

**North Dakota Department of Environmental Quality Public Notice
Modification of an NDPDES Permit**

Public Notice Date: 3/11/2020

Public Notice Number: ND-2020-010

Purpose of Public Notice

The Department intends to modify the following North Dakota Pollutant Discharge Elimination System (NDPDES) Discharge Permit under the authority of Section 61-28-04 of the North Dakota Century Code.

Permit Information

Application Date: 12/31/2019

Application Number: NDP026689

Applicant Name: Marathon Dickinson Refinery

Mailing Address: 3815 116th Ave. SW, Dickinson, ND 58601

Telephone Number: 701.456.6939

Proposed Permit Expiration Date: 9/30/2024

Facility Description

Marathon Corporation - Dickinson Refinery is a petroleum refining facility located at 3815 116th Avenue Southwest in the City of Dickinson, ND 58506.

The refinery is a regulated categorical industrial user (40 CFR Part 419.17 - Petroleum Refining Category) with a wastewater discharge permit issued by the North Dakota Department of Environmental Quality under the North Dakota Pollution Discharge Elimination System (NDPDES) program. The discharge permit regulates process wastewater discharged to the City of Dickinson's Publically Owned Treatment Works (POTW). The department proposes to modify this permit.

Tentative Determinations

Proposed effluent limitations and other permit conditions have been made by the Department. They assure that State Water Quality Standards and applicable provisions of the FWPCA will be protected.

Information Requests and Public Comments

Copies of the application, draft permit, and related documents are available for review. Comments or requests should be directed to the ND Dept of Env Quality, Div of Water Quality, 918 East Divide Ave, Bismarck ND 58501-1947 or by calling 701.328.5210.

All comments received by April 11, 2020 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice. If you require special facilities or assistance relating to a disability, call TDD at 1.800.366.6868.

**STATEMENT OF BASIS (SOB) FOR NORTH DAKOTA POLLUTION DISCHARGE
ELIMINATION SYSTEM (NDPDES) PERMIT NDP026689**

**MARATHON CORPORATION – DICKINSON REFINERY
DICKINSON, NORTH DAKOTA**

DATE OF THIS ~~SOB MODIFICATION~~ – ~~March~~FEBRUARY 2020~~19~~

INTRODUCTION

The Federal Clean Water Act (CWA, 1972, and later amendments in 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. A mechanism for achieving the goals of the CWA is the National Pollutant Discharge Elimination System (NPDES), which the U.S. Environmental Protection Agency (EPA) has oversight authority. In 1975, the State of North Dakota was delegated primacy of the NPDES program by the EPA. The North Dakota Department of Environmental Quality (department) has been designated the state water pollution control agency for all purposes of the Federal Water Pollution Control Act as amended [33 U.S.C. 1251, et seq], and is hereby authorized to take all action necessary or appropriate to secure to this state the benefits of that act and similar federal acts. The department's authority and obligations for the wastewater discharge permit program is in the NDAC 33.1-16 (North Dakota Administrative Code), which was promulgated pursuant to NDCC chapter 61-28 (North Dakota Century Code). The department uses the North Dakota Pollutant Discharge Elimination System (NDPDES) as its permitting title.

This facility falls under the Industrial Pretreatment Program, which is under the NDPDES program. The department was delegated pretreatment authority from the EPA in 2005. The following regulations apply to NDPDES permits issued to Significant Industrial Users (SIU):

- Procedures the department uses for issuing NDPDES permits (NDAC chapter 33.1-16-01),
- Pretreatment Regulations (NDAC chapter 33.1-16-01.1).
- 40 Code of Federal Regulations Section 403 and 419.17 - Pretreatment Standards for New Sources (PSNS)

These rules require any treatment facility operator to obtain a NDPDES permit before discharging wastewater to waters of the state. These rules include commercial or industrial discharges to sewage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state also define the basis for limits on each discharge and for other requirements imposed by the permit.

This SOB is a companion document to the State Wastewater Discharge Permit - NDP026689. The department is proposing to ~~issue~~modify this permit which ~~will~~allows a wastewater discharge to the City of Dickinson - Publicly Owned Treatment Works (POTW). This SOB explains the nature of the proposed discharge, the department's decisions of limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

According to the NDAC, section 33.1-16-01-08, the NDPDES permit program, the department must prepare a draft permit and accompanying statement of basis and make it available for a

thirty-day (30) public review period (NDAC chapter 33.1-16-01-07). The department must also publish an announcement (public notice) informing people where they can obtain the draft permit and send their comments on the draft. For more details on preparing and filing comments about these documents, please see **Appendix A – Public Involvement**. After the Public Comment Period ends, the department may make changes to the draft NDPDES permit. The department will summarize the responses to comments and any changes to the permit in **Appendix B – Response to Comments**.

DRAFT

Table of Contents

DESCRIPTION OF OPERATIONS	6
Outfall Description	7
PERMIT STATUS	12
SUMMARY OF COMPLIANCE WITH PREVIOUS ISSUED PERMIT	12
PROPOSED PERMIT LIMITATIONS AND SELF-MONITORING REQUIREMENTS.....	13
Chlorides	15
Phenolics	15
Local Limits	16
PERMIT ISSUANCE PROCEDURES	16
Permit Actions.....	16
Proposed Permit Issuance	16
APPENDIX A – PUBLIC INVOLVEMENT INFORMATION.....	1817
APPENDIX B – RESPONSE TO COMMENTS.....	2149
APPENDIX C - DEFINITIONS Pretreatment Permit - BP 2019.05.29	2422

Table 1: GENERAL INFORMATION	
Applicant:	Marathon Corporation – Dickinson Refinery
Facility Address:	3815 116 th Avenue SW Dickinson, ND 58601
Owner Address:	PO Box 5601 Bismarck, ND 58506
Facility Type:	Petroleum Refining
Applicable Industrial Pretreatment Regulation:	NDAC – 33.1-16-01.1 40 CFR 403 40 CFR 419.17 PSNS
Facility Discharge Location:	Internal outfall after pretreatment system
Receiving POTW:	Dickinson
Standard Industrial Classification:	2911
Facility Contact:	Jean Butterfield, EHS Superintendent
Responsible Official:	Richard Hastings, VP, Mandan & Dickinson Refineries

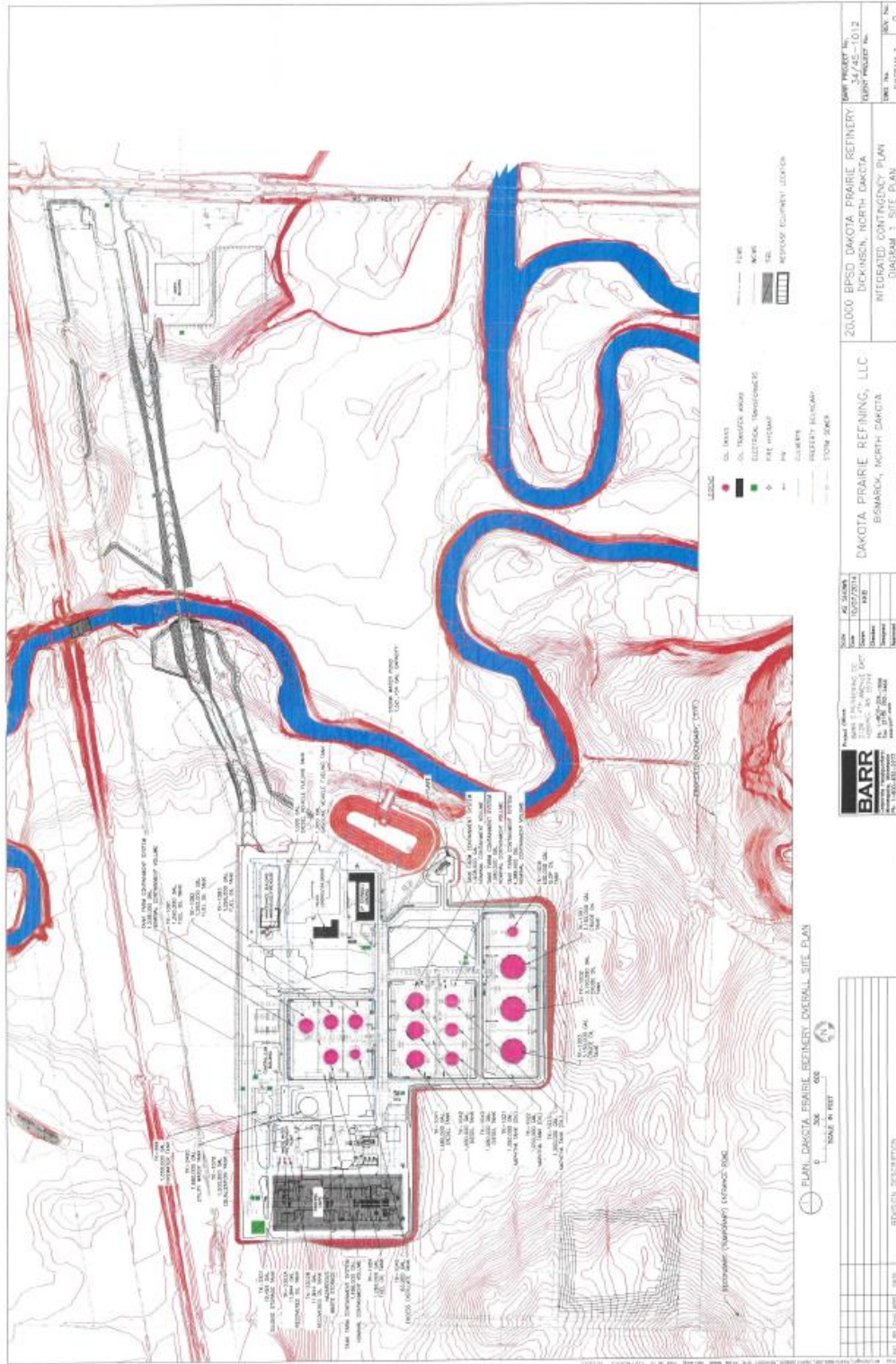


Figure 1 – Marathon Corporation – Dickinson Refinery Site Overview

DESCRIPTION OF OPERATIONS

The Marathon – Dickinson Refinery (refinery) is a petroleum refinery with a nominal processing capacity of 20,000 barrels per day. The refinery produces diesel fuels, liquefied petroleum gas (LPG), stabilized naphtha (a gasoline feedstock), and other gas-oil intermediates. The refinery began operation in 2014.

The refinery will operate an on-site process wastewater treatment plant (WWTP) (Figure 2). The purpose of the WWTP is to remove bulk oil and suspended solids from refinery's process wastewater. The effluent water will be comingled with onsite domestic sanitary sewer water after pretreatment compliance sampling for final discharge to the City of Dickinson's POTW.

The WWTP will include:

- an influent sump,
- overflow sump,
- equalization tank,
- an API separator to remove the majority of oil and suspended solids from refinery wastewater prior to subsequent downstream wastewater treatment processes,
- secondary treatment with a dissolved gas flotation (DGF) unit,
- recovered oil storage, and
- sludge storage and disposal.

Below is a schematic illustrating the refinery system.

The WWTP is the collection point of all process wastewater and impacted stormwater for the facility. All influent flows to the WWTP will be from the oily water sewer system (OWS). The OWS is divided between two collection systems – one for process wastewater flows (POWS), and one for wet weather/firewater flows (WOWS). The POWS' flows include the constant and intermittent flows from units in the on-site laboratory, water treatment backwash, and wash pad drainage.

The WWTP is designed to receive a continuous POWS flow of 140 gallons per minute (gpm) with a maximum capacity of 240 gpm. The hydraulic capacity of the WWTP system is designed with two - 250 gpm pumps to provide 100% lift station redundancy.

During large storm events, the WWTP is not expected to simultaneously process all WOWS and POWS influent wastewater. In that case, an equalization tank provides a buffer by storing the excess volume of water. When the combined influent flow rate (POWS plus WOWS) exceeds the hydraulic capacity of the WWTP system, all additional WOWS flow will be automatically diverted to the equalization tank, and the POWS flow will continue to be directed to the WWTP system for processing.

There are two byproduct waste streams from the WWTP – recovered oil and sludge. Recovered oil will be reprocessed in the refinery, and sludge will be disposed offsite as hazardous waste by a hazardous waste contractor chosen by the refinery.

Outfall Description

Discharges at any location not authorized under a NDPDES permit is a violation of the Clean Water Act (CWA) and could subject the person(s) responsible for such discharge to penalties under section 309 of the CWA. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within the specified timeframe outlined in this permit could subject such person(s) to criminal penalties as provided under the CWA.

Outfall 001. Active. Final Pretreatment - Internal			
Latitude: 46.858611	Longitude: -102.894167	County: Stark	
Township: 140N	Range: 49W	Section: 11	QQ: DCA
Receiving POTW: Dickinson – Mechanical		Classification: NA	
All compliance monitoring shall take place at Outfall 001 – After treatment and Prior to discharge to the POTW.			

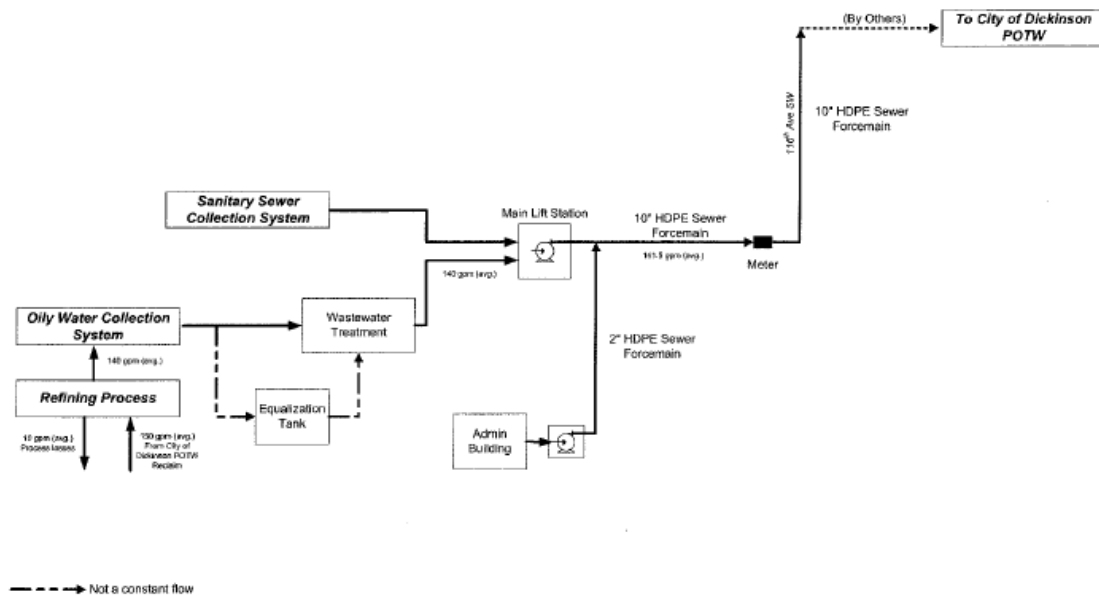


Figure 2 - General Sewer System Schematic

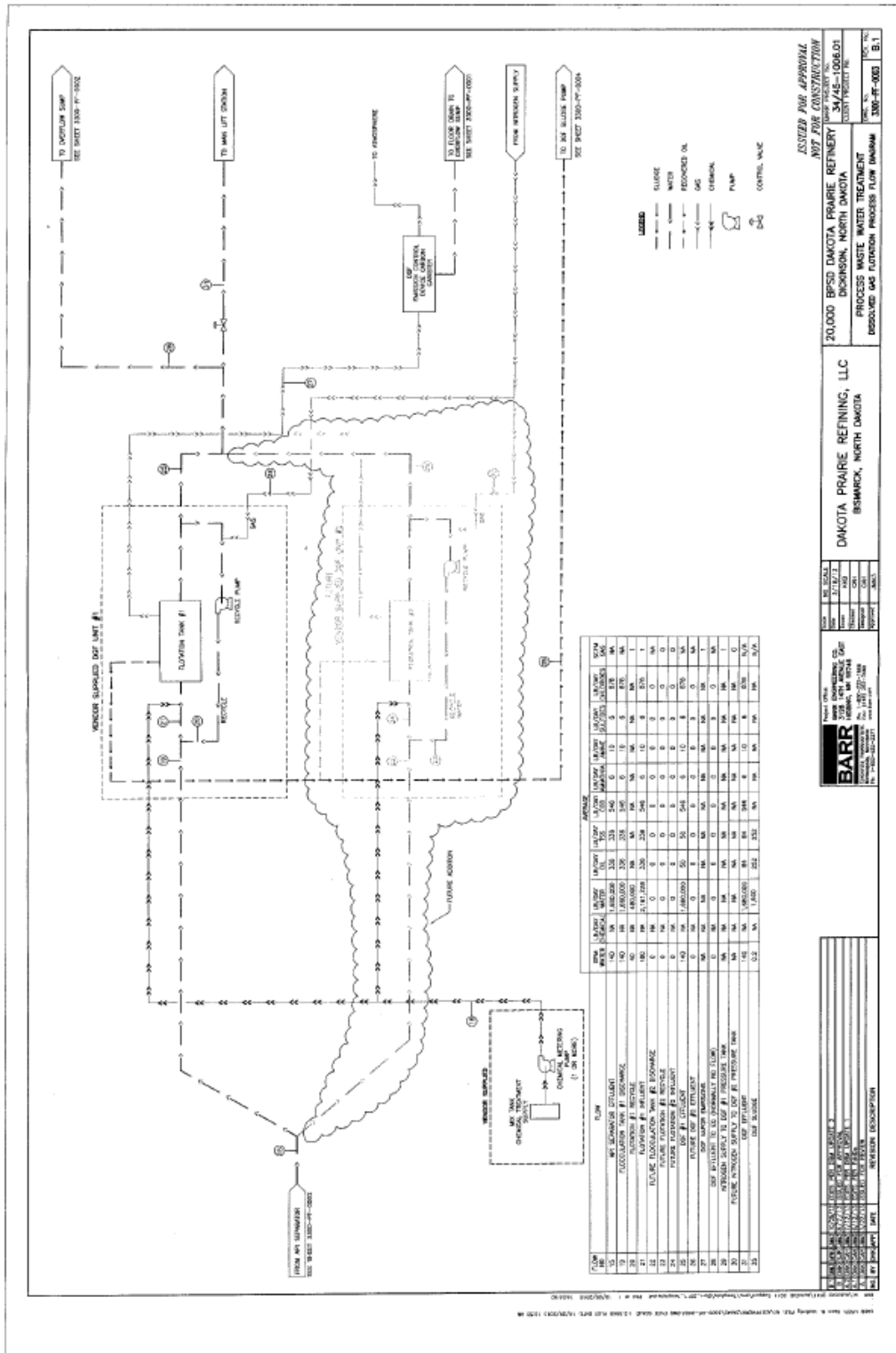


Figure 5 - Process Wastewater Treatment – Dissolved Gas Flotation Process Flow Diagram – Barr Engineering, 2018

PERMIT STATUS

The department ~~reissued~~ the ~~previous~~ permit on ~~November 1, 2014~~ October 1, 2019. The ~~previous~~ permit placed daily limits on Biochemical Oxygen Demand (BOD₅), pH, Total Suspended Solids (TSS), Total Kjeldahl Nitrogen (TKN), total Phosphorus, Temperature, Chlorides, Chemical Oxygen Demand (COD), Oil and Grease, Ammonia as N, Total Chromium, and Phenolic Compounds. The following parameters ~~were~~ are reported monthly only for monitoring purposes with no limits: Chlorides, Oil & Grease, Total Chromium, and Phenolic Compounds.

~~The department has been in contact with the refinery to obtain information to reissue the permit. EPA Forms 1 and 2C were received by the department on December 26, 2018. Effluent sample data has been provided to the department through official laboratory reports, Discharge Monitoring Reports (DMRs), and the permit application. The department has been in contact with the refinery as well as the City to obtain information regarding increased phenolic loading. The compliance schedule outlined in the permit requires the refinery to comply with the loading limit specified by the City of Dickinson, and to identify treatment solutions for effluent phenolics by December 31, 2019. In a letter dated October 24, 2019 the City addressed the refinery and outlined their review of a proposed increase in phenolic loading. In their review, the City determined a maximum phenol loading of 2.4 lbs/day would be an allowable load for the wastewater plant. The department also conducted a review of effluent sample data from official laboratory results, Discharge Monitoring Reports (DMRs), and the permit application.~~

SUMMARY OF COMPLIANCE WITH PREVIOUS ISSUED PERMIT

The department's assessment of compliance is based on review of the facility's DMR forms and inspections conducted by the department. Five (5) inspections of the facility were conducted from 2015 to 2019. The facility had 276 total effluent exceedances during the previous permit cycle. However, the department has noted that, with the exception of temperature, chloride, and phenolic compounds (will be discussed further), all the exceedances occurred during the start-up and initial operational phases.

Temperature was exceeded once in 2017 and once in 2018. All exceedances were from the onsite temperature monitoring station.

The refinery is a continuous discharger with the previous permit's discharge data summarized in Table 2:

001A	Location	Parameter	Max Daily Value	Max 30-Day Value	Units	lbs/Day Loading	No. Exc.
001A	Effluent	Biochemical Oxygen Demand	646	108	mg/l	646.0	2
001A	Effluent	Chemical Oxygen Demand	1220	399.2	mg/l	1890.0	0
001A	Effluent	Total Organic Carbon	405.6	131.1	mg/l		0
001A	Effluent	pH	6.9 minimum 9.0 maximum	NA	Standard Units	NA	0
001A	Effluent	Temperature	112.3	NA	NA	NA	41

001A	Effluent	Phosphorus	8.1	3	mg/l	16.0	0
		Phenolics	0.63	NA	mg/l	2.80	29
001A	Effluent	Chlorides	1610	605	mg/l	2303	162
001A	Effluent	Chromium, Total	0.05	N/A	mg/l	0.096	0
001A	Effluent	Total Suspended Solids (TSS)	716	243.8	mg/l	1260.0	3
001A	Effluent	Process Flow	0.365	0.190	MGD	NA	NA
001A	Effluent	TKN	156	35	mg/l	345.0	11
		Ammonia as N	144	28.8	mg/l	318.0	21
001A	Effluent	Sulfides	9.06	2.1	mg/l	12.0	0
001A	Effluent	Oil & Grease	184.7	36.7	mg/l	NA	7

This permit authorizes the permittee to discharge only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

A 90-day compliance report was received by the department on August 17, 2015 after initiation of discharge to the POTW and shall satisfy the initial compliance reporting requirements pursuant to 40 Code of Federal Regulation (CFR) 403.12 (d).

The permittee is also responsible for any waste collected from the pretreatment system for disposal off site by a third party and to maintain the collection records onsite for review.

PROPOSED PERMIT LIMITATIONS AND SELF-MONITORING REQUIREMENTS

The refinery is subject to federal categorical pretreatment standards found under 40 CFR Part 419.17 Subpart A – Topping Subcategory - Pretreatment Standards for New Sources (PSNS). In addition, the discharge must be in compliance with state, federal, and local industrial pretreatment requirements prohibiting industrial wastewater discharges to POTWs that may cause pass through and/or interference.

Table 3: 40 CFR 419.17	
Pollutant or Pollutant Property	Pretreatment Standards for New Sources – maximum for any 1 day
	Milligrams per liter (mg/l)
Oil and Grease	100
Ammonia as N	100
Total Chromium 1/	1.0
1/. Applies to the cooling tower discharge part of the total refinery flow to the POTW by multiplying: (1) The standard; (2) by the total refinery flow to the POTW; and (3) by the ratio of the cooling tower discharge flow to the total refinery flow.	

The department proposes the following effluent limitations for Outfall 001.

Table 4: Effluent Limitations and Monitoring Requirements	
	Effluent Limitations

STATEMENT OF BASIS FOR PERMIT NDP026689
 MARATHON CORPORATION – DICKINSON REFINERY
 EXPIRATION DATE: SEPTEMBER 30, 2024
 Page 14 of 26

Parameter	Daily Maximum Limit		Monthly Maximum Limit	Basis ^{a/}
	mg/l	pounds/day	mg/l	
Biochemical Oxygen Demand (BOD ₅)	450	750	225	BPJ Previous Permit
Total Suspended Solids (TSS)	490	820	255	BPJ Previous Permit
Total Kjeldahl Nitrogen (TKN)	89.5	150	38	BPJ Previous Permit
Phosphorus, Total	23	39	12	PBJ Previous Permit
Temperature (°F)	Not to exceed 104.0 at the POTW Treatment Plant		NA	40 CFR 403.5(b)(5)
pH ^{b/}	Shall remain between 6.0 and 9.0 S.U.			BPJ Previous Permit
Chlorides	NA	878	NA	BPJ
Chemical Oxygen Demand	1050	1765	500	BPJ Previous Permit
Oil & Grease	100.0	NA	*Monitor	40 CFR 419.17 Previous Permit
Ammonia as N	56.5	95.0	25.5	BPJ Previous Permit
Total Chromium	0.0571	43.6 grams per day	*Monitor	BPJ Previous Permit
Phenolic Compounds	NA	0.692.4	*Monitor	BPJ Previous Permit
Notes:				
* This parameter is not limited. However, the department may impose limitations based on sample history and to protect the POTW.				
a/ The basis for the effluent limitations is given below:				
<p>“Previous Permit” refers to limitations in the previous permit. The NDPDES regulations 40 CFR Part 122.44(l)(1) Reissued Permits require that when a permit is renewed or reissued, interim limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit unless the circumstances on which the previous permit was issued have materially and substantially changed since the previous permit was issued and would constitute cause for permit modification or revocation and reissuance under 40 CFR Part 122.62.</p>				
“BPJ” refers to best professional judgment.				
b/ The pH is an instantaneous limitation.				

With the exception of chlorides and phenolics, all pollutant monitoring and limits will remain the same as the previous permit and will not receive further consideration for modification. Parameters listed that are not part of the PSNS (40 CFR 419.17) are included as a City requirement to protect the POTW and are based on the BPJ. Oil and grease, ammonia as N, and total chromium are the only parameters regulated under 40 CFR 419.17. The permit

contains more stringent limitations (based on BPJ to protect the POTW) for ammonia as N and total chromium than required under 40 CFR 419.17.

Chlorides and phenolic compounds will be further discussed as the permittee has requested modification to these parameters.

Chlorides

The current permitted effluent limitations for chlorides for the refinery are:

- a daily maximum of 522 mg/l, and
- a loading limit of 878 lbs/day.

The refinery contacted the City of Dickinson requesting the elimination of the concentration-based limit of 522 mg/l while retaining the mass daily limit of 878 lbs/day. In a letter dated June 7, 2018 from the City of Dickinson to the refinery, the POTW design engineer (APEX Engineering Group) and the City's Water Reclamation Facility Manager recommended removing the chloride concentration limit of 522 mg/l from the NDPDES permit while maintaining the loading limit of 878 lbs/day.

The department reviewed the discharge data from the previous permit cycle to justify the refinery's request of removing the daily chloride concentration-based limit of 522 mg/l while retaining the mass-based limit of 878 lbs/day. The refinery had 162 exceedances for chloride monitoring during the previous permit cycle. The department evaluated the 90th percentile of DMR chloride data from the previous permit cycle. The 90th percentile for the concentration chloride daily maximum is 969.5 mg/l. The 90th percentile for the mass chloride data is 1,337 lbs/day.

Even with the effluent discharges that exceeded permit limits for chlorides from the refinery, the department will rely on the City's decision to eliminate the chloride concentration limit while maintaining the daily chloride loading limit of 878 lbs/day. The City must continue to meet the conditions of its NDPDES permit #ND0023175.

Phenolics

The current permit effluent limitation for phenolics for the refinery is

- 0.60 lbs/day with no concentration limit.

The department reviewed the discharge data from the previous permit cycle. The refinery had 29 exceedances for phenolics during the previous permit cycle. The department examined phenolic-compound effluent data submitted by the refinery during the previous permit cycle. The data were based on the 90th percentile for loading and resulted in 1.185 lbs/day. Based on this result, it appears phenolic compounds are not treated sufficiently by the refinery's pretreatment system to meet the permit compliance requirement of 0.60 lbs/day. [A compliance schedule developed by the department was outlined in the reissued permit to address phenolic compounds discharged to the Dickinson POTW.](#)

[Per Compliance Schedule requirements, the refinery has identified treatment solutions for effluent phenolics. The proposed method relies on removal of increased phenolic compounds at the POTW.](#) The refinery has requested an increase from 0.60 lbs/day to

~~2.4 lbs/day. The City of Dickinson has re-evaluated influent phenolic limits and determined in this reissued permit for the phenolics loading limit. an increase to the phenolic loading to 2.4 lbs/day would be an allowable load for the wastewater plant. The City has indicated the need to re-evaluate influent phenolics limit in order to potentially accommodate an increase to the phenolic loading limit. This influent re-evaluation for phenolics has not been conducted to date. Therefore, based on the phenolics data analysis (90th percentile results) and the pending re-evaluation, the department will not consider a change to the permitted limit of 0.60 lbs/day for phenolics.~~

Based on the evaluation of phenolic loading limits conducted by the City, as well as the DMR data review conducted by the department, an increase in phenolic loading to a daily maximum limit of 2.4 lbs/day is an acceptable permit modification. Data reviewed by the department included the City of Dickinson's monthly average effluent data and average percent treatment efficiency of the wastewater treatment plant for phenolics. Data was compiled from the period of April 1, 2015 through July 1, 2019. The phenolic running effluent monthly average was 0.011 mg/l and the running average for percent treatment efficiency of the plant was 87.8%.

This modification satisfies the remaining Compliance Schedule requirements for phenolics treatment.

~~Based on the 90th percentile examination by the department, noncompliance with the phenolic loading limit must be addressed by considering added treatment to reduce phenolic loading. Several technologies are available that are reliable and economically feasible to treat phenolic compounds in wastewater. A compliance schedule developed by the department is implemented in the reissued permit to address phenolic compounds discharged to the Dickinson POTW.~~

Local Limits

The City of Dickinson does not have an approved pretreatment program with local limitations. The facility shall follow all known, available, and reasonable methods of prevention, control, and treatment for all wastewater generated within the facility to be discharged to the Dickinson POTW.

PERMIT ISSUANCE PROCEDURES

Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. This includes the establishment of limitations or prohibitions based on changes to Pretreatment Standards, the development and approval of waste load allocation plans, the development or revision to water quality management plans, or the establishment of prohibitions or more stringent limitations for pollutants. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Proposed Permit Issuance Modification

The proposed permit modification meets all statutory requirements for the department to authorize a wastewater discharge. The permit includes limits and conditions to protect human

STATEMENT OF BASIS FOR PERMIT NDP026689
MARATHON CORPORATION – DICKINSON REFINERY
EXPIRATION DATE: SEPTEMBER 30, 2024
Page 17 of 26

health and aquatic life, and the beneficial uses of waters of the State of North Dakota. ~~The department proposes to issue this permit for a term of five (5) years.~~

DRAFT

APPENDIX A – PUBLIC INVOLVEMENT INFORMATION

The department proposes to issue an industrial user wastewater discharge permit to **Marathon Corporation – Dickinson Refinery**. The permit includes wastewater discharge limits and other conditions. This statement of basis describes the facility and the department's reasons for requiring a permit.

The department placed a Public Notice of Draft on **August 21, 2019** in the **Dickinson Press** to inform the public and to invite comment on the proposed draft North Dakota Pollutant Discharge Elimination System permit and statement of basis. [The department placed a Public Notice of Draft on March 11, 2020 in the Dickinson Press to inform the public and to invite comment on the proposed modification.](#)

The notice –

- Tells where copies of the draft permit and statement of basis are available for public evaluation.
- Offers to provide assistance to accommodate special needs.
- Urges people to submit their comments before the end of the comment period.
- Informs the public that if there is significant interest, a public hearing will be scheduled.

You may obtain further information from the department by telephone, 701.328.5210 or by writing to the address listed below:

North Dakota Department of Environmental Quality
Division of Water Quality
918 East Divide Avenue - 4th Floor
Bismarck, ND 58501-1947

The primary author of this permit and statement of basis is Jeff Roerick. [The primary author of the modification is Emily Joynt.](#)

Name of the Newspaper: Dickinson Press

**North Dakota Department of Environmental Quality Public Notice
Reissue of an NDPDES Permit**

Public Notice Date: 8/21/2019

Purpose of Public Notice

The Department intends to reissue the following North Dakota Pollutant Discharge Elimination System (NDPDES) Discharge Permit under the authority of Section 61-28-04 of the North Dakota Century Code.

Permit Information

Public Notice Number: ND-2019-023
Application Date: 12/26/2018 Application Number: NDP026689
Applicant Name: Marathon Dickinson Refinery
Mailing Address: 3815 116th Ave. SW, Dickinson, ND 58601
Telephone Number: 701.456.6939
Proposed Permit Expiration Date: 9/30/2024

Facility Description

Marathon Corporation - Dickinson Refinery is a petroleum refining facility located at 3815 116th Avenue Southwest in the City of Dickinson, ND 58506.

The refinery is a regulated categorical industrial user (40 CFR Part 419.17 - Petroleum Refining Category) with a wastewater discharge permit issued by the North Dakota Department of Environmental Quality under the North Dakota Pollution Discharge Elimination System (NDPDES) program. The discharge permit regulates process wastewater discharged to the City of Dickinson's Publicly Owned Treatment Works (POTW).

Tentative Determinations

Proposed effluent limitations and other permit conditions have been made by the Department. They assure that State Water Quality Standards and applicable provisions of the FWPCA will be protected.

Information Requests and Public Comments

Copies of the application, draft permit, and related documents are available for review. Comments or requests should be directed to the ND Dept of Env. Quality, Div. of Water Quality, 918 East Divide Ave, Bismarck ND 58501-1947 or by calling 701.328.5210.

All comments received by September 19, 2019 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice. If you require special facilities or assistance relating to a disability, call TDD at 1.800.366.6868.

Name of the Newspaper: Dickinson Press

North Dakota Department of Environmental Quality Public Notice
Modification of an NDPDES Permit

Public Notice Date: 3/11/2020

Purpose of Public Notice

The Department intends to modify the following North Dakota Pollutant Discharge Elimination System (NDPDES) Discharge Permit under the authority of Section 61-28-04 of the North Dakota Century Code.

Permit Information

Public Notice Number: ND-2020-010
Application Date: 12/31/2019 Application Number: NDP026689
Applicant Name: Marathon Dickinson Refinery
Mailing Address: 3815 116th Ave. SW, Dickinson, ND 58601
Telephone Number: 701.456.6939
Proposed Permit Expiration Date: 9/30/2024

Facility Description

Marathon Corporation - Dickinson Refinery is a petroleum refining facility located at 3815 116th Avenue Southwest in the City of Dickinson, ND 58506.

The refinery is a regulated categorical industrial user (40 CFR Part 419.17 - Petroleum Refining Category) with a wastewater discharge permit issued by the North Dakota Department of Environmental Quality under the North Dakota Pollution Discharge Elimination System (NDPDES) program. The discharge permit regulates process wastewater discharged to the City of Dickinson's Publicly Owned Treatment Works (POTW).

Tentative Determinations

Proposed effluent limitations and other permit conditions have been made by the Department. They assure that State Water Quality Standards and applicable provisions of the FWPCA will be protected.

Information Requests and Public Comments

Copies of the application, draft permit, and related documents are available for review. Comments or requests should be directed to the ND Dept of Env. Quality, Div. of Water Quality, 918 East Divide Ave, Bismarck ND 58501-1947 or by calling 701.328.5210.

All comments received by April 11, 2020 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice. If you require special facilities or assistance relating to a disability, call TDD at 1.800.366.6868.

APPENDIX B – RESPONSE TO COMMENTS

Comment and Response for Public Notice ND-2019-023

Comments were submitted by Marathon Corporation and the City of Dickinson during the 30-day public notice period ending September 19, 2019. Each comment is identified below and the department's response to that comment follows.

Marathon Corporation Comment #1: On page #7 of the draft Permit under special conditions, a compliance schedule has been included that requires the treatment of phenolics loading to meet the 0.6 lbs/day as specified by the City of Dickinson. In the NDPDES renewal application, the refinery requested an increase in phenolic loading range to 2.4 lbs/day. This increase request was based on the prior 5 years of phenol actual discharge range. It was the refinery's understanding that similar POTWs can adequately handle higher loads than what was initially allocated by the City. The initial 0.6 lbs/day loading rate was set in part because of potential equipment compatibility and uncertainty with the significant POTW upgrade project occurring at the same time period.

Department Response to Comment #1: The Dickinson POTW is designed to treat domestic wastewater. A pretreatment permit limit cannot be made to be less stringent without justification provided to the department that the POTW is protected from pass through and interference. The initial limit was based on BPJ and will require an evaluation submitted to the department for review prior to a permit-limit modification for phenolic compounds. The department understands that this evaluation has not been completed as of the writing of this permit.

Marathon Comment #2a (broken into 2 parts): As stated in the draft SOB for the NDPDES permit, the City has not conducted an evaluation of influent phenolics loading limit. However, it does not appear that the City has issues in handling phenolics which are typically treated using biological treatment. Therefore, the refinery requests the department to remove the compliance schedule until the City conducts the influent limit evaluation.

Department Response to Comment #2a: The department has not received a phenolic compound evaluation to determine if the City has issues handling phenolics. As stated in the department's response to comment #1, the Dickinson POTW is not designed to treat phenolic compounds. The refinery is a Categorical Industrial User (CIU) that is required to treat its process wastewater prior to discharge to the Dickinson POTW. The permit limit for phenolic compounds discharged from the refinery to the Dickinson POTW is based on BPJ. Treatment for phenolic compounds will not be conducted at the POTW – all pretreatment to meet permit conditions will be conducted by the refinery prior to discharge to the Dickinson POTW. The compliance schedule is designed to promote CIU compliance for permits issued during a five-year period and for a specific process wastestream.

Marathon Comment #2b: The refinery is currently working with the City to evaluate the phenolics limit for a Renewable Diesel Project (RDP) at the site in order to determine the best location for phenolics treatment (i.e. at the POTW or the refinery) if phenolics loading was increased. The RDP would come online in the third quarter of 2020 and will require a NDPDES permit modification because of process changes. A new phenolics limit or compliance schedule, if necessary, after completion of the influent limit evaluation, could be included at that

time. If the compliance schedule cannot be removed, the refinery requests to adjust the timeline to align with the City influent study and the RDP permit modification as outlined below:

- Compliance Schedule – Item 1 – identify treatment solutions for effluent phenolics if required after City influent limit evaluation – December 31, 2020.
- Compliance Schedule – Item 2 -Submit final phenolics treatment plan if required after City influent limit evaluation – March 31, 2021.
- Compliance Schedule – Item 3 – Implement phenolics treatment within pretreatment system if required after City influent limit evaluation – To be determined during this permit cycle.

Department Response to Comment #2b: The compliance schedule is designed to promote CIU compliance for permits issued during a five-year period and for regulated process wastestreams. Based on the phenolic compound evaluation conducted by the department as part of writing this permit (using the 90th percentile of the submitted phenolic data), it appears phenolic compounds are not treated sufficiently by the refinery’s pretreatment system to meet the permit compliance requirement of 0.60 lbs/day.

The department believes the compliance schedule outlined in the permit provides adequate time to meet all the specified conditions as outlined in 40 CFR 403.12(b)(7)

Marathon Comment #3: The refinery currently monitors temperature at a vault on refinery property to demonstrate compliance with the temperature limit of 104°F. the daily maximum limit for temperature in the draft permit states: “Not to exceed 104.0°F at the POTW Treatment Plant.” The refinery intends to continue monitoring and reporting compliance with data collected at the vault on refinery property which is more conservative than stated in the permit. The refinery requests addition of a footnote to the temperature limit that the compliance sample point will be on refinery property.

Department Response to Comment #3: The department modified the temperature language in the permit to align with the requirements outlined in North Dakota Administrative Code 33.1-16-01.1-02(3)(e) which states: “Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40°C (104°F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits.”

The department recognizes the temperature monitoring vault is located on refinery property prior the POTW and will provide representative discharge data. The permit stipulates: “Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving the facility property or entering the POTW”.

City of Dickinson Comment #4: The proposed temperature of 104 degrees F at the POTW Treatment Plant does not make sense. Since the flow from the refinery would be diluted (around 1:20 before it arrives at the plant), this would make the allowable temperature discharged from the refinery much higher than 200 degrees F. A more appropriate point from which the 104 degrees F limit would apply is where the refinery discharge meets the City of Dickinson sewer trunk line (at Highway 10 and 116th Avenue) manhole, or prior to this point back to the refinery.

Department Response to Comment #4 Please refer to the Department Response to Comment #3 above.

City of Dickinson Comment #5: Since there is a pH limit requirement to this permit, the personnel responsible for running the pH test should be Field pH certified by the ND Department of Environmental Quality. This would be consistent with the City of Dickinson WRF discharge permit.

Department Response to Comment #5 As part of the permit conditions, sampling and analysis shall be in accordance with the techniques prescribed in 40 CFR part 136 and amendments thereto. The NDPDES permit requirements for pH sampling and analysis are satisfied by the refinery by utilizing an inline probe to collect instantaneous pH results for permit compliance – no field pH samples are used for compliance.

No further comments [for Public Notice ND-2019-023.](#)

▮

[Comment and Response for Public Notice ND-2020-010](#)

DRAFT

APPENDIX C - DEFINITIONS Pretreatment Permit - BP 2019.05.29

1. "**Approval Authority**" means the department.
2. "**Bypass**" means the intentional diversion of wastestreams from any portion of an industrial user's treatment facility.
3. "**Categorical industrial user**" or "CIU" means an industrial user that is subject to a pretreatment standard for an industry category.
4. "**Control authority**" means either:
 - a. The POTW, if the POTW which receives the indirect discharge administers an approved pretreatment program in accordance with sections 33.1-16-01.1-06 and 33.1-16-01.1-08, or
 - b. The department, if the POTW which receives the indirect discharge does not administer an approved pretreatment program in accordance with sections 33.1-16-01.1-06 and 33.1-16-01.1-08.
6. "**Indirect discharge**" means the introduction of pollutants into a POTW from any non-domestic source regulated under 307(b), (c), or (d) of the Federal Water Pollution Control Act.
7. "**Industrial user**" or "**user**" means a source of indirect discharge.
8. "**Interference**" means an indirect discharge which, alone or in conjunction with any other indirect discharges, both:
 - a. inhibits or disrupts the POTW processes or operations, or its sludge processes, use or disposal; and
 - b. causes a violation of any requirement of the POTW's NDPDES permit (including an increase in the magnitude or duration of a violation) or prevents sewage sludge use or disposal in compliance with federal or state law or statute.
9. "**New source**" means:
 - a. Any building, structure, facility or installation for which construction commenced after the publication of proposed pretreatment standards which will apply to such source after promulgation, from which there is or may be an indirect discharge, provided that:
 - (1) The building, structure, facility or installation is constructed at a site at which no other source is located; or
 - (2) The building, structure, facility or installation totally replaces the process or production equipment that causes the indirect discharge at an existing source; or

- (3) The production or wastewater generating processes of the building, structure, facility or installation is substantially independent of an existing source at the same site.
 - a. Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility or installation meeting the criteria of paragraphs 2 and 3 of subdivision a, but otherwise alters, replaces or adds to existing process or production equipment.
 - b. Construction of a new source as defined under this subsection has commenced if the owner or operator has undertaken any of the following:
 - (1) Begun, or caused to begin as part of a continuous onsite construction program,
 - (a) Any placement, assembly, or installation of facilities or equipment; or
 - (b) Significant site preparation work which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
 - (2) Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation.
10. "**Pass through**" means an indirect discharge which exits the POTW into waters of the state in quantities or concentrations which, alone or in conjunction with any other discharges, causes a violation of the POTW's NDPDES permit (including an increase in the magnitude or duration of a violation).
11. "**Pretreatment**" means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW.
12. "**Pretreatment requirements**" means any substantive or procedural requirement related to pretreatment, other than a pretreatment standard, imposed on an industrial user.
13. "**Pretreatment standards**" means any regulation which applies to industrial users, that contains pollutant discharge limits promulgated by the environmental protection agency in accordance with the Federal Water Pollution Control Act, including prohibitive discharge limits established pursuant to section 33.1-16-01.1-02.
14. "**Publicly owned treatment works**" or "POTW" means a treatment works as defined by section 212 of the Federal Water Pollution Control Act, which is owned by a state or municipality, including any devices or systems used in the storage, treatment, recycling and reclamation of municipal sewage or liquid industrial wastes, as well as sewers, pipes and other conveyances that convey wastewater to a publicly owned treatment works treatment

plant. This term also means the municipality that has jurisdiction over the indirect discharges to and the discharges from the treatment works.

15. "**Publicly owned treatment works treatment plant**" or "POTW treatment plant" means that portion of the publicly owned treatment works which is designed to provide treatment of municipal sewage and industrial waste.
16. "**Severe property damage**" means substantial physical damage to property, damage to treatment facilities which renders them inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. It does not mean economic loss caused by delays in production.
17. "**Significant industrial user**" or "SIU" means:
 - a. All industrial users subject to categorical pretreatment standards under sections 33.1-16-01.1-04 and 33.1-16-01-31; and
 - b. Any other industrial user that meets at least one of the following criteria:
 - (1) Discharges an average of twenty-five thousand gallons per day or more of process wastewater to the POTW, excluding sanitary wastewater, noncontact cooling water and boiler blowdown wastewater;
 - (2) Contributes a process wastestream which makes up five percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or
 - (3) Is designated as a significant industrial user by the control authority on the basis that the user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.
 - c. Upon a finding that an industrial user which meets the criteria of subdivision b has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the control authority may, at any time, determine that the industrial user is not a significant industrial user.
18. "**Upset**" means an exceptional incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards because of factors beyond the reasonable control of the industrial user. Upset does not include noncompliance to the extent caused by operational error, inadequate or improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Permit No: NDP026689
Effective Date: October 1, 2019
Expiration Date: September 30, 2024
Modification Date: [May 1, 2020](#)

AUTHORIZATION TO DISCHARGE UNDER THE
NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Chapter 33.1-16-01.1 of the North Dakota Department of Environmental Quality rules as promulgated under Chapter 61-28 (North Dakota Water Pollution Control Act) of the North Dakota Century Code,

the Marathon Corporation – Dickinson Refinery

is authorized to discharge from its wastewater pretreatment system to the City of Dickinson's Publicly Owned Treatment Works (POTW)

provided all the conditions of this permit are met.

This permit and the authorization to discharge shall expire at midnight, September 30, 2024.

Signed this _____ day of _____, _____.

Karl H. Rockeman, P.E.
Director
Division of Water Quality

BP 2019.05.29

This page is intentionally left blank

DRAFT

TABLE OF CONTENTS

DEFINITIONS Pretreatment Permit - BP 2019.05.29	4
PERMIT SUBMITTALS SUMMARY	7
SPECIAL CONDITIONS.....	7
I. WASTEWATER EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.....	8
A. Discharge Authorization	8
B. Effluent Limitations and Monitoring	8
II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS.....	9
A. Representative Sampling (Routine and Non-Routine Discharges).....	9
B. Flow Measurement.....	9
C. Test Procedures.....	9
D. Recording of Results.....	9
E. Additional Monitoring.....	10
F. Reporting of Monitoring Results.....	10
G. Records Retention	11
III. COMPLIANCE RESPONSIBILITIES.....	11
A. Duty to Comply	11
B. Proper Operation and Maintenance.....	11
C. Planned Changes.....	11
D. Duty to Provide Information	11
E. Signatory Requirements.....	11
F. Twenty-four Hour Notice of Noncompliance Reporting	12
G. Bypass of Treatment Facilities.....	13
H. Upset Conditions	13
I. Duty to Mitigate	14
J. Removed Materials	14
K. Duty to Reapply.....	14
IV. GENERAL PROVISIONS.....	14
A. Inspection and Entry.....	14
B. Availability of Reports	14
C. Transfers	14
D. New Limitations or Prohibitions	15
E. Permit Actions.....	15
F. Need to Halt or Reduce Activity Not a Defense	15
G. State Laws	15
H. Oil and Hazardous Substance Liability	15
I. Property Rights	15
J. Severability.....	15
A. General Responsibilities	15
B. Pollutant Restrictions	15
C. Control Authority	16
D. Control Authority Options	16
E. Enforcement.....	16
G. Dilution Prohibited.....	17
H. Solid Waste Disposal.....	17

DEFINITIONS Pretreatment Permit - BP 2019.05.29

1. "**Approval Authority**" means the department.
2. "**Bypass**" means the intentional diversion of wastestreams from any portion of an industrial user's treatment facility.
3. "**Categorical industrial user**" or "CIU" means an industrial user that is subject to a pretreatment standard for an industry category.
4. "**Control authority**" means either:
 - a. The POTW, if the POTW which receives the indirect discharge administers an approved pretreatment program in accordance with sections 33.1-16-01.1-06 and 33.1-16-01.1-08, or
 - b. The department, if the POTW which receives the indirect discharge does not administer an approved pretreatment program in accordance with sections 33.1-16-01.1-06 and 33.1-16-01.1-08.
6. "**Indirect discharge**" means the introduction of pollutants into a POTW from any non-domestic source regulated under 307(b), (c), or (d) of the Federal Water Pollution Control Act.
7. "**Industrial user**" or "**user**" means a source of indirect discharge.
8. "**Interference**" means an indirect discharge which, alone or in conjunction with any other indirect discharges, both:
 - a. inhibits or disrupts the POTW processes or operations, or its sludge processes, use or disposal; and
 - b. causes a violation of any requirement of the POTW's NDPDES permit (including an increase in the magnitude or duration of a violation) or prevents sewage sludge use or disposal in compliance with federal or state law or statute.
9. "**New source**" means:
 - a. Any building, structure, facility or installation for which construction commenced after the publication of proposed pretreatment standards which will apply to such source after promulgation, from which there is or may be an indirect discharge, provided that:
 - (1) The building, structure, facility or installation is constructed at a site at which no other source is located; or
 - (2) The building, structure, facility or installation totally replaces the process or production equipment that causes the indirect discharge at an existing source; or
 - (3) The production or wastewater generating processes of the building, structure, facility or installation is substantially independent of an existing source at the same site.
 - a. Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility or installation meeting the criteria of paragraphs 2 and 3 of subdivision a, but otherwise alters, replaces or adds to existing process or production equipment.
 - b. Construction of a new source as defined under this subsection has commenced if the owner or

operator has undertaken any of the following:

- (1) Begun, or caused to begin as part of a continuous onsite construction program,
 - (a) Any placement, assembly, or installation of facilities or equipment; or
 - (b) Significant site preparation work which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
- (2) Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation.

10. "**Pass through**" means an indirect discharge which exits the POTW into waters of the state in quantities or concentrations which, alone or in conjunction with any other discharges, causes a violation of the POTW's NDPDES permit (including an increase in the magnitude or duration of a violation).
11. "**Pretreatment**" means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW.
12. "**Pretreatment requirements**" means any substantive or procedural requirement related to pretreatment, other than a pretreatment standard, imposed on an industrial user.
13. "**Pretreatment standards**" means any regulation which applies to industrial users, that contains pollutant discharge limits promulgated by the environmental protection agency in accordance with the Federal Water Pollution Control Act, including prohibitive discharge limits established pursuant to section 33.1-16-01.1-02.
14. "**Publicly owned treatment works**" or "POTW" means a treatment works as defined by section 212 of the Federal Water Pollution Control Act, which is owned by a state or municipality, including any devices or systems used in the storage, treatment, recycling and reclamation of municipal sewage or liquid industrial wastes, as well as sewers, pipes and other conveyances that convey wastewater to a publicly owned treatment works treatment plant. This term also means the municipality that has jurisdiction over the indirect discharges to and the discharges from the treatment works.
15. "**Publicly owned treatment works treatment plant**" or "POTW treatment plant" means that portion of the publicly owned treatment works which is designed to provide treatment of municipal sewage and industrial waste.
16. "**Severe property damage**" means substantial physical damage to property, damage to treatment facilities which renders them inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. It does not mean economic loss caused by delays in production.
17. "**Significant industrial user**" or "SIU" means:
 - a. All industrial users subject to categorical pretreatment standards under sections 33.1-16-01.1-04 and 33.1-16-01-31; and
 - b. Any other industrial user that meets at least one of the following criteria:
 - (1) Discharges an average of twenty-five thousand gallons per day or more of process wastewater to

the POTW, excluding sanitary wastewater, noncontact cooling water and boiler blowdown wastewater;

- (2) Contributes a process wastestream which makes up five percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or
- (3) Is designated as a significant industrial user by the control authority on the basis that the user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.

c. Upon a finding that an industrial user which meets the criteria of subdivision b has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the control authority may, at any time, determine that the industrial user is not a significant industrial user.

18. "**Upset**" means an exceptional incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards because of factors beyond the reasonable control of the industrial user. Upset does not include noncompliance to the extent caused by operational error, inadequate or improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

OUTFALL DESCRIPTION

Outfall 001. Active. Final Pretreatment - Internal			
Latitude: 46.858611	Longitude: -102.894167	County: Stark	
Township: 140N	Range: 49W	Section: 11	QQ: DCA
Receiving POTW: Dickinson – Mechanical		Classification: NA	
All compliance monitoring shall take place at Outfall 001 – After treatment and prior to discharge to the POTW.			

PERMIT SUBMITTALS SUMMARY

Coverage Point	Submittal	Frequency	First Submittal Date
001A	Discharge Monitoring Report – Categorical Standard – 40 CFR 419.17	Quarterly	January 31, 2020
001A	Slug Discharge Control Plan	1/permit cycle	December 31, 2022
Compliance Schedule – Item 1	Identify treatment solutions for effluent phenolics	NA	December 31, 2019
Compliance Schedule - Item 2	Submit final phenolics treatment plan	NA	March 31, 2020
Compliance Schedule – Item 3	Implement phenolics treatment within pretreatment system	NA	To be determined during this permit cycle.
Application Renewal	NDPDES Application Renewal	1/permit cycle	April 1, 2024

SPECIAL CONDITIONS

There shall be no discharge of contaminated runoff from this facility. Discharges of contaminated runoff shall be subject to the effluent limitations applicable at the discharge point. "Contaminated runoff" means the flow of stormwater resulting from precipitation coming into contact with any raw material, intermediate product, finished product, byproduct, or waste product located on refinery property.

Compliance Schedule

The refinery must implement a phenolics treatment system to comply with the loading limit specified by the City of Dickinson. Please refer to the Permit Submittals Table above for specific submittal dates.

I. WASTEWATER EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Discharge Authorization

During the effective period of this permit, the permittee is authorized to discharge pollutants from the specified outfalls to the following: **City of Dickinson – POTW**

This permit authorizes the permittee to discharge only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

B. Effluent Limitations and Monitoring

The permittee must limit and monitor all discharges as specified below:

Technology Based and Best Professional Judgment Effluent Limitations and Monitoring Requirements Outfall 001					
Pollutant or Pollutant Property	Pretreatment Standard New Source (PSNS)			Monitoring Requirements	
	Daily Maximum Limit		Monthly Maximum Limit	Sample Frequency	Sample Type
	mg/l	Lbs/day	mg/l		
Biochemical Oxygen Demand	450	750	225	3/week	Composite
Total Suspended Solids (TSS)	490	820	255	3/week	Composite
Total Kjeldahl Nitrogen (TKN)	89.5	150	38	3/week	Composite
Phosphorus, Total	23	39	12	3/week	Composite
Temperature (°F)	Not to exceed 104.0 at the POTW Treatment Plant		NA	Continuous	Grab
pH ¹	Shall remain between 6.0 s.u. and 9.0 s.u.			Continuous	Grab
Chlorides	NA	878	NA	3/week	Composite
Chemical Oxygen Demand	1050	1765	500	3/week	Composite
Oil and Grease	100.0	NA	*Monitor	3/week	Grab
Ammonia as N	56.5	95.0	25.5	3/week	Composite
Sulfides, (Dissolved)	Monitor Only			3/week	Grab
Total Chromium	0.0571	43.6 grams/day	*Monitor	3/week	Composite
Phenolic Compounds	NA	0.602.4	*Monitor	3/week	Grab
Total Days Discharging	NA		Monitor	Report	Calculated
Flow Effluent, MGD	NA		Monitor	Report	Meter
Total Drain, MGAL	NA		Monitor	Report	Calculated
*This parameter is not limited. However, the department may impose limitations based on sample history and to protect the POTW					
1. The pH is an instantaneous limitation.					

Stipulations:

The dates of discharge, frequency of analyses, total number of gallons discharged, discharge flow rates, and number of exceedances shall also be included on the Discharge Monitoring Reports (DMR).

Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving the facility property or entering the POTW.

The department may specify additional discharge conditions or restrictions at any time to maintain protection to the POTW.

II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS

A. Representative Sampling (Routine and Non-Routine Discharges)

All samples and measurements taken shall be representative of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited under Wastewater Effluent Limitations and Monitoring Requirements of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with the Test Procedures section of this permit. The permittee must report all additional monitoring in accordance with the Additional Monitoring section of this permit.

B. Flow Measurement

The Permittee will verify the following on all installed water meters:

1. Appropriate flow measurement devices and methods consistent with accepted scientific practices are selected and used.
2. The accuracy of the measurements is consistent with the accepted industry standard and the manufacturer's requirements.
3. Device calibration is consistent with the frequency required by the manufacturer.
4. Calibration records are maintained for at least three (3) years.

C. Test Procedures

The collection and transportation of all samples shall conform with EPA preservation techniques and holding times found in 40 CFR 136. All laboratory tests shall be performed by a North Dakota certified laboratory in conformance with test procedures pursuant to 40 CFR 136, unless other test procedures have been specified in this permit or approved by EPA as an alternate test procedure under 40 CFR 136.5. The method of determining the total amount of water discharged shall provide results within 10 percent of the actual amount.

D. Recording of Results

Records of monitoring information shall include:

1. the date, exact place and time of sampling or measurements;
2. the name(s) of the individual(s) who performed the sampling or measurements;

3. the name of the laboratory;
4. the date(s) and time(s) analyses were performed;
5. the name(s) of the individual(s) who performed the analyses;
6. the analytical techniques or methods used; and
7. the results of such analyses.

E. Additional Monitoring

If the discharge is monitored more frequently than this permit requires, all additional results, if in compliance with the Test Procedures section of this permit, shall be included in the summary on the Discharge Monitoring Report.

F. Reporting of Monitoring Results

1. Monitoring results shall be summarized and reported to the department using Discharge Monitoring Reports (DMRs). If no discharge occurs during a reporting period, "No Discharge" shall be reported. The permittee must submit DMRs electronically using the electronic information reporting system unless requirements in subsection 3 are met.
2. Prior to December 21, 2020, the permittee may elect to electronically submit the following compliance monitoring data and reports instead of mailing paper forms. Beginning December 21, 2020, the permittee must report the following using the electronic reporting system:
 - a. General permit reports [e.g., notices of intent (NOI); notices of termination (NOT); no exposure certifications (NOE)];
 - b. Municipal separate storm sewer system program reports;
 - c. Pretreatment program reports;
 - d. Sewer overflow/bypass event reports; and
 - e. Clean Water Act 316(b) annual reports
3. The permittee may seek a waiver from electronic reporting. To obtain a waiver, the permittee must complete and submit an Application for Temporary Electronic Reporting Waiver form (SFN 60992) to the department. The department will have 120 days to approve or deny the waiver request. Once the waiver is approved, the permittee may submit paper versions of monitoring data and reports to the department.
 - a. One of the following criteria must be met in order to obtain a waiver. The department reserves the right to deny any waiver request, even if they meet one of the criteria below.
 1. No internet access,
 2. No computer access,
 3. Annual DMRs (upon approval of the department),
 4. Employee turnover (3-month periods only), or
 5. Short duration permits (upon approval of the department)

All reports must be postmarked by the last day of the month following the end of each reporting period. All original documents and reports required herein shall be signed and submitted to the department at the following address:

ND Department of Environmental Quality
Division of Water Quality
918 East Divide Ave
Bismarck ND 58501-1947

Discharge Monitoring Reports shall be submitted to the City of Dickinson at the same time to the

following address:

Dickinson, City of
Attn: Wastewater Treatment Facility
99 2nd Street East
Dickinson ND 58601-5222

G. Records Retention

All records and information (including calibration and maintenance) required by this permit shall be kept for at least three years or longer if requested by the department or EPA.

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

B. Proper Operation and Maintenance

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. If necessary to achieve compliance with the conditions of this permit, this shall include the operation and maintenance of backup or auxiliary systems.

The permittee shall develop and maintain written procedures for processes and systems that impact wastewater discharge quality. The procedures shall include measures to prevent and mitigate the release of any unauthorized discharges to the wastewater stream. The procedures should be consistent with the permittee's Industrial Stormwater Pollution Prevention Plan (SWPP) and/or Spill Prevention Control and Countermeasure Plan (SPCC), as applicable.

The permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. Additionally, the department has determined that the permittee has the potential for a discharge or a spill that could adversely affect the POTW. Therefore, a slug discharge prevention, control, and countermeasure plan is required (40 CFR §403.8(f)).

C. Planned Changes

The department shall be given advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance. Any anticipated facility expansions, production increase, or process modifications which might result in new, different, or increased discharges of pollutants shall be reported to the department as soon as possible. Changes which may result in a facility being designated a "new source" as determined in 40 CFR 122.29(b) shall also be reported.

D. Duty to Provide Information

The permittee shall furnish to the department, within a reasonable time, any information which the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the department, upon request, copies of records required to be kept by this permit. When a permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or any report, it shall promptly submit such facts or information.

E. Signatory Requirements

All applications, reports, or information submitted to the department shall be signed and certified.

All permit applications shall be signed by a responsible corporate officer, a general partner, or a principal executive officer or ranking elected official.

All reports required by the permit and other information requested by the department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the department; and
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

If an authorization under section is no longer accurate for any reason, a new authorization satisfying the above requirements must be submitted to the department prior to or together with any reports, information, or applications to be signed by an authorized representative.

Any person signing a document under this section shall make the following certification:

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

F. Twenty-four Hour Notice of Noncompliance Reporting

The permittee shall report any noncompliance which may endanger health or the environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the EPA, Region VIII, Emergency Response Branch at 1.800.424.8802 and the State of North Dakota, Division of Homeland Security at 1.800.472.2121. The following occurrences of noncompliance shall be reported by telephone to the department at 701.328.5210 by the first workday (8:00 a.m.-5:00 p.m. Central time) following the day the permittee became aware of the circumstances:

1. Any lagoon cell overflow or any unanticipated bypass which exceeds any effluent limitation in the permit under the Bypass of Treatment Facilities section of this permit;
2. Any upset which exceeds any effluent limitation in the permit under the Upset Conditions section of this permit; or
3. Violation of any daily maximum effluent or instantaneous discharge limitation for any of the pollutants listed in the permit.

A written submission shall also be provided within five days of the time that the permittee became aware of the circumstances. The written submission shall contain:

1. A description of the noncompliance and its cause;

2. The period of noncompliance, including exact dates and times;
3. The estimated time noncompliance is expected to continue if it has not been corrected; and
4. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

Reports shall be submitted to the address in the Reporting of Monitoring Results section of this permit. The department may waive the written report on a case by case basis if the oral report has been received within 24 hours by the department at 701.328.5210 as identified above.

All other instances of noncompliance shall be reported no later than at the time of the next Discharge Monitoring Report submittal. The report shall include the four items listed in this subsection.

G. Bypass of Treatment Facilities

Bypass not exceeding limitations: The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to any of the following provisions in this section.

Bypass exceeding limitations-notification requirements:

1. Anticipated Bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten (10) days before the date of bypass.
2. Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass as required under the Twenty-four Hour Notice of Noncompliance Reporting section of this permit.

Prohibition of Bypass: Bypass is prohibited, and the department may take enforcement action against a permittee for bypass, unless:

1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
3. The permittee submitted notices as required under the 1. Anticipated Bypass subsection of this section.

The department may approve an anticipated bypass, after considering its adverse effects, if the department determines that it will meet the three (3) conditions listed above.

H. Upset Conditions

An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of the following paragraph are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred and the permittee can identify its cause(s);
2. The permitted facility was, at the time being, properly operated;
3. The permittee submitted notice of the upset as required under the Twenty-four hour Notice of Noncompliance Reporting section of this permit and;
4. The permittee complied with any remedial measures required under the Duty to Mitigate section of this permit.

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

I. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee, at the department's request, shall provide accelerated or additional monitoring as necessary to determine the nature and impact of any discharge.

J. Removed Materials

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be buried or disposed of in such a manner to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not be directly blended with or enter either the final plant discharge and/or waters of the state. The permit issuing authority shall be contacted prior to the disposal of any sewage sludges. At that time, concentration limitations and/or self-monitoring requirements may be established.

K. Duty to Reapply

Any request to have this permit renewed should be made six months prior to its expiration date.

IV. GENERAL PROVISIONS

A. Inspection and Entry

The permittee shall allow department and EPA representatives, at reasonable times and upon the presentation of credentials if requested, to enter the permittee's premises to inspect the wastewater treatment facilities and monitoring equipment, to sample any discharges, and to have access to and copy any records required to be kept by this permit.

B. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the department and EPA. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

C. Transfers

This permit is not transferable except upon the filing of a Statement of Acceptance by the new party and subsequent department approval. The current permit holder should inform the new controller, operator, or owner of the existence of this permit and also notify the department of the possible change.

D. New Limitations or Prohibitions

The permittee shall comply with any effluent standards or prohibitions established under Section 306(a), Section 307(a), or Section 405 of the Act for any pollutant (toxic or conventional) present in the discharge or removed substances within the time identified in the regulations even if the permit has not yet been modified to incorporate the requirements.

E. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. This includes the establishment of limitations or prohibitions based on changes to Water Quality Standards, the development and approval of waste load allocation plans, the development or revision to water quality management plans, changes in sewage sludge practices, or the establishment of prohibitions or more stringent limitations for toxic or conventional pollutants and/or sewage sludges. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

F. Need to Halt or Reduce Activity Not a Defense

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.

G. State Laws

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation preserved under Section 510 of the Act.

H. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

J. Severability

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.

V. PROHIBITED DISCHARGES

A. General Responsibilities

The permittee has the responsibility to protect the Publicly-Owned Treatment Works (POTW) from pollutants which would inhibit, interfere, or otherwise be incompatible with operation of the treatment works including interference with the use or disposal of municipal sludge.

B. Pollutant Restrictions

Pretreatment Standards (40 CFR Section 403.5) developed pursuant to Section 307 of the Federal Clean Water Act (the Act) require that the permittee shall not allow, under any circumstances, the introduction of the following pollutants to the POTW from any source of nondomestic discharge:

1. Any other pollutant which may cause Pass Through or Interference;

2. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than sixty (60) degrees Centigrade (140 degrees Fahrenheit) using the test methods specified in 40 CFR Section 261.21;
3. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with a pH of lower than 5.0 s.u., unless the treatment facilities are specifically designed to accommodate such discharges;
4. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, or other interference with the operation of the POTW;
5. Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with any treatment process at the POTW;
6. Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds forty (40) degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;
7. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through at the POTW;
8. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
9. Any trucked or hauled pollutants, except at discharge points designated by the POTW; and
10. Any specific pollutant which exceeds a local limitation established by the permittee in accordance with the requirements of 40 CFR Section 403.5 (c) and (d).

C. Control Authority

The City does not have an approved industrial pretreatment program. The department was delegated Industrial Pretreatment Program authority by EPA in September 2005. The department shall be the Control Authority.

D. Control Authority Options

At such time as a specific pretreatment limitation becomes applicable to an industrial user, the department may, as appropriate:

1. Amend the permittee's North Dakota Pollutant Discharge Elimination System (NDPDES) discharge permit to specify the additional pollutant(s) and corresponding effluent limitation(s) consistent with the applicable Pretreatment Standards;
2. Require the permittee to monitor its discharge for any pollutant which may likely be discharged from the permittee's POTW, should the industrial user fail to properly pre-treat its wastewater.

E. Enforcement

The department shall evaluate all reports, notifications, and data submitted to or obtained by the department in compliance with the permit and shall investigate and follow up all apparent violations for possible enforcement action pursuant to North Dakota Century Code (NDCC) section 61-28-08.

F. Prohibited Unless Approved

Any of the following discharges are prohibited unless approved by the department under extraordinary circumstances (such as lack of direct discharge alternatives due to combined sewer service or a need to augment sewage flows due to septic conditions):

1. Storm water and other direct inflow sources.
2. Wastewaters significantly affecting system hydraulic loading, which do not require treatment or would not be afforded a significant degree of treatment by the system.

G. Dilution Prohibited

The permittee shall not dilute the wastewater discharge with stormwater or increase the use of potable water, process water, noncontact cooling water, or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with limitations contained in this permit.

H. Solid Waste Disposal

The Permittee must handle and dispose of all solid waste material in such a manner as to prevent its entry into state waters.

DRAFT