Separator, and signs of leakage and corrosion on and around tanks, loading and unloading stations, and above ground valving and piping. Written procedures and inspection forms are not used for these types of inspections. The operator training program at the plant and actual hands-on experience directed by the foreman in charge of the area are sufficiently detailed that the responsible personnel are aware of potential problem areas. If any issues are detected, corrective action, including repair or replacement, will be undertaken as soon as practicable.

Additionally, a monthly inspection is performed for the API Separator, berms, sewer caps, the spill trailer, and the Pipeline, Processing, and Wastewater and Crude Tank Farms. Example monthly inspection forms are provided in Appendix 6-1.

##### **Bulk Storage**

Ultrasonic tank shell and head thickness readings are obtained on all tanks approximately every 5 years. More frequent inspections are performed if visual inspections reveal problem areas. Also, more frequent inspections are performed if there exists a greater than normal potential for problems due to the characteristics of the material stored or construction materials of the tanks. When a tank is empty, clean, and vapor free, interior tank inspections are performed, including ultrasonic tank bottom thickness testing. Tank inspection procedures are performed in accordance with API Standard 653 – Tank Inspection, Repair, Alteration, and Reconstruction. Records of tank inspections are maintained. Results of the tank inspections along with recommendations are outlined in a memorandum which is forwarded to the management personnel, including the Supervisor of Maintenance.

##### **Central Accumulation Areas**

The two permanent central accumulation areas are operated in accordance with 40 CFR 262.17. At least weekly, these areas are visually inspected for leaking containers caused by corrosion or other factors. If the containers holding wastes are not in good conditions, or if they begin to leak, the waste is immediately transferred to a container that is in good condition.

##### **Underground Lines**

Navajo has prepared a master list of underground hydrocarbon lines at the plant, leak detection testing of these lines is performed on a periodic basis. If any line leaks are detected,

corrective action including repairing or replacement will be undertaken. When possible, underground lines will be replaced with aboveground lines.

### **Oil Spills**

Actions to control, contain, remove, and clean up oil spills are to begin as soon as the oil spill is observed. Plant personnel make regular rounds throughout their shift. Any spill or uncontrolled release of oil or hazardous material would be detected during these inspections. Different response actions are required according to the location and type of the spill incurred.

### **Loading/Unloading**

The Refinery has standard operating procedures in place that are followed for each loading/unloading event to protect personal safety, minimize environmental releases, and minimize exposures to H<sub>2</sub>S. These standard operating procedures are provided in Appendix 6-2. The Division/Shift Foreman is responsible for assuring that procedures are correctly followed.

The oil loading/unloading process is manned at all times to ensure the correct valves and pumps are being utilized. A 4-way gas monitor wand is placed directly over the hatch to monitor air quality during transfer operations to ensure proper line hook-ups. Operations staff will also be required to do valve alignments and implement start/stop procedures. The Division/Shift Foreman is responsible for seeing that the procedures are correctly followed during loading/unloading activities.

#### **6.1.2 Automated Detection System**

All tanks are equipped with high level and high-high level alarms. The alarms have an audible alarm that is sent to the Control room which is manned 24-hours a day. The control room has read outs that show the level in each tank. Operators can trend tank levels to have them fill or empty faster or slower as needed. Once per month level confirmation is done on each tank to verify that the system is operating correctly.

The Refinery utilizes Praxair TracerTight® leak detection technology on all of its tanks. TracerTight® is a non-volumetric test method that utilizes tracer compounds and can be applied to USTs, ASTs, and Pipelines. The methodology is third-party evaluated with a leak sensitivity of 0.05 gph with a probability of detection (PD) of 97.1% and a probability of false alarm (PF) of 2.9%. The method is accepted and listed by the United States Environmental Protection Agency (U.S. EPA) National Work Group of Leak Detection Evaluations (NWGLDE).

If a leak is detected, the Praxair system inoculates the tank with a small amount of a tracer compound into the fuel of the storage tank and samples are then collected from vapor sampling probes for the presence or non-presence of the tracer compound. TracerTight® does not require the tank to be taken out of service during the test. If the presence of the tracer compound is confirmed, tank inspectors are immediately notified. Tank inspectors will then run tests to further confirm the leak, and if confirmed, materials will be removed from the tank, and the tank will be considered out of service until it has been repaired. Approximately 20% of the storage tanks at the Refinery are inspected every year using the Praxair system.

## 6.2 MAINTENANCE

Routine inspections of the Refinery processes are conducted as described in Section 6.1 above. If during these inspections, deficiencies are identified, the supervisor in charge of the area is notified and they are responsible for initiating and implementing required corrective action. The Refinery also conducts maintenance operations on an ongoing basis as needed in general accordance with industry standards and the Process Safety Management regulations in 29 CFR 1910. All Refinery equipment is included in a comprehensive maintenance program to ensure that the equipment is periodically inspected and maintained in good operating conditions in accordance with the manufacturer's recommendations and best commercial practices. Documentation of complete maintenance and repair activities is maintained at the Refinery.

## 6.3 MONITORING AND REPORTING

Facility-wide groundwater monitoring is conducted to identify releases at the Refinery; to evaluate the presence, nature, and extent of groundwater impacts; and to support remediation of impaired groundwater. The groundwater monitoring program consists of semi-annual well gauging and groundwater sampling and analysis conducted in accordance with the FWGMWP. The Refinery submits an *Annual Groundwater Monitoring Report* to the OCD to document groundwater monitoring and recovery activities conducted. These groundwater monitoring results are also used as a means to identify any releases. If an increase in constituents of concern are observed, the facility promptly works to identify the source of the increase.

## **APPENDICES FOR INSPECTION, MAINTENANCE, AND REPORTING**

### **Appendices**

- 6-1 Example Inspection Forms
- 6-2 Standard Operating Procedures for Loading/Unloading

**APPENDIX 6-1  
EXAMPLE INSPECTION FORMS**

**MONTHLY INSPECTION  
PIPELINE TANK FARM  
Tks 101B, 102A, 103A, 103B, 104A, 105A, 105B**

**TANKS** \_\_\_\_\_

	YES	NO	COMMENTS/WORK PERFORMED
<b>TANKS AND DIKES</b>			
1. Are any dikes cut or damaged?			
2. Are there any leaking or damaged valves of piping?			
3. Do any sumps or sewers need to be pumped or flushed?			
4. Is there any indication of tank leaks or damage to tank foundations?			

NOTE: Any "yes" responses should be corrected ASAP.

**SIGNATURE** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**MONTHLY INSPECTION  
PROCESSING TANK FARM**

**Tks 1202, 1204, 1205 1206, 1207, 1208, 1208, 1210, 1214, 1215**

**TANKS** \_\_\_\_\_

	YES	NO	COMMENTS/WORK PERFORMED
<b>TANKS AND DIKES</b>			
5. Are any dikes cut or damaged?			
6. Are there any leaking or damaged valves of piping?			
7. Do any sumps or sewers need to be pumped or flushed?			
8. Is there any indication of tank leaks or damage to tank foundations?			

NOTE: Any "yes" responses should be corrected ASAP.

**SIGNATURE** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**MONTHLY INSPECTION  
WASTEWATER AND CRUDE TANK FARM  
Tks 1201A, 1201B, 1201C, 1201D**

**TANKS** \_\_\_\_\_

	YES	NO	COMMENTS/WORK PERFORMED
<b>TANKS AND DIKES</b>			
9. Are any dikes cut or damaged?			
10. Are there any leaking or damaged valves of piping?			
11. Do any sumps or sewers need to be pumped or flushed?			
12. Is there any indication of tank leaks or damage to tank foundations?			

NOTE: Any "yes" responses should be corrected ASAP.

**SIGNATURE** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**Navajo Refining Company  
Lea Refinery API Separator Monthly Inspection Checklist**

Date: \_\_\_\_\_

Inspector: \_\_\_\_\_

Item	Inspection Task	Acceptable	Not Acceptable	NA	Comments
1	Visually inspect cover and inspection hatches for gaps, cracks, or open access points.				
2	Visually inspect exterior of structure and surrounding area for signs of overflow, releases, or discoloration.				
3	Visually inspect concrete structure for cracks, degradation, or recent staining.				
4	Visually inspect all above ground piping in and out of the API Pit west of the Oil Water Separator for signs of vapor releases, liquids dripping, or unusual odors.				

**Navajo Refining Company  
Lea Refinery**

### Berm Inspection Log

*At least monthly (unless otherwise noted) and after major storm events (more than 1 inch of rain per hour, but not more than one section per day) the following should be inspected, observations recorded, and repairs made if necessary. All corrective actions should be documented on this form with the date they were completed.*

*A Refinery map can be used as a guide for inspections and to mark the location of any issues identified during inspection.*

Inspection Item	Yes	No	N/A	Comments
<b>Dikes</b>				
1. Is there evidence of surface erosion?				
2. Is there evidence of wave erosion?				
3. Is there evidence of burrowing animals?				
4. Is there deep-rooted vegetation (trees, bushes) that need removal?				
5. Is there evidence of subsidence or slumping?				
6. Is there evidence of seepage or leakage?				
7. Any other conditions that threatened the integrity of the dike?				
8. Is there standing water on the interior of any of the diked areas?				
9. Are the discharged valves closed?				
10. Are there any places around the perimeter where storm water could escape or bypass the berms?				
<b>Other Observations:</b>				
<b>Work Memo Number:</b>	<b>Date Issued:</b>		<b>Date Completed:</b>	
<b>Inspection Date:</b>	<b>Inspector Signature:</b>			

**Navajo Refining Company  
Lea Refinery**

### Sewer Caps Inspections

Inspected By: \_\_\_\_\_

Date: \_\_\_\_\_

No.	Sewer Cap Location	Repairs Needed? Y / N	Visible Gaps? Y / N	Comments
5	E of E-141			
N/A	S of D-504			
N/A	E-504 (big square cap)			
N/A	NW of E-504			
N/A	N of D-501			
12	W of D-501			
122	S of H-502 (out of service heater)			
N/A	N of D-503			
N/A	NE of D-503 (big sewer cap)			
29	E of H-102			
N/A	S of H-102			
N/A	E of H-102			
N/A	E of H-102 (behind candy cane)			
59	E of P-110A			
58	E of P-135 (AGO)			
N/A	W of P-105			
40	E of E-150			
66	E of P-106B			
N/A	W of P-105 (big square cap)			
71	E of P-112			
N/A	W of P-131 (big sewer cap)			
89	N of P-137			
N/A	N of T-1108			
N/A	S of BO-1105 (east boiler)(big sewer cap)			
112	S of BO-1104 (west boiler)			
N/A	W of E-132B			
44	E of E-130			
N/A	E of T-103			
N/A	E of T-103			
N/A	E of T-103			
N/A	W of D-101 (big square cap)			
N/A	W of D-101 (inside containment)			
108	S of tank B softener			
141	In between both boilers			
Candy Cane Location		Repairs Needed? Y / N	Visible Gaps? Y / N	Comments
E of H-102				
2 at API				
N of D-503 by stanchion				

**Navajo Refining Company  
Lea Refinery**

**Spill Trailer Check List:**

**DATE:** \_\_\_\_\_

**Tools on Spill Trailer**

2 Round point shovels

1 – 6 cu. Ft. wheelbarrow

2 Square shovels

4 Wheel chocks

1 Trenching shovel

2 Squeegees

2 Multi-purpose scrapers

Materials on Spill Trailer

2 Double play bow rakes

10 bags of peat

1 Mortar hoe

5 bags of bio sorb

1 Garden hoe

4 – 5” x 20” snake containment

1 – 5 lb. Pick mattock

2 Goggles

1 – 95 gallon over pack plastic barrow

**MISC.**

3 plastic containers

12 ratchet tie downs

20 tie down attachments

**APPENDIX 6-2**  
**STANDARD OPERATING PROCEDURES**  
**FOR LOADING/UNLOADING**

	<b>Temporary Loading of Gas Oil at Tk.1206</b> <b>84-N-002</b>
<b>Authorized By</b>	<u><b>Eloy Hernandez</b></u>
<b>Procedure Start Date</b> _____ <b>Procedure End Date</b> _____	

- Scope** Temporary truck loading of Gas Oil at Tk. 1206.
- Responsibilities**

All refining company operators are responsible for carrying out these steps.

The Division/Shift Foreman is responsible for seeing that the procedures are followed.
- Requirements**

It will be required to follow these procedures for each and every load, to ensure safe loading, minimize environmental release, and minimize exposures to H<sub>2</sub>S. Communication between Operator/Loader and Truck Driver will need to be established throughout loading process.
- Relevant Documents**

Unit P&IDs, Unit Operating Manual, MSDS, Navajo Safety Manual and the Maintenance Work Scope.
- Materials/Equipment**

4-way gas monitor, air mover, air compressor, Sulfix 9272, chemical pump, ground cable, loading hose, portable ramp, wheel chocks.
- Process Control**

The process will be monitored and controlled from the field.
- Safety & Health**

All standard Navajo PPE should be used. Hard hat, safety glasses with side shields, goggles, FR clothing, gloves, hearing protection, personal H<sub>2</sub>S monitors, and boots with a safety toe. Fall protection (if required). SCBA/SAR (if required). Respirator (if required). Chemical splash suit (if required).

**Navajo Refinery – Please indicate when a shift change occurs.**

Original Issue Date: [7-11-13]	Revision Number: 1 Last Review Date: 1-26-21	Page 1 of 8
<b>Uncontrolled if Printed</b>		

	<b>Temporary Loading of Gas Oil at Tk.1206</b> <b>84-N-002</b>
<b>Authorized By</b>	<u><b>Eloy Hernandez</b></u>
<b>Procedure Start Date</b> _____ <b>Procedure End Date</b> _____	

**Environmental**

If there is an environmental incident an Environmental Notification Form must be completed and the Environmental Department must be notified immediately. 24 hour (**575-365-8365**).

**Navajo Refinery – Please indicate when a shift change occurs.**

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	<p><b>Temporary Loading of Gas Oil at Tk.1206</b>  <b>84-N-002</b></p>
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**TIME OPER.**

**TEMPORARY LOADING OF GAS OIL AT TK. 1206**

**NOTE: There will be trucks loading Gas Oil at TK.1206 for a period of about 4 months beginning in July. The trucks will weigh in prior to loading and weigh out after loading. The Gas Oil will be hauled to Artesia and loaded onto railcars. H2S Scavenger chemical will be injected into the stream being loaded in an effort to curtail any exposure while being off-loaded. An air mover on a loading ramp is provided while loading to protect personnel from an exposure. The following steps are required to be followed.**

**\*NIGHT TIME OPERATION\***  
**Light Plants have been provided for night time loading. Ensure that the emissions log sheet reflects the hours of usage per day.**

1. The first truck of the day will need to sign in to the log book at the comfort station.
2. The first truck of each shift will obtain the Safe Work Permit and provide the JSA for the shift.
3. The security Guard will call the Operator/Loader when a truck arrives.
4. The Operator designated as loader will guide the trucks in until they become familiar with the route.
5. The truck will need to be guided and parked inside the berm.
6. The wheels on the truck will need to be chocked, both front and back of tires on one of the rear tanker axles.
7. The portable ramp will need to be positioned directly over the hatch.

**Navajo Refinery – Please indicate when a shift change occurs.**

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	<p><b>Temporary Loading of Gas Oil at Tk.1206</b> <b>84-N-002</b></p>
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**TIME   OPER.**

**TEMPORARY LOADING OF GAS OIL AT TK. 1206**

8. The 4-way gas monitor wand will need to be placed directly over the hatch to monitor air quality.
9. The air compressor will need to be started. Ensure that the emissions log book reflects the hours of usage per day.
10. Put air mover online.
11. The ground cable will need to be connected to the tanker.
12. Put rubber tub under valve/valves on tanker.
13. The loading hose will need to be connected to the tanker.
14. Install strap on quick connects.
15. Verify all bleeders in the loading hose system are closed.
16. The chemical pump will need to be started, currently set at 80% speed/stroke. Can be increased if needed.
17. Open the valve/valves on the tanker.
18. Open the loading valves, (Ball valves first then ease open the gate valve).

**Caution**  
**H2S may be present. Ensure air mover to be functioning.**

19. The truck driver will be on the portable ramp observing the tanker level and will let the Operator/Loader know when the tanker is full.
20. Loader/Operator will monitor air quality above and at the hatch on each load and document readings. Readings under 10 PPM are passable but closer to zero PPM readings are desired.
21. Once the truck is full, close the loading valves first, (gate valve first then ball valves).

**Navajo Refinery – Please indicate when a shift change occurs.**

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	<p><b>Temporary Loading of Gas Oil at Tk.1206</b> <b>84-N-002</b></p>
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**TIME   OPER.**

**TEMPORARY LOADING OF GAS OIL AT TK. 1206**

22. Close the valve/valves on the tanker.
23. Open the bleeder to de-pressure the loading hose system.
  - 23.1. Ensure that the product is draining into the rubber tub.
  - 23.2. Close bleeder when product is done draining.
24. Remove strap from quick connects.
25. Disconnect the loading hose from the tanker and place hose in stationary rubber tub located on the right.
26. Remove rubber tub from under valve/valves.
27. Install caps on tanker valves.
28. Shut off the chemical injection.
29. Disconnect the ground cable.
30. Roll the portable ramp away from the tanker.
31. Remove the wheel chocks.
32. Shut off the compressor if another tanker is not available to load.
33. Empty both rubber tubs using the pneumatic pump if needed.
34. The tanker is now ready to weigh out at the scales.

**End of Procedure**

**Navajo Refinery – Please indicate when a shift change occurs.**

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	<p><b>Temporary Loading of Gas Oil at Tk.1206</b></p> <p><b>84-N-002</b></p>
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**Signoff Section**

This procedure was completed:

	Date	Time
<p>Board Oper: _____</p> <p style="text-align: center;">or                      Print Name</p> <p>Craftsman</p>	Signature	
<p>A-Operator: _____</p> <p style="text-align: center;">Print Name</p>	Signature	

Procedure Status:

- No change/revision required
- Adjust for clarity (see notes)
- Adjust for Equipment/Process Change, Generate MOC
- Other \_\_\_\_\_

Suggested changes/updates/Deviations: (use separate page if needed)

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Reviewed and forwarded to Area Specialist by: \_\_\_\_\_

Division/Craft Foreman

**All executed procedures must be reviewed,  
signed and returned to the Area Specialist.**

**Navajo Refinery**

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	<p><b>Temporary Loading of Gas Oil at Tk.1206</b></p> <p><b>84-N-002</b></p>
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**Revision History**

Revision or Review Date and Number	Authorized By		Document Reviewer	Notes
	Name	Approval Date		
Rev.0 on 7-11-13	Eloy Hernandez	9-5-13	Efren Hernandez	Original Issue
Rev.1 on 11-18-14 Review held on 11-18-14	Eloy Hernandez	11-18-14	Eloy Hernandez Grady Backus Efren Hernandez	Applied learned KBC Guidelines, went to new format. Annual Review
Rev.1 Review held on 3-16-16	Eloy Hernandez	3-16-16	Eloy Hernandez Eric Luevano Efren Hernandez Israel Torrez Nathaniel Calderon	Annual Review
Rev.1 Review held on 1-26-21	Eloy Hernandez	1-27-21	Eloy Hernandez Eric Hernandez Efren Hernandez	Annual Review Conducted Method B review.

**Navajo Refinery**

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	<b>Temporary Loading of Gas Oil at Tk.1206</b> <b>84-N-002</b>
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**Navajo Refinery**

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	<b>Temporary Unloading of Gas Oil to Tk.1203</b> <b>84-N-003</b>
<b>Authorized By</b>	<u><b>Eloy Hernandez</b></u>
<b>Procedure Start Date</b> _____ <b>Procedure End Date</b> _____	

- Scope** Temporary truck unloading of Gas Oil to Tk. 1203.
  
- Responsibilities** Any operator(s) assigned to assist trucking are responsible for carrying out these steps.  
The Division/Shift Foreman is responsible for seeing that the procedures are followed.
  
- Requirements** It will be required to follow these procedures for each and every load, to ensure safe unloading, minimize environmental release, and minimize exposures to H<sub>2</sub>S. Communication between Operator/Loader and Truck Driver will need to be established throughout unloading process.
  
- Relevant Documents** This procedure.
  
- Materials/Equipment** Ground cable, Unloading hose, and Wheel chocks.
  
- Process Control** The process will be monitored and controlled from the field.
  
- Safety & Health** All standard Navajo PPE should be used. Hard hat, safety glasses with side shields, goggles, FR clothing, gloves, hearing protection, personal H<sub>2</sub>S monitors, and boots with a safety toe. Fall protection (if required). SCBA/SAR (if required). Respirator (if required). Chemical splash suit (if required). Driver must be wind conscious at all times.

**Navajo Refinery – Please indicate when a shift change occurs.**

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	<b>Temporary Unloading of Gas Oil to Tk.1203</b> <b>84-N-003</b>
<b>Authorized By</b>	<u><b>Eloy Hernandez</b></u>
<b>Procedure Start Date</b> _____ <b>Procedure End Date</b> _____	

**Environmental**

Environmental compliance must be achieved by complying with all environmental regulations. If there is an exceedance, (Scrubbing, Flaring), an Environmental Notification Form must be completed and the Environmental Department must be notified immediately. 24 hour (**575-365-8365**)..

**Navajo Refinery – Please indicate when a shift change occurs.**

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	<p><b>Temporary Unloading of Gas Oil to Tk.1203</b>  <b>84-N-003</b></p>
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TIME OPER.

**TEMPORARY UNLOADING OF GAS OIL TO TK.1203**

**NOTE: There will be trucks unloading Gas Oil at Tk.1203 for the duration of the year beginning in September. The Gas Oil will be hauled from Artesia and loaded into Tk.1203.**

**NOTE: Operations will need to get a starting/ending gauge on Tk.1203 daily. Varec, Radar, and Handline gauges need to be proven and logged. If discrepancies exist a WA will need to be generated. Maximum working level on Tk.1203 is 33' 2". Trucks unloading into Tk.1203 will be the same trucks loading from Tk.1206.**

**Caution**

**H2S May be present**

1. The first truck of the day will need to sign in to the log book at the comfort station.
2. The first truck of each shift will obtain the Safe Work Permit and provide the JSA for the shift. (**Unloading only**).
3. The security guard will call the Operator/Loader when a truck arrives.
4. The Operator designated as loader will guide the trucks in until they become familiar with the route.
5. The wheels on the truck will need to be chocked, both front and back of tires on one of the rear tanker axles.
6. The ground cable will need to be connected to the tanker.
7. Place rubber tub under valve/valves on tanker.
8. Remove cap from tanker valve.
9. The unloading hose will need to be connected to the tanker.

**Navajo Refinery – Please indicate when a shift change occurs.**

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	<p><b>Temporary Unloading of Gas Oil to Tk.1203</b> <b>84-N-003</b></p>
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**TIME   OPER.**

**TEMPORARY UNLOADING OF GAS OIL TO TK.1203**

10. Install strap on quick connects.
11. Open top hatch on Tanker.
12. Open up all 3 discharge valves leaving tramp pump to tank.
13. Open up valve(s) on unloading hose.
14. Open up valve(s) on Tanker.
15. Turn pump on. (Do not leave unattended).
16. Monitor level on tanker, when empty shut pump down.
17. Close valve(s) on Tanker.
18. Close valve(s) on unloading hose.
19. Close first discharge valve on pump.
20. Uncouple hose at tanker and de-pressure/drain into tub.
21. Install caps on Tanker valves.
22. Install cap on stationary load hose.
23. Disconnect ground clamp.
24. Remove wheel chocks.
25. Check and install plugs on bleeders and air vents.
26. Check and verify no OEL's.

**End of Procedure**

**Navajo Refinery – Please indicate when a shift change occurs.**

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	<p><b>Temporary Unloading of Gas Oil to Tk.1203</b></p> <p><b>84-N-003</b></p>
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**Signoff Section**

This procedure was completed:

	Date	Time
Board Oper: _____ or Craftsman	Print Name	Signature
A-Operator: _____	Print Name	Signature

Procedure Status:

- No change/revision required
- Adjust for clarity (see notes)
- Adjust for Equipment/Process Change, Generate MOC
- Other \_\_\_\_\_

Suggested changes/updates/Deviations: (use separate page if needed)

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Reviewed and forwarded to Area Specialist by: \_\_\_\_\_  
Division/Craft Foreman

**All executed procedures must be reviewed,  
signed and returned to the Area Specialist.**

**Navajo Refinery**

Original Issue Date: [9-3-13]	Revision Number: 1 Last Review Date: 3-9-22	Page 5 of 6
<b>Uncontrolled if Printed</b>		

	<p><b>Temporary Unloading of Gas Oil to Tk.1203</b></p> <p><b>84-N-003</b></p>
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**Revision/Review History**

Revision Or Review Date and Number	Authorized By		Document Reviewer	Notes
	Name	Approval Date		
9-3-13 Rev.0	Eloy Hernandez	9-5-13	Eloy Hernandez Efren Hernandez	Original Issue
10-20-14 Rev.1	Eloy Hernandez	10-20-14	Eloy Hernandez Efren Hernandez	Went to new format
Review held on 8-17-16 Rev.1	Eloy Hernandez	8-25-16	Efren Hernandez Jeremiah Everhart Manuel Molina	Annual Review
Review held on 1-26-21 Rev.1	Eloy Hernandez	1-27-21	Eloy Hernandez Eric Hernandez Efren Hernandez	Annual Review Conducted Method B review.
Review held on 3-9-22 Rev.1	Eloy Hernandez	3-9-22	Eloy Hernandez Jeremiah Everhart Efren Hernandez	Conducted Method A review. Added gauging required and included Maximum working level.

**Navajo Refinery**

Original Issue Date: [9-3-13]	Revision Number: 1 Last Review Date: 3-9-22	Page 6 of 6
<b>Uncontrolled if Printed</b>		

	<b>Truck Unloading Using PU-105C Procedure</b> <b>84-N-004</b>
<b>Authorized By</b>	<u><b>Eloy Hernandez</b></u>
<b>Procedure Start Date</b> _____ <b>Procedure End Date</b> _____	

**Scope** In compliance with the new downgraded product policy, it will be necessary for Vacuum/Transport trucks to use P-105C to unload oil to Crude Tanks.

**Responsibilities** It is the responsibility of the maintenance department and/or their designated service contractor to perform the tasks involved in the oil loading/unloading using P-105C. Orientation of new contractors will be conducted by onsite security. Any operator(s) assigned to assist trucking are also responsible for carrying out these steps.

The Division/Shift Foreman is responsible for seeing that the procedures are followed.

**Requirements** New contractors first run should be supervised by a qualified person as training and documented. The oil unloading process will need to be manned at all times to minimize the chance of a spill and or environmental release. A safe work permit will be required along with a JSA before work can begin. Operations will be required to do valve alignments and start/stop PU-105C.

**Relevant Documents** Unit P&IDs, Unit Operating Manual, MSDS, Navajo Safety Manual and the Maintenance Work Scope. Vacuum truck fluid log sheet.

**Materials/Equipment** Vacuum/Transport truck.

**Navajo Refinery – Please indicate when a shift change occurs.**

Original Issue Date: [10-26-13]	Revision Number: 1 Last Review Date: 3-9-22	Page 1 of 7
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	<b>Truck Unloading Using PU-105C Procedure</b> <b>84-N-004</b>
<b>Authorized By</b>	<u><b>Eloy Hernandez</b></u>
<b>Procedure Start Date</b> _____ <b>Procedure End Date</b> _____	

**Process Control**

The Vacuum/Transport truck driver will control the unloading process on the truck side. Operations will control the unloading process on the valve alignment and start/stop associated with the PU-105C.

**Safety & Health**

All standard Navajo PPE should be used. Hard hat, safety glasses with side shields, goggles, FR clothing, gloves, hearing protection, personal H<sub>2</sub>S monitors, and boots with a safety toe. Fall protection (if required). SCBA/SAR (if required). Respirator (if required). Chemical splash suit (if required). Driver must be wind conscious at all times.

**Environmental**

Environmental compliance must be achieved by complying with all environmental regulations. If there is an exceedance, (Scrubbing, Flaring), an Environmental Notification Form must be completed and the Environmental Department must be notified immediately. 24 hour (**575-365-8365**).

**Navajo Refinery – Please indicate when a shift change occurs.**

Original Issue Date: [10-26-13]	Revision Number: 1 Last Review Date: 3-9-22	Page 2 of 7
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	<p><b>Truck Unloading Using PU-105C Procedure</b> <b>84-N-004</b></p>
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**TIME   OPER.**

**TRUCK UNLOADING USING PU-105C PROCEDURE**

13. Slowly open tanker/trailer valve to 1/3 open, check hose and connections for leaks.
14. If no leaks then fully open tanker/trailer valve.
15. Operations will open 3" brass ball valve on PU-105C suction.
16. Operations will air bleed suction pot through high point bleeder then close bleeder valve.
17. Operations will air bleed discharge high point bleeder then close bleeder valve.
18. Operations will fully open discharge gate valve.
19. Operations will start PU-105C and wait by pump until truck is empty.
20. Operations will stop PU-105C.
21. Truck driver will close tanker/trailer valve.
22. Truck driver will close high point bleeder/vent on tanker/trailer.
23. Truck driver will set pump on vacuum and build up vacuum on tanker/trailer.
24. Operations will fully close discharge gate valve on PU-105C.
25. Operations will fully close 3" brass ball valve on PU-105C suction.
26. Truck driver will slowly open tanker/trailer valve and then open 1/2" vent valve to remove fluid from vacuum hose.
27. Once fluid has been removed from vacuum hose, close tanker/trailer valve and disconnect vacuum hose from tanker/trailer valve and also disconnect from unloading line.
28. Load vacuum hose onto tanker/trailer.
29. Install end cap and close 1/2" bleeder valve in yellow tub containment.
30. Truck driver will remove grounding cable.

**Navajo Refinery – Please indicate when a shift change occurs.**

Original Issue Date: [10-26-13]	Revision Number: 1 Last Review Date: 3-9-22	Page 4 of 7
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	<p><b>Truck Unloading Using PU-105C Procedure</b> <b>84-N-004</b></p>
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TIME OPER.

**TRUCK UNLOADING USING PU-105C PROCEDURE**

31. Truck driver will shut down tanker/trailer pump and de-pressure tanker/trailer.
32. Truck driver will remove vacuum pump exhaust hose and load hose onto tanker/trailer.
33. Check and install plugs on bleeders and air vents.
34. Check and verify no OEL's.
35. Truck driver will remove wheel chocks.
36. Truck driver can now board truck and unset parking brakes, and then drive to next work site.

**End of Procedure**

**Navajo Refinery – Please indicate when a shift change occurs.**

Original Issue Date: [10-26-13]	Revision Number: 1 Last Review Date: 3-9-22	Page 5 of 7
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	<p><b>Truck Unloading Using PU-105C Procedure</b></p> <p><b>84-N-004</b></p>
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**Signoff Section**

This procedure was completed:

Date	Time
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Board Oper:	Print Name	Signature
or		
Craftsman		

A-Operator:	Print Name	Signature
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Procedure Status:

- No change/revision required
- Adjust for clarity (see notes)
- Adjust for Equipment/Process Change, Generate MOC
- Other \_\_\_\_\_

Suggested changes/updates/Deviations: (use separate page if needed)

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Reviewed and forwarded to Area Specialist by: \_\_\_\_\_

Division/Craft Foreman

**All executed procedures must be reviewed, signed and returned to the Area Specialist.**

**Navajo Refinery**

Original Issue Date: [10-26-13]	Revision Number: 1 Last Review Date: 3-9-22	Page 6 of 7
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	<p><b>Truck Unloading Using PU-105C Procedure</b> <b>84-N-004</b></p>
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**Revision/Review History**

Revision Or Review Date and Number	Authorized By		Document Reviewer	Notes
	Name	Approval Date		
10-26-13 Rev.0	Eloy Hernandez	2-12-14	Eloy Hernandez	Original Issue
10-20-14 Rev.1	Eloy Hernandez	10-20-14	Eloy Hernandez Efren Hernandez	Went to new format
Review held on 8-17-16 Rev.1	Eloy Hernandez	8-25-16	Efren Hernandez Jeremiah Everhart Manuel Molina	Annual Review
Rev.1 Review held on 1-26-21	Eloy Hernandez	1-27-21	Eloy Hernandez Eric Hernandez Efren Hernandez	Conducted Method B review.
Rev.1 Review held on 3-9-22	Eloy Hernandez	3-9-22	Eloy Hernandez Jeremiah Everhart Efren Hernandez	Conducted Method A review. Added gauging required and included Maximum working level.

**Navajo Refinery**

Original Issue Date: [10-26-13]	Revision Number: 1 Last Review Date: 3-9-22	Page 7 of 7
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## 7 PROPOSED MODIFICATIONS

The discharge collection and storage systems at the Refinery meet the necessary criteria provided in 20.6.2.3106(D) and 23.6.2.3107 NMAC to protect groundwater quality in accordance with 20.6.2.3101 and 20.6.2.3103 NMAC. Therefore, Navajo does not propose modifications to the current operating system at this time.

Discharges of potential water contaminants are not expected at the Refinery given the design, inspection, and maintenance procedures for the collection and storage systems. Tanks and containers are provided with secondary containment and surficial spills can be cleaned up rapidly in accordance with established emergency response procedures described in Section 8 of this Application.

The Refinery has existing emergency preparedness, communications, and response procedures and plans in place (e.g., the *RCRA Contingency Plan*) to be utilized in the event of a contingency associated with the Refinery. Implementation of the emergency preparedness and response procedures described in Section 8 of this Application allows for the protection of groundwater in the event of an unintentional release or emergency.

Inspection and maintenance of tanks or containers containing materials and piping that could cause a potential discharge is conducted on a regular basis as described in Section 6 of this Application to provide further protection from potential discharges.

In addition, the Refinery conducts routine groundwater monitoring and reporting in accordance with the FWGMWP as described in Section 3 of this Application. Regular groundwater monitoring allows for identification and correction of any releases.

If in the future, protection of groundwater cannot be demonstrated, Navajo will describe what modifications are proposed for the particular protection method to meet the requirements.

## 8 CONTINGENCY PLAN

The Refinery is designed, maintained, and operated in such a manner as to minimize hazards to human health and/or the environment from fires, explosions, or any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility. The Refinery conducts an inspection and maintenance program as described in Section 6 of this Application. Regular inspections allow for quick detection or maintenance concerns or any spills or leaks, thereby reducing the likelihood and size of any unplanned releases.

Further, if a spill or leak were to occur, Navajo has existing emergency preparedness, communications, and response procedures and plans in place at the Refinery to effectively address the unintended release and protect surface and groundwater; e.g., the *RCRA Contingency Plan*. These well-established plans and procedures will be utilized in the event of a spill or emergency associated with the Refinery.

### 8.1 EMERGENCY PREPAREDNESS AND RESPONSE FOR POTENTIAL DISCHARGES

#### Tanks

The Refinery's oil storage tanks have been designed in accordance with industrial standards to prevent emergency situation or releases and have the following design characteristics:

- Tanks are constructed of a material that is compatible with the materials stored and the conditions of storage.
- Tanks are constructed to API standards.
- Tanks are operated within "Safe Fill" levels positioned below the capacity limits of the tank.
- Tanks are equipped with flame arrestors and/or pressure/vacuum relief, as appropriate.

The Refinery's storage tanks, and associated facilities, are situated within secondary containment constructed of compacted earthen, concrete, and/or plastic containment walls. Each secondary containment is designed to hold the volume of the largest tank plus sufficient freeboard. Oil product storage tanks are positioned or located to prevent spilled oil from reaching navigable waters and are not constructed in locations that will be subject to period flooding or washout. Each tank also comes equipped with Praxair TracerTight leak detection technology at the Refinery, as discussed in Section 6 of this Application.

Tanks are inspected for leaks and spills regularly as described in Section 6 of this Application. In the event of a release, the Refinery will implement the procedures included in the *RCRA Contingency Plan*.

#### Transfer Operations

Transfer of product through Refinery transfer lines is monitored by personnel at the transfer site and by general system monitoring in the control room. Transfer stations are also illuminated

during periods of darkness. Loading arm valves are allowed to drain following transfer activities and, when not in use, are stored with containment to collect any drips. Equipment is maintained according to schedules that are set based on manufacturer's recommendations and experience. Equipment that can impact or cause a release is inspected regularly, as described in Section 6 of this Application. Approximately 99% of the transfer lines at the Refinery are aboveground, allowing for regular inspection for leaks, corrosion, or damage. Employees and contractors receive transfer operation procedure orientation before any transfer activities are conducted.

Buried piping installations (~1% of Refinery piping) are coated and wrapped to reduce corrosion. Any time existing buried piping is exposed, the piping is inspected for deterioration or corrosion damage and corrective action is taken as necessary.

### **Loading/Unloading Operations**

Loading and unloading areas are equipped with open sumps which are capable of holding the contents of the single largest compartment of a railcar or a tank truck. These sumps are pumped out via vacuum truck, as needed. Tank loading or unloading connections are securely capped and blind flanged when not in service for a period of six months.

### **Hazardous Waste Storage**

Containers stored at the two CAAs or at SAAs have the potential to release hazardous wastes. The CAAs are provided with containment and are inspected for leaks and spills regularly. In the event of a release or emergency situation at one of the CAAs or at an SAA, the Refinery will implement the *RCRA Contingency Plan* to minimize potential impacts to surface or groundwater sources.

### **Stormwater**

The Refinery has procedures in place to control and drain accumulated stormwater and other liquids that may be discharged or spilled from the storage facilities into the diked storage areas at the Refinery and preventing release from the diked areas (e.g., including securing dike drains in the closed position and equipping some compacted earthen and concrete containment walls with manual open and close type block valves). In the event of a release or emergency situation related to stormwater collection, the Refinery will implement the *RCRA Contingency Plan* to minimize potential impacts to surface or groundwater sources.

## **8.2 GENERAL REFINERY EMERGENCY RESPONSE PROCEDURES**

When a spill or release is discovered, the nearest emergency alarm button is immediately pressed, the type of emergency and location is announced over the operating radio channel twice, the Control Room is contacted via cell (or other) phone, and personnel in the affected spill area are alerted.

On-duty operations personnel will implement the response process detailed in the applicable emergency response plan (e.g., the *RCRA Contingency Plan*) and will take immediate action within their scope of training to:

- Shut off pumps feeding the leak;
- Isolate the leak by closing appropriate valves;
- If possible, eliminate any sources of ignition;
- If possible, de-energize electrical equipment;
- If possible, transfer content of leaking equipment to another tank or vessel; and
- If possible, repair the leak.

Refinery personnel, under the direction of an Incident Commander, will begin deploying necessary pumps, vacuum trucks, booms, and oil skimmers to begin removing any spilled oil product or hazardous material. Waste and contaminated materials that result from a release will be handled and disposed of in accordance with all applicable local, state, and federal regulations. Recovery of large amounts of spilled liquid materials includes initial recovery with a vacuum truck and recycling oil in on-site process equipment. Solid materials may be placed in bags, drums, or roll-off containers.

If needed for a larger release or a longer-term spill response, the Refinery can utilize additional resources from Marine Spill Response Corporation (MSRC), a nationwide oil spill response organization (OSRO). MSRC can provide support (equipment, materials, and labor) for a worst-case discharge event or longer-term incident and can provide Incident Command System-level section chiefs and incident management as needed. Navajo's contract with MSRC covers both the Lovington and Artesia facilities.

### **8.3 RELEASE REPORTING**

A minor release is an unauthorized release with a volume greater than five bbls but less than 25 bbls. A major release is an unauthorized release with a volume greater than 25 bbls. Navajo will notify OCD's Administrative Permitting Section via phone and/or email for spills under five bbls. The OCD must be notified of a major or minor release verbally (or by email) within 24 hours to the OCD Environmental Bureau Chief and the OCD District 1 office. The OCD District 1 and District 4 offices must also receive a written notification within one week of discovery of the release via the OCD Form C141 in accordance with the requirements of 19.15.29 NMAC. A written corrective action report shall be provided within 15 days after learning of the release.

When applicable, Navajo must also verbally notify the National Response Center (NRC) immediately for any spills that impact navigable waters or adjoining shoreline. Written communication must be submitted within 60 days to the U.S EPA for a spill in excess of 24 bbls in a single event or two spill events of 42 gallons or more within a twelve-month period into or upon navigable waters or adjoining shorelines. Given that the nearest navigable water is more than 12 miles away from the Refinery, it is extremely unlikely that a release from the Refinery will impact navigable waters or adjoining shorelines.

*Groundwater Discharge Plan*  
*HollyFrontier Navajo Refining LLC – Lovington, New Mexico*

*April 6, 2022*

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The New Mexico Environmental Department (NMED) will be contacted as needed or as deemed appropriate. Additional release reporting procedures can be found in the Refinery's *RCRA Contingency Plan*.

## **9 PUBLIC NOTICE**

This Application is subject to public notice requirements set forth in 20.6.2.3108 NMAC. A discussion of Navajo's planned procedures for notifying the public and meeting the public notice requirements is provided in the subsections below. A copy of the public notice to be used for the required mailing, which includes the information required by 20.6.2.3108(F) NMAC, is provided in Appendix 9-1. Initial public notice will be provided within 30 days of Navajo's receipt of an administrative completeness determination from OCD regarding the Application.

### **9.1 LOCATION OF PUBLIC NOTICE DISPLAY**

A synopsis of the public notice will be posted for 30 days in both English and Spanish and at least two feet by three feet in size in two locations: 1) outside of the Lovington Facility's main administrative office at 7406 South Main Street, Lovington, NM 88210; and 2) Lea County District Courthouse at 100 Main Street, Lovington, NM 88260.

### **9.2 NOTIFICATION OF NEARBY PROPERTY OWNERS**

Notice of the proposed modification will be made by United States Postal Service (USPS) certified mail, return receipt requested, to property owners located within 1/3 mile of the Refinery property boundary, or to the nearest adjacent landowner, in accordance with 20.6.2.3108(B)(2) NMAC.

### **9.3 OWNER OF THE DISCHARGE SITE**

Navajo is the applicant and operates the potential discharge location on land owned by the City of Lovington. Therefore, separate notification to the discharge site landowner will be provided.

### **9.4 NEWSPAPER PUBLICATION**

A synopsis of the public notice will be published by Navajo one time in the Hobbs News-Sun in both English and Spanish, in a display ad at least three inches by four inches in size, which is not posted in the classified or legal advertisements section.

### **9.5 PROOF OF PUBLIC NOTICE**

Within 15 days of completion of public notice requirements, Navajo will submit to OCD an affidavit of mailings and the list of property owners, and an affidavit and proof of publication from the Hobbs News-Sun.

### **9.6 CONTENTS OF THE PUBLIC NOTICE**

Navajo will provide a notice that fulfills the requirements in 20.6.2.3108(F) NMAC, as shown in the proposed Notice of Permit Application provided in Appendix 9-1.

Groundwater Discharge Plan  
HollyFrontier Navajo Refining LLC – Lovington, New Mexico

April 6, 2022

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## APPENDICES FOR PUBLIC NOTICE

### Appendices

9-1 Public Notice

**APPENDIX 9-1  
PUBLIC NOTICE**

## Notice of Permit Application

On April 6, 2022, the HollyFrontier Navajo Refining LLC (Navajo), Lovington, New Mexico (NM), Refinery (the Refinery), submitted a Groundwater Discharge Plan to the New Mexico Energy, Minerals & Natural Resources Department Oil Conservation Division (OCD) as the application for a Discharge Permit (the Discharge Permit Application). This Discharge Permit Application provides information on current Refinery operations and potential (unintentional) discharges at the Refinery. As specified in 20.6.2.3108(B) New Mexico Administrative Code (NMAC), the Refinery is posting this public notice of discharge permit application in a newspaper to inform the general public. This public notice includes the information required by 20.6.2.3108(F) NMAC.

The Refinery is a crude/vacuum distillation facility that processes crude oil into intermediate products that are transported to the Navajo Artesia Refinery by means of intermediate pipelines owned by Holly Energy Partners (HEP). The Refinery is located at 7406 South Main Street in the City of Lovington, Lea County, NM, 88260 in Section 15, Township 16 South, Range 36 East, New Mexico Principal Meridian (NMPM), Lea County. The Refinery is a crude/vacuum distillation facility that processes crude oil into intermediate products that are transported to the Navajo Artesia Refinery by means of intermediate pipelines to be later upgraded into finished products. The Refinery has a storage capacity of 1,238,453 barrels/day, with an average daily throughput of approximately 69,931 barrels/day.

Ground water that may be affected by a potential (unintentional) discharge at the Refinery occurs at a depth of approximately 100 feet below ground surface with a total dissolved solids concentration of approximately 1,440 milligrams per liter (mg/L).

Comments, questions, and requests for a copy of the application (either a paper copy or an electronic copy via the internet) should be sent to the following OCD contact:

Ms. Leigh Barr  
Oil Conservation Division  
New Mexico Energy, Minerals & Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, NM 87505  
(505) 670-5684  
[OCD.DischargePermits@state.nm.us](mailto:OCD.DischargePermits@state.nm.us)

Para obtener más información sobre esta solicitud en español, sirvase comunicarse por favor: New Mexico Energy, Minerals and Natural Resources Department (Depto. Del Energia, Minerals y Recursos Naturales de Nuevo México), Oil Conservation Division (Depto. Conservación Del Petróleo), 1220 South St. Francis Drive, Santa Fe, New México (Contacto: Laura Tulk, 575-703-3842)

The OCD will accept comments and statements of interest regarding this application and will create a facility-specific mailing list for persons wishing to receive future notices.

## AVISO DE SOLICITUD DE PERMISO

El día 6 de abril de 2022, HollyFrontier Navajo Refining LLC (Navajo), Lovington, Nuevo México (NM), refinería (la refinería), presentó un Plan de Descarga de Agua Subterránea a la División de Conservación de Petróleo (OCD) del Departamento de Energía, Minerales y Recursos Naturales de Nuevo México como solicitud para un Permiso de Descarga (la Solicitud de Permiso de Descarga). Esta Solicitud de Permiso de Descarga proporciona información sobre las operaciones actuales de la Refinería y las posibles descargas (no intencionales) en la Refinería. Como se especifica en 20.6.2.3108(B) del Código Administrativo de Nuevo México New Mexico Administrative Code [NMAC]), la refinería publica este aviso público de solicitud de permiso de descarga en un periódico para informar al público en general. Este aviso público incluye la información requerida por 20.6.2.3108(F) NMAC.

La Refinería es una instalación de destilación al vacío/crudo que procesa el petróleo crudo en productos intermedios que se transportan a la Refinería Navajo Artesia por medio de oleoductos intermedios propiedad de Holly Energy Partners (HEP). La refinería está ubicada en 7406 South Main Street en la ciudad de Lovington, condado de Lea, NM 88260 en la sección 15, municipio 16 sur, rango 36 este, meridiano principal de Nuevo México (NMPM), condado de Lea. La Refinería es una instalación de destilación de crudo/vacío que procesa el petróleo crudo en productos intermedios que se transportan a Artesia por medio de oleoductos intermedios para luego convertirlos en productos terminados. La Refinería tiene una capacidad de almacenamiento de 1,238,453 barriles/día, con un rendimiento promedio diario de aproximadamente 69,931 barriles/día.

El agua subterránea que puede verse afectada por una descarga potencial (no intencional) en la refinería ocurre a una profundidad de aproximadamente 100 pies debajo de la superficie del suelo con una concentración total de sólidos disueltos de aproximadamente 1,440 miligramos por litro (mg/L).

Para enviar comentarios, preguntas, y ordenar una copia de la solicitud (ambos en papel o copia electrónica vía internet), favor mandarlos al siguiente contacto de la OCD:

**Sra. Leigh Barr**

Oil Conservation Division  
New Mexico Energy, Minerals & Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, NM 87505  
(505) 670-5684

[OCD.DischargePermits@state.nm.us](mailto:OCD.DischargePermits@state.nm.us)

Para obtener más información sobre esta solicitud en español, sírvase comunicarse por favor: New Mexico Energy, Minerals and Natural Resources Department (Departamento de Energía, Minerales y Recursos Naturales de Nuevo México), Oil Conservation Division (División de Conservación de Petróleo), 1220 South St. Francis Drive, Santa Fe, New México (Contacto: Laura Tulk, 575-703-3842)

La OCD aceptará comentarios y declaraciones de interés en relación con esta solicitud y preparará una lista de correo específica de esta instalación para personas que desean recibir avisos futuros.

## **10 ADDITIONAL INFORMATION**

Based on the inspection, maintenance, and monitoring programs in place at the Refinery, it is not expected that unplanned discharges will result in concentrations of constituents of concern that exceed the water quality control standards in WQCC 20.6.2.3103 NMAC. In addition, there are no unlined surface impoundments or pits or leach fields present; therefore, this section is not applicable to this Application.

## **11 CLOSURE PLAN**

The applicability of a Closure Plan for the Refinery to prevent the exceedance of standards of 20.6.2.3103 NMAC in groundwater after the cessation of operation of the Refinery, required under 20.6.2.3107(A)(11) NMAC, will be assessed and discussed with OCD when facility operations are scheduled to cease permanently. OCD and NMED regulations regarding closure of the Refinery will be reviewed, and Navajo will develop a site-wide closure plan, as appropriate.

## 12 CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons that manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: \_\_\_\_\_



Parrish Miller  
Vice President and Refinery Manager  
HollyFrontier Navajo Refining LLC

Date: \_\_\_\_\_

5/24/2022

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
 Action 115548

**CONDITIONS**

Operator: NAVAJO REFINING COMPANY, L.L.C. P.O. Box 159 Artesia, NM 88211	OGRID: 15694
	Action Number: 115548
	Action Type: [UF-DP] Discharge Permit (DISCHARGE PERMIT)

**CONDITIONS**

Created By	Condition	Condition Date
lbarr	None	6/21/2022