

September 17, 2025

Mr. William Schmaltz
Dickinson Renewable Diesel Facility
Environmental Professional
3815 - 116th Avenue SW
Dickinson, ND 58601

Re: Air Quality
Title V (Revision)
Permit to Operate

Dear Mr. Schmaltz:

Pursuant to the Air Pollution Control Rules of the State of North Dakota, the Department of Environmental Quality has reviewed your permit revision application dated January 17, 2025, for the Dickinson Renewable Diesel Facility 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 October 2, 2025, and end October 31, 2025.

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 November 1, 2025, and end December 15, 2025.

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)328-5218 or email kkschneider@nd.gov.

Sincerely,



Kyla K. Schneider
Environmental Scientist
Division of Air Quality

KKS:er

Enc:

xc/enc: EPA Region 8, Air Permitting (email – r8airpermitting@epa.gov)

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Water Quality
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Division of Chemistry
701-328-6140
2635 East Main Ave
Bismarck ND 58501

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 reissue an Air Pollution Control Permit to Operate to Dakota Prairie Refining, LLC dba Marathon Dickinson Refinery, Dickinson Renewable Diesel Facility, for the continued operation 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. The draft permit incorporates construction permit ACP-18206 v1.0.

A thirty-day public comment period for the draft permit will begin October 2, 2025, and end on October 31, 2025. 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 v1.1. 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 Kyla Schneider at (701)328-5218 or emailing kkschneider@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. Language assistance services are available free of charge to you. To request accommodations or language assistance, contact the NDDEQ Non-discrimination/EJ Coordinator at 701-328-5150 or deqEJ@nd.gov. TTY users may use Relay North Dakota at 711 or 1-800-366-6888.

Dated this 17th day of September 2025

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 – 116 th Avenue SW Dickinson, ND 58601 | Permit Number: AOP-28492 v1.1 Source Name: Dickinson Renewable Diesel Facility |
| Source Location: 3815 – 116 th 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: April 6, 2028 | |

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: 4/6/23

Revision (Sig. Mod.): TBD

James L. Semerad
Director
Division of Air Quality

Marathon Dickinson Refinery
Title V Permit to Operate
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Attachment List

Attachment A – Fugitive Emissions Monitoring

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 |
| HAP | hazardous air pollutants |
| HHV | higher heating value |
| H ₂ S | hydrogen sulfide |
| IFR | internal floating roof |
| kPa | kilopascals |
| LDAR | leak detection and repair |
| lb/10 ⁶ Btu | pounds per million British thermal units |
| LPG | liquefied petroleum gas |
| LNB | low NO _x burner |
| MACT | Maximum Achievable Control Technology |
| NDAC | North Dakota Administrative Code |
| NESHAP | National 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/Air Construction Permit |
| PTO/AOP | Permit to Operate/Air Operating Permit |
| 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 NO _x burner |
| VCU | vapor collection unit |
| VE | visible emissions |
| VEO | visible emission observation |
| VOC | volatile organic compounds |

1. **Emission Unit Identification:**

A. The emission units regulated by this permit are as follows:

Table 1.1 Emission Unit Identification

| Emission Unit Description | Emission Unit (EU) | Emission Point (EP) | Air Pollution Control Equipment |
|------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------|------------------------------------------|
| Natural gas-fired Heat Recovery Corporation distillate hydroprocessor charge heater rated at 12.8×10^6 Btu/hr | H-801 | 2 | Low NO _x Burners (LNB) |
| Natural gas-fired Eclipse ThermJet distillate hydroprocessor reboiler rated at 18.8×10^6 Btu/hr | H-802 | 3 | LNB |
| Gaseous fuels-fired Zeeco hydrogen plant heater rated at 39.0×10^6 Btu/hr | R-1901 | 4 | LNB |
| Natural gas-fired Heatec hot oil heater rated at 4.8 MMBtu/hr | H-5710 | 5 | LNB |
| Natural gas-fired Cleaver Brooks steam boiler #1 rated at 24.8×10^6 Btu/hr (NSPS Dc) | PK-2403A | 6 | LNB |
| Natural gas-fired Cleaver Brooks steam boiler #2 rated at 24.8×10^6 Btu/hr (NSPS Dc) | PK-2403B | 7 | LNB |
| Natural gas-fired Cleaver Brooks steam boiler #3 rated at 24.8×10^6 Btu/hr (NSPS Dc) | PK-2403C | 8 | LNB |
| Truck loading and unloading rack (renewable diesel and renewable naphtha) | P-9800 | 9 | Submerged Fill Pipe (SFP) & EU 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 |
| Diesel fuel-fired emergency fire pump engine rated at 542 hp (NSPS IIII; NESHAP/MACT ZZZZ) | P-2415 ^{A, B} | 13 | None |
| Natural gas-fired emergency generator set rated at 530 hp (NSPS IIII; NESHAP/MACT ZZZZ) | P-2409 ^{A, B} | 14 | None |
| Stripped sour water off-gas incinerator rated at 1.65×10^6 Btu/hr | H-1301 | 15/11 ^C | N/A |
| Hydrogen plant steam de-aerator vent 1 | V-1906 | 16 | None |
| Natural gas-fired Tulsa Heaters Inc. distillate hydroprocessor charge heater rated at 22.7×10^6 Btu/hr | H-901 | 18 | LNB |
| Gaseous fuels-fired Callidus Technologies hydrogen plant heater rated at 247.0×10^6 Btu/hr | R-2051 | 19 | Ultra-Low NO _x Burners (ULNB) |
| Cooling tower 2 | CT-2402A/B ^A | 20 | Drift Eliminators |

| Emission Unit Description | Emission Unit (EU) | Emission Point (EP) | Air Pollution Control Equipment |
|--------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|--------------------------------------------|
| Hydrogen plant steam de-aerator vent 2 | V-2055 | 21 | None |
| Natural gas-fired Dickinson rail terminal (DRT) Hurst steam boiler #1 rated at 20.1×10^6 Btu/hr (NSPS Dc) | B-8001 | 22 | LNB |
| Natural gas-fired DRT Hurst steam boiler #2 rated at 20.1×10^6 Btu/hr (NSPS Dc) | B-8002 | 23 | LNB |
| DRT Caterpillar natural gas-fired emergency generator rated at 1,468 bhp (NSPS JJJJ; NESHAP/MACT ZZZZ) | 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 natural gas-fired thermal oil heater #1 rated at 9.6×10^6 Btu/hr | H-8101 | 28 | None |
| PRT natural gas-fired thermal oil heater #2 rated at 9.6×10^6 Btu/hr | H-8201 | 29 | None |
| LPG loading | FUG-1 ^A | FUG-1 | None |
| Wastewater treatment plant | FUG-2 | FUG-2 | None |
| Process equipment leaks in VOC service | FUG-3 | FUG-3 | Leak Detection and Repair (LDAR) Practices |
| DRT process equipment leaks | FUG-4 ^A | FUG-4 | None |
| PRT process equipment leaks in VOC service | FUG-5 ^A | FUG-5 | None |
| Gasoline dispensing facility (MACT CCCCCC) | TK-GAS ^A | TK-GAS | None |
| 15,000 bbl slop oil storage tank (NSPS Kb) | TK-1009 | FUG-6 | SFP & 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[40 CFR 60, Subpart JJJJ, §60.4243(d) , 40 CFR 63, Subpart ZZZZ, §63.6640(f)].

^C EU PK-2402/EP 11 serves as back-up emissions control when EU H-1301/EP 15 is unavailable.

Table 1.2 Insignificant Emission Units/Activities

| Unit/Activity Description | Equipment ID | Location |
|---------------------------------------------------------------------------------------------------------------|--------------------------------|------------------|
| 0.924 x 10 ⁶ Btu/hr natural gas catalytic heater | H-2401-1 | WBI Fence |
| 24 bbl facility vehicle fueling tank | TK-Diesel | West of Firehall |
| Heater expansion tank (1,000 gal.) | TK-100 | PRT |
| Firewater storage tank | TK-999 | Wastewater Area |
| 75,000 bbl vegetable oil storage tank #1 | TK-1001 | Tank Farm |
| 75,000 bbl vegetable oil storage tank #2 | TK-1002 | Tank Farm |
| 75,000 bbl vegetable oil storage tank #3 | TK-1003 | Tank Farm |
| 15,000 bbl excess renewable diesel | TK-1040 | Tank Farm |
| 40,000 bbl renewable diesel storage tank #1 | TK-1041 | Tank Farm |
| 40,000 bbl renewable diesel storage tank #2 | TK-1042 | Tank Farm |
| 40,000 bbl renewable diesel storage tank #3 | TK-1043 | Tank Farm |
| 15,000 bbl wastewater equalization tank | TK-1070 | Wastewater Area |
| 30,000 bbl vegetable oil storage tank #4 | TK-1081 | Tank Farm |
| 30,000 bbl vegetable oil storage tank #5 | TK-1082 | Tank Farm |
| 30,000 bbl vegetable oil storage tank #6 | TK-1083 | Tank Farm |
| 30,000 bbl vegetable oil storage tank #7 | TK-1084 | Tank Farm |
| 34,000 bbl biogenic fats/oils/greases storage tank | TK-1085 | Tank Farm |
| Red dye additive storage tank | TK-1091 | Truck Rack Area |
| Lubricity additive storage tank | TK-1092 | Truck Rack Area |
| 286 bbl petroleum diesel loading tank | TK-1093 | Main Plant |
| Sludge storage tank | TK-3301 | Wastewater Area |
| Recovered oil storage tanks | TK-3302 A/B | Wastewater Area |
| 90,000 bbl renewable diesel storage tank | TK-9101 | PRT |
| 90,000 bbl renewable diesel storage tank | TK-9201 | PRT |
| PRT locomotive diesel fuel tank | | PRT |
| DRT locomotive diesel fuel tank | | DRT |
| Amine Storage Tank | V-812 | Main Plant |
| Horizontal storage drums (no emission expected since they are routed to the flare EU PK-2402) | V-1010, V-1011, V-1012, V-1013 | -- |
| Associated catalyst preparation processes | | |
| Chemical storage drums outside of onsite lab containing lab waste materials | | |
| 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) | | |
| 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 | | |

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

A. **Fuel Restrictions:**

- 1) Process heaters, boilers, and emergency generators EU B-8001, B-8002, GN-9001, H-801, H-802, H-901, H-5710, H-8101, H-8201, P-2409, PK-2403A, PK-2403B and PK-2403C are restricted to combusting only pipeline quality natural gas.
- 2) Process heaters EU R-1901 and R-2051 shall comply with NDAC 33.1-15-06 for SO₂ 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, ACP-18206 v1.0 and NDAC 33.1-15-14-06.5.b(1)

B. **Control of VOC Emissions (EU PK-2402 & VCU-1):**

- 1) The flare, EU PK-2402, 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) For the flare, the presence of a flame shall be monitored using a thermocouple or any other equivalent device approved by the Department.
- 4) EU VCU-1 shall be operated at an appropriate combustion temperature for VOC destruction during light oil service truck loading operations (Table 4.1 and Condition 4.B.10).

Applicable Requirements: ACP-17872 v1.2 and 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 (H₂S) contained in the sour water stripper (SWS) off-gas. At times when EU H-1301 is unavailable, off-gas shall be routed to the refinery flare (EU PK-2402).

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

- E. **Truck and Rail Loading and Transloading (EU P-9100, P-9200, P-9800 and P-9900):** 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. Note: 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.
 - b) 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 and NDAC 33.1-15-07-01

- F. **Cooling Tower 1 and 2 (EU CT-2049 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

G. **Storage Tanks:**

- 1) All tanks identified in Condition 1.A 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.A shall be designed, operated, maintained, and tested in accordance with NSPS Kb.

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

- H. **Stack Heights:** Emissions shall be vented through stacks that meet the following height requirements.

Table 2.1 Stack Heights

| EU | EP | Stack Height (Feet) ^A |
|---------------------|----|----------------------------------|
| 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 ^B | 16 | 78 |
| H-901 | 18 | 137 |
| R-2051 | 19 | 100 |
| V-2055 ^B | 21 | 78 |
| B-8001 | 22 | 35 |
| B-8002 | 23 | 35 |

^A Stack heights may be no less than those listed in the table below without prior approval from the Department.

^B Heater and boiler stack heights used for modeling and permitting due to criteria pollutant emissions. EU V-1906 and V-2055 do not emit criteria pollutants.

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

I. **Gasoline Dispensing Facility (EU TK-GAS):** Requirements for this facility under 40 CFR 63, Subpart CCCCC 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: ACP-17872 v1.2 and 40 CFR 63, Subpart CCCCC

- J. **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 and ACP-18150 v1.0

- K. **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 (EU B-8001, B-8002, PK-2403A, PK-2403B and PK-2403C).
- 2) Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (EU TK-1009, TK-1021, TK-1022, and TK-1023).
- 3) Subpart IIII (4I) - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (EU P-2415).
- 4) Subpart JJJJ (4J) - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (EU GN-9001 and P-2409).

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

- L. **National Emission Standards for Hazardous Air Pollutants (NESHAP)/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 (4Z) - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (EU GN-9001, P-2409 and P-2415). As an area source of HAP emissions, compliance with 40 CFR 60, Subpart IIII or JJJJ constitutes compliance with 40 CFR 63, Subpart ZZZZ. The North Dakota Department of Environmental Quality has not adopted the area source provisions of this subpart. All required documentation must be submitted to EPA at the following address.

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

- 2) Subpart CCCCCC (6C) - 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 A, ZZZZ and CCCCCC

M. **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)

3. Emission Unit Limits:

Table 3.1 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 |
| R-1901 process heater | R-1901 | 4 | Opacity | 20% ^B | 33.1-15-03-02 |
| 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 |
| Main plant truck loading and unloading rack | P-9800 | 9 | Operation | Condition 2.E.1 | ACP-17872 v1.2 |
| Main plant truck rack VCU firing LPG or natural gas | VCU-1 | 9 | Opacity | 20% ^B | 33.1-15-03-02 |
| | | | Operation | Condition 2.E.1)b | ACP-17872 v1.2 |

| Emission Unit Description | EU | EP | Pollutant / Parameter | Emission Limit or Design / Work Practices ^A | NDAC Applicable Requirement |
|-----------------------------------------|------------|----|--------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------|
| Refinery flare | PK-2402 | 11 | VOC | Condition 2.B | ACP-17872 v1.2 |
| | | | Opacity | 0% ^C | ACP-17872 v1.2 |
| | | | Operation | Condition 2.J | ACP-17872 v1.2 |
| Cooling tower 1 | CT-2409 | 12 | PM/PM ₁₀ /PM _{2.5} | Condition 2.F | ACP-17872 v1.2 |
| Diesel fuel-fired emergency fire pump | P-2415 | 13 | PM/PM ₁₀ /PM _{2.5} /Fuel Use | Condition 2.A.3 | ACP-17872 v1.2, 33.1-15-12, Subpart 4I, 40 CFR 63, Subpart 4Z |
| | | | NO _x | 3.0 g/hp-hr | ACP-17872 v1.2, 33.1-15-12, Subpart 4I |
| | | | Opacity | 20% ^B | 33.1-15-03-02 |
| | | | Operating Hours | Table 1.1, Footnote B | 33.1-15-12, Subpart 4I, 40 CFR 63, Subpart 4Z |
| Natural gas-fired emergency generator | P-2409 | 14 | NO _x | 2.0 g/hp-hr | 33.1-15-12, Subpart 4J |
| | | | CO | 4.0 g/hp-hr | 33.1-15-12, Subpart 4J |
| | | | VOC | 1.0 g/hp-hr | 33.1-15-12, Subpart 4J |
| | | | Opacity | 20% ^B | 33.1-15-03-02 |
| | | | Fuel Use | Condition 2.A.1 | ACP-17872 v1.2 |
| | | | Operating Hours | Table 1.1, Footnote B | 33.1-15-12, Subpart 4I, 40 CFR 63, Subpart 4Z |
| Stripped sour water off-gas incinerator | H-1301 | 15 | Opacity | 20% ^B | 33.1-15-03-02 |
| | | | Operation | Condition 2.C | ACP-18150 v1.0 |
| Hydrogen plant steam de-aerator vent 1 | V-1906 | 16 | Opacity | 20% ^B | 33.1-15-03-02 |
| H-901 process heater | H-901 | 18 | Opacity | 20% ^B | 33.1-15-03-02 |
| R-2051 process heater | R-2051 | 19 | NO _x | 0.040 lb/10 ⁶ Btu ^D | ACP-17872 v1.2 |
| | | | CO | 0.020 lb/10 ⁶ Btu ^D | ACP-18150 v1.0 |
| | | | Opacity | 20% ^B | 33.1-15-03-02 |
| Cooling tower 2 | CT-2402A/B | 20 | PM/PM ₁₀ /PM _{2.5} | Condition 2.F | ACP-17872 v1.2 |

| Emission Unit Description | EU | EP | Pollutant / Parameter | Emission Limit or Design / Work Practices ^A | NDAC Applicable Requirement |
|---------------------------------------------|---------|-------|-----------------------|--------------------------------------------------------|-----------------------------------------------|
| 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 |
| DRT natural gas-fired emergency generator | GN-9001 | 24 | NO _x | 2.0 g/hp-hr | 33.1-15-12, Subpart 4J |
| | | | CO | 4.0 g/hp-hr | 33.1-15-12, Subpart 4J |
| | | | VOC | 1.0 g/hp-hr | 33.1-15-12, Subpart 4J |
| | | | Opacity | 20% ^B | 33.1-15-03-02 |
| | | | Fuel Use | Condition 2.A.1 | ACP-17872 v1.2 |
| | | | Operating Hours | Table 1.1, Footnote B | 33.1-15-12, Subpart 4I, 40 CFR 63, Subpart 4Z |
| DRT rail loading rack - renewable diesel | P-9900 | 25 | VOC | Condition 2.E.2 | ACP-17872 v1.2 |
| PRT renewable naphtha transloading | P-9100 | 26 | VOC | Condition 2.E.2 | ACP-18150 v1.0 |
| PRT rail loading rack - renewable diesel | P-9200 | 27 | VOC | Condition 2.E.2 | 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-8102 | 29 | Opacity | 20% ^B | 33.1-15-03-02 |
| LPG loading | FUG-1 | | VOC | Condition 2.J | ACP-17872 v1.2 |
| Wastewater treatment plant | FUG-2 | | VOC | Condition 2.J | ACP-17872 v1.2 |
| Process equipment leaks in VOC service | FUG-3 | | VOC | Condition 2.D | ACP-18150 v1.0 |
| Gasoline dispensing facility | TK-GAS | | VOC | Conditions 2.I, 2.J & 2.L.2 | ACP-17872 v1.2, 40 CFR 63, Subpart 6C |
| Slop oil storage tank | TK-1009 | FUG-6 | VOC | Condition 2.G | 33.1-15-07, 33.1-15-12, Subpart KKB |
| Renewable naphtha storage tanks #1, #2 & #3 | TK-1021 | | | | |
| | TK-1022 | | | | |
| | TK-1023 | | | | |

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

^B 40% opacity 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.

C 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.

D On a higher heating value basis and determined by compliance testing.

4. Monitoring Requirements and Conditions:

A. Requirements:

Table 4.1 Emission Monitoring

| EU | EP | Pollutant/ Parameter | Monitoring Method | Condition Number | NDAC Applicable Requirement |
|-----------|----|-----------------------------------------------------------------------------------------------|------------------------------|---------------------|---------------------------------------------|
| H-801 | 2 | Opacity | Recordkeeping | 4.B.1 | 33.1-15-03-02 |
| H-802 | 3 | | | | |
| R-1901 | 4 | | | | |
| H-5710 | 5 | | | | |
| V-1906 | 16 | | | | |
| H-901 | 18 | | | | |
| V-2055 | 21 | | | | |
| H-8101 | 28 | | | | |
| H-8201 | 29 | | | | |
| PK-2403 A | 6 | Opacity | Recordkeeping | 4.B.1 | 33.1-15-03-02 |
| PK-2403 B | 7 | | | | |
| PK-2403C | 8 | | | | |
| B-8001 | 22 | Fuel Use | Recordkeeping | 4.B.2 | 33.1-15-12, Subpart Dc |
| B-8002 | 23 | | | | |
| P-9800 | 9 | VOC/Operation | Recordkeeping | 4.B.3 | 33.1-15-14-06.5.a(3)(a) |
| P-9900 | 25 | | | | |
| P-9100 | 26 | | | | |
| P-9200 | 27 | | | | |
| VCU-1 | 9 | VOC | Recordkeeping | 4.B.10 | 33.1-15-14-06.5.a(3)(a) |
| | | Opacity | VEO | 4.B.4 | 33.1-15-03-02 |
| | | Operation | Recordkeeping | 4.B.3 | 33.1-15-07-02 |
| PK-2402 | 11 | VOC | VOC Control Recordkeeping | 2.B | 33.1-15-14-02.9 |
| | | Opacity | VEO | 4.B.5 | 33.1-15-03-02 |
| | | Operation | Recordkeeping | 2.J | 33.1-15-07-02 |
| P-2415 | 13 | PM/PM ₁₀ /PM _{2.5} /NO _x /Opacity/ Fuel Use/Operating Hours | Recordkeeping | 4.B.1, 4.B.6 | 33.1-15-03-02, 33.1-15-12, 33.1-15-22 |

| EU | EP | Pollutant/ Parameter | Monitoring Method | Condition Number | NDAC Applicable Requirement |
|---------|--------|--------------------------------------------------------------|----------------------|---------------------|---------------------------------------------|
| P-2409 | 14 | NO _x /CO/VOC/Opacity/ Fuel Use/Operating Hours | Recordkeeping | 4.B.1, 4.B.6 | 33.1-15-03-02, 33.1-15-12, 33.1-15-22 |
| GN-9001 | 24 | | | | |
| H-1301 | 15 | Opacity | VEO | 4.B.4 | 33.1-15-03-02 |
| | | Operation | Recordkeeping | 4.B.7 | 33.1-15-07-02 |
| R-2051 | 19 | NO _x /CO | Emissions Testing | 4.B.8 | 33.1-15-03-02 |
| | | Opacity | Recordkeeping | 4.B.1 | 33.1-15-14-02.9 |
| TK-GAS | TK-GAS | VOC | Recordkeeping | 2.L.2 | 33.1-15-07, 40 CFR 63, Subpart 6C |
| FUG-3 | FUG-3 | VOC | FEMP/LDAR | 2.D | 33.1-15-07 |
| TK-1009 | FUG-6 | VOC | Recordkeeping | 4.B.9 | 33.1-15-07, 33.1-15-12, Subpart Kb |
| TK-1021 | | | | | |
| TK-1022 | | | | | |
| TK-1023 | | | | | |

B. Monitoring Conditions:

- 1) 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 (SO₂) 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 SO₂ emission limit in the event of enforcement action.
- 2) 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) through (3).
- 3) For monitoring compliance with truck and rail loadout conditions specified in Condition 2.E, the permittee shall maintain records documenting that the applicable control requirements have been met. Records shall be maintained for at least two years.
- 5) Visual Emissions Observation (VEO): During unit operation and normal functioning, a company representative who is currently or has been certified in accordance with EPA Reference Method 9 or has received Department approved visible emissions training (requires a one-time visible emissions lecture course) shall observe the emission point at least one time during the operating month using EPA Reference Method 22 for one 5-minute period.

- a) If no visible emissions are present, the date, time and observation results shall be recorded.
 - b) If the observation indicates visible emissions are present a visible emissions observation shall be made using EPA Reference Method 22 for one 5-minute period. If no visible emissions are observed, the date and time shall be recorded. If visible emissions are observed for longer than 24 hours, a formal visible emissions evaluation shall be conducted within one week of the Method 22 in accordance with Condition 4.B.4)b)1.
 - 1] A formal visible emissions evaluation of the emission point shall be conducted within one week of the Method 22 to determine if the emissions are in compliance with the applicable opacity standard. Opacity reading shall consist of three consecutive six-minute periods per day of visible emissions using EPA Reference Method 9 and conducted by a certified visible emissions reader.
 - c) All instances of visible emissions and formal emissions evaluations shall be recorded. The permittee shall comply with the visible emissions and any particulate emission limits and nothing in this condition shall be construed as authorizing otherwise.
- 6) Visual Emissions Observation (VEO) for EU PK-2402: At least once per month when the unit is operating normally, a company representative who is currently or has been certified in accordance with EPA Reference Method 9 or has received Department approved visible emissions training (requires a one-time visible emissions lecture course) shall observe the emission point using EPA Reference Method 22 for one 5-minute period.
- a) If no visible emissions are present, the date, time and observation results shall be recorded.
 - b) 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.
 - c) 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 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 one hour in length or longer.
 - 1] If no visible emissions are present, the date, time and observation results shall be recorded.

- 2] 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.
- d) All instances of visible emissions, plant upsets, investigations of malfunctions and corrective actions shall be recorded and maintained for at least two years. The permittee shall comply with the visible emissions and any particulate emission limits and nothing in this condition shall be construed as authorizing otherwise.
- 6) For 40 CFR 60, Subpart JJJJ and IIII compliance monitoring, 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 engine using a non-resettable hour meter. Records shall be maintained to differentiate between time operated for emergency purposes, for maintenance/testing purposes, and for other nonemergency purposes.
 - b) Certified engines - Collect operational and maintenance data to demonstrate compliance with the engine manufacturer's emission-related written instructions [40 CFR 60.4211(a) and 49 CFR 60.4243(a)].
- 7) For monitoring compliance with incinerator operation Condition 2.C, the permittee shall maintain records documenting that the applicable control requirements have been met. Records shall be maintained for at least two years.
- 8) Once per term of a renewal permit and within one year of the issuance of a renewal permit, the permittee shall conduct an emissions test to measure NO_x (nitrogen oxide) and CO (carbon monoxide) emissions using EPA Reference Methods in 40 CFR 60, Appendix A.
- 9) For monitoring compliance with the Tanks, the permittee shall maintain the following:
 - a) Dimensions of the storage vessels and an analysis showing the capacity of the storage vessels. Records shall be maintained for the life of the source.
 - b) Record of material stored, period of storage, and maximum true vapor pressure of material stored. Records shall be maintained for at least two years.
- 10) EU VCU-1 operations shall be monitored on a quarterly basis using optical gas imaging (OGI) to verify combustion of gases.
 - a) Maintenance shall be performed any time the unit is not appropriately combusting gases.
 - 1] Records of all OGI verification and maintenance activities shall be maintained.

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 5.1 Monitoring Records

| EU | EP | Pollutant/ Parameter | Compliance Monitoring Record |
|--------------|----|-------------------------|------------------------------|
| H-801 | 2 | Opacity | Fuel Type/Use Data |
| H-802 | 3 | | |
| R-1901 | 4 | | |
| H-5710 | 5 | | |
| V-1906 | 16 | | |
| H-901 | 18 | | |
| V-2055 | 21 | | |
| H-8101 | 28 | | |
| H-8201 | 29 | | |
| PK-2403 A | 6 | Opacity/Fuel Use | Fuel Type/Use Data |
| PK-2403 B | 7 | | |
| PK-2403C | 8 | | |
| B-8001 | 22 | | |
| B-8002 | 23 | | |
| P-9800 | 9 | VOC/Operation | Loadout Records & Data |
| P-9900 | 25 | | |
| P-9100 | 26 | | |
| P-9200 | 27 | | |

| EU | EP | Pollutant/ Parameter | Compliance Monitoring Record |
|---------|--------|-------------------------------------------------------------------------------|------------------------------------------------|
| VCU-1 | 9 | VOC | OGI Recordkeeping |
| | | Opacity | VEO Data |
| | | Operation | Loadout Records & Data |
| PK-2402 | 11 | VOC | VOC Control Records & Data |
| | | Opacity | VEO Data |
| | | Operation | BMP Records & Data |
| P-2415 | 13 | PM/PM ₁₀ /PM _{2.5} /NO _x / Opacity/Fuel Use | Fuel Type/Use Data, Certification Data |
| | | Operating Hours | Hours of Operation Data |
| P-2409 | 14 | NO _x /CO/VOC/ Opacity/Fuel Use | Fuel Type/Use Data, Certification/Test Data |
| GN-9001 | 24 | Operating Hours | Hours of Operation Data |
| H-1301 | 15 | Opacity | VEO Data |
| | | Operation | Control Requirements Records & Data |
| R-2051 | 19 | NO _x /CO | Emissions Test Data |
| | | Opacity | Fuel Type/Use Data |
| TK-GAS | TK-GAS | VOC | Fuel Throughput Records & Data |
| FUG-3 | FUG-3 | VOC | FEMP/LDAR Records & Data |
| TK-1009 | FUG-6 | VOC | Inspection/Stored Material Records & Data |
| TK-1021 | | | |
| TK-1022 | | | |
| TK-1023 | | | |

B. In addition to requirements outlined in Condition 5.A, recordkeeping shall be in accordance with the following requirements of NDAC 33.1-15-12 and 40 CFR 63, as applicable.

- 1) NDAC 33.1-15-12-02, 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 Requirements: ACP-17872 v1.2, NDAC 33.1-15-12 and 40 CFR 63, Subparts ZZZZ and CCCCCC

- C. The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings/computer printouts of continuous 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:

- A. Reporting shall be in accordance with the following requirements of NDAC 33.1-15-12 and 40 CFR 63, as applicable:

- 1) NDAC 33.1-15-12-02, 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 Requirements: ACP-17872 v1.2, NDAC 33.1-15-12 and 40 CFR 63, Subparts ZZZZ and CCCCCC

- B. 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. 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)

- D. 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)

- E. The permittee shall submit an annual emission inventory report (AEIR) 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

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 Paragraphs 1), 2) and 3) of this condition.

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 waste 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.

Applicable Requirement: NDAC 33.1-15-07-02

- F. **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

- G. **Shutdowns/Malfunction:**

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

- b) The expected length of time that the air pollution control equipment will be out of service.
- c) The nature and estimated quantity of emissions of air pollutants likely to be emitted during the shutdown period.
- d) Measures, such as the use of off-shift labor and equipment, that will be taken to minimize the length of the shutdown period.
- e) 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.
- b) 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.
- c) 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

- 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

- 3) Except for sources subject to 40 CFR 63, the permittee shall notify the Department by submitting a Proposed Test Plan, or its equivalent, at least 30 calendar days in advance of any tests of emissions of air contaminants required by the Department. The permittee shall notify the Department at least 60 calendar days in advance of any performance testing required under 40 CFR 63, unless otherwise specified by the subpart. If the permittee is unable to conduct the performance test on the scheduled date, the permittee shall notify the Department as soon as practicable when conditions warrant and shall coordinate a new test date with the Department.

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

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

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 as incorporated by NDAC Chapter 33.1-15-15): 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 40 CFR 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: 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 Modifications:** 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 (H₂S) 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

Dickinson Renewable Diesel Facility

AOP-28492

DRAFT

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. 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

| | |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>In gas/vapor service (GV)</i> | means that the piece of equipment contains process fluid that is in the gaseous state at operating conditions |
| <i>In heavy liquid service (HL)</i> | means that the piece of equipment is not in gas/vapor service or in light liquid service |
| <i>In light liquid service (LL)</i> | 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. H ₂ O 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. H ₂ O at 68°F) is greater than or equal to 20 percent by weight, and the fluid is liquid at operating conditions |
| <i>In vacuum service (CVS)</i> | means that equipment is operating at an internal pressure which is at least 5 kilopascals (kPa) (0.7 psia) below ambient pressure |
| <i>In VOC service</i> | means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight |
| <i>Leak</i> | (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 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.

Dakota Prairie Refining, LLC dba Marathon Dickinson Refinery
Dickinson Renewable Diesel Facility
Title V Permit to Operate No. AOP-28492 v1.1
Statement of Basis
(3/6/2025)

Facility Background: The Marathon Dickinson Refinery (Dickinson Refinery) was built in 2014 and is located in Stark County, North Dakota, approximately 3 miles west of Dickinson and 2.5 miles south of Interstate I-94. The refinery was originally constructed to process 20,000 barrels a day (bbl/day) of crude oil into petroleum products. From 2014 through 2018, the Dickinson Refinery operated primarily as a petroleum diesel refinery. It currently operates as a renewable fuels facility and processes renewable fuel feedstocks, such as soybean oil and distiller's corn oil, and tallow into renewable diesel, naphtha, and liquid petroleum gas (LPG). Truck loading operations take place at Dickinson Refinery, loading and transloading operations take place at the Patterson Rail Terminal, and rail receiving operations take place at the Dickinson Rail Terminal.

Chronology of significant events (not all inclusive):

February 21, 2013 - The initial construction permit PTC12090 (ACP-17495 v1.0) was issued to the Dickinson Refinery.

October 28, 2013 - Revision No. 1 of the initial Permit to Construct (PTC) was issued to the Dickinson Refinery (ACP-17495 v1.1) for technology and equipment changes (LO-CAT to Clause SRU technology change).

March 4, 2015 - Revision No. 2 of the initial Permit to Construct (PTC) was issued to the Dickinson Refinery (ACP-17495 v1.2) for updates to the greenhouse gas permitting rule and for final specifications of regulated emission units.

April 30, 2015 - Date of startup notification for the Dickinson Refinery and applicable regulations.

July 13, 2016 - Ownership of the Dickinson Refinery changed from WBI Energy/Calument Energy to Tesoro Refining and Marketing Co/Marathon Petroleum.

December 28, 2016 - The initial, minor source operating permit was issued for the Dickinson Refinery.

September 5, 2018 - Construction permit No. PTC18016 (ACP-17872 v1.0) was issued to convert the existing facility from a crude oil refinery to a vegetable oil refinery that would produce renewable diesel and other renewable fuels; the Renewable Diesel Project (RDP).

March 26, 2020 - Revision No. 1 of PTC18016 (ACP-17872 v1.1) was issued for various equipment changes resulting from Marathon's acquisition of a portion of a nearby rail terminal to support logistical operations of the renewable fuels.

October 30, 2020 - Revision No. 2 of PTC18016 (ACP-17872 v1.2) was issued for updated design representations that occurred as the RDP construction and design process continued to advance.

November 2020 - RDP was completed and commenced operations.

September 12, 2022 - ACP-18150 v1.0 was issued to reflect the as-built operating conditions associated with RDP and to transfer ownership of certain equipment in renewable materials service to the Marathon Dickinson Refinery upon Tesoro Great Plains Gathering & Marketing, LLC's acquisition of the Bakken Oil Express, LLC (BOE) – Crude Oil Storage: Rail Loading facility (herein referred to as Patterson Rail Terminal "PRT")

April 6, 2023 - The initial Title V Permit to Operate (PTO) No. AOP-28492 v1.0 was issued for the facility and incorporated ACP-17872 v1.2 and ACP-18150 v1.0.

November 14, 2023 - ACP-18206 v1.0 was issued for the construction of two, natural gas-fired thermal oil heaters each rated at 9.6×10^6 Btu/hr at the PRT site.

Current Action: On January 17, 2025, the Department received a timely application from the Dickinson Refinery for revision of the Dickinson Renewable Diesel Facility Title V Permit to Operate No. AOP-28492. The draft Title V Permit incorporates ACP-18206 v1.0, standard formatting and condition updates, as well as regulatory applicability updates.

The Department proposes to issue Title V Permit to Operate No. AOP-28492 v1.1 after the required 30-day public comment period and subsequent 45-day EPA review period of the draft permit. This statement of basis summarizes the relevant information considered during the issuance of the Title V. The legal basis for each permit condition is stated in the draft permit under the heading of "Applicable Requirement."

Applicable Programs/As-Needed Topics:

1. **Title V.** The Marathon Dickinson Refinery is a major source, as defined in 40 CFR 70.2, and requires a Title V PTO because the potential to emit from the facility exceeds 100 tons per year for nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC). The facility is a minor/area source of Hazardous Air Pollutant (HAP) emissions because individual and combined potential annual HAP emissions are below 10 tpy and 25 tpy, respectively. A potential to emit table is provided on the last page of this document.
2. **New Source Performance Standards (NSPS).** The following NDAC 33.1-15-12-02 and 40 CFR 60 subparts apply to the facility.

Subpart A, General Provisions, applies to each source unit to which another NSPS subpart applies.

Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989, and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr) (EU B-8001, B-8002, PK-2403A, PK-2403B and PK-2403C).

Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced After July 23, 1984, and On or Before October 4, 2023 (EU TK-1009, TK-1021, TK-1022, TK-1023 because they store volatile organic liquids with a maximum true vapor pressure equal to or greater than 3.5 kPa, have capacities greater than 39,890 gallons, and were constructed after 7/23/84 and before 10/4/23).

Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (EU P-2415 because it is a compression ignition engine manufactured after 4/1/06). As an area source of HAP emissions, compliance with this subpart constitutes compliance with 40 CFR 63, Subpart ZZZZ.

Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (EU GN-9001 and P-2409 because they are spark ignition emergency engines with a maximum engine power greater than 25 hp and manufactured after 1/1/09). As an area source of HAP emissions, compliance with this subpart constitutes compliance with 40 CFR 63, Subpart ZZZZ.

3. **National Emission Standards for Hazardous Air Pollutants (NESHAP).** No NDAC 33.1-15-13 and 40 CFR 61 subparts apply to the facility, with the possible exception of NDAC 33.1-15-13-02 (40 CFR 61) Subpart M (National Emission Standard for Asbestos) may apply during facility modifications involving asbestos.
4. **NESHAP/Maximum Achievable Control Technology (MACT).** The following NDAC 33.1-15-22-03 and 40 CFR 63 subparts apply to the facility, which is an area source of HAP emissions.

Subpart A, General Provisions, applies to each source unit to which another MACT subpart applies.

Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (EU GN-9001, P-2409 and P-2415 because the engines were constructed on or after 6/12/06). The requirements of Subpart ZZZZ for the engines are met by complying with the requirements of 40 CFR 60, Subparts IIII and JJJJ. North Dakota has not adopted the area source provisions of this subpart; all required reports and documentation are to be sent to EPA Region 8.

Subpart CCCCCC, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities (EU TK-GAS because it is a gasoline storage/dispensing tank). North Dakota has not adopted this subpart; all required reports and documentation are to be sent to EPA Region 8.

5. **Acid Rain.** NDAC 33.1-15-21 (40 CFR 72, 73, 75 and 76) does not apply to the facility since the plant is an existing electric utility steam generating plant rated at greater than 25 MWe.
6. **Prevention of Significant Deterioration (PSD).** The facility is classified as a chemical process plant¹ with a PSD major source threshold of 100 tpy. Prior to the RDP, the facility was not classified as an existing major stationary source and was not subject to PSD review. The PTE for the standalone RDP (ACP-17872 v1.2 and ACP-18150 v1.0) equipment is below PSD major source thresholds (<100 tpy), so the RDP did not trigger PSD review. Upon start-up of RDP, the Marathon Dickinson Refinery became a major stationary source under PSD. Each future physical change or change in the method of operation at the Marathon Dickinson Refinery will be compared against the major modification thresholds to determine PSD applicability.
7. **BACT.** Although this facility is a major source under PSD, this permit action does not require a BACT review because there are no physical changes or changes in method of operation contained in this draft permit that increase potential emissions by a PSD-significant amount.
8. **Gap Filling for Periodic Monitoring.** This permit contains gap filling for testing, monitoring or recordkeeping not otherwise required by rule. The gap filling conditions are generally identified by the applicable requirement NDAC 33.1-15-14-06.5.a(3)(a).
9. **Streamlining Decisions.** The NDAC 33.1-15-06-01.2 Restrictions applicable to fuel burning installations emission limit for sulfur (3.0 pounds sulfur per million Btu) was streamlined because the standard ND fuel restrictions for sulfur are more stringent.
10. **Compliance Assurance Monitoring (CAM).** CAM does not apply to any of the pollutant specific emission units because adequate monitoring is specified in post-11/15/90 NSPS and NESHAP/MACT regulations, no controlled units have an uncontrolled potential to emit (PTE) of ≥ 100 tpy of any EPA regulated criteria or uncontrolled PTE of ≥ 10 tpy individual and ≥ 25 tpy combined HAP pollutant(s) and do not satisfy the criteria specified in 40 CFR 64.2(a).
11. **Permit Shield.** Does not apply because this permit to operate does not contain a permit shield.

¹ 40 C.F.R. 52.21(b)(1)(i)(a)

12. **New Conditions/Limits.** This draft permit includes new limits and conditions associated with the incorporation of ACP-18206 v1.0. Specific modifications are identified in the "Permit Changes by Section" below.
13. **40 CFR 98 - Mandatory Greenhouse Gas Reporting.** This rule requires sources above certain emission thresholds to calculate, monitor, and report greenhouse gas emissions. According to the definition of "applicable requirement" in 40 CFR 70.2, neither Subpart 98, nor Clean Air Act section 307(d)(1)(V), the CAA authority under which Subpart 98 was promulgated, are listed as applicable requirements for the purpose of Title V permitting. Although the rule is not an applicable requirement under 40 CFR 70, the source is not relieved from the requirement to comply with the rule separately from compliance with their Part 70 operating permit. It is the responsibility of each source to determine applicability to the subpart and to comply, if necessary.

Permit Changes by Section:

Note: Administrative changes were made to some sections of the permit to update to the current North Dakota (ND) format and to correct errors. In addition, the Permit to Operate number and references to Permit to Construct numbers have been updated to accommodate the Air Quality database (CERIS-ND). These changes may not be specifically addressed below.

Cover: The permit version was updated and the revision (sig. mod.) was added.

Table of Contents: Page numbers and the list of abbreviations were updated as necessary. A list of tables and a list of attachments were added.

1. **Emission Unit Identification:** Per ACP-18206 v1.0, EU H-8101 and H-8201 (two thermal oil heaters) were added to Table 1.1. EU Tanks Farm was updated to list the individual, significant tanks and the rest of the tanks are provided in Table 1.2 Insignificant Emission Units/Activities. The insignificant units and activities were updated.
2. **Applicable Standards and Miscellaneous Conditions:** Per ACP-18206 v1.0 EU H-8101 and H-8201 (two thermal oil heaters) were added to the fuel restrictions. The stack heights Table 2.1 was updated to include EU V-1906 and footnote B. Condition 2.B.4 was added for proper operations of EU VCU-1.
3. **Emission Unit Limits:** Per ACP-18206 v1.0, EU H-8101 and H-8201 emission limits were added to Table 3.1. EU Tanks Farm was updated in the table to list the individual, significant tanks. Condition number references and footnotes were updated as necessary.

4. **Monitoring Requirements and Conditions:** Monitoring was added for EU H-8101 and H-8201. Monitoring was updated for the tanks (EU TK-1009, TK-1021, TK-1022 and TK-1023) and fugitive EU FUG-3. VOC monitoring was added for the appropriate combustion during use of EU VCU-1. Monitoring was removed for fugitives EU FUG-4 and FUG-5 since they are not subject to FEMP (Fugitives Emissions Monitoring Plan). The visible emissions monitoring and engine monitoring were updated, and for completeness, monitoring was added for EU TK-GAS.
5. **Recordkeeping Requirements:** Recordkeeping was added for EU H-8101, H-8201 and TK-GAS and updated for the tanks and fugitive EU FUG-3. Recordkeeping was removed for fugitives EU FUG-4 and FUG-5 since they are not subject to monitoring. VOC recordkeeping was added for the EU VCU-1 monitoring.
6. **Reporting:** Reporting was updated to be consistent with applicable regulations and the current ND standard reporting requirements.
7. **Facility Wide Operating Conditions:** The continuous emission monitoring system failure condition was removed since it does not apply to this facility. The Noncompliance Due to an Emergency condition was removed per EPA's Affirmative Defense Provision Rule effective 8/21/23. The chemical accident prevention condition was updated to indicate delegated authority.
8. **General Conditions:** No change.
9. **State Enforceable Only Conditions (not Federally enforceable):** No change.

Attachment A: Fugitive Emissions Monitoring Plan: Administrative updates provided by the Dickinson Refinery.

Comments/Recommendations: It is recommended that Title V Permit to Operate No. AOP-28492 v1.1 be processed and considered for issuance following a 30-day public comment period and a subsequent 45-day EPA review period.

Marathon Dickinson Refinery Facility-wide Potential to Emit ^A

| Pollutant | Tons Per Year |
|----------------------------------|----------------------|
| PM | 23.8 |
| PM₁₀ | 22.6 |
| PM_{2.5} | 21.4 |
| SO₂ | 38.5 |
| NO_x | 171.0 |
| CO | 179.0 |
| VOC | 222.1 |
| Total HAPs | 20.5 |
| Individual HAP (Methanol) | 7.1 |

^A Based upon Title V revision application information submitted through CERIS-ND on 1/17/2025. Emission unit and emission point specific potential emissions are provided in the associated revision application.