

# **ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397

JAMES JENNINGS, ACTING DIRECTOR

NPDES Permit No. IL0001244

NPDES Permit No. IL0001244 Notice No. KPM:24080701.docx

Public Notice Beginning Date: November 14, 2024

Public Notice Ending Date: December 16, 2024

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency Bureau of Water Division of Water Pollution Control Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276 217/782-0610

Name and Address of Discharger:

The Premcor Refining Group, Inc. 201 E. Hawthorne St. Hartford, IL 62048

Name and Address of Facility:

The Premcor Refining Group, Inc. 201 E. Hawthorne St. Hartford, IL 62048 (Madison County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Keegan MacDonna at 217/782-0610.

The applicant is engaged in petroleum storage and distribution operations (SIC 5171). Plant operation results in an average discharge of 0.35 MGD of groundwater, cooling tower blowdown, boiler blowdown, tank bottom water, truck wash water, general maintenance water, tank cleaning water, hydrostatic test water, and stormwater from Outfall 001 and an intermittent discharge of stormwater runoff from Outfall 002.

The applicant requested the addition of a new outfall, Outfall 003, for discharges of treated dewaters from Lagoons #1-3 and the site's former borrow pit at a design average flow rate of 7.16 MGD. Outfall 003 will also discharge stormwater runoff on an intermittent basis. Once the dewatering process is complete, Outfall 003 will discharge stormwater only.

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Application is made for existing discharges which are located in Madison County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

<u>Outfall</u>	Receiving Stream	<u>Latitude</u>		<u>Longitude</u>		Stream Classification	Integrity <u>Rating</u>
001	Mississippi River	38° 50′ 07.19″	North	90° 6′ 19.79″	West	General Use	Not Rated
002	Unnamed Ditch Tributary to Mississippi River	38° 50' 10"	North	90° 4' 28"	West	General Use	Not Rated
003	Mississippi River	38° 50' 6.97"	North	90° 6' 20.05"	West	General Use	Not Rated

To assist you further in identifying the location of the discharge please see the attached map.

The stream segment receiving the discharge from Outfall 002 is not on the 2020/2022 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication - Integrating Multiple Taxa in a Biological Stream Rating System.

The stream segment J-05 receiving the discharge from Outfall 001 and Outfall 003 is on the 2020/2022 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication - Integrating Multiple Taxa in a Biological Stream Rating System.

The following parameters have been identified as the pollutants causing impairment:

Potential Cause:

**Designated Use:** 

Aldrin, Dieldrin, Endrin, Heptachlor, Mercury, Mirex,

Fish Consumption

Polychlorinated Biphenyls, and Toxaphene

The discharges from the facility shall be monitored and limited at all times as follows:

	LOAD LIM <u>DAF (</u>	,	CONCENTRATION <u>LIMITS mg/l</u>			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall 001:						
Flow (MGD)						35 IAC 309.146
рН				6 – 9	s.u.	35 IAC 304.125
Temperature						35 IAC 302.211
BOD₅	133	400	35 IAC 304.120(b)	20	40	35 IAC 304.120(b)
Total Suspended Solids	166	500	35 IAC 304.120(b)	25	50	35 IAC 304.120(b)
Oil & Grease	100	300	35 IAC 304.124	15	30	35 IAC 304.124
Phenols	2	6	35 IAC 304.124	0.3	0.6	35 IAC 304.124
Chromium (Total)	6.7	20	35 IAC 304.124	1	2	35 IAC 304.124
Chromium (Hexavalent)	0.67	2	35 IAC 304.124	0.1	0.2	35 IAC 304.124
Benzene		0.6	40 CFR 125.3		0.05	40 CFR 125.3
Total BETX		7.5	35 IAC 304.124		0.75	35 IAC 304.124
Total PNA's		1.0	40 CFR 125.3		0.1	40 CFR 125.3
Ammonia (as N)				Monito	or Only	

		ITS lbs/day ( <u>DMF)</u>		CONCENTRATION <u>LIMITS mg/l</u>		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall 002:						
SWPPP						
Outfall 003:						
Flow (MGD)						35 IAC 309.146
рН				6-9	s.u.	35 IAC 304.125
BOD₅				20	40	35 IAC 304.120(b)
Total Suspended Solids				25	50	35 IAC 304.120(b)
Copper				0.5	1	304.124
Iron (total)				2	4	304.124
Manganese				1	2	304.124
Nickel				0.0095	0.1565	302.208
SWPPP						

Load Limit Calculations (Outfall 001):

A. Load limit calculations for the following pollutant parameters were based on an average flow of 0.8 MGD and a maximum flow of 1.2 MGD and using the formula of average or maximum flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day):

The facility has configured their wastewater treatment plant to a DAF of 1.25 MGD and a DMF of 1.5 MGD, but will be able to meet the previous load limits based on 0.8 MGD DAF and 1.2 MGD DMF.

Sample data provided by the facility for total residual chlorine (TRC) showed that it was present in the lagoons discharging to Outfall 003 at concentrations higher than established BPJ limits for TRC. The lab that analyzed the samples confirmed that the reported TRC concentration was a false positive due to interference in the lab method. TRC is not expected to be present in the lagoons, as they did not receive chlorinated wastewater. No TRC limit has been included for Outfall 003.

The following explain the conditions of the proposed permit:

Special Conditions clarify flow monitoring and reporting, pH, thermal discharges, monitoring location, re-opener, Discharge Monitoring Report submission, Class K Operator, water quality standards, FOG sampling requirements, stormwater BAT/BCT (Outfall 001 only), Total PNA's definition, stormwater only at Outfall 002, and Stormwater Pollution Prevention Plan Requirements.

# Antidegradation Assessment NPDES Permit No. IL0001244

The subject facility has applied for an NPDES permit renewal for construction of a new outfall to support the closure of the #1, #2, and #3 lagoons, and the former borrow pit in Hartford, Madison County, Illinois. The facility is proposing to address the Consent Order that requires closure of the lagoons and former borrow pit. The lagoons and borrow pit require dewatering of stormwater that has collected, as well as capping of the sediments to control release of hydrocarbons. The lagoons had functioned as oxidation lagoons for the disposal of refinery wastes, and currently only receives water from stormwater and overflow from the Mississippi River under extremely high-flow conditions.

A Sediment Path Forward Approach (SPFA), and remediation goals were developed due to the presence of constituents of potential concern (COPCs) in the sediments. The SPFA involves dry capping the #1 and #2 Lagoons by isolating and containing the impacted sediments using a geosynthetic barrier, followed by a clean, imported soil cover and vegetation. The #3 Lagoon did not exhibit the same impact as the #1 and #2 Lagoons so it will be converted with a layer of soil cover and vegetated. The former borrow pit will be converted to a sediment basin for treatment of stormwater runoff from the covered #1 Lagoon, and a second sediment basin will be constructed at the western portion of the #2 Lagoon.

The project will consist of three phases. Pre-construction will concentrate on surface and shoreline preparations, access road

construction, water treatment system installation and lagoon dewatering pump stations, and construction of the new outfall. The construction phase will include construction of dikes for individual cell creation, dewatering maintenance, cap and cover construction, borrow pit conversion to sediment basin, surface grading and vegetation of #1 and #2 Lagoons, and soil cover and vegetation for the #3 Lagoon. The post-construction phase will include the cover system maintenance and monitoring, outlet structure removal, if necessary, in order to convert the sediment basins to vegetated swales.

The lagoons and former borrow pit are located near the existing Outfall 001. A new, larger outfall, Outfall 003, will be constructed to enable faster discharge during the initial dewatering period, to allow for remediation project associated discharge to remain separate from the current outfall discharge. Flow controls will also be included in the design.

A temporary treatment system will be utilized as water quality conditions warrant its use throughout the construction phase of the project. The treatment system will no longer be needed once #1 and #2 Lagoons are capped. Stormwater will be directed to one of two sedimentation basins. Sed Basin 1, to be located in the former borrow pit, and Sed Basin 2, to be constructed at the western end of #2 Lagoon and would allow for stormwater-based sediment capture while vegetation develops on the lagoon covers. Water from the soil cover will be routed through Sed Basin 2. All flows would be considered non-impacted once remediation is completed and sedimentation basins are regraded.

Information used in this review was obtained from the permit application and antidegradation assessment dated October 4, 2023, November 17, 2023, November 30, 2023, and August 21, 2024.

# **Identification and Characterization of the Affected Water Body**

Outfall 003 would discharge to the Mississippi River at a point where 21,620 cfs of flow exists upstream of the outfalls during critical 7Q10 low-flow conditions. The Mississippi River is classified as a General Use Water. The Mississippi River is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, nor is it given an integrity rating in that document. The Mississippi River, Waterbody Segment, IL\_J-05, is listed on the 2020/2022 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption with potential caused given as aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls (PCBs), and toxaphene. Aesthetic quality, aquatic life, primary contact, and public and food processing water supply uses are fully supported. This segment of the Mississippi River is subject to enhanced dissolved oxygen standards.

## Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses

Sampling events took place in October 2020 and July 2022. Sampling was done at varying depths and locations within the lagoons as well as sampling after bottom sediment was disturbed during the July 2022 sampling event.

General chemistry, inorganics, and field parameters were analyzed. Of those parameters sampled, 7 were above the water quality standard: total residual chlorine (TRC), dissolved oxygen (DO), pH, iron, lead, nickel, and zinc. For the four metals parameters which exceeded, the standard was listed in the dissolved form, while the value measured during the 2020 sampling event was in total form. The metals parameters that were above the standard, based on the total fraction, were re-assessed based on the dissolved fraction during the 2022 sampling event. All four dissolved metals were below the applicable dissolved standard indicating metals are not anticipated to exceed the standard when the Lagoons are being dewatered. The two field parameters exceeding the standards, pH and DO, were measured during the July 2022 sampling event. Both pH and DO were within the allowable range in the October 2020 sampling event. These shifts in the parameters are believed to be caused by natural events, triggered only in the hot summer timeframe.

### Fate and Effect of Parameters Proposed for Increased Loading

Treatment will consist of sand filters, multi-media bag filters, multi-media organoclay and GAC filters, and pH neutralization. The full list of equipment is included with the application documents.

The proposed treatment of the effluent from proposed Outfall 003 involves different stages of constituent reduction. Initially, water will be pumped from the #1 and #3 Lagoons into the #2 Lagoon, and from the #2 Lagoon, water will be pumped to a 250,000-gallon modular tank. Equalization will occur in the tank by providing a constant flow rate over time, along with hydraulic grades steady, and allowing solids to settle and any residues to float on the surface. Two 1,000 gpm pumps will transfer water from the modular tank to one of two 21,000-gallon frac tanks for additional settling.

The water will then be pumped from the frac tanks to the filtration part of the water treatment system.

This filtration system includes sand filters, bag filters, multi-media filters which consist of organoclay and granular activated carbon (GAC), and GAC filters. Below are details about the filtration system:

# Sand Filter

- Ability to handle flow rates between 1,000 to 1,500 gpm with backwash rate of 15 gpm per square foot of vessel area.
  - Vessel will contain 7 cubic feet of crushed rock (0.5 to 0.75 inches) at the bottom and 21 cubic feet of crushed silica sand (0.47 millimeter).
- Will be equipped with automatic backwash cycle to minimize recycled solids impact on the wastewater treatment system.
- Are expected to remove total suspended solids (TSS) down to 50 microns.

### Bag Filter

- Each will house twelve 1-micron filter bags to remove suspended solids from the wastewater stream down to 1 micron in order to help reduce the solids loading on the multi-media filter units.
- Assemblies will operate with one unit online and the other unit on standby.
  - Each unit has inlet and outlet pressure gauges to monitor differential pressure.
- Operators will replace bag filters when the differential pressure reaches 15 psi.
- Each unit weighs 1,720 pounds empty and is rated at 125 psi, with a maximum rating of 1,000 gpm using 1-micron bags.

#### Multi-media Filters

- Filters will use a combination of organoclay and GAC.
- The system will include two types of vessels: Tetrasolv or Clear Creek CM-360 media filtration units.
  - Both units are rated for 75 psi operating pressure with a maximum flow rate of 600 gpm per unit.
  - Each vessel weighs approximately 5,000 pounds empty and will hold 5,000 pounds of CETCO PM200 organoclay and 5,000 pounds of 8x30 mesh GAC.
- The final filtration step will be the GAC filters will be the same media filtration units as the multi-media filters, only filled with 10,000 pounds of 8x30 mesh GAC.

#### pH Neutralization System

- Will consist of an HCL bulk tote, two HCL chemical feed pumps, inline static mixer, and pH meter/controller that consists
  of a pH probe and controller.
- Prior to discharge, pH may require adjustment after exiting the GAC units as it is anticipated that based on the GAC
  filtration during the initial dewatering and the use of Portland cement as a solidification agent for the sediments in the
  Lagoons, that the pH may be too high to meet effluent requirements.

The effluent monitoring for the water treatment system will consist of continuous flow rate, turbidity, and pH monitoring. The flow rate and totalizer will be documented using a flow meter/totalizer with an online process turbidimeter and pH meter. These three devices will provide continuous data to the operator to record and monitor water treatment system performance. In addition, a minimum of biweekly grab samples of treatment system effluent will be collected before, between, and after the multimedia and carbon vessels to determine media performance. The effluent is proposed to be routed to the proposed Outfall 003

### Purpose and Social & Economic Benefits of the Proposed Activity

A May 2018 Consent Order requires closure of the lagoons and the former borrow pit located at the site. The project will require dewatering of stormwater that has collected in the lagoons and former borrow pit, followed by capping the sediments. The capping will control the migration of light non-aqueous phase liquids such as oil, gas, or diesel fuel, and meet the site-specific endpoints for lagoon closure. The proposed activities are critical to the protection of human health as well as the environment.

## Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation

The Applicant has reviewed various alternatives to discharging the dewatering effluent. Dewatering the lagoons and maintaining them in a dry state requires pumping/treating water at approximately 2,000 gpm. Options evaluated for managing this water included onsite/off-site treatment and discharge to the publicly owned treatment works (POTW). The local POTW was not able to accept the discharge on a routine basis due to infrastructure limitations such as adequate sewer pipe size and access through the USACE levee, and treatment capacity. Offsite treatment was evaluated but it was determined that similar restrictions in available infrastructure existed and would also likely require the same type of discharge.

It was determined that onsite treatment with discharge from a proposed new Outfall 003, adjacent to the existing Premcor outfall, was the most reasonable and practical solution. The least impactful alternative would be a no action alternative; however, this is not an acceptable alternative given the need to comply with the May 2018 Consent Order to close the Lagoons.

# Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities

An EcoCAT endangered species consultation (Project # 2502391) was submitted on August 21, 2024, to the Illinois Department of Natural Resources. The natural resource review provided by EcoCAT identified the following protected resources may be in the vicinity of the proposed action:

- Butterfly Mussel (Ellipsaria lineolata)
- Indiana Bat (Myotis sodalis)
- Spectaclecase Mussel (Margaritifera monodonta)

"Due to the project scope and proximity to protected resources, the Department offers the following comments and recommends the following actions be taken to avoid adversely impacting protected natural areas in the vicinity of the project:

#### **Indiana Bat**

This project is in the vicinity of records for the State listed Indiana bat. Due to the potential presence of the bat on the project site, the Department recommends any tree removal, if necessary, occur between November 15th and March 31st when the bats are likely hibernating off site. If these dates cannot be accommodated, a field visit should be performed by a qualified individual (biologist, forester, or others who have been trained accordingly) to determine if suitable trees are present to provide Indiana bat habitat. If suitable habitat trees are found within the project area, they should be clearly flagged and/or marked and shall not be cut between April 1st – November 14th when the bats are most likely to be present. Suitable habitat trees are defined as trees >5 inches diameter breast height (dbh), with exfoliating bark and other features potentially utilized by roosting bats. All non-suitable trees may be cut at any time.

## **Butterfly Mussel and Spectaclecase Mussel**

The project is adjacent to a reach of the Mississippi River known to contain mussel beds and two State listed freshwater mussel species including the butterfly and spectaclecase. Due to the potential presence of these species within the river adjacent to the lagoon closure activities, the Department recommends the following actions:

- 1. Water pumped from the lagoon should be filtered to ensure sediment removal prior to discharging into the river.
- Water pumped from the lagoon should not be discharged to the river if the IEPA determined toxicity is detrimental living organisms.
- 3. Pumped water has potential to scour the river bottom due to discharge velocity. The velocity should be managed in way to prevent scouring and the adverse impacts this type of disturbance can have on the mussels; therefore, velocity dissipation should be incorporated into project planning. This could include instream dissipation or discharge onto the bank and ensure velocity is dissipated in a manner that prevents scouring of the bank and streambed. The Department recommends the use of the Illinois Urban Manual or equivalent document to select erosion control best management practices.
- 4. If the project proponent cannot devise a plan to ensure water quality and erosion do not become problematic, then an aquatic survey to determine the presence or absence of freshwater mussels at the river discharge point should be conducted. If this option is pursued, permits would need to be obtained from the IDNR and a draft mussel survey plan would need to be submitted prior to initiating the survey effort. Water temperature over 59°F would be required prior to initiating survey efforts. If mussels are located by instream sampling and impacts cannot be avoided, then an Incidental Take Authorization (ITA) from the IDNR would need to be obtained prior to starting lagoon closure activities. The ITA process can take a minimum of 4 months or possibly longer to complete.
- 5. The following are links to additional information pertaining to IDNR permits:
  - · General Scientific Permits (illinois.gov)
  - ITA Guidelines Document\_9-23-2021.pdf (illinois.gov)"

Given the above recommendations are adopted, the Department has determined that impacts to the Indiana bat, spectaclecase mussel, and butterfly mussel are unlikely. The Department has determined impacts to other protected resources in the vicinity of the project location are also unlikely.

Consultation under 17 III. Adm. Code Part 1075 was terminated.

## **Agency Conclusion**

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 III. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time this assessment was written. We tentatively find that the proposed activity will result in the attainment of water quality standards. All technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity. This activity will benefit the community by fulfilling the May 2018 Consent Order in order to protect human health and the environment. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.

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Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: Issue Date: Effective Date:

Name and Address of Permittee: Facility Name and Address:

The Premcor Refining Group, Inc.

201 E. Hawthorne St.

Hartford, IL 62048

(Madison County)

The Premcor Refining Group, Inc.

201 E. Hawthorne St.

Hartford, IL 62048

(Madison County)

Discharge Number and Name: Receiving Waters:

001 Treated Wastewater Mississippi River

002 Stormwater Runoff Unnamed ditch tributary to Mississippi River

003 Lagoon #1-3 Dewaters, Former Borrow Pit Dewaters, and Mississippi River

Stormwater Runoff

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Darin E. LeCrone, P.E. Manager, Permit Section Division of Water Pollution Control

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## **Effluent Limitations and Monitoring**

1. From the effective date of this permit until the expiration date, the effluent of the following discharges shall be monitored and limited at all times as follows:

LOAD LIMITS lbs/day

	DAF (DMF)			S mg/l		
PARAMETER	30 DAY	DAILY	30 DAY	DAILY	SAMPLE	SAMPLE
	AVERAGE	MAXIMUM	AVERAGE	MAXIMUM	FREQUENCY	TYPE

CONCENTRATION

Outfall 001 – Treated Wastewater (DAF = 1.25 MGD)

The discharge consists of:

- 1. Groundwater
- 2. Cooling Tower Blowdown
- 3. Boiler Blowdown
- 4. Tank Bottom Water
- 5. Stormwater\*\*\*\*
- 6. Hydrostatic Test Water
- 7. General Maintenance Water
- 8. Truck Wash Water
- 9. Tank Cleaning Water

Flow (MGD)	See Special Con	dition 1.			Daily	Continuous
рН	See Special Con	dition 2.			2/Month	Grab
Temperature	See Special Con	dition 3.			2/Month	Single-Read
BOD₅	133	400	20	40	2/Month	Composite
Total Suspended Solids	166	500	25	50	2/Month	Composite
Oil & Grease**	100	300	15	30	2/Month	Composite
PhenoIs	2	6	0.3	0.6	1/Month	Composite
Chromium (Total)	6.7	20	1	2	1/Quarter*	Composite
Chromium (Hex)	0.67	2	0.1	0.2	1/Quarter*	Composite
Benzene		0.6		0.05	1/Quarter*	Grab
Total BETX***		7.5		0.75	1/Quarter*	Calculation
Total PNAs****		1.0		0.1	1/Quarter*	Calculation
Ammonia (as N)			Monitor	Only	2/Year*	Composite

<sup>\* -</sup> The results of quarterly sampling shall be submitted along with the March, June, September, and December monthly DMRs. The results of 2/Year sampling shall be submitted along with the March and September monthly DMRs.

Outfall 002 – Stormwater Runoff\* (Intermittent Discharge)

<sup>\*\* -</sup> See also Special Condition 9.

<sup>\*\*\* -</sup> Total BETX shall be defined as the arithmetic sum of analytical results of benzene, ethylbenzene, toluene, and xylenes.

<sup>\*\*\*\* -</sup> See Special Condition 11.

<sup>\*\*\*\*\* -</sup> See Special Condition 10.

<sup>\*</sup> See Special Condition 14.

# **Effluent Limitations and Monitoring**

1. From the effective date of this permit until the expiration date, the effluent of the following discharges shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day CONCENTRATION <u>DAF (DMF)</u> <u>LIMITS mg/l</u>					
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall 003 – Lagoon #1- (Intermittent Discharge)	3 and Former Borro	ow Pit Dewaters (D	AF = 2.16 MGD), ar	nd Stormwater**		
Flow (MGD)	See Special Con	dition 1.			Daily*	Measure
рН	See Special Con-	dition 2.			Daily*	Grab
BOD <sub>5</sub>			20	40	1/Week*	Composite
Total Suspended Solids			25	50	1/Week*	Composite
Copper			0.5	1.0	1/Week*	Composite
Iron (total)			2.0	4.0	1/Week*	Composite
Manganese			1.0	2.0	1/Week*	Composite
Nickel			0.0095	0.1565	1/Week*	Composite

<sup>\*</sup>When discharging dewaters. Sampling is not required for discharges consisting only of stormwater.

<sup>\*\*</sup>See Special Condition 14.

## **Special Conditions**

<u>SPECIAL CONDITION 1</u>. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum on the Discharge Monitoring Report.

<u>SPECIAL CONDITION 2</u>. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. This facility meets the allowed mixing criteria for thermal discharges pursuant to 35 IAC 302.102. No reasonable potential exists for the discharge to exceed thermal water quality standards. This determination is based a design average flow of 0.8 MGD and a maximum effluent temperature of 56.5°F during the months of January and February. No mixing is necessary for the other months since the water quality standard is met at the end of pipe. The permittee shall monitor the flow and temperature of the discharge prior to entry into the receiving water body. The monthly maximum value shall be reported on the monthly Discharge Monitoring Report. This permit may be modified to include formal temperature limitations should the results of the monitoring show that there is reasonable potential to exceed a thermal water quality standard. Modification of this permit shall follow public notice and opportunity for comment.

There shall be no abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions. The normal daily and seasonal temperature fluctuations which existed before the addition of heat due to other than natural causes shall be maintained.

<u>SPECIAL CONDITION 4</u>. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

<u>SPECIAL CONDITION 5</u>. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

<u>SPECIAL CONDITION 6</u>. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) electronic forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee is required to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA unless a waiver has been granted by the Agency. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, <a href="https://epa.illinois.gov/topics/water-quality/surface-water/netdmr.html">https://epa.illinois.gov/topics/water-quality/surface-water/netdmr.html</a>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 28th day of the following month, unless otherwise specified by the permitting authority.

Permittees that have been granted a waiver shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Attention: Compliance Assurance Section, Mail Code # 19 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

<u>SPECIAL CONDITION 7</u>. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

<u>SPECIAL CONDITION 8</u>. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 III. Adm. Code 302.

<u>SPECIAL CONDITION 9</u>. The composites for oil, fats, and greases shall consist of sample aliquots of approximately equal volume, a minimum of 100 milliliters, be collected at regular time intervals over a 24-hour period (8 aliquots total). A single sample formed by combining all the aliquots, and the solvent rinse of the container, would then be analyzed. The results of the single analysis is then reported for oil, fats, and grease.

<u>SPECIAL CONDITION 10</u>. The Agency has determined that the effluent limitations in this permit in Outfall 001 constitute BAT/BCT for storm water which is treated in the existing treatment facilities for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity,

## **Special Conditions**

and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

<u>SPECIAL CONDITION 11</u>. For the purpose of this permit, Total PNA's is defined as the arithmetic sum of the following polynuclear aromatic compounds: Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluorene, Fluorene, Indeno(1,2,3-c,d)pyrene, Naphthalene, Phenanthrene, and Pyrene.

SPECIAL CONDITION 12. For the purpose of this permit, Outfall 002 is limited to storm water, free from other wastewater discharges.

SPECIAL CONDITION 13. For the purpose of this permit, Outfall 001 is limited to groundwater, cooling tower blowdown, boiler blowdown, hydrostatic test water, tank bottom water, truck wash water, general maintenance water, tank cleaning water, and stormwater, treated in existing treatment system, free from other wastewater discharges. In the event the Permittee requires additional wastestreams, or in the event the Permittee requires additives other than those previously approved by this Agency, or in the event the Permittee needs to increase the feed rates or quantities of those additives, the Permittee shall notify the Agency in writing in accordance with the Standards condition, Attachment H.

### **SPECIAL CONDITION 14.**

## STORM WATER POLLUTION PREVENTION PLAN (SWPPP) - Outfalls 002 and 003

- A. A storm water pollution prevention plan shall be maintained by the permittee for the storm water associated with industrial activity at this facility. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. The permittee shall modify the plan if substantive changes are made or occur affecting compliance with this condition.
  - 1. Waters not classified as impaired pursuant to Section 303(d) of the Clean Water Act.
    - Unless otherwise specified by federal regulation, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.
  - 2. Waters classified as impaired pursuant to Section 303(d) of the Clean Water Act
    - For any site which discharges directly to an impaired water identified in the Agency's 303(d) listing, and if any parameter in the subject discharge has been identified as the cause of impairment, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations, the storm water pollution prevention plan shall adhere to a more restrictive design criteria.
- B. The operator or owner of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request.
  - Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.
- C. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.
- D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a quarterly visual observation required by paragraph H or the annual facility inspection required by paragraph I of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within 30 days of any proposed construction or operational changes at the facility, and shall be provided to the Agency for review upon request.
- E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:
  - 1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm

water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate. Any map or portion of map may be withheld for security reasons.

## 2. A site map showing:

- The storm water conveyance and discharge structures;
- ii. An outline of the storm water drainage areas for each storm water discharge point;
- iii. Paved areas and buildings;
- iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
- v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
- vi. Surface water locations and/or municipal storm drain locations
- vii. Areas of existing and potential soil erosion;
- viii. Vehicle service areas;
- ix. Material loading, unloading, and access areas.
- x. Areas under items iv and ix above may be withheld from the site for security reasons.
- A narrative description of the following:
  - i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
  - ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
  - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;
  - iv. Industrial storm water discharge treatment facilities;
  - v. Methods of onsite storage and disposal of significant materials.
- 4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities. Also provide a list of any pollutant that is listed as impaired in the most recent 303(d) report.
- 5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
- 6. A summary of existing sampling data describing pollutants in storm water discharges.
- F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:
  - Storm Water Pollution Prevention Personnel Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
  - 2. Preventive Maintenance Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
  - 3. Good Housekeeping Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
  - 4. Spill Prevention and Response Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill cleanup equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.

- 5. Storm Water Management Practices Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:
  - i. Containment Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff. To the maximum extent practicable storm water discharged from any area where material handling equipment or activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water should not enter vegetated areas or surface waters or infiltrate into the soil unless adequate treatment is provided.
  - ii. Oil & Grease Separation Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges.
  - iii. Debris & Sediment Control Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges.
  - iv. Waste Chemical Disposal Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.
  - v. Storm Water Diversion Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination. Minimize the quantity of storm water entering areas where material handling equipment of activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water using green infrastructure techniques where practicable in the areas outside the exposure area, and otherwise divert storm water away from exposure area.
  - vi. Covered Storage or Manufacturing Areas Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.
  - vii. Storm Water Reduction Install vegetation on roofs of buildings within adjacent to the exposure area to detain and evapotranspirate runoff where precipitation falling on the roof is not exposed to contaminants, to minimize storm water runoff; capture storm water in devices that minimize the amount of storm water runoff and use this water as appropriate based on quality.
- 6. Sediment and Erosion Prevention The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion. The plan shall describe measures to limit erosion.
- 7. Employee Training Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
- 8. Inspection Procedures Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.
- G. Non-Storm Water Discharge The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharge. The certification shall include a description of any test for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible.
- H. Quarterly Visual Observation of Discharges The requirements and procedures for quarterly visual observations are applicable to all outfalls covered by this condition.
  - 1. You must perform and document a quarterly visual observation of a storm water discharge associated with industrial activity from each outfall. The visual observation must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, you are excused from the visual observations requirement for that quarter, provided you document in your records that no runoff occurred. You must sign and certify the document.
  - 2. Your visual observation must be made on samples collected as soon as practical, but not to exceed 1 hour or when the runoff or snow melt begins discharging from your facility. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measureable (greater than 0.1 inch rainfall) storm event. The observation must document: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. If visual observations indicate any unnatural color, odor, turbidity, floatable material, oil sheen or other indicators of storm water pollution, the permittee shall obtain a sample and monitor for the parameter or the list of pollutants in Part E.4.

- 3. You must maintain your visual observation reports onsite with the SWPPP. The report must include the observation date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.
- 4. You may exercise a waiver of the visual observation requirement at a facility that is inactive or unstaffed, as long as there are no industrial materials or activities exposed to storm water. If you exercise this waiver, you must maintain a certification with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water.
- 5. Representative Outfalls If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, you may conduct visual observations of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s).
- 6. The visual observation documentation shall be made available to the Agency and general public upon written request.
- I. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.
- J. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated there under, and Best Management Programs under 40 CFR 125.100.
- K. The plan is considered a report that shall be available to the public at any reasonable time upon request.
- L. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.
- M. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirement imposed by the operator of the municipal system

# Construction Authorization

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

- N. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee there upon waives all rights there under.
- O. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.
- P. Plans and specifications of all treatment equipment being included as part of the stormwater management practice shall be included in the SWPPP.
- Q. Construction activities which result from treatment equipment installation, including clearing, grading and excavation activities which result in the disturbance of one acre or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding the required permit(s).

## REPORTING

R. The annual inspection report shall include results of the annual facility inspection which is required by Part I of this condition. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s). The annual inspection report is considered a public document that shall be available at any reasonable time upon request.

- S. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.
- T. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.
- U. The permittee shall retain the annual inspection report on file at least 3 years. This period may be extended by request of the Illinois Environmental Protection Agency at any time.

Annual inspection reports shall be submitted electronically at <a href="mailto:epa.prmtspeccondtns@illinois.gov">epa.prmtspeccondtns@illinois.gov</a> or mailed to the following address:

Illinois Environmental Protection Agency Bureau of Water Compliance Assurance Section Annual Inspection Report 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276