



**STATE OF IOWA  
DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROGRAM  
AMENDMENT TO NPDES PERMIT**

Iowa NPDES Permit #: 6800100  
Date of Issuance: August 1, 2023  
Date of Expiration: July 31, 2028  
Date of this Amendment: **January 1, 2024**  
EPA Number: IA0063762

**Name and Mailing Address of Applicant:**

CARGILL, INC.  
17540 MONROE WAPELLO RD  
EDDYVILLE, IA 52553

**Identity and Location of Facility:**

CARGILL, INC.  
17540 MONROE WAPELLO RD  
EDDYVILLE, IA 52553  
Township 73N, Range 16W, Section 12, Monroe County

Pursuant to the authority Iowa Code Section 455B.174, and of Rule 567--64.3, Iowa Administrative Code, the Director of the Iowa Department of Natural Resources has issued the above referenced permit. Pursuant to the same authority the Director hereby amends said permit as set forth below:

This amendment extends the construction date, optimization date, and submittal of effluent data date in the Outfall 005 Nutrient Reduction Strategy schedule for installing treatment to reduce total nitrogen and total phosphorus. The extension is needed due to long lead times needed to procure equipment. This amendment also removes Outfalls 002 and 003, as the sanitary plant has been closed. Sanitary wastewater is now stored and hauled to the city for treatment. Please replace your entire permit with the attached permit.

For the Department of Natural Resources:

By \_\_\_\_\_  
Wendy Hieb  
NPDES Section  
ENVIRONMENTAL SERVICES DIVISION

**IOWA DEPARTMENT OF NATURAL RESOURCES**  
**National Pollutant Discharge Elimination System (NPDES) Permit**

**OWNER NAME & ADDRESS**

CARGILL, INC.  
17540 MONROE WAPELLO RD  
EDDYVILLE, IA 52553-0000

**FACILITY NAME & ADDRESS**

CARGILL, INC.  
17540 MONROE WAPELLO RD  
EDDYVILLE, IA 52553-

Section 12, T73N, R16W  
Monroe County

**IOWA NPDES PERMIT NUMBER:** 6800100  
**DATE OF ISSUANCE:** 08/01/2023  
**DATE OF EXPIRATION:** 07/31/2028

**YOU ARE REQUIRED TO FILE FOR RENEWAL  
OF THIS PERMIT BY:** 02/02/2028  
**EPA NUMBER:** IA0063762

This permit is issued pursuant to the authority of section 402(b) of the Clean Water Act (33 U.S.C. 1342(b)), Iowa Code section 455B.174, and rule 567-64.3, Iowa Administrative Code. You are authorized to operate the disposal system and to discharge the pollutants specified in this permit in accordance with the effluent limitations, monitoring requirements and other terms set forth in this permit.

Pursuant to rule 561-7.4, Iowa Administrative Code, you may appeal any condition of this permit by filing a written notice of appeal and request for administrative hearing with the director of the department within 60 days of permit issuance.

Any existing, unexpired Iowa operation permit or Iowa NPDES permit previously issued by the department for the facility identified above is revoked by the issuance of this permit. This provision does not apply to any authorization to discharge under the terms and conditions of a general permit issued by the department or to any permit issued exclusively for the discharge of stormwater.

FOR THE DEPARTMENT OF NATURAL RESOURCES

By \_\_\_\_\_

Wendy Hieb  
NPDES Section, Environmental Services Division

**Facility Name:** CARGILL, INC.

**Permit Number:** 6800100

**Outfall No.:** 005 RO REJECT, COOLING TOWER BLOWDOWN, WATER TREATMENT RESIDUALS, STORMWATER, AND TREATED PROCESS WASTEWATER FROM CORN WET MILLING AND PRODUCTION OF CITRIC ACID AND RELATED PRODUCTS, GERM, ETHANOL, VITAMIN E, R & D ACTIVITIES, OUTDOOR MANUFACTURING AND WASTEWATER FROM AJINOMOTO, WACKER CHEMICAL, EDDYVILLE CHLOR-ALKALI, QORE, AND LEACHATE FROM CARGILL'S COAL CUMBUSTION RESIDUE LANDFILL.

**Receiving Stream:** DES MOINES RIVER

**Route of Flow:** DES MOINES RIVER

Class A1 waters are primary contact recreational use waters in which recreational or other uses may result in prolonged and direct contact with the water, involving considerable risks of ingesting water in quantities sufficient to pose a health hazard. Such activities would include, but not be limited to, swimming, diving, water skiing, and water contact recreational canoeing.

Waters designated Class B(WW1) are those in which temperature, flow and other habitat characteristics are suitable to maintain warm water game fish populations along with a resident aquatic community that includes a variety of native nongame fish and invertebrate species. These waters generally include border rivers, large interior rivers, and the lower segments of medium-size tributary streams.

Waters designated Class HH are those in which fish are routinely harvested for human consumption or waters both designated as a drinking water supply and in which fish are routinely harvested for human consumption.

**Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited.**

Facility Name: CARGILL, INC.

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**Effluent Limitations:**

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

<b>Outfall: 005 Effective Dates: 08/01/2023 to 07/31/2028</b>			
<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>	<u>Limits</u>
<b>BIOCHEMICAL OXYGEN DEMAND (BOD5)</b>			
	Yearly	30 Day Average	6328 LBS/DAY
	Yearly	Daily Maximum	17857 LBS/DAY
<b>TOTAL SUSPENDED SOLIDS</b>			
	Yearly	30 Day Average	6841 LBS/DAY
	Yearly	Daily Maximum	20523 LBS/DAY
<b>ACUTE TOXICITY, CERIODAPHNIA</b>			
	Yearly	Daily Maximum	1 NO TOXICITY
<b>ACUTE TOXICITY, PIMEPHALES</b>			
	Yearly	Daily Maximum	1 NO TOXICITY
<b>PH</b>			
	Yearly	Daily Maximum	9.0 STD UNITS
	Yearly	Daily Minimum	6.0 STD UNITS
<b>BATHYMETRIC REPORT</b>			
	Yearly	Daily Maximum	1 Yes/ No
<b>DIFFUSER VALIDATION REPORT</b>			
	Yearly	Daily Maximum	1 Yes/ No

**Facility Name:** CARGILL, INC.

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### **Monitoring and Reporting Requirements**

(a) Samples and measurements taken shall be representative of the volume and nature of the monitored wastewater.

(b) Analytical and sampling methods specified in 40 CFR Part 136 or other methods approved in writing by the department shall be utilized. All effluent samples for which a limit applies must be analyzed using sufficiently sensitive methods (i.e. testing procedures) approved under 567 IAC Chapter 63 and 40 CFR Part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter I, subchapter N or O.

For the purposes of this paragraph, an approved method is sufficiently sensitive when:

- (1) the method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or
- (2) the method has the lowest ML of the approved analytical methods for the measured pollutant or pollutant parameter.

Samples collected for operational testing need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

(c) You are required to report all data including calculated results needed to determine compliance with the limitations contained in this permit. The results of any monitoring not specified in this permit performed at the compliance monitoring point and analyzed according to 40 CFR Part 136 shall be included in the calculation and reporting of any data submitted in accordance with this permit. This includes daily maximums and minimums, 30-day averages and 7-day averages for all parameters that have concentration (mg/l) and mass (lbs/day) limits. In addition, flow data shall be reported in million gallons per day (MGD).

(d) Records of monitoring activities and results shall include for all samples: the date, exact place and time of the sampling; the dates the analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses.

(e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

(f) Operational performance monitoring for treatment unit process control shall be conducted to ensure that the facility is properly operated in accordance with its design. The results of any operational performance monitoring need not be reported to the department, but shall be maintained in accordance with rule 567 IAC 63.2 (455B). The results of any operational performance monitoring specified in this permit shall be submitted to the department in accordance with these reporting requirements.

(g) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.

**Facility Name:** CARGILL, INC.

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<b>Outfall</b>	<b>Wastewater Parameter</b>	<b>Sample Frequency</b>	<b>Sample Type</b>	<b>Monitoring Location</b>
The following monitoring requirements shall be in effect from 08/01/2023 to 07/31/2028				
005	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	TREATMENT PROCESS 02 RAW WASTE
005	PH	7/WEEK OR DAILY	GRAB	TREATMENT PROCESS 02 RAW WASTE
005	TEMPERATURE	7/WEEK OR DAILY	GRAB	TREATMENT PROCESS 02 RAW WASTE
005	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	TREATMENT PROCESS 01 RAW WASTE
005	PH	7/WEEK OR DAILY	GRAB	TREATMENT PROCESS 01 RAW WASTE
005	TEMPERATURE	7/WEEK OR DAILY	GRAB	TREATMENT PROCESS 01 RAW WASTE
005	BIOCHEMICAL OXYGEN DEMAND (BOD5)	3 TIMES PER WEEK	24 HOUR COMPOSITE	RAW WASTE - TOTAL
005	FLOW	7/WEEK OR DAILY	CALCULATED	RAW WASTE - TOTAL
005	NITROGEN, TOTAL (AS N)	1 TIME PER WEEK	24 HOUR COMPOSITE	RAW WASTE - TOTAL
005	NITROGEN, TOTAL KJELDAHL (AS N)	1 EVERY 2 WEEKS	24 HOUR COMPOSITE	RAW WASTE - TOTAL
005	PHOSPHORUS, TOTAL (AS P)	1 TIME PER WEEK	24 HOUR COMPOSITE	RAW WASTE - TOTAL
005	TOTAL SUSPENDED SOLIDS	7/WEEK OR DAILY	24 HOUR COMPOSITE	RAW WASTE - TOTAL
005	ACUTE TOXICITY, CERIODAPHNIA	1 EVERY 3 MONTHS	24 HOUR COMPOSITE	FINAL EFFLUENT AT EFFLUENT METERING AND SAMPLING STATION
005	ACUTE TOXICITY, PIMEPHALES	1 EVERY 3 MONTHS	24 HOUR COMPOSITE	FINAL EFFLUENT AT EFFLUENT METERING AND SAMPLING STATION
005	AMMONIA NITROGEN (N)	7/WEEK OR DAILY	24 HOUR COMPOSITE	FINAL EFFLUENT AT EFFLUENT METERING AND SAMPLING STATION
005	BATHYMETRIC REPORT	ONCE PER PERMIT CYCLE	MEASUREMENT	IN-STREAM EFFLUENT DIFFUSER
005	BIOCHEMICAL OXYGEN DEMAND (BOD5)	3 TIMES PER WEEK	24 HOUR COMPOSITE	FINAL EFFLUENT AT EFFLUENT METERING AND SAMPLING STATION

**Facility Name:** CARGILL, INC.

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<b>Outfall</b>	<b>Wastewater Parameter</b>	<b>Sample Frequency</b>	<b>Sample Type</b>	<b>Monitoring Location</b>
The following monitoring requirements shall be in effect from 08/01/2023 to 07/31/2028				
005	DIFFUSER VALIDATION REPORT	1 EVERY 12 MONTHS	VISUAL	IN-STREAM EFFLUENT DIFFUSER
005	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	FINAL EFFLUENT AT EFFLUENT METERING AND SAMPLING STATION
005	NITROGEN, TOTAL (AS N)	1 TIME PER WEEK	24 HOUR COMPOSITE	FINAL EFFLUENT AT EFFLUENT METERING AND SAMPLING STATION
005	PH	7/WEEK OR DAILY	GRAB	FINAL EFFLUENT AT EFFLUENT METERING AND SAMPLING STATION
005	PHOSPHORUS, TOTAL (AS P)	1 TIME PER WEEK	24 HOUR COMPOSITE	FINAL EFFLUENT AT EFFLUENT METERING AND SAMPLING STATION
005	TEMPERATURE	7/WEEK OR DAILY	GRAB	FINAL EFFLUENT AT EFFLUENT METERING AND SAMPLING STATION
005	TOTAL SUSPENDED SOLIDS	7/WEEK OR DAILY	24 HOUR COMPOSITE	FINAL EFFLUENT AT EFFLUENT METERING AND SAMPLING STATION
005	VISUAL OBSERVATION	1 EVERY MONTH	VISUAL	IN-STREAM EFFLUENT DIFFUSER

**Facility Name:** CARGILL, INC.

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### Special Monitoring Requirements

**Outfall # Description**

005 NITROGEN, TOTAL (AS N)

Total nitrogen shall be determined by testing for Total Kjeldahl Nitrogen (TKN) and nitrate + nitrite nitrogen and reporting the sum of the TKN and nitrate + nitrite results (reported as N). Nitrate + nitrite can be analyzed together or separately.

BIOCHEMICAL OXYGEN DEMAND (BOD5)

Take a 24-hour composite sample from Plant 1 and another 24-hour composite sample from Plant 2. Use the Plant 1 24-hr flow and Plant 1 sample concentration to calculate the mass of the pollutant for Plant 1. Repeat the same process for Plant 2. Sum the Plant 1 mass and Plant 2 mass to arrive at the total raw waste mass. Use the total raw waste flow (sum of Plant 1 and Plant 2 24-hr total flows) to calculate the total raw waste concentration.

NITROGEN, TOTAL (AS N)

Take a 24-hour composite sample from Plant 1 and another 24-hour composite sample from Plant 2. Use the Plant 1 24-hr flow and Plant 1 sample concentration to calculate the mass of the pollutant for Plant 1. Repeat the same process for Plant 2. Sum the Plant 1 mass and Plant 2 mass to arrive at the total raw waste mass. Use the total raw waste flow (sum of Plant 1 and Plant 2 24-hr total flows) to calculate the total raw waste concentration.

NITROGEN, TOTAL KJELDAHL (AS N)

Take a 24-hour composite sample from Plant 1 and another 24-hour composite sample from Plant 2. Use the Plant 1 24-hr flow and Plant 1 sample concentration to calculate the mass of the pollutant for Plant 1. Repeat the same process for Plant 2. Sum the Plant 1 mass and Plant 2 mass to arrive at the total raw waste mass. Use the total raw waste flow (sum of Plant 1 and Plant 2 24-hr total flows) to calculate the total raw waste concentration.

TOTAL SUSPENDED SOLIDS

Take a 24-hour composite sample from Plant 1 and another 24-hour composite sample from Plant 2. Use the Plant 1 24-hr flow and Plant 1 sample concentration to calculate the mass of the pollutant for Plant 1. Repeat the same process for Plant 2. Sum the Plant 1 mass and Plant 2 mass to arrive at the total raw waste mass. Use the total raw waste flow (sum of Plant 1 and Plant 2 24-hr total flows) to calculate the total raw waste concentration.

PHOSPHORUS, TOTAL (AS P)

Take a 24-hour composite sample from Plant 1 and another 24-hour composite sample from Plant 2. Use the Plant 1 24-hr flow and Plant 1 sample concentration to calculate the mass of the pollutant for Plant 1. Repeat the same process for Plant 2. Sum the Plant 1 mass and Plant 2 mass to arrive at the total raw waste mass. Use the total raw waste flow (sum of Plant 1 and Plant 2 24-hr total flows) to calculate the total raw waste concentration.

FLOW

Report the sum of the 24-hour total flow from Plant 1 plus the 24-hour total flow from Plant 2.



**Facility Name:** CARGILL, INC.

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Outfall Number: 005

### **Ceriodaphnia and Pimephales Toxicity Effluent Testing**

1. For facilities that have been required to conduct toxicity testing by a previous NPDES permit, the initial quarterly toxicity test shall be conducted within three months (3) of permit reissuance.
2. The test organisms that are to be used for acute toxicity testing shall be *Ceriodaphnia dubia* and *Pimephales promelas*. The acute toxicity testing procedures used to demonstrate compliance with permit limits shall be those listed in 40 CFR Part 136 and adopted by reference in rule 567--63.1(1). The method for measuring acute toxicity is specified in USEPA, October 2002, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., EPA 821-R-02-012.
3. The diluted effluent sample must contain a minimum of 7.1 % effluent and no more than 92.9 % of culture water.
4. Two successive valid positive toxicity results or three positive results out of five successive valid effluent toxicity tests will require a toxicity reduction evaluation to be completed to eliminate the toxicity.
5. A non-toxic test result shall be indicated as a "1" on the monthly operation report. A toxic test result shall be indicated as a "2" on the monthly operation report. DNR Form 542-1381 shall also be submitted to the DNR field office along with the monthly operation report.

### **Ceriodaphnia and Pimephales Toxicity Effluent Limits**

The maximum limit of "1" for the parameters Acute Toxicity, *Ceriodaphnia* and Acute Toxicity, *Pimephales* means no positive toxicity results.

Definition: "Positive toxicity result" means a statistical difference of mortality rate between the control and the diluted effluent sample. For more information, see USEPA, October 2002, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, U.S. Environmental Protection Agency, Office of Water, Washington, D.C., EPA 821-R-02-012.

**Facility Name:** CARGILL, INC.

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### **Design Capacity**

**Design:** Industrial Treatment Plant

The design capacity for the treatment works is specified in Construction Permit Number 2023-0344S, issued May 8, 2023. The treatment plant is designed to treat:

- \* An average dry weather (ADW) flow of 8.0 Million Gallons Per Day (MGD).
- \* An average wet weather (AWW) flow of 8.0 Million Gallons Per Day (MGD).
- \* A maximum wet weather (MWW) flow of 10.0 Million Gallons Per Day (MGD).
- \* A design 5-day biochemical oxygen demand (BOD5) load of 118,793 lbs/day.
- \* A design Total Kjeldahl Nitrogen (TKN) load of 5,214 lbs/day.
- \* A design Total Suspended Solids (TSS) load of 20,036 lbs/day

**Facility Name:** CARGILL, INC.

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### **Diffuser Special Monitoring Requirements**

#### **Monthly Visual Monitoring:**

At a frequency of at least once per month, the permittee shall visually observe the diffuser and record the observations in a log book. The permittee is required to visually observe and record the following items:

- Whether the diffuser and diffuser ports can be seen above or below the surface of the water;
- Whether the effluent dispersion pattern of the ports can be seen, and whether the patterns are uniform;
- Signs of non-uniform bubbling, uneven coloring or actual spraying of effluent above the water surface;
- Debris or materials that have collected on or may be obstructing the diffuser;
- General structural condition of the diffuser, diffuser ports, and protective materials; AND
- Actions taken, if applicable (i.e. corrective/ maintenance measures, adjustments of ports, removal of debris, etc.)

The log book entries shall be made available to the Department upon request. The permittee will indicate completion of the visual monitoring by entering a “1” in the “VISUAL” column on the day that the visual monitoring was completed on the Discharge Monitoring Report (DMR) spreadsheet.

#### **Annual Diffuser Performance Analysis:**

Minimum Requirements: Annually, by **August 1st**, the permittee is required to submit a Diffuser Performance Analysis report to the Department at both of the addresses shown below. The annual diffuser analysis should be performed at a stream flow as close as possible to stream critical low flow conditions.

The annual diffuser performance analysis should identify if all diffuser ports, that were active when the mixing zone percentage used in the current NPDES permit was established, are functioning properly. The annual diffuser performance analysis should also assess if rapid and uniform mixing is occurring within 100 feet downstream of the active diffuser ports with the stream flow as close as possible to critical low flow conditions.

If dye used in the Diffuser Performance Analysis shall meet the following requirements:

- 1) The Diffuser Performance Analysis shall use one of the following dyes:
  - (a) Rhodamine WT dye
  - (b) FWT red dye tablets
  - (c) FLT Yellow/Green Liquid Concentrate dye
  - (d) Green Sewer Tracing Dye
  - (e) Fluorescent FLT Yellow/Green Powder
  - (f) Bright Dye FWT Red Dye
  - (g) FLT Yellow/Green dye tablets

If a dye other than one listed above is used, you must obtain permission from the Department prior to use of the dye. Please contact Ian Willard at (515) 954-6450 or [ian.willard@dnr.iowa.gov](mailto:ian.willard@dnr.iowa.gov) to request approval of dyes other than those listed above.

- 2) The dye shall be used according to the instructions provided by the manufacturer; and
- 3) The introduction of the dye into the receiving stream shall be limited to as short a time period as possible and the amount of dye used shall be as little as possible.

Video and/or pictures of the demonstration should be sent along with the diffuser analysis performance report to both addresses shown below.

**Facility Name:** CARGILL, INC.

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The Diffuser Performance Analysis report shall describe any proposed location or discharge flow adjustments to the diffuser ports intended to comply with the designed operation of the diffuser. Any video and/or pictures of the demonstration should be included in the report. The permittee will indicate submittal of the Diffuser Performance Analysis report by entering a “1” in the “DIFFVAL” column on the Discharge Monitoring Report (DMR) spreadsheet on the day that the report is submitted. Select the No Discharge Indicator “NOT REQUIRED/MP” on the DMR spreadsheet during the months that the report is not required.

Additional Requirements: The Department will review the Diffuser Performance Analysis report. If the analysis does not show rapid and uniform mixing of the effluent within 100 feet downstream of the active diffuser ports, you shall be notified of the requirement to submit a plan to correct diffuser deficiencies. The plan to correct the deficiencies shall be submitted to the Field Office address within 60 days of Department notification. A subsequent Diffuser Performance Analysis report shall be submitted to both addresses shown below no later than 60 days after implementing the plan to correct the diffuser deficiencies. If the subsequent Diffuser Performance Analysis report does not show rapid and uniform mixing of the effluent within 100 feet downstream of the active diffuser ports, the department shall propose a permit amendment containing limits calculated for the actual mixing.

Notify DNR Field Office 5 at 515-725-0268 at least 48 hours prior to the use of dye.

### **Bathymetric Analysis:**

Minimum Requirements: The permittee is required to perform a Bathymetric Analysis and submit a Bathymetric Analysis report to the Department with the permit renewal application. The bathymetric features shall be determined by measuring the receiving stream depth at a minimum of twenty (20) equidistant intervals across the entire width of the receiving stream at the location of the diffuser. The Bathymetric Analysis report shall characterize the bathymetric features and include clear documentation of the receiving stream cross section, diffuser location, and stream bottom substrate.

- Hydrologic Events: In addition, a Bathymetric Analysis must be performed if significant changes to the stream channel occur as a result of hydrologic events (such as flooding, stream channelization, reconstruction, etc.) A report of this analysis must be submitted to the Department at both of the addresses below within sixty (60) days of the event occurrence. If the Bathymetric Analysis shows that the changes to the receiving stream may alter the mixing achieved by the diffuser, a Diffuser Performance Analysis must also be performed to demonstrate the actual mixing achieved by the diffuser. Modeling of the mixing zone may be used to perform the Diffuser Performance Analysis, with Department approval, if the receiving stream does not reach low flow conditions within four (4) months of the hydrologic event. The Diffuser Performance Analysis report must be submitted to the Department at both of the addresses below within ninety (90) days of the hydrologic event occurrence. A Diffuser Performance Analysis performed as a result of a hydrologic event will fulfill the annual report requirement for that year.

The permittee will indicate completion of the Bathymetric Analysis report by entering a “1” in the “BATHY” column on the Discharge Monitoring Report (DMR) spreadsheet on the day that the report is submitted. Select the No Discharge Indicator “NOT REQUIRED/MP” on the DMR spreadsheet during the months that the report is not required.

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### **Diffuser Mixing Zone Study Requirements**

The effluent limits in this permit are based on the percent mixing capability of your diffuser. The current percent mixing for your facility's diffuser is **59.1%**. A mixing zone study shall be submitted with the permit renewal application to confirm the percent mixing. If no such study is completed, effluent limits in the renewal permit will be based on default mixing.

The permittee is authorized to conduct a mixing zone study under the following conditions:

- 1) The mixing zone study shall use one of the following dyes:
  - a) Rhodamine WT dye
  - b) FWT red dye tablets
  - c) FLT Yellow/Green Liquid Concentrate dye
  - d) Green Sewer Tracing Dye
  - e) Fluorescent FLT Yellow/Green Powder
  - f) Bright Dye FWT Red Dye
  - g) FLT Yellow/Green dye tablets

If a dye other than one listed above is used, you must obtain permission from the Department prior to use of the dye. Please contact Ian Willard at (515) 954-6450 or [ian.willard@dnr.iowa.gov](mailto:ian.willard@dnr.iowa.gov) to request approval of dyes other than those listed above. Other mixing zone study options can be found at: <http://www.iowadnr.gov/Environmental-Protection/Water-Quality/Wasteload-Allocations> under the subheading Final WLAP.

- 2) The dye shall be used according to the instructions provided by the manufacturer.
- 3) The introduction of the dye into the receiving stream shall be limited to as short a time period as possible and the amount of dye used shall be as little as possible.
- 4) The mixing zone study shall be conducted during low river flow conditions and it shall follow the DNR Mixing Zone Study Guidelines.
- 5) The mixing zone study report shall include clear documentation of the mixing characteristics and the percentages of the total river flows in the mixing zone.
- 6) The following restrictions to the maximum allowed mixing zone shall be recorded in the mixing zone study documentation:
  - a) The distance to the juncture of two perennial streams.
  - b) The distance to a public water supply intake.
  - c) The distance to the upstream limits of an established recreational area, such as public beaches, and state, county and local parks.
  - d) The distance to the middle of a crossover point in a stream where the main current flows from one bank across to the opposite bank.
- 7) The distance to another mixing zone. The mixing zone does not exceed a distance of 100 feet.

Notify DNR Field Office 5 at 515-725-0268 at least 48 hours prior to the use of dye.

### **Addresses for Report Submittal:**

Ian Willard  
Iowa Department of Natural Resources  
502 E 9<sup>th</sup> St  
Des Moines, IA 50319

AND

[NPDES.mail@dnr.iowa.gov](mailto:NPDES.mail@dnr.iowa.gov) Subject: Diffuser Report (6800100)

**Facility Name:** CARGILL, INC.

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### **Additional Requirements**

- Sampling and analysis of an outfall is required if there is a discharge during the reporting month.
- If there is no discharge from an outfall during a given reporting month, your monthly report shall state that no discharge occurred.
- Raw waste monitoring for the industrial treatment plant is required whenever there is raw waste coming into the plant. Always report raw waste flow and sample results at Outfall 005.

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### **Cooling Water Intake Structure Requirements**

Cargill, Inc. in Eddyville, IA operates a cooling water intake structure subject to requirements of section 316(b) of the Clean Water Act (CWA). In accordance with CWA §316(b), the department has reviewed information on the cooling water intake structure and cooling water system and determined that the existing intake structure constitutes the best technology available for minimizing impingement mortality and entrainment. To continue to comply with CWA §316(b) requirements, you must do the following:

- 1) You shall maintain in good working order and operate all existing equipment and continue to implement operational measures to minimize impingement and entrainment of fish and shellfish.
- 2) You shall provide written notice to the department of any planned changes in the location, design, operation, or capacity of the intake structure.

Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.

Submit all correspondence regarding 316(b) to:  
[NPDES.mail@dnr.iowa.gov](mailto:NPDES.mail@dnr.iowa.gov) Subject: 316(b) (6800100)

**Facility Name:** CARGILL, INC.

**Permit Number:** 6800100

### **Nutrient Reduction Strategy Construction Schedule**

#### **Total Phosphorus and Total Nitrogen – Outfall 005**

Cargill, Inc. shall implement the strategy recommended in its Nutrient Reduction Strategy Feasibility Study dated November 23, 2020 (and revised on October 13, 2021) for reducing total phosphorus and total nitrogen in the final effluent. Construction of facilities shall be implemented according to the following schedule:

- Submit progress report by **May 1, 2024**. This progress report must include an update on the engineering and construction progress for the phosphorus and nitrogen removal systems.
- Complete construction by **June 1, 2027**.
- Complete 6 months of treatment plant optimization for phosphorus and nitrogen reduction by **December 1, 2027**.
- Submit one year of at least weekly total phosphorus and total nitrogen sampling data from the raw waste and final effluent by **January 1, 2029**. The report must include the results of all monitoring for total phosphorus and total nitrogen in the raw waste and final effluent between December 1, 2027 and November 30, 2028.

Progress reports shall be submitted by the required due dates. Within fourteen (14) days following all dates of construction completion, optimization completion, and one year of monitoring, the permittee shall provide written notice of compliance with the scheduled event along with any applicable data. All written notices and progress reports shall be sent to the following addresses:

[NPDES.mail@dnr.iowa.gov](mailto:NPDES.mail@dnr.iowa.gov) Subject: NRS Schedule (6800100)

DNR Field Office 5, 502 E. 9<sup>th</sup> St., Des Moines, IA 50319



**Facility Name:** CARGILL, INC.

**Permit Number:** 6800100

## **STORM WATER DISCHARGES COVERED UNDER THIS PERMIT**

### **PART I. DESCRIPTION OF STORM WATER DISCHARGES**

#### **STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY**

This permit authorizes the discharge of storm water associated with industrial activity through outfall 005.

#### **STORM WATER DISCHARGE NOT ASSOCIATED WITH INDUSTRIAL ACTIVITY**

Storm water discharge associated with industrial activity (as defined in 567 IAC 60) authorized by this permit may be combined with other sources of storm water that are not classified as associated with industrial activity pursuant to 40 CFR 122.26(b)(14) or with wastewater from outfalls defined elsewhere in this permit.

#### **LIMITATION ON COVERAGE**

Unless specifically identified elsewhere in this permit, the following discharges are not authorized under this permit:

- Non-storm water discharges except those listed elsewhere in this permit,
- The discharge of substances resulting from an on-site spill,
- Storm water discharge associated with industrial activity from construction activity, specifically any land disturbing activity of one or more acres;
- The discharge of pavement washwaters is only authorized where the permittee has minimized the presence of spilled materials in accordance with part iii.a.3.a.(1). of this permit,
- Washwaters from material handling and processing areas,
- Washwaters from drum, tank, or container rinsing and cleaning, and
- Vehicle and equipment washwaters.
- Stormwater discharge associated with industrial activity that the Department has shown to be or may reasonably be expected to be contributing to a violation of a water quality standard.

#### **NON-STORM WATER DISCHARGES**

The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharge is in compliance with the conditions listed in the storm water portion of this permit:

Discharges from fire fighting activities, fire hydrant flushings, potable water sources including waterline flushings, uncontaminated groundwater, foundation or footing drains where flows are not contaminated with process materials such as solvents, irrigation water, exterior building washdown, pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred and where detergents are not used, and air conditioning condensate.

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## **PART II. SPECIAL CONDITIONS**

### **ADDITIONAL REQUIREMENTS FOR FACILITIES WITH SALT STORAGE**

Storage piles of salt used for deicing or other commercial or industrial purposes and that generate a storm water discharge to waters of the United States shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile.

## **PART III. STORM WATER POLLUTION PREVENTION PLAN**

The storm water pollution prevention plan must be updated as needed and implemented. Storm water pollution prevention plans will be prepared in accordance with good engineering practices. The plan must identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharge associated with industrial activity from the facility. In addition, the plan must describe and ensure the implementation of practices that are used to reduce the pollutants in storm water discharge associated with industrial activity at the facility and to ensure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

### **A. CONTENTS OF THE STORM WATER POLLUTION PREVENTION PLAN**

The plan shall include, at a minimum, the following items.

1. Pollution Prevention Team The plan shall identify a specific individual or individuals within the facility organization as members of a Storm Water Pollution Prevention Team that is responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member.
2. Description of Potential Pollutant Sources The plan shall provide a description of potential sources which may reasonably be expected to add pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. The plan shall identify all activities and significant materials that may potentially be pollutant sources. The plan shall include, at a minimum:
  - a. Drainage and Site Plan - A site map shall be developed for the facility. This map shall include, at a minimum: the location of all structures (manufacturing buildings, garages, etc.), impervious areas, the location of each storm water outfall and/or connection to the municipal storm sewer; types of discharges included in each discharge; an outline of the portions of the drainage area of each outfall within the facility boundaries and a prediction of the direction of flow in each area; each existing structural control measure to reduce pollutants in storm water runoff; surface water bodies; locations where materials are exposed to precipitation; and locations of major spills or leaks identified under Part III.A.2.c. The map shall also indicate the locations of the following activities: any bag house or other air pollution control device, the portion of the site where regular sweeping or equivalent housekeeping measures will be implemented to prevent the accumulation of spilled materials or settled dust, fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; locations used for the treatment, storage or disposal of wastes; storage tanks and other containers; processing and storage areas; access roads, rail cars and tracks; the location of transfer of substances in bulk; and machinery.
  - b. Inventory of Exposed Materials and Management Practices - an inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of "significant materials" that have been handled, treated, or disposed of in a manner to allow exposure to storm water beginning from 3 years prior to the issuance date of this permit, method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff beginning 3 years prior to the issuance

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date of this permit to the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

- c. Spills and Leaks - a list of any hazardous condition occurrence(s) at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility dating 3 years prior to the issuance date of this permit. Such list shall be updated as appropriate during the term of the permit.
- d. Sampling Data - a summary of any existing discharge sampling data describing pollutants in storm water collected 5 years before the permit issuance date and actual sampling data obtained for this permit shall be included in the storm water pollution prevention plan. All sampling data shall be held for a period of at least 5 years.
- e. Risk Identification and Summary of Potential Pollutant Sources -
  - (1) A narrative description of the potential pollutant sources from the following: loading, unloading, and transfer of chemicals; outdoor storage of salt, pallets, coal, drums, containers, fuels, or other materials; outdoor manufacturing or processing activities; significant dust or particulate generating processes; fueling stations; vehicle and equipment maintenance and/or cleaning areas; locations used for the treatment, storage or disposal (on or off site) of wastes and wastewater; storage tanks and other containers; processing and storage areas; access roads, rail cars and tracks; the location of transfer of substances in bulk; and machinery.
  - (2) The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., total suspended solids) of concern shall be identified.
  - (3) Factors to consider include: quantity of chemicals used, produced, or discharged, the likelihood of contact with storm water and the history of significant leaks or spills. In addition, flows with a significant potential for causing erosion shall be identified.

3. Measures and Controls The permittee shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

- a. (1) Good Housekeeping - Good housekeeping requires that areas that may contribute pollutants to storm water discharges are maintained in a clean, orderly manner.

At a minimum, the permittee shall prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), kiln dust, fly ash, settled dust other significant materials in storm water from paved portions of the site that are exposed to storm water. Measures used to minimize the presence of these materials may include regular sweeping, or other equivalent measures. The plan shall indicate the frequency of sweeping or other measures. The frequency shall be determined based upon consideration of the amount of industrial activity occurring in the area and frequency of precipitation.

Facilities shall prevent the exposure of fine granular solids such as cement, fly ash, and kiln dust to storm water. Where practicable, these materials shall be stored in enclosed silos, hoppers, or buildings, in covered areas, or under covering.

- (2) Preventive Maintenance - A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

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- (3) Spill Prevention and Response Procedures - Spill prevention and response procedures shall be developed. Areas where potential spills (that can contribute pollutants to storm water discharges) can occur and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up (e.g., absorbent materials) should be available to personnel.

This permit does not relieve the permittee of the spill notification requirements as specified in 455B.386 of the Iowa Code. Iowa law requires that as soon as possible, but no more than six hours after the onset of a “hazardous condition”, the Department and the local sheriff’s office, or the office of the sheriff of the affected county be notified.

- (4) Inspections - Qualified personnel shall conduct at least quarterly inspections to assess the effectiveness of the storm water pollution prevention plan. Such inspections shall be documented and this documentation shall be retained as part of the pollution prevention plan. Changes based on the results of these inspections shall be made in a timely manner.

All areas exposed to precipitation shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loading shall be evaluated to determine whether they are adequate and properly implemented or whether additional control measures are needed. Structural storm water management measures (diking, berming, curbing, sediment and erosion control measures, stabilization controls, etc.) shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

- (5) Employee Training - Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as conducting inspections, spill response, good housekeeping, and material management practices. Training shall address proper procedures for equipment and vehicle washing including where and how vehicles must be washed so that there is no unpermitted discharge of wash water. The pollution prevention plan shall identify periodic dates for at least annual training. More frequent training may be necessary if there is a high turnover of employees or if employee participation is essential to the storm water pollution prevention plan.

- (6) Record keeping and Internal Reporting Procedures - A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

- (7) Facility Security - Facilities shall have the necessary security systems to prevent accidental or intentional entry that could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

- b. **Structural Practices** - The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity [see Part III.A.2. Description of Potential Pollutant Sources of this permit] shall be considered when determining reasonable and appropriate structural measures. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained.
- c. **Management of Runoff** - The plan shall contain a description of storm water management practices used and/or to be used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. Appropriate measures may include: vegetative swales, rip-rap, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, use of porous pavements, and wet detention/retention devices.

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d. **Sediment and Erosion Control** - The plan shall identify areas that, due to topography, activities, or other factors, have a potential for significant soil erosion. Plans shall describe permanent stabilization practices and shall ensure that disturbed portions of the site are stabilized. Stabilization practices may include: permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures.

e. **Non-Storm Water Discharges**

- (1) The plan shall include a certification that the storm water discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. A discharger that is unable to provide the certification required by this paragraph must notify the Department in accordance with Part III.A.3.e.(3) below.
- (2) Except for flows from fire fighting activities, sources of non-storm water listed in Part I.D. Non-Storm Water Discharges of this permit that are combined with storm water discharge associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.
- (3) Failure to Certify - Any facility that is unable to provide the required certification (testing for non-storm water discharges), must notify the Department within 180 days of the issuance date of this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm water disposal systems and why adequate tests for such storm water disposal systems were not feasible. Non-storm water discharges to waters of the United States that are not authorized by an NPDES permit are unlawful, and must be terminated.

4. Comprehensive Site Compliance Evaluation. A member(s) of the pollution prevention team or a qualified professional designated by the team shall conduct, at a minimum, annual site compliance evaluations.

- a. Areas contributing to a storm water discharge associated with industrial activity such as material storage and handling, loading and unloading, process activities, and plant yards shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loading shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of this permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, other structural pollution prevention measures identified in the plan, as well as process related pollution control equipment shall be observed or tested to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
- b. Based on the results of the evaluation, the description of Potential Pollutant Sources (Part III.A.2.) and pollution prevention Measures And Controls (Part III.A.3.) identified in the plan shall be revised as appropriate within 2 weeks of such evaluation. In addition, implementation of any changes to the plan shall be made in a timely manner, but in no case more than 12 weeks after the evaluation.
- c. A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, observations relating to the implementation of the plan, and actions taken shall be retained as part of the plan for at least 3 years after the date of the evaluation. The report shall also identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the plan and this permit. The report shall be signed in accordance with Standard Condition #10 of this permit.

**ADDITIONAL POLLUTION PREVENTION PLAN REQUIREMENTS**

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In addition to the previously specified contents of the pollution prevention plan, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with the following applicable guidelines:

1. Requirements for Storm Water Discharges Associated With Industrial Activity that Discharge Into or Through Municipal Separate Storm Sewer Systems
  - a. Facilities covered by this permit must comply with applicable requirements in municipal storm water management programs developed under a NPDES permit issued for the discharge from the municipal separate storm sewer system that receives the facility's discharge, provided the discharger has been notified of such conditions.
  - b. Permittees that discharge storm water associated with industrial activity through a municipal separate storm sewer system shall make the pollution prevention plan available to the municipal operator of the system upon request.

#### **DEADLINES FOR PLAN PREPARATION AND COMPLIANCE**

The plan shall be updated as needed and implemented.

#### **SIGNATURE AND PLAN REVIEW**

1. Signature / Location The plan shall be signed and shall be retained on-site at the facility that generates the storm water discharge.
2. Availability The storm water pollution prevention plan, quarterly site compliance inspection report, Comprehensive Site Compliance Evaluation Reports, or other information shall be made available upon request to the Department.
3. Required Modifications The Department may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this part. Such notification shall identify those provisions of the permit that are not being met, and identify which provisions of the plan require modification in order to meet the minimum requirements of this part. Within 30 days of such notification from the Department, (or as otherwise provided by the Department), the permittee shall make the required changes to the plan and shall submit to the Department a written certification that the requested changes have been made.

#### **KEEPING PLANS CURRENT**

1. The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to the waters of the United States or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing the discharge of pollutants from sources identified under Part III.A.2. of this permit, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. New owners shall review the existing plan and make appropriate changes.
2. The storm water pollution prevention plan required by this permit must be modified within 14 calendar days of the occurrence of any "hazardous condition" to: provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed by the permittee to identify measures to prevent the reoccurrence of such a condition and to respond to such discharges, and the plan must be modified where appropriate.

#### **SIGNATORY REQUIREMENTS**

Storm Water Pollution Prevention Plans, reports, certifications or information either submitted to the Department (and/or the operator of a municipal separate storm sewer system), or that this permit requires be maintained by the permittee, shall be signed as required by Standard Condition #10 of this permit.

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#### **PART IV. DEFINITIONS**

1. Hazardous condition means any situation involving the actual, imminent, or probable spillage, leakage, or release of a hazardous substance on to the land, into a water of the state, or into the atmosphere, which creates an immediate or potential danger to the public health or safety or to the environment.
2. Hazardous substance means any substance or mixture of substances that presents a danger to the public health or safety and includes but is not limited to a substance that is toxic, corrosive, or flammable, or that is an irritant or that generates pressure through decomposition, heat, or other means. "Hazardous substance" may include any hazardous waste identified or listed by the administrator of the United States environmental protection agency under the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, or any toxic pollutant listed under section 307 of the federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous substance designated under section 311 of the federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous material designated by the secretary of transportation under the Hazardous Materials Transportation Act.
3. Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); any chemical the facility is required to report pursuant to Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
4. Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.
5. Uncontaminated groundwater means water that is potable for humans, meets the narrative water quality standards in subrule 567-61.3(2) of the Iowa Administrative Code, contains no more than half the listed concentration of any pollutants in subrule 567- 61.3(3) of the IAC, has a pH of 6.5-9.0 and is located in soil or rock strata.
6. Waters of the United States see 40 CFR 122.2 Definitions.

## STANDARD CONDITIONS

1. **ADMINISTRATIVE RULES** - Rules of the Iowa Department of Natural Resources (department) that govern the operation of a facility in connection with this permit are published in Part 567 of the Iowa Administrative Code (IAC) in Chapters 60-65, 67, and 121. Reference to the term “rule” in this permit means the designated provision of Part 567 of the IAC. Reference to the term “CFR” means the Code of Federal Regulations.
2. **LIMIT DEFINITIONS** -
  - (a) 7 day average is the arithmetic mean (average) of pollutant parameter values for samples collected in a period of seven consecutive days. A calendar month consists of four 7-day periods with the first 7-day period beginning the first day of the month. *{567 IAC 60.2}*
  - (b) 30 day average is the arithmetic mean of pollutant parameter values for samples collected in a period of 30 consecutive days. A 30-day period begins the first day of the month. *{567 IAC 60.2}*
  - (c) Daily maximum is the total discharge by mass, volume, or concentration during a twenty-four hour period. *{567 IAC 60.2}*
3. **MONITORING AND RECORDS OF OPERATION** -
  - (a) Electronic reporting. Records of operation required by this permit shall be electronically submitted to the department within 15 days following the close of the monthly reporting period, in accordance with the monitoring requirements incorporated in this permit, unless an approval for paper submittal of records of operation has been obtained in accordance with 567 IAC 63.7(2).
  - (b) Maintenance of records. You shall retain for a minimum of three years all paper and electronic records of monitoring activities and results including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records. *{567 IAC 63.2(3)}*
  - (c) Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years, or both. *{40 CFR 122.41(j)(5)}*
4. **USE OF CERTIFIED LABORATORIES** - Analyses of wastewater, groundwater or sewage sludge that are required to be submitted as a result of this permit must be performed by a laboratory certified by the State of Iowa. Routine, on-site monitoring for pH, temperature, dissolved oxygen, total residual chlorine and other pollutants that must be analyzed immediately upon sample collection, physical measurements, and operational performance monitoring specified in 567 IAC 63.3(4) are excluded from this requirement. *{567 IAC 63.1}*
5. **DUTY TO PROVIDE INFORMATION** - You must furnish to the director, within a reasonable time, any information the director may request to determine compliance with this permit or determine whether cause exists for amending, revoking and reissuing, or terminating this permit, in accordance with 567 IAC 64.3(11)“c”. You must also furnish to the director, upon request, copies of any records required to be kept by this permit. If you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, you must promptly submit such facts or information. If you become aware that you failed to submit any relevant facts in any report to the director, including records of operation, you shall promptly submit such facts or information. *{567 IAC 60.4(2)“a”, 567 IAC 63.7(6), 40 CFR 122.41(h)}*
6. **DUTY TO REAPPLY AND PERMIT CONTINUATION** - If you wish to continue to discharge after the expiration date of this permit, you must file a complete application for reissuance at least 180 days prior to the expiration date of this permit. If a timely and sufficient application is submitted, this permit will remain in effect until the department makes a final determination on the permit application. *{567 IAC 64.8(1), Iowa Code 17A.18}*
7. **DUTY TO COMPLY** - You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Iowa Code and the Clean Water Act and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Issuance of this permit does not relieve you of the responsibility to comply with all local, state and federal laws, ordinances, regulations or other legal requirements applying to the operation of your facility. *{567 IAC 64.7(4)“E”, 40 CFR 122.41(a)}*
8. **DUTY TO MITIGATE** - You shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. *{567 IAC 64.7(7)“i”, 40 CFR 122.41(d)}*
9. **PROPER OPERATION AND MAINTENANCE** - All facilities and control systems shall be operated as efficiently as possible and maintained in good working order. A sufficient number of staff, adequately trained and knowledgeable in the operation of your facility, shall be retained at all times. Adequate laboratory controls and appropriate quality assurance procedures shall be provided to maintain compliance with the conditions of this permit. *{567 IAC 64.7(7)“f”, 40 CFR 122.41(e)}*
10. **SIGNATORY REQUIREMENTS** - Applications, discharge monitoring reports, or other information submitted to the department in connection with this permit must be signed and certified in accordance with 567 IAC 64.3(8).
11. **TRANSFER OF TITLE OR OWNER ADDRESS CHANGE** - If title to your facility, or any part of it, is transferred, the new owner shall be subject to this permit. You are required to notify the new owner of the requirements of this permit in writing prior to any transfer of title. The department shall be notified in writing within 30 days of the occurrence. No transfer of the authorization to discharge from the facility represented by the permit shall take place prior to notifying the department of the transfer of title. Whenever the address of the owner is changed, the department shall be notified in writing within 30 days of the address change. *{567 IAC 64.14}*



## STANDARD CONDITIONS

- 12. PERMIT MODIFICATION, SUSPENSION OR REVOCATION** - This permit may be amended, revoked and reissued, or terminated in whole or in part for cause including, but not limited to, those specified in 567 IAC 64.3(11)“b”. This permit may be modified due to conditions or information on which this permit is based, including any new standard the department may adopt that would change the required effluent limits. If a toxic pollutant is present in your discharge and more stringent standards for toxic pollutants are established under Section 307(a) of the Clean Water Act, this permit will be modified in accordance with the new standards. The filing of a request for a permit amendment, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. *{567 IAC 64.3(11)“d”, 64.7(7)“b” and “g”, 40 CFR 122.62(a)(6)}*
- 13. TWENTY-FOUR HOUR REPORTING** - You shall report any noncompliance that may endanger human health or the environment, including, but not limited to, violations of maximum daily limits for any toxic pollutant (listed as toxic in Section 307(a)(1) of the Clean Water Act) or hazardous substance (as designated in 40 CFR Part 116 pursuant to 311 of the Act). Information shall be provided orally to the appropriate regional field office of the department within 24 hours from the time you become aware of the circumstances. A written submission that includes a description of noncompliance and its cause; the period of noncompliance including exact dates and times; whether the noncompliance has been corrected or the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent a reoccurrence of the noncompliance must be provided to the appropriate field office within 5 days of the occurrence. *{567 IAC 63.12, 40 CFR 122.41(l)(6)}*
- 14. OTHER NONCOMPLIANCE** - You shall report all instances of noncompliance not reported under Condition #13 at the time discharge monitoring reports are submitted. The report shall contain the information listed in Condition #13. You shall give advance notice to the appropriate regional field office of the department of any planned activity which may result in noncompliance with permit requirements. Notice is required only when previous notice has not been given to any other section of the department. *{567 IAC 63.7(5), 63.14 and 63.15, 40 CFR 122.41(l)(7)}*
- 15. INSPECTION OF PREMISES, RECORDS, EQUIPMENT, METHODS AND DISCHARGES** - You are required to permit authorized personnel to:
- Enter upon the premises where a regulated facility or activity is located or conducted or where records are kept under conditions of this permit;
  - Provide access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - Inspect, at reasonable times, any facilities, equipment, practices or operations regulated or required under this permit; and
  - Sample or monitor, at reasonable times, to assure compliance or as otherwise authorized by the Clean Water Act.
- {567 IAC 64.7(7)“c”, 40 CFR 122.41(i)}*
- 16. NOTICE OF CHANGED CONDITIONS** - You are required to notify the director of any changes in existing conditions or information on which this permit is based, including, but not limited to, the following:
- If your facility is a publicly owned treatment works (POTW) or otherwise accepts waste for treatment from an indirect discharger or industrial contributor, you must notify the director if there is any substantial change in the volume or character of pollutants being introduced to the POTW by an indirect discharger or industrial contributor. See 567 IAC 64.3(5) and 64.7(7)“d” for further requirements. *{40 CFR 122.42(b)}*
  - If your facility has a manufacturing, commercial, mining, or silviculture discharge, you must notify the director as soon as you know or have reason to believe that any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in this permit. *{40 CFR 122.42(a)}*
  - You must notify the director if you have begun or will begin to use or manufacture, as an intermediate or final product or byproduct, any toxic pollutant which was not reported in the permit application. *{40 CFR 122.21(g)(9)}*
- 17. PLANNED CHANGES** - You shall give notice to the appropriate regional field office of the department 30 days prior to any planned physical alterations or additions to the permitted facility. Facility expansions, production increases, or process modifications which result in new or increased discharges of pollutants must be reported by submission of a new permit application. If any modification of, addition to, or construction of a disposal system is to be made, you must first obtain a written construction permit from this department. In addition, no construction activity that will result in disturbance of one acre or more shall be initiated without first obtaining coverage under NPDES General Permit No. 2.
- Notice is required only when:
- Notice has not been given to any other section of the department;
  - The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as defined in 567 IAC 60.2;
  - The alteration or addition results in a significant change in sludge use or disposal practices; or
  - The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in the permit.
- {567 IAC 63.13, 567 IAC 64.2 and 64.7(7)“a”}*
- 18. FAILURE TO SUBMIT FEES** - This permit may be revoked, in whole or in part, if the appropriate permit fees are not submitted within thirty (30) days of the date of notification that such fees are due. *{567 IAC 64.16(1)}*

## STANDARD CONDITIONS

- 19. BYPASSES** - “Bypass” means the diversion of waste streams from any portion of a treatment facility or collection system. A bypass does not include internal operational waste stream diversions that are part of the design of the treatment facility, maintenance diversions where redundancy is provided, diversions of wastewater from one point in a collection system to another point in a collection system, or wastewater backups into buildings that are caused in the building lateral or private sewer line. *{567 IAC 60.2}*
- (a) Prohibition. Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited, in accordance with 567 IAC 63.6(1). The department may not assess a civil penalty against a permittee for a bypass if the permittee has complied with all of the following:
- The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - 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 backup 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
  - The permittee submitted notices as required by 567 IAC 63.6.
- (b) Anticipated bypass. Except for bypasses that occur as a result of mechanical failure or acts beyond the control of the owner or operator of a waste disposal system (unanticipated bypasses), the owner or operator shall obtain written permission from the department prior to any discharge of sewage or wastes from a waste disposal system not authorized by this permit. The Director may approve an anticipated bypass after considering its adverse effects if the Director determines that it will meet the three conditions listed above and a request for bypass has been submitted to the appropriate regional field office of the department at least ten days prior to the expected event, in accordance with the requirements listed in 567 IAC 63.6(2).
- (c) Unanticipated bypass. In the event that a bypass or upset occurs without prior notice having been provided pursuant to 567 IAC 63.6(2) or as a result of mechanical failure or acts beyond the control of the owner or operator, the owner or operator of the treatment facility or collection system shall notify the department by telephone as soon as possible but not later than 24 hours after the onset or discovery in accordance with the requirements in 567 IAC 63.6(3). A written submission describing the bypass shall also be provided within five days of the time the permittee becomes aware of the bypass, in accordance with the requirements in 567 IAC 63.6(3)“d”.
- (d) Reporting. Bypasses shall be reported in accordance with 567 IAC 63.6.  
*{567 IAC 63.6}*
- 20. UPSETS** - “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (a) Effect of an upset. An upset constitutes an affirmative defense to the assessment of a civil penalty for noncompliance with technology-based permit effluent limitations if the requirements of paragraph (b) of this condition 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.
- (b) Conditions necessary for demonstration of an upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed operating logs or other relevant evidence, that:
- An upset occurred and that the permittee can identify the cause(s) of the upset;
  - The permitted facility was at the time being properly operated;
  - The permittee submitted notice of the upset to the department in accordance with 567 IAC 63.6(3); and
  - The permittee complied with any remedial measures required by the department in accordance with 567 IAC 63.6(6)“b”(4).
- (c) Burden of Proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.  
*{567 IAC 63.6}*
- 21. 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. *{567 IAC 64.7(7)“j”, 40 CFR 122.41(c)}*
- 22. PROPERTY RIGHTS** - This permit does not convey any property rights of any sort or any exclusive privilege. *{567 IAC 64.4(3)“b”, 40 CFR 122.41(g)}*
- 23. EFFECT OF A PERMIT** - Compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 307, 318, 403 and 405(a)-(b) of the Clean Water Act, and equivalent limitations and standards set out in 567 IAC Chapters 61 and 62. *{567 IAC 64.4(3)“a”}*
- 24. SEVERABILITY** - The provisions of this permit are severable. If any provision or application of any provision to any circumstance is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding.