Table of Contents

Air Title V Operating Permit (AOP) - Modification

version 2.3

(Submission #: HQ9-5QAV-AM2M2, version 1)

Details

Submission ID HQ9-5QAV-AM2M2

Status In Process

Form Input

Form Instructions

Section A - Permit Information

Permit Number
AOP-28492

Permit Version
1

Issue Date
04/06/2023

Expiration Date
04/06/2028

Owner

Company Name
Dakota Prairie Refining

Address

3815 - 116th Avenue SW

Dickinson, ND 58601

United States

Responsible Official

Prefix
NONE PROVIDED

First Name	Last Name
Josh	Dorfmueller

Title
General Manager

Phone Type	Number	Extension
Business	7014566900	

Email
jdorfmueller@marathonpetroleum.com

Address
500 Old Red Trail NE
Mandan, ND 58554
United States

Contact Person for Air Pollution Matters

Prefix
NONE PROVIDED

First Name	Last Name
Danielle	Tavis

Title
NONE PROVIDED

Phone Type	Number	Extension
Business	7014566900	

Email
DLTavis@Marathonpetroleum.com

Address
3815 116th Ave SW
Dickinson, ND 58601
United States

Section B (Part 1) - Facility Information and Modification Form

Facility Name
Dakota Prairie Refining, LLC dba Marathon Dickinson Refinery - Dickinson Renewable Diesel Facility

Is this a Minor Modification application according to NDAC 33.1-15-14-06.6.e(1) or a Significant Modification application according to NDAC 33.1-15-14-06.6.e(3)?
Application for Significant Modification

Is this source subject to Title IV Acid Rain regulations?
No

Is this a portable source?
No

Facility Location
3815 116th Ave SW
SE ◆ Sec. 15, SW ◆ Sec. 14, NE ◆ Sec. 22, NW ◆ Sec. 23, T139N, R81W
Dickinson, ND 58601
United States

County
Stark

Facility Location:
46.86806273949046,-102.8745482723389

3815 116th Ave SW, Dickinson, ND

Please download the form linked here, complete it, and upload it to this application using the attachment control below.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.
PERMIT APPLICATION FOR TITLE V PERMIT TO OPERATE (SFN52858)

Attach completed form here

NONE PROVIDED

Comment

NONE PROVIDED

Section B (Part 2) - Additional Location Information

Legal Description of Facility Site

Qtr Qtr	Qtr	Section	Township	Range
NONE PROVIDED	NW	15	139N	97W

Land area at facility site (in sq. ft.)

NONE PROVIDED

Mean sea level (MSL) elevation at facility (in feet)

NONE PROVIDED

Section C - Nature of Business

General Nature of Business

Describe Nature of Business	NAICS Code	SIC Code
Industrial Organic Chemical Plant	325199-All Other Basic Organic Chemical Manufacturing	2869-Industrial Organic Chemicals

Actual Start of Construction Date

NONE PROVIDED

Actual End of Construction Date

NONE PROVIDED

Facility Startup Date

NONE PROVIDED

Date of Equipment Modification that Triggers this Title V Permit Modification Application.
03/05/2024

Section D - Process Equipment Information (1 of 1)

Emission Unit -

Emission Unit ID

NONE PROVIDED

Emission Unit Description

NONE PROVIDED

Emission Point ID
NONE PROVIDED

Emission Point Description
NONE PROVIDED

Emission Process Description
NONE PROVIDED

Emission Unit Status
NONE PROVIDED

Applicable PTCs

PTC Number
ACP 18206 v1.0

Applicable Federal Air Programs

Program Code

Applicable State Regulations

Regulation

Emission Unit form

Download the emission unit form linked here, complete it, and upload it to this application using the attachment control below.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.
EMISSION UNIT FOR TITLE V PERMIT TO OPERATE (SFN61006)

Attach Emission Unit Form
NONE PROVIDED
Comment
See Section K and L for all attachments.

Section E - Control Equipment (1 of 1)

Emission Unit: `EU_ID` - `EU_DESC`

Control Equipment ID
NONE PROVIDED

Emission units being controlled by this control unit
NONE PROVIDED

Control Equipment Description
NONE PROVIDED

Control equipment form

Download the form linked here, complete it, and upload it to this application using the attachment control below.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.
PERMIT APPLICATION FOR AIR POLLUTION CONTROL EQUIPMENT (SFN8532)

Attach Control Equipment Form

NONE PROVIDED

Comment

See Section K and L for all attachments.

Section F - Facility-Wide Applicable Regulations and Potential to Emit (PTE)

Applicable Federal Air Programs

Program Code

Applicable State Regulations

Regulation

Potential to Emit (PTE)

Pollutant	Tons Per Year Without Fugitives	Tons Per Year With Fugitives

Emission Calculations Document Upload

Using the attachment control below, upload emission calculations documents.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

Attach Emission Calculations Documents

NONE PROVIDED

Comment

See Section K and L for all attachments.

Section G - Compliance Schedule

Will your facility be in compliance with all applicable requirements effective at the time of permit issuance?

Yes

Will your facility be in compliance with all applicable requirements effective after the time of permit issuance?

Yes

Section H - Flexible Permits

Are you requesting a flexible permit?

No

Section I - Compliance Assurance Monitoring (CAM)

To determine if your facility is subject to CAM, review the information provided at the link. Please provide new or modified CAM Plans here.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.
Compliance Assurance Monitoring (CAM) Guidance

Attach completed form

NONE PROVIDED

Comment

NONE PROVIDED

Statement of Compliance with Compliance Assurance Monitoring (CAM) and Compliance Certification Requirements

The facility identified in this application is in compliance with applicable monitoring and compliance certification requirements
CAM not applicable

Section K - Redline Permit Upload

Use the attachment control below to upload a redline version of your existing permit document, showing any changes.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

Attach redline version of permit here
1_AOP28492v1_0 with edits.docx - 01/15/2025 08:30 PM
Comment
Attachment A redline in Section L.

Section L - General Document Upload

File Upload

Use the attachment control below to upload any other information necessary for application review, such as plot plans, process diagrams, maps, etc.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

Attachments
2_AOP28492v1_0 Attachment A with edits.docx - 01/15/2025 08:32 PM
3_241220 Title V PTE Calculations Summary Table.pdf - 01/15/2025 08:32 PM
Title V Permit AOP-28492 v1.0 Summary of AOP Renewal Changes.pdf - 01/17/2025 10:05 AM
Comment
NONE PROVIDED

Additional Forms
NONE PROVIDED

Attachments

Date	Attachment Name	Context	User
1/17/2025 10:05 AM	Title V Permit AOP-28492 v1.0 Summary of AOP Renewal Changes.pdf	Attachment	Danielle Tavis
1/15/2025 8:32 PM	3_241220 Title V PTE Calculations Summary Table.pdf	Attachment	Danielle Tavis
1/15/2025 8:32 PM	2_AOP28492v1_0 Attachment A with edits.docx	Attachment	Danielle Tavis
1/15/2025 8:30 PM	1_AOP28492v1_0 with edits.docx	Attachment	Danielle Tavis

Status History

	User	Processing Status
12/26/2024 8:36:42 AM	Danielle Tavis	Draft

	User	Processing Status
1/17/2025 10:19:13 AM	Jean Butterfield	Submitting
1/17/2025 10:19:13 AM	Jean Butterfield	Signing
1/17/2025 10:19:52 AM	Jean Butterfield	Submitted
1/17/2025 10:20:02 AM	Jean Butterfield	In Process

Agreements and Signature(s)

SUBMISSION AGREEMENTS

- ☑ I am the owner of the account used to perform the electronic submission and signature.
- ☑ I have the authority to submit the data on behalf of the facility I am representing.
- ☑ I agree that providing the account credentials to sign the submission document constitutes an electronic signature equivalent to my written signature.
- ☑ I have reviewed the electronic form being submitted in its entirety, and agree to the validity and accuracy of the information contained within it to the best of my knowledge.

I certify under penalty of law that the enclosed documents and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who 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 also certify that the source(s) identified in this application is/are in compliance with all applicable requirements except those requirements for which a compliance schedule has been submitted in the Compliance Schedule Form or Compliance Schedule Section of the application . I understand that failure to comply with any term of a compliance schedule is considered to be a violation of regulation NDAC 33.1-15-14-06.1.e. The source will continue to comply with the current applicable requirements with which it is in compliance. The source will meet, on a timely basis, any applicable requirement, which becomes effective during the permit term. The source is properly implementing any required risk management plan in accordance with section 112(r) of the federal clean air act, if appropriate.

I certify, as the Responsible Official, that I have read and understood the above requirements and conditions applicable to my source/facility and that the information and attachments provided in this application are true, accurate, and complete to the best of my knowledge." Further, I agree to comply with the provisions of Chapter 23.1-06 of the North Dakota Century Code and all rules and regulations of the Department, or revisions thereof. I also understand a permit is nontransferable and, if granted a permit, I will promptly notify the Department upon sale or legal transfer of this permitted establishment.

Note: This certification must be signed by a "responsible official" as defined in NDAC 33.1-15-14-06.1.

Signed By Jean Butterfield on 01/17/2025 at 10:19 AM

Marathon Petroleum Corporation
Dickinson Renewable Diesel Facility
3815 116th Ave SW
Dickinson, ND 58601

January 17, 2025

Jim Semerad
North Dakota Department of Environmental Quality
Division of Air Quality
4201 Normandy Street, 2nd Floor
Bismarck, ND 58503-1324

RE: Marathon Dickinson Renewable Diesel Facility
Title V Permit AOP-28492 v1.0
Summary of AOP Renewal Changes

Dear Mr. Semerad:

Dakota Prairie Refining LLC, a wholly owned subsidiary of Marathon Petroleum Corporation (Marathon), operates a renewable fuel production facility located at 3815 116th Ave SW Dickinson, ND, under Title V Air Operating Permit (AOP) AOP-28492 v1.0 that was issued on April 6, 2023. The Facility is doing business as Marathon Dickinson Renewable Diesel Facility (Facility).

Numerous updates have been made to the Dickinson Facility's Title V AOP-28492 v1.0 (Permit) now that the Facility has been in operation as a renewable fuels facility since November 2020. Below is a summary of the changes performed:

Title V AOP Changes

1. R-1901 hydrogen plant heater has always been permitted to combust inherently low sulfur gaseous fuels (i.e., natural gas and PSA off-gas) but was inadvertently listed in Condition 2.A.1) instead of Condition 2.A.2). This has been moved appropriately.
2. The Facility received ACP-18206 v1.0 to construct thermal oil heaters (H-8101 and H-8201) at the Patterson Rail Terminal (PRT). These have been integrated into the Permit throughout as required by Condition II. I., "*Within one year after startup of the units covered by this Permit to Construct, the permittee shall submit a permit application for a Title V Permit to Operate amendment for the facility.*"
3. Emission Unit (EU) Tank Farm (Emission Point [EP] 17) has been modified to separate New Source Performance Standards (NSPS) Kb tanks as their own individual EUs. The Facility tanks not subject to NSPS Kb have been moved to Table 2. *Insignificant Emission Units/Activities List.* Also, EP 17 was updated to FUG-6.
4. Removed TK-1070 NSPS Kb applicability throughout the Permit (previous submittal to NDDEQ in February 2023).
5. Added PRT and Dickinson Rail Terminal (DRT) locomotive diesel fuel tanks to Table 2.

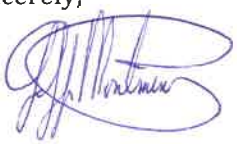
6. Added V-1906 (Unit 1900 deaerator vent) to Table 3. *Stack Heights* with a footnote that this EU doesn't affect modeling for criteria pollutants. It was added to the table for completeness since it was the only stack missing.
7. Removed FUG-4 and FUG-5 from Table 5. *Monitoring Requirements and Conditions* since these EUs are not subject to the Fugitive Emissions Monitoring Plan (FEMP) (Attachment A of the Permit).
8. Added TK-GAS to Table 5 for recordkeeping purposes.
9. Request NDDEQ update visible emissions observation (VEOs) with current standard requirements in Conditions 4.B.6) and 4.B.7).
10. Removed *Continuous Emissions Monitoring System Failures* Condition 7.F.3) and *Performance Tests* language from Condition 7.J.2) since they are not applicable to the Facility.
11. Added language to Condition 7.N. to send all required reports to EPA since NDDEQ does not have delegated authority.
12. Attachment A – FEMP changes were made to reflect actual Facility operations including: closed vent system (CVS) distinction and monitoring requirements; delay of repair (DOR) options and increased DOR repair verification monitoring (from 15 days to 30).

Potential to Emit (PTE) Calculation Changes

1. ACP-18206 v1.0 for PRT thermal oil heaters (H-8101 and H-8201) has been integrated into the PTE calculations throughout.
2. Adjusted TK-1070 PTE calculations after reevaluating the composition of the stored material and removing the floating roof.
3. Updated fugitive component counts and emission factors (EFs) for FUG-3/FUG-4/FUG-5 to represent actual field operations.
4. Updated U-1900 and U-2000 hydrogen plant capacity ratios to be more accurate based on actual production. No physical modifications have been made to equipment, so the change in emissions is insignificant.

If you have any questions or comments regarding this submittal, please contact Danielle Tavis of my staff at DLTavis@marathonpetroleum.com.

Sincerely,



Jeff Montminy
Environmental, Safety, and Security Manager
Mandan Refinery & Dickinson Renewable Diesel Facility

DLT

Attachments
1. AOP28492v1.0 with edits
2. AOP28492v1.0 Attachment A with edits
3. Title V PTE Calculations Summary Table

NORTH Dakota | Environmental Quality
Be Legendary.™

January 10, 2023

Ms. Jean Butterfield
Superintendent, EHS
Marathon Dickinson Refinery
3815 - 116th Avenue SW
Dickinson, ND 58601

Re: Air Pollution Control
Proposed Title V Permit to Operate (Initial)

Dear Ms. Butterfield:

Pursuant to the Air Pollution Control Rules of the State of North Dakota, the North Dakota Department of Environmental Quality (Department) has reviewed your application dated December 23, 2021, for the Dakota Prairie Refining, LLC dba Marathon Dickinson Refinery located in Stark County, North Dakota.

Enclosed is a copy of the Department's draft/proposed Title V Permit to Operate and statement of basis for the facility. Before making final determinations on the permit application, the Department provides for public comment by means of the enclosed public notice, to be immediately followed by a 45-day Environmental Protection Agency (EPA) review period. As indicated in the notice, the 30- day public comment period will begin January 19, 2023, and end February 17, 2023.

If any changes are subsequently made to the draft permit, then a review copy of the proposed permit reflecting those changes will be provided to EPA prior to the start of a 45-day EPA review period. The 45-day EPA review period is scheduled to begin February 18, 2023, and end April 3, 2023.

All comments received will be considered in the final determination concerning issuance of the permit. The Department will take final action on the permit application following the public comment period and the EPA review period. You will be notified in writing of our final determination.

If you have any questions, please contact me at (701)328-5229 or email destroh@nd.gov.

Sincerely,

David Stroh
Environmental Engineer
Division of Air Quality

DES:lc
Enc:
xc/enc: Dan Fagnant, EPA/R8 (email - fagnant.daniel@epa.gov)

NOTICE OF INTENT TO ISSUE AN
AIR POLLUTION CONTROL
TITLE V
PERMIT TO OPERATE

Take notice that the North Dakota Department of Environmental Quality (NDDEQ) proposes to issue an Air Pollution Control Permit to Operate (PTO) to Dakota Prairie Refining, LLC dba Marathon Dickinson Refinery, for the continued operation of a renewable fuels facility in accordance with the North Dakota Air Pollution Control Rules. The facility is located near Dickinson, North Dakota in Stark County and processes various renewable oil feedstocks into renewable fuels, primarily renewable diesel. The mailing address is 3815 - 116th Avenue SW, Dickinson, North Dakota 58601. AOP-28492 v1.0 is the initial Title V PTO proposed for issuance to the facility and incorporates all previously issued permit to construct conditions.

A thirty-day public comment period for the draft permit will begin January 19, 2023, and end on February 17, 2023. Direct comments in writing to the NDDEQ, Division of Air Quality, 4201 Normandy Street 2nd Floor, Bismarck, ND 58503-1324 or email AirQuality@nd.gov, Re: Public Comment Permit No. AOP-28492 v1.0. Please note that, to be considered, comments submitted by email must be sent to the email address listed; comments sent to any other email address **will not** be considered. Comments must be received by 11:59 p.m. central time on the last day of the public comment period to be considered in the final permit determination. A public hearing regarding issuance of the permit will be held if a significant degree of public interest exists as determined by the NDDEQ. Requests for a public hearing must be received in writing by the NDDEQ before the end of the public comment period.

The notice, draft permit, statement of basis and application are available for review at the NDDEQ address and at the Division of Air Quality website at https://deq.nd.gov/AQ/PublicCom.aspx. A copy of these documents may be obtained by writing to the Division of Air Quality or contacting David Stroh at (701)328-5229 or emailing destroh@nd.gov.

The NDDEQ will consider every request for reasonable accommodation to provide an accessible meeting facility or other accommodation for people with disabilities, language interpretation for people with limited English proficiency (LEP), and translations of written material necessary to access programs and information. To request accommodations, contact Jennifer Skjod, Acting Non-discrimination Coordinator at (701)328-5226 or jskjod@nd.gov. TTY users may use Relay North Dakota at 711 or 1-800-366-6888.

Dated this 10th day of January 2023.

James L. Semerad
Director
Division of Air Quality

AIR POLLUTION CONTROL
TITLE V PERMIT TO OPERATE

Permittee: **Name**: Dakota Prairie Refining, LLC dba Marathon Dickinson Refinery **Address**: 3815 116th Avenue SW Dickinson, ND 58601	**Permit Number**: AOP-28492 v1.0 **Source Name**: Dickinson Renewable Diesel Facility
Source Location: 3815 116th Avenue SW Dickinson, ND 58601 SE ¼ Sec. 15, SW ¼ Sec. 14, NE ¼ Sec. 22, NW ¼ Sec. 23, T139N, R81W Stark County	**Source Type**: Chemical Process Plant Renewable Fuels Production

Expiration Date:

TBD

Pursuant to Chapter 23.1-06 of the North Dakota Century Code (NDCC), and the Air Pollution Control Rules of the State of North Dakota, Article 33.1-15 of the North Dakota Administrative Code (NDAC), and in reliance on statements and representations heretofore made by the permittee (i.e., owner) designated above, a Title V Permit to Operate is hereby issued authorizing such permittee to operate the emissions units at the location designated above. This Title V Permit to Operate is subject to all applicable rules and orders now or hereafter in effect of the North Dakota Department of Environmental Quality (Department) and to any conditions specified on the following pages. All conditions are enforceable by EPA and citizens under the Clean Air Act unless otherwise noted.

Initial: _____

Jim Semerad
Director
Division of Air Quality

Marathon Dickinson Refinery

Title V Permit to Operate

Table of Contents

Tables

Attachment

List of Abbreviations:

bbl	barrel
BMP	Best Management Practices
Btu/hr	British thermal units per hour
CO	carbon monoxide
DRT	Dickinson Rail Terminal
gr/dscf	grains per dry standard cubic foot
IFR	internal floating roof
HAP	hazardous air pollutants
HHV	higher heating value
H_2S	hydrogen sulfide
kPa	kilopascals
LDAR	leak detection and repair
lb/10^6 Btu	pounds per million British thermal units
LPG	liquefied petroleum gas
LNB	Low NOx Burner
MACT	Maximum Achievable Control Technology
NDAC	North Dakota Administrative Code
NESHAP	Nation Emissions Standards for Hazardous Air Pollutants
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operations and maintenance
PM	particulate matter
ppm	parts per million
ppmvd	parts per million volume on a dry basis
PRT	Patterson Rail Terminal
PSD	Prevention of Significant Deterioration
PTC/ACP	Permit to Construct
PTO	Permit to Operate
scfd/scfh	standard cubic feet per day/standard cubic feet per hour
SFP	submerged filled pipe
SWS	sour water stripper
SO_2	sulfur dioxide
tpy	tons per year
ULNB	Ultra Low NOx Burner
VCU	Vapor collection unit
VE	visible emissions
VEO	visible emission observation
VOC	volatile organic compounds

1. **Emission Unit Identification**:

Table 1. Emission Unit Identification

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Heat Recovery Corporation Distillate hydroprocessor charge heater rated at a maximum of 12.8 x 10^6 Btu/hr and fired on natural gas	H-801	2	Low NO_X Burners (LNB)
Eclipse ThermJet Distillate hydroprocessor reboiler rated at a maximum of 18.8 x 10^6 Btu/hr and fired on natural gas	H-802	3	LNB
Tulsa Heaters Inc. Distillate hydroprocessor charge heater rated at a maximum of 22.7 x 10^6 Btu/hr and fired on natural gas	H-901	18	LNB
Zeeco Hydrogen plant heater rated at a maximum of 39.0 x 10^6 Btu/hr and fired on natural gas	R-1901	4	LNB
Callidus Technologies Hydrogen plant heater rated at a maximum of 247.0 x 10^6 Btu/hr and fired on gaseous fuels	R-2051	19	Ultra-Low NOx Burners (ULNB)
Heatec Hot oil heater rated at a maximum of 4.8 x 10^6 Btu/hr and fired on natural gas	H-5710	5	LNB
Cleaver Brooks Steam boiler #1 rated at a maximum of 24.8 x 10^6 Btu/hr and fired on natural gas (NSPS Dc)	PK-2403A	6	LNB
Cleaver Brooks Steam boiler #2 rated at a maximum of 24.8 x 10^6 Btu/hr and fired on natural gas (NSPS Dc)	PK-2403B	7	LNB
Cleaver Brooks Steam boiler #3 rated at a maximum of 24.8 x 10^6 Btu/hr and fired on natural gas (NSPS Dc)	PK-2403C	8	LNB
Truck loading and unloading rack	P-9800	9	Submerged fill pipe (SFP) and VCU-1
Truck rack vapor combustor unit (VCU) firing LPG or natural gas	VCU-1	9	N/A
Refinery flare	PK-2402	11	N/A
Cooling tower 1	CT-2409 [A]	12	Drift eliminators
Cooling tower 2	CT-2402A/B [A]	20	Drift eliminators
Diesel fuel-fired emergency fire pump engine rated at a maximum of 542 hp (NSPS IIII)	P-2415 [A, B]	13	None

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Natural gas-fired emergency generator set rated at a maximum of 530 hp (NSPS JJJJ)	P-2409 [A, B]	14	None
Stripped sour water off-gas incinerator rated at 1.65 x 10^6 Btu/hr	H-1301	15	N/A [C]
Hydrogen plant steam de-aerator vent 1	V-1906	16	None
Hydrogen plant steam de-aerator vent 2	V-2055	21	None
Dickinson rail terminal (DRT) Hurst steam boiler #1 rated at a maximum of 20.1 x 10^6 Btu/hr and fired on natural gas (NSPS Dc)	B-8001	22	LNB
DRT Hurst steam boiler #2 rated at a maximum of 20.1 x 10^6 Btu/hr and fired on natural gas (NSPS Dc)	B-8002	23	LNB
DRT Caterpillar natural gas-fired emergency generator rated at a maximum of 1,468 bhp (NSPS JJJJ)	GN-9001 [B]	24	None
DRT rail loading rack - renewable diesel	P-9900 [A]	25	SFP
PRT renewable naphtha transloading	P-9100	26	SFP
PRT rail loading rack - renewable diesel	P-9200 [A]	27	SFP
PRT thermal oil heater #1 rated at a maximum capacity of 9.6 x 10^6 Btu/hr	H-8101	28	None
PRT thermal oil heater #2 rated at a maximum capacity of 9.6 x 10^6 Btu/hr	H-8201	29	None
LPG loading	FUG-1 [A]		None
Wastewater treatment plant	FUG-2		None
Process equipment leaks in VOC service	FUG-3		Leak detection and repair (LDAR) practices
DRT process equipment leaks	FUG-4 [A]		None
PRT process equipment leaks in VOC service	FUG-5 [A]		None
Gasoline dispensing facility (MACT CCCCCC)	TK-GAS [A]		None
15,000 bbl slop oil storage tank (NSPS Kb)	TK- 1009	FUG-6	Submerged Fill Pipe (SFP) and Internal Floating Roof (IFR)
25,000 bbl renewable naphtha storage tank #1 (NSPS Kb)	TK-1021		
25,000 bbl renewable naphtha storage tank #2 (NSPS Kb)	TK-1022		
25,000 bbl renewable naphtha storage tank #3 (NSPS Kb)	TK-1023		

[A] Insignificant or fugitive emission sources (no specific emission limit).

[B] The potential to emit for an emergency stationary reciprocating internal combustion engine (RICE) is based on operating no more hours per year than is allowed by the applicable subpart (40 CFR 60, Subpart IIII and

40 CFR 60, Subpart JJJJ) except for emergency situations. For engines to be considered emergency stationary RICE under the RICE rules, engine operations must comply with the non-emergency operating hour limits as specified in the applicable subpart. There is no time limit on the use of emergency stationary RICE in emergency situations.

C PK-2402 serves as back-up emissions control when H-1301 is unavailable.

Table 2. Insignificant Emission Units/Activities List

Equipment ID	Description	Location
H-2401-1	0.924 MMBTU/hr Natural Gas Catalytic Heater	WBI Fence
TK-1001	75,000 bbl vegetable oil storage tank #1	Tank Farm
TK-1002	75,000 bbl vegetable oil storage tank #2	Tank Farm
TK-1003	75,000 bbl vegetable oil storage tank #3	Tank Farm
TK-1040	15,000 bbl excess renewable diesel	Tank Farm
TK-1041	40,000 bbl renewable diesel storage tank #1	Tank Farm
TK-1042	40,000 bbl renewable diesel storage tank #2	Tank Farm
TK-1043	40,000 bbl renewable diesel storage tank #3	Tank Farm
TK-1070	15,000 bbl wastewater equalization tank	Wastewater Area
TK-1081	30,000 bbl vegetable oil storage tank #4	Tank Farm
TK-1082	30,000 bbl vegetable oil storage tank #5	Tank Farm
TK-1083	30,000 bbl vegetable oil storage tank #6	Tank Farm
TK-1084	30,000 bbl vegetable oil storage tank #7	Tank Farm
TK-1085	34,000 bbl biogenic fats/oils/greases storage tank	Tank Farm
TK-1091	Red Dye Additive Storage Tank	Truck Rack Area
TK-1092	Lubricity Additive Storage Tank	Truck Rack Area
TK-1093	286 bbl petroleum diesel loading tank	Main Plant
TK-999	Firewater storage tank	Wastewater Area
TK-9101	90,000 bbl renewable diesel storage tank	PRT
TK-9201	90,000 bbl renewable diesel storage tank	PRT
TK-100	Heater Expansion Tank (1,000 gal.)	PRT
PRT Locomotive Diesel Fuel Tank		PRT
DRT Locomotive Diesel Fuel Tank		DRT
TK-Diesel	24 bbl facility vehicle fueling tank	West of Firehall
TK-3301	Sludge storage tank	Wastewater Area
TK-3302 A/B	Recovered oil storage tanks	Wastewater Area
V-812	Amine Storage Tank	Main Plant
Associated catalyst preparation processes		
Chemical storage drums outside of onsite lab containing lab waste materials		
Chemical storage totes containing cooling tower anti-scalant additive		
Chemical storage totes/tanks containing fuel additives/corrosion inhibitors/antifoulants/ scavenger chemicals		
Chemical storage totes containing other wastewater chemicals (e.g., flocculants, water softening)		
Cold cleaning degreasers		
Comfort heating equipment (e.g., boilers, water heaters, air heaters, and steam generators)		

Table 2. Insignificant Emission Units/Activities List

Equipment ID	Description	Location
Startup/shutdown activities from U-1900 Hydrogen Plant		
Startup/shutdown activities from U-2000 Hydrogen Plant		
Intermittent process atmospheric venting activities		
Laydown areas		
Material sampling stations		
V-1010, V-1011, V-1012, V-1013 Horizontal Storage Drums (no emission expected because they are routed to the flare)		

2. **Applicable Standards, Restrictions and Miscellaneous Conditions**:

A. **Fuel Restrictions**:

1) Process heaters, boilers, and emergency generators EUs H-801, H-802, H-901, H-5710PK-2403A/B/C, B-8001, B-8002, H-8101, H-8201, P-2409 and GN-9001 are restricted to combusting only pipeline quality natural gas.

2) Process heaters EUs R-1901 and R-2051shall comply with NDAC 33.1-15-06 for SO_2 emissions by firing natural gas and other inherently low sulfur gaseous fuels.

3) The emergency fire pump (EU P-2415) is restricted to combusting only distillate oil containing no more than 0.0015 percent sulfur by weight.

Applicable Requirements: ACP-17872 v1.2, NDAC 33.1-15-14-06.5.b(1)

B. **Flaring Restrictions (EU PK-2402)**:

1) The flare shall be operated with a flame present at all times when emissions may be vented to the flare.

2) The flare must be equipped and operated with an automatic ignitor or a continuous burning pilot which must be maintained in good working order per NDAC 33.1-15-07-02.

3) The presence of a flame shall be monitored using a thermocouple or any other equivalent device approved by the Department.

4) The flare shall be operated with no visible emissions except for periods not to exceed a total of five minutes during any two consecutive hours. Reference Method 22 of 40 CFR 60, Appendix A shall be used to determine compliance with this visible emissions provision.

Applicable Requirements: ACP-17872 v1.2, NDAC 33.1-15-14-06.5.b(1)

C. **Incinerator (EU H-1301)**:

The permittee shall operate EU H-1301 to combust the hydrogen sulfide (H_2S) contained in the sour water stripper (SWS) off-gas. At times when H-1301 is unavailable, off-gas shall be routed to the refinery flare (PK-2402).

Applicable Requirements: ACP-18150 v1.0, NDAC 33.1-15-16-02.1

D. **Fugitive Emissions Monitoring Program (FEMP) (EU FUG-3)**:

The permittee shall operate a leak detection and repair (LDAR) program to identify and repair leaks in a timely manner. The permittee shall comply with the fugitive emissions monitoring program requirements included in Attachment A to this permit.

Applicable Requirements: ACP-18150 v1.0, NDAC 33.1-15-17-04

E. **Best Management Practices (BMP)**:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

Applicable Requirement: ACP-17872 v1.2, ACP-18150 v1.0

F. **Truck and Rail Loading and Transloading (EU P-9800/EU P-9900/EU P-9100/EU P- 9200)**:

For light oil (i.e., renewable naphtha) and heavy oil (i.e., renewable diesel) loading activities, the permittee shall meet the following control requirements as applicable. If the previous load into the truck or railcar was in light oil service or cannot otherwise be determined to be in heavy oil service, then the requirements for light oil service shall be followed for that loading activity.

1) Truck Loading:

   a) Heavy oil service: operate with a submerged filling arm during loadout operations in accordance with NDAC 33.1-15-07-01.3.

   b) Light oil service: operate with a submerged filling arm and vapor combustion unit

   (EU VCU-1 for truck loading) during loadout operations in accordance with NDAC 33.1-15-07-01.3.

2) Rail Loading and Transloading:

   a) Heavy oil service: operate with a submerged filling arm during loadout operations in accordance with NDAC 33.1-15-07-01.3.

   Light oil service: operate with a submerged filling arm and vapor balance line to return the vapors to the truck or vessel during loadout operations in accordance with NDAC 33.1-15-07-01.3.

Applicable Requirements: ACP-17872 v1.2, ACP-18150 v1.0, NDAC 33.1-15-07-01

G. **Cooling Tower 1 and 2 (EUs CT-2409 and CT-2402A/B)**:

The cooling towers shall be equipped with and operated with mist eliminators that are guaranteed to limit drift to 0.005% or less of the circulating flow and shall not use chromium-based water treatment chemicals.

Applicable Requirement: ACP-17872 v1.2

H. **Storage Tanks**:

1) All tanks identified in Condition 1.B shall be equipped with and filled through a submerged fill pipe in accordance with NDAC 33.1-15-07-01.3.

2) NSPS Kb tanks identified in Condition 1.B shall be designed, operated, maintained, and tested in accordance with NSPS Kb.

Applicable Requirement: ACP-17872 v1.2, ACP-18150 v1.0, 40 CFR 60, Subpart Kb

I. **Stack Heights**:

Emissions shall be vented through stacks that meet the following height requirements. Stack heights may be no less than those listed in the table below without prior approval from the Department.

Table 3. Stack Heights

Emission Unit	Emission Point (EP)	Stack Height (Feet)
H-801	2	80
H-802	3	64
R-1901	4	63
H-5710	5	34
PK-2403A	6	43
PK-2403B	7	43
PK-2403C	8	43
VCU-1	9	43
PK-2402	11	186
H-1301	15	80
V-1906*	16	78
H-901	18	137
R-2051	19	100
V-2055*	21	78
B-8001	22	35
B-8002	23	35
* Heater and boiler stack heights used for modeling and permitting due to criteria pollutant emissions. V-1906 and V-2055 do not emit criteria pollutants.		

Applicable Requirements: ACP-17495 v1.2, ACP-17872 v1.2

J. **Gasoline Dispensing Facility** (EU TK-GAS)

Requirements for this facility under 40 CFR 63, Subpart CCCCCC include but may not be limited to the following:

1) Minimize spills.

2) Clean up spills expeditiously.

3) Cover gasoline containers and storage tank fill pipes with gasketed seal.

4) Minimize gasoline sent to open collection systems.

5) The permittee must be able to demonstrate, within 24 hours of request, gasoline throughput is below 10,000 gallons per month.

Applicable Requirements: PTC18016 Amendment No. 2, 40 CFR 63, Subpart CCCCCC

K. **Like Kind Engine Replacement**:

This permit allows the permittee to replace the existing engine(s) with a like-kind engine. Replacement is subject to the following conditions.

1) The Department must be notified within 10 days after change-out of the engine.

2) The replacement engine shall operate in the same manner, provide no increase in throughput and have equal or less emissions than the engine it is replacing.

3) The date of manufacture of the replacement engine must be included in the notification. The facility must comply with any applicable federal standards (e.g., NSPS, NESHAP) triggered by the replacement.

4) The replacement engine is subject to the same state emission limits as the existing engine in addition to any NSPS or NESHAP emission limit that is applicable.

Applicable Requirement: NDAC 33.1-15-14-06.5.b(1)

L. **New Source Performance Standards (NSPS)**:

The permittee shall comply with all applicable requirements of the following NDAC 33.1-15-12-02 and 40 CFR 60 subparts in addition to complying with Subpart A — General Provisions.

1) Subpart Dc — Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (EUs PK-2403A/B/C, B-8001 and B-8002).

2) Subpart Kb — Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (EUs TK-1009, TK-1021, TK-1022, and TK-1023).

3) Subpart IIII — Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (EU P-2415).

4) Subpart JJJJ — Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (EUs P-2409 and GN-9001).

Applicable Requirements: NDAC 33.1-15-12-02, 40 CFR 60, Subparts Dc, Kb, IIII, and JJJJ

M. **Maximum Achievable Control Technology (MACT)**:

The permittee shall comply with all applicable requirements of the following NDAC 33.1-15-22-03 and 40 CFR 63 subparts in addition to complying with Subpart A — General Provisions.

1) Subpart ZZZZ — National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (EUs P-2409, P-2415 and GN-9001). The North Dakota Department of Environmental Quality has not adopted the area source provisions of this subpart. Please send all required reports and documentation to EPA Region 8 at the address listed below:

U.S. EPA Region 8
1595 Wynkoop Street
Mail Code 8ENF-AT
Denver, CO 80202-1129

Note: As an area source of HAPs, compliance with 40 CFR 60 Subparts IIII and JJJJ constitutes compliance with 40 CFR 63, Subpart ZZZZ.

2) Subpart CCCCCC — National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities (EU TK-GAS). The North Dakota Department of Environmental Quality has not adopted this subpart. Please send all required reports and documentation to EPA Region 8 at the address listed above.

Applicable Requirements: 40 CFR 63, Subparts ZZZZ and CCCCCC

3. **Emission Unit Limits**:

A. **Emission Unit Limits**:

Table 4. Emission Unit Limits

Emission Unit Description	EU	EP	Pollutant / Parameter	Emission Limit or Design / Work Practices [A]	NDAC Applicable Requirement
H-801 process heater	H-801	2	Opacity	20% [B]	33.1-15-03-02
H-802 process heater	H-802	3	Opacity	20% [B]	33.1-15-03-02
H-901 process heater	H-901	18	Opacity	20% [B]	33.1-15-03-02
R-1901 process heater	R-1901	4	Opacity	20% [B]	33.1-15-03-02
R-2051 process heater	R-2051	19	NO_X CO Opacity	0.040 lb/MMBtu 0.020 lb/MMBtu20% [B]	ACP-17872 v1.2 ACP-18150 v1.033.1-15-03-02
H-5710 oil heater	H-5710	5	Opacity	20% [B]	33.1-15-03-02
Steam boiler #1	PK- 2403A	6	Opacity	20% [B]	33.1-15-03-02
Steam boiler #2	PK- 2403B	7	Opacity	20% [B]	33.1-15-03-02
Steam boiler #3	PK- 2403C	8	Opacity	20% [B]	33.1-15-03-02

Table 4. Emission Unit Limits

Emission Unit Description	EU	EP	Pollutant / Parameter	Emission Limit or Design / Work Practices [A]	NDAC Applicable Requirement
Main Plant truck loading and unloading rack	P-9800	9	Operation	Condition 2.F.1)	33.1-15-07-02, ACP-17872 v1.2
Main plant truck rack VCU firing LPG or natural gas	VCU-1	9	Opacity Operation	20% [B] Condition 2.F.1)b)	33.1-15-03-02 33.1-15-07-02, ACP17872 v1.2
Refinery flare	PK-2402	11	Operation VOC Opacity	Condition 2.B Condition 2.E Condition 2.B.4)	ACP-17872 v1.2 ACP-17872 v1.2 ACP-17872 v1.2
Cooling tower 1	CT-2409	12	$PM/PM_{10}/PM_{2.5}$	Condition 2.G	33.1-15-17-01.2 & ACP-17872 v1.2
Cooling tower 2	CT-2402A/B	20	$PM/PM_{10}/PM_{2.5}$	Condition 2.G	33.1-15-17-01.2 & ACP-17872 v1.2
Diesel fuel-fired emergency fire pump	P-2415	13	$PM/PM_{10}/PM_{2.5}$ NO_X Fuel Use Operating Hours	0.15 g/hp-hr 3.0 g/hp-hr Condition 2.A.3) Condition 1, Footnote B	33.1-15-12, Subpart IIII & 40 CFR 63, Subpart ZZZZ [EPA] ACP-17872 v1.2 33.1-15-12, Subpart IIII & 40 CFR 63, Subpart ZZZZ [EPA]
Natural gas-fired emergency generator	P-2409	14	NO_X CO VOC Fuel Use Operating Hours	2.0 g/hp-hr 4.0 g/hp-hr 1.0 g/hp-hr Condition 2.A.1) Condition 1, Footnote B	33.1-15-12, Subpart JJJJ & 40 CFR 63, Subpart ZZZZ [EPA] ACP-17872 v1.2 33.1-15-12, Subpart IIII & 40 CFR 63, Subpart ZZZZ [EPA]
Stripped sour water off-gas incinerator	H-1301	15	Opacity Operation	20% [B] Condition 2.C	33.1-15-03-02 ACP-18150 v1.0
Hydrogen plant steam de-aerator vent 1	V-1906	16	Opacity	20% [B]	33.1-15-03-02
Hydrogen plant steam de-aerator vent 2	V-2055	21	Opacity	20% [B]	33.1-15-03-02
DRT steam boiler #1	B-8001	22	Opacity	20% [B]	33.1-15-03-02
DRT steam boiler #2	B-8002	23	Opacity	20% [B]	33.1-15-03-02

Table 4. Emission Unit Limits

Emission Unit Description	EU	EP	Pollutant / Parameter	Emission Limit or Design / Work Practices [A]	NDAC Applicable Requirement
DRT natural gas-fired emergency generator	GN- 9001	24	NO_X CO VOC Fuel Use Operating Hours	2.0 g/hp-hr 4.0 g/hp-hr 1.0 g/hp-hr Condition 2.A.1) Condition 1, Footnote B	33.1-15-12, Subpart JJJJ & 40 CFR 63, Subpart ZZZZ [EPA] ACP-17872 v1.2 33.1-15-12, Subpart IIII & 40 CFR 63, Subpart ZZZZ [EPA]
DRT rail loading rack - renewable diesel	P-9900	25	VOC	Condition 2.F.2)	33.1-15-07-02, ACP-17872 v1.2
PRT renewable naphtha transloading	P-9100	26	VOC	Condition 2.F	33.1-15-07-02, ACP-18150 v1.0
PRT rail loading rack - renewable diesel	P-9200	27	VOC	Condition 2.F	33.1-15-07-02, ACP-18150 v1.0
PRT thermal oil heater #1	H-8101	28	Opacity	20% [B]	33.1-15-03-02
PRT thermal oil heater #2	H-8201	29	Opacity	20% [B]	33.1-15-03-02
LPG loading	FUG-1		VOC	Condition 2.E	ACP-17872 v1.2
Wastewater treatment plant	FUG-2		VOC	Condition 2.E	ACP-17872 v1.2
Process equipment leaks in VOC service	FUG-3		VOC	Condition 2.D	ACP-18150 v1.0
DRT equipment leaks in VOC service	FUG-4		VOC	Condition 2.D	ACP-18150 v1.0
PRT process equipment leaks in VOC service	FUG-5		VOC	Condition 2.D	ACP-18150 v1.0
Gasoline dispensing facility	TK-GAS		VOC	Condition 2.J	33.1-15-07, ACP-17872 v1.2 40 CFR 63, Subpart CCCCCC [EPA]
Slop oil storage tank (NSPS Kb)	TK-1009	FUG-6	VOC	Condition 2.H	33.1-15-07 & 33.1-15-12 (40 CFR 60, Subpart Kb Tanks)
Renewable naphtha storage tank #1 (NSPS Kb)	TK-1021				
Renewable naphtha storage tank #2 (NSPS Kb)	TK-1022				
Renewable naphtha storage tank #3	TK-1023				

Table 4. Emission Unit Limits

Emission Unit Description	EU		EP	Pollutant / Parameter	Emission Limit or Design / Work Practices [A]	NDAC Applicable Requirement
(NSPS Kb)						

[A] The emission limits and work practice standards specified in this permit apply at all times including startup, shutdown and malfunction.

[B] Twenty percent, except that a maximum of 40 percent is permissible for not more than one six-minute period per hour. This standard applies at all times, except as allowed by NDAC 33.1-15-03-04. Compliance with this visible emissions standard shall be determined by conducting observations in accordance with Method 9 of 40 CFR 60, Appendix A as incorporated by reference into NDAC 33.1-15-12.

B. **Hydrogen plant heater (EU R-2051)**:

1) The permittee shall not discharge to the atmosphere any emissions of NO_X in excess of 0.040 lb/MMBtu higher heating value basis determined by compliance testing.

Applicable Requirement: ACP-17872 v1.2

2) The permittee shall not discharge to the atmosphere any emissions of CO in excess of 0.020 lb/MMBtu higher heating value basis determined by compliance testing.

Applicable Requirement: ACP-18150 v1.0

4. **Monitoring Requirements and Conditions**:

A. **Requirements**:

Table 5. Monitoring Requirements and Conditions

EU	EP	Pollutant/ Parameter	Monitoring Method	Condition Number	NDAC Applicable Requirement
H-801	2	Opacity	Recordkeeping	4.B.2)	33.1-15-03-02
H-802	3				
R-1901	4				
H-901	18				
H-5710	5				
V-1906	16				
V-2055	21				
H-8101	28				
H-8201	29				
R-2051	19	NO_X/CO SO_2/Opacity	Emissions Testing Recordkeeping	4.B.1) 4.B.2)	33.1-15-03-02 33.1-15-14-02.9
PK-2403A	6	Opacity Fuel Type	Recordkeeping	4.B.2) 4.B.3)	33.1-15-03-02 33.1-15-12, NSPS Dc
PK-2403B	7				
PK-2403C	8				
B-8001	22				

Table 5. Monitoring Requirements and Conditions

EU	EP	Pollutant/ Parameter	Monitoring Method	Condition Number	NDAC Applicable Requirement
B-8002	23				
H-1301	15	Opacity Operation	VEO Recordkeeping	4.B.6) 4.B.9)	33.1-15-03-02 33.1-15-07-02
PK-2402	11	Opacity Operation VOC	VEO Recordkeeping	4.B.7) 2.B 2.E	33.1-15-03-02 33.1-15-07-02 33.1-15-14-02.9
P-9800	9	VOC	Recordkeeping	4.B.8)	33.1-15-14 06.5.a(3)(a)
P-9900	25				
P-9100	26				
P-9200	27				
VCU-1	9	Opacity Operation	VEO Recordkeeping	4.B.6) 4.B.8)	33.1-15-03-02 33.1-15-07-02
P-2415	13	PM/NO_x/ Fuel Use/Operating Hours	Recordkeeping	4.B.5)	33.1-15-03-02 33.1-15-12 33.1-15-22
P-2409	14	NO_x/CO/VOC/Fuel Use/Operating Hours	Recordkeeping	4.B.5)	33.1-15-03-02 33.1-15-12 33.1-15-22
GN-9001	24				
FUG-3	FUG-3	VOC	FEMP/LDAR	2.D	ACP-18150 v1.0
TK-GAS	TK-GAS	VOC	Recordkeeping	Condition 2.J	33.1-15-07, ACP-17872 v1.2 40 CFR 63, Subpart CCCCCC [EPA]
TK-1009	FUG-6	VOC	Recordkeeping	4.B.4)	33.1-15-07, 33.1-15-12, NSPS Kb
TK-1021					
TK-1022					
TK-1023					

B. **Monitoring Conditions**:

1) Once per the term of the permit, the permittee shall conduct an emissions test to measure NO_x and CO emissions using EPA Reference Methods in 40 CFR 60, Appendix A. The test shall be conducted within one year of issuance of this permit.

2) For purposes of compliance monitoring, burning of fuels as outlined in Condition 2.A, shall be considered credible evidence of compliance with any applicable opacity, particulate matter (PM) or sulfur dioxide (SO_2) emission limit. However, results from tests conducted in accordance with the test methods in 40 CFR 50, 51, 60, 61, or 75 will take precedence over burning of fuels as outlined in Condition 2.A, for evidence of compliance or noncompliance with any applicable opacity, PM and/or SO_2 emission limit, in the event of enforcement action.

3) For monitoring compliance with 40 CFR 60, Subpart Dc, the permittee shall record and maintain records of the amount of natural gas combusted during each calendar month per §60.48c(g)(1)-(3).

4) For monitoring compliance with the Tanks, the permittee shall maintain the following:

Dimensions of the storage vessels and an analysis showing the capacity of the storage vessels. (Kept for life of source)

Record of material stored, period of storage, and maximum true vapor pressure of material stored. (Kept for at least 2 years)

5) For monitoring compliance with 40 CFR 60, Subpart JJJJ and IIII, the permittee shall maintain the following:

a) Emergency Engines: a log shall be kept of the total hours of operation on a calendar year basis for each of the engines. Records shall be maintained to differentiate annual emergency vs. non-emergency/maintenance/etc. hours of operation.

b) Certified engines: collect operational and maintenance data to demonstrate that the facility complies with the engine manufacturer's emission-related written instructions.

6) Visual Emissions Observation (VEO): Once per month when the unit is in normal operation, the permittee shall conduct a visible emissions evaluation using EPA Reference Method 22 for one 5-minute period to determine if visible emissions are present. If visible emissions are present, the permittee shall complete a formal opacity evaluation using EPA Reference Method 9 within one week of the Method 22 evaluation. The Method 9 evaluation shall consist of three consecutive 6-minute periods conducted by a certified visible emissions reader.

7) Visual Emissions Observation (VEO) specific to the refinery flare: Once per month when the unit is in normal operation, the permittee shall conduct a visible emissions evaluation using EPA Reference Method 22 for one 5-minute period to determine if visible emissions are present. If visible emissions are observed for more than one continuous minute during any 5-minute observation period, the observation period using Method 22 must be extended to two hours or until five minutes of visible emissions are observed. In addition, during periods of plant upsets that result in the potential for increased opacity from the refinery flare due to higher than normal flare gas loading, such as an emergency plant-wide shutdown, then visible smoke emissions from the flare shall be observed for a 5-minute period each hour during daylight hours using EPA Reference Method 22 following the first hour of the plant upset, if the duration of the upset is at least one hour. If visible emissions are observed for more than one continuous minute during any 5-minute observation period, the observation period must be extended to two hours or until five minutes of visible emissions are observed. (Kept for at least 2 years)

8) For monitoring compliance with truck and rail loadout conditions specified in Condition 2.F, the permittee shall maintain records documenting that the applicable control requirements have been met. (Kept for at least 2 years)

9) For monitoring compliance with incinerator operation Condition 2.C, the permittee shall maintain records documenting that the applicable control requirements have been met. (Kept for at least 2 years)

5. **Recordkeeping Requirements**:

A. The permittee shall maintain compliance monitoring records as outlined in the Monitoring Records table that include the following information.

1) The date, place (as defined in the permit) and time of sampling or measurement.

2) The date(s) testing was performed.

3) The company, entity, or person that performed the testing.

4) The testing techniques or methods used.

5) The results of such testing.

6) The operating conditions that existed at the time of sampling or measurement.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(3)(b)[1]

Table 6. Monitoring Records

EU	EP	Pollutant/ Parameter	Compliance Monitoring Record
H-801	2	Opacity	Fuel Type Data
H-802	3		
R-1901	4		
H-901	18		
H-5710	5		
V-1906	16		
V-2055	21		
H-8101	28		
H-8201	29		
R-2051	19	NO_x/CO SO_2/Opacity	Emissions Test Data Fuel Type Data
PK-2403A	6	Opacity/Fuel Type	Fuel Type Data
PK-2403B	7		
PK-2403C	8		
B-8001	22		
B-8002	23		
H-1301	15	Opacity Operation	VEO Records Operational Records
PK-2402	11	Opacity Operation VOC	VEO Records Operational Records BMP Records
P-9800	9	Operation	Loadout Records
P-9900	25		
P-9100	26		
P-9200	27		
VCU-1	9	Opacity	VEO Records
P-2415	13	PM/NO_x/Fuel Use/Operating Hours	Fuel Type Data/ Certification Data & Hours of Operation Data
P-2409	14	NO_x/CO/VOC/Fuel	Fuel Type Data/

Table 6. Monitoring Records

EU	EP	Pollutant/ Parameter	Compliance Monitoring Record
GN-9001	24	Use/Operating Hours	Certification/Test Data & Hours of Operation Data
FUG-3	FUG-3	VOC	FEMP/LDAR Records
TK-GAS	TK-GAS	VOC	Fuel Throughput Data
TK-1009	FUG-6	VOC	Inspection/Stored Material Records
TK-1021			
TK-1022			
TK-1023			

B. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least five years, unless otherwise stated, from the date of the compliance monitoring sampling, measurement, report, or application. Support information includes all maintenance records of all the emission units and all original strip-chart recordings/computer printouts and calibrations of the continuous compliance monitoring instrumentation, and copies of all reports required by the permit.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(3)(b)[2]

6. **Reporting Requirements**:

A. Reporting shall be in accordance with the following requirements, as applicable:

1) NDAC 33.1-15-12, Subpart A, §60.7, Notification and Recordkeeping

2) NDAC 33.1-15-12, Subpart Dc, §60.48c, Reporting and Recordkeeping Requirements

3) NDAC 33.1-15-12, Subpart Kb, §60.115b Reporting and Recordkeeping Requirements

4) NDAC 33.1-15-12, Subpart IIII, §60.4214, Notification, Reporting and Recordkeeping Requirements

5) NDAC 33.1-15-12, Subpart JJJJ, §60.4245, Notification, Reporting and Recordkeeping Requirements

6) 40 CFR 63, Subpart ZZZZ, §63.6655 and §63.6660, Reporting and Recordkeeping

7) 40 CFR 63, Subpart CCCCCC, §63.11125 and §63.11126, Reporting and Recordkeeping

Applicable Requirement: ACP-17872 v1.2, NDAC 33.1-15-12

B. **Semi-Annual Reporting**:

The permittee shall submit a semi-annual monitoring report for all monitoring records required under Condition 5 in a format provided or approved by the Department. All instances of deviations from the permit must be identified in the report. A monitoring report shall be submitted within 45 days after June 30 and December 31 of each year.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(c)[1] and [2]

C. **Annual Reporting**:

1) The permittee shall submit an annual compliance certification report in accordance with NDAC 33.1-15-14-06.5.c(5) within 45 days after December 31 of each year in a format provided or approved by the Department.

Applicable Requirement: NDAC 33.1-15-14-06.5.c(5)

2) The permittee shall submit an annual emission inventory report in a format provided or approved by the Department. This report shall be submitted by March 15 of each year. Insignificant units/activities listed in this permit do not need to be included in the report.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(7) and NDAC 33.1-15-23-04

D. **Performance Test Reporting**:

For emission units where the method of compliance monitoring is demonstrated by an EPA Test Method or a portable analyzer test, the test report shall be submitted to the Department within 60 days after completion of the test.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(6)(e)

7. **Facility Wide Operating Conditions**:

A. **Ambient Air Quality Standards**:

1) Particulate and gases. The permittee shall not emit air contaminants in such a manner or amount that would violate the standards of ambient air quality listed in Table 1 of NDAC 33.1-15-02 external to buildings, to which the general public has access.

2) Radioactive substances. The permittee shall not release into the ambient air any radioactive substances exceeding the concentrations specified in NDAC 33.1-10.

3) Other air contaminants. The permittee shall not emit any other air contaminants in concentrations that would be injurious to human health or well-being or unreasonably interfere with the enjoyment of property or that would injure plant or animal life.

4) Disclaimer. Nothing in any other part or section of this permit may in any manner be construed as authorizing or legalizing the emission of air contaminants in such manner that would violate the standards in Condition 7.A.1) through 7.A.3).

Applicable Requirements: NDAC 33.1-15-02-04 and 40 CFR 50.1(e)

B. **Fugitive Emissions**:

The release of fugitive emissions shall comply with the applicable requirements in NDAC 33.1-15-17.

Applicable Requirement: NDAC 33.1-15-17

C. **Open Burning**:

The permittee may not cause, conduct, or permit open burning of refuse, trade waste, or other combustible material, except as provided for in Section 33.1-15-04-02 and may not conduct, cause,

or permit the conduct of a salvage operation by open burning. Any permissible open burning under NDAC 33.1-15-04-02 must comply with the requirements of that section.

Applicable Requirement: NDAC 33.1-15-04

D. **Asbestos Renovation or Demolition**:

Any asbestos renovation or demolition at the facility shall comply with emission standard for asbestos in NDAC 33.1-15-13.

Applicable Requirement: NDAC 33.1-15-13-02

E. **Requirements for Organic Compounds Gas Disposal**:

1) Any organic compounds, gases and vapors which are generated as wastes as the result of storage, refining or processing operations and which contain hydrogen sulfide shall be incinerated, flared or treated in an equally effective manner before being released into the ambient air.

2) Each flare must be equipped and operated with an automatic ignitor or a continuous burning pilot.

3) Rotating Pumps and Compressors: All rotating pumps and compressors handling volatile organic compounds must be equipped and operated with properly maintained seals designed for their specific product service and operating conditions.

Applicable Requirement: NDAC 33.1-15-07-01.5, NDAC 33.1-15-07-02

F. **Shutdowns, Malfunctions, and Continuous Emission Monitoring System Failures**:

1) Maintenance Shutdowns: In the case of shutdown of air pollution control equipment for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Department at least 24-hours prior to the planned shutdown provided that the air contaminating source will be operated while the control equipment is not in service. Such prior notice shall include the following:

Identification of the specific facility to be taken out of service as well as its location and permit number.

The expected length of time that the air pollution control equipment will be out of service.

The nature and estimated quantity of emissions of air pollutants likely to be emitted during the shutdown period.

Measures, such as the use of off-shift labor and equipment, that will be taken to minimize the length of the shutdown period.

The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.

f) Nothing in this subsection shall in any manner be construed as authorizing or legalizing the emission of air contaminants in excess of the rate allowed by this article or a permit issued pursuant to this article.

Applicable Requirement: NDAC 33.1-15-01-13.1

2) Malfunctions:

a) When a malfunction in any installation occurs that can be expected to last longer than 24-hours and cause the emission of air contaminants in violation of this article or other applicable rules and regulations, the person responsible for such installation shall notify the Department of such malfunction as soon as possible during normal working hours. The notification must contain a statement giving all pertinent facts, including the estimated duration of the breakdown. The Department shall be notified when the condition causing the malfunction has been corrected.

Immediate notification to the Department is required for any malfunction that would threaten health or welfare or pose an imminent danger. During normal working hours the Department can be contacted at 701-328-5188. After hours the Department can be contacted through the 24-hour state radio emergency number 1-800-472-2121. If calling from out of state, the 24-hour number is 701-328-9921.

Unavoidable Malfunction. The owner or operator of a source who believes any excess emissions resulted from an unavoidable malfunction shall submit a written report to the Department which includes evidence that:

1] The excess emissions were caused by a sudden, unavoidable breakdown of technology that was beyond the reasonable control of the owner or operator.

2] The excess emissions could not have been avoided by better operation and maintenance, did not stem from an activity or event that could have been foreseen and avoided, or planned for.

3] To the extent practicable, the source maintained and operated the air pollution control equipment and process equipment in a manner consistent with good practice for minimizing emissions, including minimizing any bypass emissions.

4] Any necessary repairs were made as quickly as practicable, using off-shift labor and overtime as needed and possible.

5] All practicable steps were taken to minimize the potential impact of the excess emissions on ambient air quality.

6] The excess emissions are not part of a recurring pattern that may have been caused by inadequate operation or maintenance, or inadequate design of the malfunctioning equipment.

The report shall be submitted within 30-days of the end of the calendar quarter in which the malfunction occurred or within 30-days of a written request by the Department, whichever is sooner.

The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate that an unavoidable equipment malfunction occurred.

The Department may elect not to pursue enforcement action after considering whether excess emissions resulted from an unavoidable equipment malfunction. The Department will evaluate, on a case-by-case basis, the information submitted by the owner or operator to determine whether to pursue enforcement action.

Applicable Requirement: NDAC 33.1-15-01-13.2

3) Continuous Emission Monitoring System Failures: When a failure of a continuous emission monitoring system occurs, an alternative method for measuring or estimating emissions must be undertaken as soon as possible. The owner or operator of a source that uses an alternative method shall have the burden of demonstrating that the method is accurate. Timely repair of the emission monitoring system must be made. The provisions of this subsection do not apply to sources that are subject to monitoring requirements in Chapter 33.1-15-21 (40 CFR 75, Acid Rain Program).

Applicable Requirement: NDAC 33.1-15-01-13.3

G. **Noncompliance Due to an Emergency**:

The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:

1) An emergency occurred, and that the permittee can identify the cause(s) of the emergency;

2) The permitted facility was at the time being properly operated;

3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and

4) The permittee submitted notice of the emergency to the Department within one working day of the time when emission limitations were exceeded longer than 24-hours due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. Those emergencies not reported within one working day, as well as those that were, will be included in the semi-annual report.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

Technology-based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a New Source Performance Standard) rather than those established to attain a health-based air quality standard.

An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of this source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes this source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly

designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Applicable Requirement: NDAC 33.1-15-14-06.5.g

H. **Air Pollution from Internal Combustion Engines**:

The permittee shall comply with all applicable requirements of NDAC 33.1-15-08-01 – Internal Combustion Engine Emissions Restricted.

Applicable Requirement: NDAC 33.1-15-08-01

I. **Prohibition of Air Pollution**:

1) The permittee shall not permit or cause air pollution, as defined in NDAC 33.1-15-01-04.

2) Nothing in any other part of this permit or any other regulation relating to air pollution shall in any manner be construed as authorizing or legalizing the creation or maintenance of air pollution.

Applicable Requirement: NDAC 33.1-15-01-15

J. **Performance Tests**:

1) The Department may reasonably require the permittee to make or have made tests, at a reasonable time or interval, to determine the emission of air contaminants from any source, for the purpose of determining whether the permittee is in violation of any standard or to satisfy other requirements of NDCC 23.1-06. All tests shall be made, and the results calculated in accordance with test procedures approved or specified by the Department including the North Dakota Department of Environmental Quality Emission Testing Guideline. All tests shall be conducted by reputable, qualified personnel. The Department shall be given a copy of the test results in writing and signed by the person responsible for the tests.

2) The Department may conduct tests of emissions of air contaminants from any source. Upon request of the Department, the permittee shall provide necessary and adequate access into stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants.

Applicable Requirement: NDAC 33.1-15-01-12

Failure to give the proper notification may prevent the Department from observing the test. If the Department is unable to observe the test because of improper notification, the test results may be rejected.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(a), NDAC 33.1-15-12-02 Subpart A (40 CFR 60.8), NDAC 33.1-15-13-01.2 Subpart A (40 CFR 61.13), NDAC 33.1-15-22-03 Subpart A (40 CFR 63.7)

K. **Pesticide Use and Disposal**:

Any use of a pesticide or disposal of surplus pesticides and empty pesticide containers shall comply with the requirements in NDAC 33.1-15-10.

Applicable Requirements: NDAC 33.1-15-10-01 and NDAC 33.1-15-10-02

L. **Air Pollution Emergency Episodes**:

When an air pollution emergency episode is declared by the Department, the permittee shall comply with the requirements in NDAC 33.1-15-11.

Applicable Requirements: NDAC 33.1-15-11-01 through NDAC 33.1-15-11-04

M. **Stratospheric Ozone Protection**:

The permittee shall comply with any applicable standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:

1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.

2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.

3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to Section 82.161.

4) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to Section 82.156.

Applicable Requirement: 40 CFR 82, Protection of Stratospheric Ozone

N. **Chemical Accident Prevention**:

The permittee shall comply with all applicable requirements of Chemical Accident Prevention pursuant to 40 CFR 68. The permittee shall comply with the requirements of this part no later than the latest of the following dates:

1) Three years after the date on which a regulated substance is first listed under this part; or

2) The date on which a regulated substance is first present above a threshold quantity in a process.

The North Dakota Department of Environmental Quality does not have delegated authority of 40 CFR 68 provisions. Please send all required reports and documentation to EPA.

Applicable Requirement: 40 CFR 68, Chemical Accident Prevention

O. **Air Pollution Control Equipment**:

The permittee shall maintain and operate air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The manufacturer's recommended Operations and Maintenance (O&M) procedures, or a site-specific O&M procedure developed from the manufacturer's recommended O&M procedures, shall be followed to assure proper operation and maintenance of the equipment. The permittee shall have the O&M procedures available onsite and provide the Department with a copy when requested.

Applicable Requirement: NDAC 33.1-15-14-06.5.b(1)

P. **Prevention of Significant Deterioration of Air Quality (40 CFR 52.21)**:

If this facility is classified as a major stationary source under the Prevention of Significant Deterioration of Air Quality (PSD) rules, a Permit to Construct must be obtained from the Department for any project which meets the definition of a "major modification" under 40 CFR 52.21(b)(2).

If this facility is classified as a major stationary source under the PSD rules and the permittee elects to use the method specified in Section 52.21(b)(41)(ii)(a) through (c) for calculating the projected actual emissions of a proposed project, then the permittee shall comply with all applicable requirements of 40 CFR 52.21(r)(6).

Applicable Requirement: as incorporated by NDAC 33.1-15-15-01.2

8. **General Conditions**:

A. **Annual Fee Payment**:

The permittee shall pay an annual fee, for administering and monitoring compliance, which is determined by the actual annual emissions of regulated contaminants from the previous calendar year. The Department will send a notice, identifying the amount of the annual permit fee, to the permittee of each affected installation. The fee is due within 60-days following the date of such notice. Any source that qualifies as a "small business" may petition the Department to reduce or exempt any fee required under this section. Failure to pay the fee in a timely manner or submit a certification for exemption may cause this Department to initiate action to revoke the permit.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(7) and NDAC 33.1-15-23-04

B. **Permit Renewal and Expiration**:

This permit shall be effective from the date of its issuance for a fixed period of five years. The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least six months, but no more than 18 months, prior to the date of permit expiration. The Department shall approve or disapprove the renewal application within 60-days of receipt. Unless the Department requests additional information or otherwise notifies the applicant of incompleteness, the application shall be deemed complete. For timely and complete renewal applications for which the Department has failed to issue or deny the renewal permit before the expiration date of the previous permit, all terms and conditions of the permit, including any permit shield previously granted shall remain in effect until the renewal permit has been issued or denied. The application for renewal shall include the current permit number, description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.

Applicable Requirements: NDAC 33.1-15-14-06.4 and NDAC 33.1-15-14-06.6

C. **Transfer of Ownership or Operation**:

This permit may not be transferred except by procedures allowed in Chapter 33.1-15-14 and is to be returned to the Department upon the destruction or change of ownership of the source unit(s), or upon expiration, suspension or revocation of this permit. A change in ownership or operational control of a source is treated as an administrative permit amendment if no other change in the permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department.

Applicable Requirement: NDAC 33.1-15-14-06.6.d

D. **Property Rights**:

This permit does not convey any property rights of any sort, or any exclusive privilege.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(6)(d)

E. **Submissions**:

1) Reports, test data, monitoring data, notifications, and requests for renewal shall be submitted to the Department using a format provided or approved by the Department. Physical submittals shall be submitted to:

North Dakota Department of Environmental Quality
Division of Air Quality
4201 Normandy Street, 2nd Floor
Bismarck, ND 58503-1324

2) Any application form, report or compliance certification submitted shall be certified as being true, accurate, and complete by a responsible official.

Applicable Requirement: NDAC 33.1-15-14-06.4.d

F. **Right of Entry**:

Any duly authorized officer, employee or agent of the North Dakota Department of Environmental Quality may enter and inspect any property, premise or place listed on this permit or where records are kept concerning this permit at any reasonable time for the purpose of ascertaining the state of compliance with this permit and the North Dakota Air Pollution Control Rules. The Department may conduct tests and take samples of air contaminants, fuel, processing material, and other materials which affect or may affect emissions of air contaminants from any source. The Department shall have the right to access and copy any records required by the Department's rules and to inspect monitoring equipment located on the premises.

Applicable Requirements: NDAC 33.1-15-14-06.5.c(2) and NDAC 33.1-15-01-06

G. **Compliance**:

The permittee must comply with all conditions of this permit. Any noncompliance with a federally-enforceable permit condition constitutes a violation of the Federal Clean Air Act. Any noncompliance with any State enforceable condition of this permit constitutes a violation of NDCC Chapter 23.1-06 and NDAC 33.1-15. Violation of any condition of this permit is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application. Noncompliance may also be grounds for assessment of penalties under the NDCC 23.1-06. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(6)(a) and NDAC 33.1-15-14-06.5.a(6)(b)

H. **Duty to Provide Information**:

The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This includes instances where an alteration, repair, expansion, or change in method of operation of the source occurs. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such recourse directly to the Department along with a claim of confidentiality. The permittee, upon becoming aware that any relevant facts were omitted, or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. Items that warrant supplemental information submittal include, but are not limited to, changes in the ambient air boundary and changes in parameters associated with emission points (i.e., stack parameters). The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(6)(e), NDAC 33.1-15-14-06.6.b(3) and NDAC 33.1-15-14-06.4.b

I. **Reopening for Cause**:

The Department will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:

1) Additional applicable requirements under the Federal Clean Air Act become applicable to the permittee with a remaining permit term of three or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.

2) The Department or the United States Environmental Protection Agency determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

3) The Department or the United States Environmental Protection Agency determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

4) Reopenings shall not be initiated before a notice of intent to reopen is provided to the permittee by the Department at least 30 days in advance of the date that this permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency. Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

Applicable Requirement: NDAC 33.1-15-14-06.6.f

J. **Permit Changes**:

The permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(6)(c)

K. **Off-Permit Changes**:

A permit revision is not required for changes that are not addressed or prohibited by this permit, provided the following conditions are met:

1) No such change may violate any term or condition of this permit.

2) Each change must comply with all applicable requirements.

3) Changes under this provision may not include changes or activities subject to any requirement under Title IV or that are modifications under any provision of Title I of the Federal Clean Air Act.

4) A Permit to Construct under NDAC 33.1-15-14-02 has been issued, if required.

5) Before the permit change is made, the permittee must provide written notice to both the Department and Air Program (8P-AR), Office of Partnerships & Regulatory Assistance, US EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129, except for changes that qualify as insignificant activities in Section 33.1-15-14-06. This notice shall describe each change, the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result.

6) The permittee shall record all changes that result in emissions of any regulated air pollutant subject to any applicable requirement not otherwise regulated under this permit, and the emissions resulting from those changes. The record shall reside at the permittee's facility.

Applicable Requirement: NDAC 33.1-15-14-06.6.b(3)

L. **Administrative Permit Amendments**:

This permit may be revised through an administrative permit amendment, if the revision to this permit accomplishes one of the following:

1) Corrects typographical errors.

2) Identifies a change in the name, address or phone number of any person identified in this permit or provides a similar minor administrative change at the source.

3) Requires more frequent monitoring or reporting by the permittee.

4) Allows for a change in ownership or operational control of the source where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the Department.

5) Incorporates into the Title V permit the requirements from a Permit to Construct when the review was substantially equivalent to Title V requirements for permit issuance, renewal, reopenings, revisions and permit review by the United States Environmental Protection Agency and affected state review, that would be applicable to the change if it were subject to review as a permit modification and compliance requirements substantially equivalent to Title V requirements for permit content were contained in the Permit to Construct.

6) Incorporates any other type of change which the Administrator of the United States Environmental Protection Agency has approved as being an administrative permit amendment as part of the Department's approved Title V operating permit program.

Applicable Requirement: NDAC 33.1-15-14-06.6.d

M. **Minor Permit Modification**:

This permit may be revised by a minor permit modification, if the proposed permit modification meets the following requirements:

1) Does not violate any applicable requirement.

2) Does not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in this permit.

3) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis.

4) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include a federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the Federal Clean Air Act; and alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the Federal Clean Air Act.

5) Is not a modification under NDAC 33.1-15-12, 33.1-15-13, and 33.1-15-15 or any provision of Title I of the Federal Clean Air Act.

6) Is not required to be processed as a significant modification.

Applicable Requirement: NDAC 33.1-15-14-06.6.e(1)

N. **Significant Modifications**:

1) Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments. Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions shall be considered significant. Nothing therein shall be construed to preclude the permittee from making changes consistent with this subsection that would render existing permit compliance terms and conditions irrelevant.

2) Significant permit modifications shall meet all Title V requirements, including those for applications, public participation, review by affected states, and review by the United States Environmental Protection Agency, as they apply to permit issuance and permit renewal. The Department shall complete review of significant permit modifications within nine months after receipt of a complete application.

Applicable Requirement: NDAC 33.1-15-14-06.6.e(3)

O. **Operational Flexibility**:

The permittee is allowed to make a limited class of changes within the permitted facility that contravene the specific terms of this permit without applying for a permit revision, provided the changes do not exceed the emissions allowable under this permit, are not Title I modifications and a Permit to Construct is not required. This class of changes does not include changes that would violate applicable requirements; or changes to federally-enforceable permit terms or conditions that are monitoring, recordkeeping, reporting, or compliance certification requirements.

The permittee is required to send a notice to both the Department and Air Program (8P-AR), Office of Partnerships & Regulatory Assistance, US EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129, at least seven days in advance of any change made under this provision. The notice must describe the change, when it will occur and any change in emissions, and identify any permit terms or conditions made inapplicable as a result of the change. The permittee shall attach each notice to its copy of this permit. Any permit shield provided in this permit does not apply to changes made under this provision.

Applicable Requirement: NDAC 33.1-15-14-06.6.b(2)

P. **Relationship to Other Requirements**:

Nothing in this permit shall alter or affect the following:

1) The provisions of Section 303 of the Federal Clean Air Act (emergency orders), including the authority of the administrator of the United States Environmental Protection Agency under that section.

2) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.

3) The ability of the United States Environmental Protection Agency to obtain information from a source pursuant to Section 114 of the Federal Clean Air Act.

4) Nothing in this permit shall relieve the permittee of the requirement to obtain a Permit to Construct.

Applicable Requirements: NDAC 33.1-15-14-06.3 and NDAC 33.1-15-14-06.5.f(3)(a), (b) and (d)

Q. **Severability Clause**:

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(5)

R. **Circumvention**:

The permittee shall not cause or permit the installation or use of any device of any means which conceals or dilutes an emission of air contaminants which would otherwise violate this permit.

Applicable Requirement: NDAC 33.1-15-01-08

9. **State Enforceable Only Conditions (Not Federally Enforceable)**:

A. **General Odor Restriction**:

The permittee shall not discharge into the ambient air any objectionable odorous air contaminant which exceeds the limits established in NDAC 33.1-15-16.
Applicable Requirement: NDAC 33.1-15-16

B. **Hydrogen Sulfide Restriction**:

The permittee shall not discharge into the ambient air hydrogen sulfide (H_2S) in concentrations that would be objectionable on land owned or leased by the complainant or in areas normally accessed by the general public. For the purpose of complaint resolution, two samples with concentrations greater than 0.05 parts per million (50 parts per billion) sampled at least 15 minutes apart within a two-hour period and measured in accordance with Section 33.1-15-16-04 constitute a violation.

Applicable Requirement: NDAC 33.1-15-16-04

Attachment A – Fugitive Emissions Monitoring Program

1.0 INTRODUCTION

The fugitive volatile organic compounds (VOC) emissions monitoring program detailed in this Attachment shall be implemented on the fugitive process equipment in VOC service at the Marathon Dickinson Facility (EU FUG-3). This fugitive VOC emissions monitoring program is referred to as the leak detection and repair (LDAR) program. Fugitive process equipment at the Dickinson Rail Terminal (EU FUG-4) and the Patterson Rail Terminal (EU FUG-5) are not subject to this LDAR program, ~~however, leaks will be identified during regular operator rounds via audible, visual, and olfactory (AVO) detection methods~~. The protocols included in this LDAR program help ensure potential emissions attributed to these processes are accurately accounted for.

2.0 DEFINITIONS

Table 1. LDAR Program Definitions

In gas/vapor service (GV)	means that the piece of equipment contains process fluid that is in the gaseous state at operating conditions
In heavy liquid service (HL)	means that the piece of equipment is not in gas/vapor service or in light liquid service
In light liquid service (LL)	defined as equipment containing materials for which the vapor pressure of one or more organic component is greater than 0.3 kPa at 20°C (1.2 in. H2O at 68°F), the total concentration of pure organic components has a vapor pressure greater than 0.3 kPa at 20°C (1.2 in. H2O at 68°F) is greater than or equal to 20 percent by weight, and the fluid is liquid at operating conditions
In vacuum service (CVS)	means that equipment is operating at an internal pressure which is at least 5 kilopascals (kPa) (0.7 psia) below ambient pressure
In VOC service	means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight
Leak	(for the purposes of this attachment) means a screening value at or above the leak definitions presented in Table 2, issues identified via audible, visual, or olfactory (AVO) detection, and/or emissions imaged by an optical gas imaging device

3.0 WORK PRACTICE STANDARDS

3.1 Applicable Equipment

Equipment subject to this protocol includes pumps, compressors, pressure relief devices, valves, flanges and other connectors at EU FUG-3 that contain or contact process fluid that is at least 10 percent VOC by weight.

Closed vent system (CVS) (i.e., flare header under vacuum pressure during normal conditions) that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device (flare) are also applicable, but monitored at a different frequency per Table 2.

3.2 Monitoring

Equipment in CVS, gas/vapor, or light liquid service shall be monitored by the methods described in Table 2 below using the prescribed leak definitions.

Table 2. Leak Definitions and Monitoring Frequencies

Equipment Type	Leak Definition (ppm)	Monitoring Frequency	Comments
Valve	500	Quarterly	
Connector	500	Annual	
Relief Devices	500	Annual	
Compressor	500	Annual	
Pump	2,000	Monthly	LL Pumps are also AVO monitored weekly
Drains	500	Annual	
CVS	500	Annual	Initial Method 21 inspection and annual AVO thereafter

Equipment in heavy liquid service does not require routine Method 21 monitoring. If a leak is found, it should be repaired as soon as practical.

3.3 Alternative Monitoring

Under certain circumstances, some equipment may be exempt from monitoring or subject to reduced monitoring according to the following provisions:

3.3.1 Unsafe to Monitor

Valves are considered unsafe to monitor (UTM) if monitoring personnel would be exposed to imminent danger while monitoring. A monitoring plan for all UTM components must be drafted to require monitoring of the valves as frequently as practicable during safe to monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

3.3.2 Difficult to Monitor

Valves are considered difficult to monitor (DTM) if the act of monitoring would require monitoring personnel to be elevated more than 2 meters from a walking surface, and the total number of DTM valves does not exceed 3%. DTM components must be monitored annually.

3.3.3 Inaccessible

Connectors are considered inaccessible if they are ceramic, ceramic lined, buried, fully obstructed, permanently insulated, greater than 25 feet off the ground, or located such that the monitoring personnel must be elevated greater than 2 meters above a walking surface to monitor. Inaccessible connectors are exempt from monitoring. If an inaccessible connector displays evidence of an audible, visual, or olfactory (AVO) leak, repair must be attempted within 5 days of leak detection with a successful repair within 15 days of leak detection.

3.4 Leak Detection

If an instrument reading exceeds the leak limits defined in Table 2, a first attempt must be made within five days of leak discovery. A successful attempt at repair must be made within 15 days of leak discovery. A successful leak repair is completed if EPA Method 21 readings record a value less than the leak definitions shown in 2. A successful repair must be verified by the same detection method that identified the leak.

Leaks detected during monitoring will be documented in a leak log, and a weatherproof indicator listing unique leak ID, inspector ID, and leak date will be placed on the leaking component.

3.5 Delay of Repair

If repair cannot be completed and meets one of the reasons below, the component may be placed on delay of repair (DOR) within 15 days of leak discovery. DOR Authorization shall be made by the Dickinson Facility Manager, Operations Manager, Operations Day Foreman, Operations Maintenance Specialist, or an authorized delegate. DORs must be repaired during the next process unit shutdown if the shutdown renders the component feasible and safe to repair. Repair verification will be performed within 30 days of stable process unit start-up.

If repair cannot be completed within 15 days of leak discovery, the component may be placed on DOR if the any of the following conditions are met:

- Repair is technically infeasible without a process unit shutdown and is repaired by the end of the subsequent process unit shutdown.
- Equipment is isolated from the process and does not remain in VOC service.
- Emissions from leaking equipment during the DOR would be less than those purged as a result of repair while equipment remains in service.
- Replacement equipment are either 1) Regularly stocked, but have been depleted of materials necessary to repair the equipment or 2) Need to be ordered because it is not a regularly stocked item.
- A major safety issue, mechanical integrity concern, facility product quality risk, or environmental factor is present and restricts proper repair of the component leaking.

3.6 Management of Change

When the facility issues a management of change affected VOC service equipment, the LDAR Coordinator must review the MOC documentation to determine if changes impact this LDAR program. This may include equipment additions, reconfigurations, or removals. Changes to the facility impacting LDAR applicable components must be communicated to the LDAR contractor ~~prior to introducing VOC to the impacted equipment with follow up communication of the date that VOC was introduced to the equipment~~ so that it may be monitored within an appropriate timeframe.

4.0 RECORDKEEPING

Marathon Dickinson Facility shall maintain the following records for a period of at least five years:

A. During each monitoring event, for each component:

- Component identification number
- Inspection date, start time, and end time
- Background reading (ppm)

- Maximum reading (ppm)
- Inspector and instrument identification

B. For each leak:

- Component identification number
- First attempt date and time
- Repair date and time
- Repair method(s)
- Successful repair maximum reading (ppm)
- Inspector and instrument identification

C. Delay of repair documentation shall be kept in a central location (e.g., LDAR database or file folder) and include the following (at minimum):

- Reason for delay of repair
- Date of expected successful repair/next scheduled shutdown
- Authorized signature
- Date of process unit shutdowns occurring during delay of repair
- Date(s) of successful repair and confirmation of repair

D. Non-standard monitoring documentation, including:

- DTM monitoring plan
- UTM justification
- UTM monitoring plan

E. Up-to-date process and instrumentation diagrams (P&ID) defining process streams subject to this monitoring program.

Marathon Dickinson Renewable Diesel Facility

Facility-wide Potential to Emit (tpy)

Table 1 - PTE Summary (tpy)

Source [1]	Emission Unit ID (EU)	NOx	CO	SO_2	VOC	PM	PM_{10}	$PM_{2.5}$	CO_2e	HAP Total [5]	Single Highest HAP	Single Highest Individual HAP Name
Distillate Hydroprocessor Charge Heater	H-801	5.50	4.62	0.33	0.30	0.42	0.42	0.42	6,560	0.10	0.10	Hexane
New Distillate Hydroprocessor Charge Heater	H-901	9.75	8.19	0.58	0.54	0.75	0.75	0.75	11,634	0.18	0.18	Hexane
Distillate Hydroprocessor Reboiler	H-802	8.07	6.78	0.48	0.44	0.62	0.62	0.62	9,635	0.15	0.15	Hexane
U-1900 Hydrogen Plant Heater	R-1901	16.75	14.07	1.00	0.92	1.28	1.28	1.28	47,616	0.32	0.30	Hexane
U-2000 Hydrogen Plant Heater	R-2051	43.27	21.64	6.36	5.83	8.11	8.11	8.11	414,436	2.00	1.91	Hexane
Steam Boiler #1	PK-2403A	10.65	8.95	0.64	0.59	0.81	0.81	0.81	12,710	0.20	0.19	Hexane
Steam Boiler #2	PK-2403B	10.65	8.95	0.64	0.59	0.81	0.81	0.81	12,710	0.20	0.19	Hexane
Steam Boiler #3	PK-2403C	10.65	8.95	0.64	0.59	0.81	0.81	0.81	12,710	0.20	0.19	Hexane
Hot Oil Heater	H-5710	2.06	1.73	0.12	0.11	0.16	0.16	0.16	2,460	0.04	0.04	Hexane
Emergency Fire Pump Engine	P-2415	0.90	0.78	0.28	0.34	0.04	0.04	0.04	155	3.40E-03	1.12E-03	Formaldehyde
Emergency Generator Engine	P-2409	0.58	1.17	6.62E-04	0.29	0.01	0.01	0.01	132	0.08	0.06	Formaldehyde
DRT Generator	GN-9001	1.62	3.24	1.46E-03	0.81	0.02	0.02	0.02	291	0.18	0.13	Formaldehyde
DRT Boiler A	B-8001	7.48	3.25	0.52	0.47	0.66	0.66	0.66	10,294	0.16	0.16	Hexane
DRT Boiler B	B-8002	7.48	3.25	0.52	0.47	0.66	0.66	0.66	10,294	1.63E-01	1.55E-01	Hexane
PRT Heater #1	H-8101	4.12	3.46	2.47E-01	0.23	0.32	0.32	0.32	4,916	7.78E-02	7.41E-02	Hexane
PRT Heater #2	H-8201	4.12	3.46	2.47E-01	0.23	0.32	0.32	0.32	4,916	7.78E-02	7.41E-02	Hexane
PRT Renewable Naphtha Transloading [2]	P-9100	---	---	---	7.41	---	---	---	---	0.10	0.04	Hexane
PRT Rail Loading Rack - Renewable Diesel	P-9200	---	---	---	0.76	---	---	---	---	0.23	0.11	Hexane
Truck Loading Rack - Renewable Diesel	P-9800	0.38	0.96	4.57E-02	6.84	3.82E-03	3.82E-03	3.82E-03	1,206	0.10	0.03	Toluene
Truck Loading Rack - Renewable Naphtha	P-9800	0.28	0.70	4.75E-02	8.11	2.81E-03	2.81E-03	2.81E-03	1,254	0.11	0.05	Hexane
DRT Rail Loading Rack - Renewable Diesel	RAILOUT	---	---	---	0.76	---	---	---	---	0.23	0.11	Hexane
North Cooling Tower	CT-2409	---	---	---	0.29	0.53	0.27	1.14E-03	---	---	---	N/A
South Cooling Tower	CT-2402 A/B	---	---	---	1.03	1.84	0.96	3.98E-03	---	---	---	N/A
U-1900 Hydrogen Plant De-aerator	V-1906	---	0.66	---	0.84	---	---	---	154	0.84	0.84	Methanl
U-1900 Hydrogen Plant Start-up/Shutdown Activities	-	---	0.76	---	---	---	---	---	5	---	---	N/A
U-2000 Hydrogen Plant De-aerator	V-2055	---	4.91	---	6.26	---	---	---	1,141	6.26	6.26	Methanol
U-2000 Hydrogen Plant Start-up/Shutdown Activities [3]	-	---	4.52	---	---	---	---	---	40	---	---	N/A
Refinery Flare	PK-2402	14.02	63.44	11.40	49.12	5.53	5.53	5.53	70,152	3.79E-01	3.61E-01	Hexane
Sour Water Stripper Offgas Incinerator [4]	H-1301	12.66	0.60	14.35	0.04	0.05	0.05	0.05	846	1.34E-02	1.28E-02	Hexane
LPG Loading	FUG-1	---	---	---	0.35	---	---	---	---	---	---	N/A
Wastewater Treatment Plant	FUG-2	---	---	---	13.14	---	---	---	---	---	---	N/A
Fugitive Leaks - Refinery	FUG-3	---	---	---	78.45	---	---	---	213	5.63	1.49	Hexane
Fugitive Leaks - DRT	FUG-4	---	---	---	2.09	---	---	---	---	1.50E-01	3.97E-02	Hexane
Fugitive Leaks - PRT	FUG-5				5.22					0.38	9.92E-02	Hexane
Tanks	FUG-6	---	---	---	28.59	---	---	---	---	1.87	0.59	Hexane
Total		**170.99**	**179.00**	**38.45**	**222.06**	**23.76**	**22.63**	**21.40**	**636,479**	**20.45**	**13.93**	

Notes:

[1] List of sources includes equipment that is installed and operational.

[2] Renewable naphtha is loaded via truck (P-9800) and then transloaded over to PRT and loaded onto rail (P-9100).

[3] Emissions associated with start-up/shutdown activities of the U-2000 hydrogen plant are considered insignificant activities (IA) for emission unit ID (EU) purposes.

[4] Sour Water Stripper Offgas Incinerator emissions utilize environmental testing results from TRC Environmental Corporation.

[5] HAPs are not regulated by the New Source Review program. The EPA's major source control standards for HAP are triggered if source-wide PTE $\geq$ 10 tpy for single HAP or $\geq$ 25 tpy for combined HAP.