## NPDES Permit No. IL0000108 Notice No. KPM:22072501.docx

Public Notice Beginning Date: September 14, 2023

Public Notice Ending Date: October 16, 2023

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:

Name and Address of Facility:

Illinois Power Generating Company Water and Waste Permitting / Environmental Compliance 1500 Eastport Plaza Drive Collinsville, Illinois 62234 Coffeen Power Station 134 CIPS Lane Coffeen, Illinois 62017 (Montgomery 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 operates a former coal fired steam electric generating station (SIC 4911) which generated approximately 1000 MW. The plant ceased operation on November 1, 2019. Plant operation after closure results in an intermittent discharge of sewage treatment plant effluent, stormwater runoff, emergency recycle pond overflow, and ponded and subsurface free liquid wastewaters from Outfall 020, stormwater and treated ponded and subsurface free liquid wastewaters from Outfall 023, and an intermittent discharge of stormwater runoff from Outfalls 002, 018, and 024.

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

| Outfall | Receiving Stream | Latitude          | Longitude        | Stream<br>Classification | Biological Stream<br>Characterization |
|---------|------------------|-------------------|------------------|--------------------------|---------------------------------------|
| 002     | Coffeen Lake     | 39° 03' 19" North | 89° 24' 20" West | General Use              | Not Rated                             |
| 018     | Coffeen Lake     | 39° 03' 55" North | 89° 24' 21" West | General Use              | Not Rated                             |
| 020     | Coffeen Lake     | 39° 03' 34" North | 89° 23' 28" West | General Use              | Not Rated                             |
| 023     | Coffeen Lake     | 39° 04' 46" North | 89° 23' 62" West | General Use              | Not Rated                             |
| 024     | Coffeen Lake     | 39° 03' 24" North | 89° 24' 27" West | General Use              | Not Rated                             |

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

The subject facility discharges through Outfalls 002, 018, 020, 023, and 024 to Coffeen Lake at a point where 0 cfs of flow exists upstream of the outfall during critical 7Q10 low-flow conditions. Coffeen Lake 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 rated under IDNR's integrity rating system. Coffeen Lake, Waterbody Segment, IL\_ROG, is listed on the 2020/2022 Illinois Integrated Water Quality Report and Section 303(d) List as impaired. Aquatic life and aesthetic quality uses are fully supported. Coffeen Lake is not subject to enhanced dissolved oxygen standards.

The impaired designated uses and pollutants causing impairment are tabulated below:

<u>Designated Uses</u> <u>Pollutants Causing Impairment</u>

Fish Consumption Mercury

Internal Outfalls C20 and E20 have been removed from the permit at the request of the permittee. These outfalls discharge stormwater only and have not had any permit limit exceedances since the permit was last modified on April 21, 2021. Given that the plant is closed, pollutant concentrations at these internal outfalls are not expected to change in the future, as the stormwater runoff discharged through them no longer comes into contact with industrial activity. Additionally, Outfall 020 has its own set of effluent limits that will allow for continued monitoring of the final effluent.

Outfall 021 has been removed from the permit at the request of the permittee. Outfall 021 previously discharged stormwater runoff from the facility's now inactive cooling pond. A pollutant of concern at this outfall when the plant was operational was temperature. Now that the facility is shut down, there is no potential for discharges to take place at an elevated temperature, and the stormwater received by the former cooling pond does not come into contact with industrial activity. For these reasons, Outfall 021 has been removed from the permit.

Ponded and subsurface free liquids from the facility's Gypsum Pond and Recycle Pond have been added as a new wastestream at Outfall 023. These wastewaters must be removed from the ponds so that they can be closed in accordance with the requirements of 35 Ill. Adm. Code, Part 845. An antidegradation assessment performed by the Agency found that this new discharge will result in the attainment of water quality standards and that all existing uses of the receiving stream will be maintained. For additional details regarding the antidegradation assessment, see pages 5-7 of this Fact Sheet. Due to the addition of the new wastestream, the Agency's Water Quality Standards Unit has determined that there exists a reasonable potential to exceed the water quality standards for the following parameters at Outfall 023: boron, manganese, nickel, selenium, sulfate, and mercury. Limits for these parameters have been implemented in the permit at Outfall 023 based on the Standards Unit's recommendation.

The daily maximum limits for total dissolved solids (TDS) at Outfalls K20 and 023 have been removed from the permit, as there is no regulatory basis to include those limits at the facility given their current operations.

The applicant has requested the option to discharge ponded and subsurface free liquid wastewater from Recycle Ash Pond 1 through either Outfall 020, via internal Outfall K20, or through Outfall 023. As a result of this request, the copper limit at Outfall 020 has also been applied at Outfall 023 to ensure that the limits at Outfall 023 are equally as protective as those at Outfall 020. Ponded and subsurface free liquid wastewaters from Recycle Ash Pond 1 have been added as possible wastestreams at Outfall 023 on page 5 of the draft permit. No additional antidegradation assessment is required for this change since the discharge of wastewater from Recycle Ash Pond 1 has already been approved and because Outfalls 020 and 023 discharge into the same receiving stream.

The discharge(s) from the facility shall be monitored and limited at all times as follows:

|   | LOAD LIMITS lbs/day<br>DAF (DMF) |                  |            | CONCENTRATION<br>LIMITS mg/L |                   | _                 |                        |
|---|----------------------------------|------------------|------------|------------------------------|-------------------|-------------------|------------------------|
| PARAMETER   | 30 DAY<br>AVERAGE                | DAILY<br>MAXIMUM | REGULATION | WEEKLY<br>AVERAGE            | 30 DAY<br>AVERAGE | DAILY<br>MAXIMUM  | REGULATION             |
| Outfall 002: Coal Yard                            |                                  |                  |            |                              |                   |                   |                        |
| Flow (MGD)  |                                  |                  |            |                              |                   |                   |                        |
| рН  |                                  |                  |            |                              | 6.5 –             | 9 s.u.            | 35 IAC 302.204         |
| Total Suspended Solids                            | 3                                |                  |            |                              | 15                | 30                | 35 IAC 304.124         |
| Oil and Grease                                    |                                  |                  |            |                              | 15                | 20                | 40 CFR<br>423.12(b)(3) |
| Iron (Total)                                      |                                  |                  |            |                              | 2.0               | 4.0               | 35 IAC 304.124         |
|   |                                  |                  |            |                              |                   |                   |                        |
| Outfall 020: Discharge                            | Flume (Intermitt                 | tent Discharge   | )          |                              |                   |                   |                        |
| Flow (MGD)  |                                  |                  |            |                              |                   |                   |                        |
| рН  |                                  |                  |            |                              | 6.5 –             | 9 s.u.            | 35 IAC 302.204         |
| Mercury   |                                  |                  |            |                              |                   | 12 ng/L*          | 35 IAC 302.208         |
| Copper  |                                  |                  |            |                              | 0.017             | 0.0258            | 35 IAC 302.208         |
| Iron (Dissolved)                                  |                                  |                  |            |                              | Monito            | r Only**          | 35 IAC 309.146         |
| *On a 12-month rolling<br>**See Special Condition |                                  |                  |            |                              |                   |                   |                        |
| Outfall D20: Sanitary (In                         | ntermittent Disc                 | harge)           |            |                              |                   |                   |                        |
| Flow (MGD)  |                                  |                  |            |                              |                   |                   |                        |
| рН  |                                  |                  |            |                              | 6.5 –             | 9 s.u.            | 35 IAC 304.125         |
| BOD <sub>5</sub>                                  |                                  |                  |            |                              | 30                | 60                | 35 IAC<br>304.120(a)   |
| Total Suspended Solids                            | 5                                |                  |            |                              | 37                | 74                | 35 IAC<br>304.120(a)   |
| Fecal Coliform                                    |                                  |                  |            |                              |                   | 400 per<br>100 mL | 35 IAC<br>304.121(a)   |

| LOAD LIMITS lbs/day<br>DAF (DMF)   |                   |                  | co                | ONCENTRATION LIMITS mg/L | ON                | _                  |                   |
|--|-------------------|------------------|-------------------|--------------------------|-------------------|--------------------|-------------------|
| PARAMETER  | 30 DAY<br>AVERAGE | DAILY<br>MAXIMUM | REGULATION        | WEEKLY<br>AVERAGE        | 30 DAY<br>AVERAGE | DAILY<br>MAXIMUM   | REGULATION        |
| Outfall K20: Ponded ar   | nd Subsurface I   | Free Liquid Wa   | stewater from Red | cycle Ash Pond           | 1 (Intermittent   | Discharge)         |                   |
| Flow (MGD)   |                   |                  |                   |                          |                   |                    |                   |
| рН   |                   |                  |                   |                          | 6.5 –             | 9 s.u.             | 35 IAC 304.125    |
| Total Suspended Solid  | S                 |                  |                   |                          | 15.0              | 30.0               | 35 IAC 304.124    |
| Boron  |                   |                  |                   |                          | Monito            | or Only            | 35 IAC 309.146    |
| Sulfate  |                   |                  |                   |                          | Monito            | or Only            | 35 IAC 309.146    |
| Mercury  |                   |                  |                   |                          | Monito            | or Only            | 35 IAC 309.146    |
|  |                   |                  |                   |                          |                   |                    |                   |
| Outfall 023: Ponded an   | d Subsurface F    | Free Liquid Wa   | stewater from GM  | F Gypsum Pon             | d and Recycle     | Pond (Intermit     | tent Discharge)** |
| Flow (MGD)   |                   |                  |                   |                          |                   |                    |                   |
| pН   |                   |                  |                   |                          | 6.5 –             | 9 s.u.             | 35 IAC 304.125    |
| Total Suspended Solid  | S                 |                  |                   |                          | 15                | 30                 | 35 IAC 304.124    |
| Boron  |                   |                  |                   |                          | 7.6               | 40.1               | 35 IAC 302.208    |
| Manganese  |                   |                  |                   |                          | 2.53              | 5.94               | 35 IAC 302.208    |
| Nickel   |                   |                  |                   |                          | 0.0073            | 0.1202             | 35 IAC 302.208    |
| Selenium   |                   |                  |                   |                          |                   | 1.0                | 35 IAC 302.208    |
| Sulfate  |                   |                  |                   |                          |                   | 1354               | 35 IAC 302.208    |
| Mercury  |                   |                  |                   |                          |                   | 12 ng/L*           | 35 IAC 302.208    |
| Ammonia (as N)<br>Mar-May, Sep-Oct<br>Jun-Aug<br>Nov-Feb   |                   |                  |                   | 4.4<br>3.9<br>-          | 1.7<br>1.6<br>4.1 | 9.6<br>11.1<br>9.1 | 35 IAC 302.212    |
| Copper *On a 12-month rolling  | average.          |                  |                   |                          | 0.017             | 0.0258             | 35 IAC 302.208    |
| **See Special Condition 7.  Outfalls: 018 Stormwater Runoff Associated with the Ash Landfill (Intermittent Discharge) 024 Stormwater Runoff Associated with Limestone Runoff Pond (Intermittent Discharge) |                   |                  |                   |                          |                   |                    |                   |

The following explain the conditions of the proposed permit:

Stormwater Pollution Prevention Plan

The special conditions clarify flow monitoring and reporting, pH limits, monitoring location, DMR submission, Class K Operator, SWPPP, Re-opener, no PCBs, dewater monitoring, stormwater BAT/BCT, dissolved iron monitoring at Outfall 020, and mercury analytical method.

40 CFR 122.26(b)(14)(vii)

# Antidegradation Assessment NPDES Permit No. IL0000108

Illinois Power Generating Company (IPGC) has applied for a modification to NPDES Permit No. IL0000108 to discharge waters from the Coffeen Power Plant Gypsum Management Facility's Gypsum Pond and adjacent Recycle Pond (GMF) to Coffeen Lake. This report assesses the potential effects of proposed pollutant load increases on the water quality of Coffeen Lake in accordance with the requirements of 35 Ill. Adm. Code 302.105. Alternatives considered to avoid discharging the waters are discussed.

Coffeen is requesting a modification to the WPC permit to begin construction of a treatment system to ensure any temporary discharges caused by rainfall, and authorized by the current NPDES permit, are compliant with effluent standards.

The antidegradation report by Hanson Professional Services, Inc. indicates that discharging the entire volume of GMF waters without treatment would cause exceedances of the General Use Water Quality Standards for ammonia, boron, iron, manganese, nickel, selenium and sulfate. Other alternatives considered are not feasible for managing the volume of GMF waters. Treating the GMF waters and discharging to Coffeen Lake is IPGC's preferred alternative.

The information in this antidegradation assessment came from the July 2020 antidegradation report by Hanson Professional Services, Inc. titled "Antidegradation Assessment for Discharge of Gypsum Management Facility Waters to Coffeen Lake" and the March 2023 application by Luminant titled "Application to Modify Gypsum Management Facility (GMF) Permit Water Pollution Control Permit 2020-EO-6504".

## Identification and Characterization of the Affected Water Body.

The subject facility discharges to Lake Coffeen at a point where 0 cfs of flow exists upstream of the outfall during critical 7Q10 low-flow conditions. The facility has intermittent discharge. Lake Coffeen is classified as a General Use Water. Lake Coffeen 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. Lake Coffeen, Waterbody Segment, IL\_ROG, is listed on the 2020/2022 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential cause given as mercury. Aquatic life and aesthetic quality uses are fully supported. Lake Coffeen is not subject to enhanced dissolved oxygen standards.

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

A feed pump transfers water from the lower gypsum recycle pond to the treatment system. The Evoqua process design includes pretreatment with multimedia filters (MMF) followed by nanofiltration (NF) and two-passes of reverse osmosis (RO) to reduce total dissolved solids (TDS) and target constituents. The RO effluent is then partially re-mineralized and conditioned to meet effluent requirements.

The multimedia filtration is designed to reduce feed water turbidity and suspended solids to levels suitable for proper membrane systems operation. Coagulant is added as needed to the inlet water to aid in suspended solid removal. The MMF's are periodically backwashed with filtered water to remove the accumulated solids. MMF backwash and rinse wastewater are collected with other wastewaters and returned to the upper gypsum recycle pond.

The filtered water is then fed to the NF membrane system. A NF membrane process use pressure applied to a spiral wound semipermeable membrane. The pressure and membrane are used to separate ions into two streams. One stream is a permeate of better-quality water and the other is a concentrate of the ions that do not pass across the membrane surface.

Prior to the membranes, sulfuric acid and antiscalant are added to reduce the scaling/fouling potential of the minerals as they are concentrated by the NF process. The bulk of the diatomic ions are rejected in the NF membrane. Some ammonia and fluoride are also removed. The rejected concentrate water from the NF is collected with the other wastewaters and sent to the upper gypsum recycle pond.

The NF product then passes through two passes of RO for further reduction of ammonia, fluoride and other TDS. Like NF the RO process is also a pressure driven membrane process with membrane characteristics that are even less permeable than NF, which improves the quality of the permeate.

The operating conditions at each pass of RO are customized to meet specific constituent rejection targets. Additional scale control is provided for by injecting additional antiscalant when necessary for scaling control. Provision is also made for pH adjustment ahead of the first and second pass of RO's as needed to control metals solubility and optimize rejection of target ions. The rejected concentrate from the RO's is sent to waste with the NF reject.

Permeate from the RO is polished by passing the water through calcite filters to neutralize the permeate and restore a low level of calcium to the water. A provision is also provided to add sodium carbonate in the event additional effluent alkalinity is required. Finally, the pH is adjusted as needed with sodium hydroxide. Final conductivity, pH and flow are measured, and the product is piped to the battery limit for discharge. Any off-spec effluent is diverted from the before the battery limit if the product is not in the required pH range. The

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diverted water is recycled for additional treatment before discharge.

Due to the nature of the water, the NF and RO membranes require periodic cleaning. A clean-in-place system is utilized to circulate a selected cleaning solution to remove scale or fouling from the membrane surfaces. Once complete the cleaning solutions are recycled to the upper gypsum pond. The membranes are also be flushed periodically to slow the rate of membrane fouling and scaling. In the event the system is shutdown, the units are also flushed as they transition out of service to minimize scaling that would occur if the feed water remained stagnant inside the membranes for extended times.

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

Based on estimated effluent concentrations for this discharge, concentrations boron and sulfate may increase in the receiving water body. Settlement in the ponds may reduce the concentration of dissolved metals before final discharge to Lake Coffeen.

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

The Coffeen Power Plant is out of service. Since the plant was retired in Fall 2019, water levels in the GMF have increased due to natural precipitation. Intermittent overflows from Recycle Pond may occur, and IPGC will at some time need to drain the GMF to comply with applicable regulations. IPGC wishes to obtain an NPDES permit modification to allow removal of the waters from the GMF as needed.

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

## **Mechanical Evaporation**

IPGC and Hanson evaluated dewatering the GMF ponds by mechanical evaporation. Hanson consulted with one mechanical evaporation equipment provider to discuss the feasibility of removing the GMF waters by evaporation. Based on the information reviewed and the typical climate in this project area, mechanical evaporators could each be expected to evaporate approximately 60,000 gallons per day. Multiple evaporators would be needed to remove the estimated 163.8 million gallons of waters from the GMF ponds.

Evaporation rates would be dependent upon many factors such as performance of the evaporation equipment, water make-up and chemistry, ambient temperatures and humidity, solar radiation, wind, free flow of air over the site, and other factors. Evaporation could occur only in the warmer months, between approximately April and October, with the most efficient evaporation occurring in mid-summer. It is also likely the GMF waters would be rising during wet periods, when evaporation would not be practicable.

It is unlikely that ideal evaporation conditions would occur for enough duration to eliminate the total 163.8 million gallons of GMF waters. The unpredictability of weather and unreliability of evaporation rates make this alternative infeasible to manage the GMF water levels.

## **Agricultural Irrigation**

IPGC and Hanson evaluated using the GMF waters for agricultural irrigation. The Coffeen plant is located in a rural agricultural area, although the plant is situated between Coffeen Lake and other waterbodies including East Fork Shoal Creek and Rocky Ford Lakes. Review of aerial photography does not indicate that irrigation is currently used in the vicinity of the plant. GMF waters could be pumped from the GMF ponds and piped to fields east of the plant. However, the nearest agricultural fields do not appear to be feasible for the instillation of large irrigation rigs due to the presence of large high-voltage electric transmission lines. The nearest fields that could potentially be irrigated would require running about 1.2 miles of temporary piping across and along County Road 1650E. It is unknown if permission could be obtained from the landowners and/or tenant farmers to utilize the irrigation rigs in their fields, and what conditions or payments may be required to obtain permission. It is likely IPGC would have to compensate the farmers for damaged crops. Since the purpose of the irrigation would be to remove the waters from GMF ponds, it is likely that water would be applied at higher rates than desired for crop growth, resulting in damaged crop or diminished yields.

As with the mechanical evaporation discussed above, it is unlikely that ideal conditions would occur for enough duration to eliminate the total 163.8 million gallons of GMF waters. The unpredictability of weather and unreliability of evaporation and infiltration rates make this alternative infeasible for the proposed discharges.

## **Land Application**

IPGC and Hanson evaluated land application of the GMF waters. GMF waters could be utilized on site for dust control. Land-applied water would be dissipated by evaporation and infiltration. In order to avoid discharge to the receiving water, land application would need to be controlled so that surface runoff did not occur. Due to the large volume of waters to be removed, the relatively compact size of the Coffeen plant, and the small area of previous surfaces for infiltration, it is unlikely the GFM waters could be eliminated in a timely manner by land application. It is also likely the GMF waters would be rising during wet periods, when land application would not be practicable. Land application is infeasible to eliminate the total 163.8 million gallons of GMF waters or control the rising water levels.

## **Use GMF Waters in Power Generation Plant Process**

The Coffeen Power Plant is out of service. There are no active power plant processes to use the GMF waters. It is not feasible to return the plant to service for the purpose of using the GMF waters.

## Partial Discharge to Coffeen Lake

This antidegradation assessment indicates discharging the entire volume of GMF waters would cause exceedances of the General Use Water Quality Standards in the lake for ammonia, boron, iron, manganese, nickel, selenium and sulfate. To reduce pollutant loading to the lake, IPGC and Hanson estimated the quantity of GMF waters that could be discharged to the lake without exceeding the water quality standards. Table 5 of the July 2020 antidegradation report by Hanson Professional Services, Inc. indicates that approximately 5 million gallons of GMF waters could be discharged to Coffeen Lake without exceeding the water quality standards. This volume represents about 3% of the volume of the GMF waters. This partial discharge of GMF waters would not accomplish the need to remove sufficient waters from the GMF to avoid unpermitted discharges of GMF waters.

## Water Treatment Prior to Discharge to Coffeen Lake

IPGC and Hanson conducted cursory evaluations of treatment processes to reduce pollutant concentrations in the GMF waters discharged. Wastewater treatment processes could conceivably be installed prior to discharge. Treatment processes including oxidation, precipitation, coagulation, and flocculation would reduce TSS in the GMF waters and could reduce the dissolved concentrations of certain pollutants such as metals. However, industry experience has shown that biological treatment, chemical precipitation, or ion exchange processes are not effective in reducing concentrations of boron.

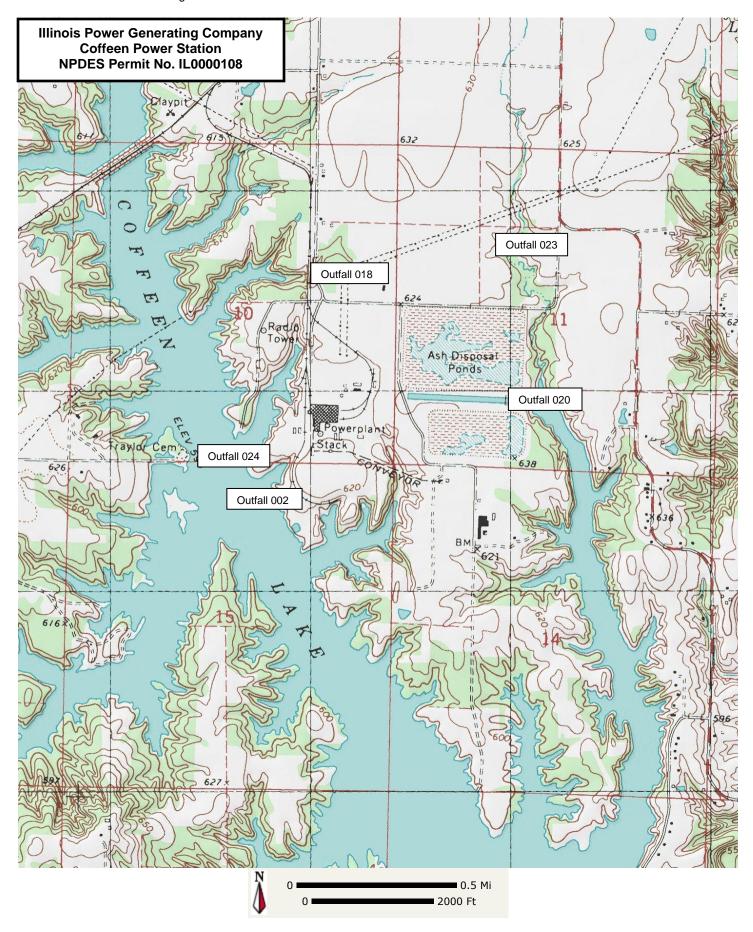
Specialized absorption processes or reverse osmosis (RO) could be utilized to reduce the concentration of boron in the GFM waters. These technologies are complex and generate waste streams that need to be disposed or treated. Further studies, including bench-scale jar testing of treatment chemicals and methods, would be needed to evaluate and develop an effective treatment plan.

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

On July 7, 2022, the IDNR EcoCAT web-based tool was used (IDNR Project Number: 2300293) and indicated that there were no endangered/threatened species present in the vicinity of the discharge. The IDNR EcoCAT web-based tool terminated the consultation.

## 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 the draft permit was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving stream will be maintained; that 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; and that this activity will benefit the community at large by allowing water to discharge from the Gypsum Pond and adjacent Recycle Pond. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.



## Public Notice of Draft Permit

Public Notice Number KPM:22072501.docx is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 1021 North Grand Avenue East, Post Office Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft National Pollutant Discharge Elimination System (NPDES) Permit Number IL0000108 has been prepared under 40 CFR 124.6(d) for Illinois Power Generating Company for discharge into Coffeen Lake from the Coffeen Power Station, 134 CIPS Lane, Coffeen, Illinois 62017, Montgomery County.

The applicant operates a former coal fired steam electric generating station (SIC 4911) which generated approximately 1000 MW. The plant ceased operation on November 1, 2019. Plant operation after closure results in an intermittent discharge of sewage treatment plant effluent, stormwater runoff, emergency recycle pond overflow, and ponded and subsurface free liquid wastewaters from Outfall 020, stormwater and treated ponded and subsurface free liquid wastewaters from Outfall 023, and an intermittent discharge of stormwater runoff from Outfalls 002, 018, and 024.

The application, draft permit and other documents are available for inspection and may be copied at the Agency between 9:30 a.m. and 3:30 p.m. Monday through Friday. A Fact Sheet containing more detailed information is available at no charge. For further information, call the Public Notice Clerk at 217/782-0610.

Interested persons are invited to submit written comments on the draft permit to the Agency at the above address. The NPDES Permit and Joint Public Notice numbers must appear on each comment page. All comments received by the Agency not later than 30 days from the date of this publication shall be considered in making the final decision regarding permit issuance.

Any interested person may submit written request for a public hearing on the draft

If written comments and/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 30 days before any public hearing.

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:

Illinois Power Generating Company Water and Waste Permitting / Environmental Compliance 1500 Eastport Plaza Drive Collinsville, Illinois 62234 Coffeen Power Station 134 CIPS Lane Coffeen, Illinois 62017 (Montgomery County)

| Dischar  | ge Number and Name:                                      | Receiving Waters: |
|----------|--|-------------------|
| Discriar | ge Namber and Name.                                      | reconving waters. |
| 002      | Coal Yard Settling Pond and Emergency Overflow Discharge | Coffeen Lake      |
| 018      | Stormwater Runoff Associated with Ash Landfill           | Coffeen Lake      |
| 020      | Discharge Flume  | Coffeen Lake      |
| D20      | Sewage Treatment Plant Discharge                         |                   |
| K20      | Recycle Ash Pond 1 Discharge                             |                   |
| 023      | GMF Gypsum Pond and Recycle Pond Discharge               | Coffeen Lake      |
| 024      | Stormwater Runoff Associated with Limestone Runoff Pond  | Coffeen Lake      |

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**

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) 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 DAILY 30 DAY DAILY SAMPLE TYPE AVERAGE MAXIMUM AVERAGE MAXIMUM FREQUENCY SAMPLE TYPE

<u>Outfall 002</u> – Coal Yard Settling Pond and Emergency Overflow Discharge (Intermittent Discharge)

The discharge consists of:

- 1. Stormwater Runoff from the Coal Yard\*\*
- 2. Coal Recovery Pond Effluent
- 3. Ash Pond 1 (Bottom Ash Recycle Pond) Level Control

| Flow (MGD)             | See Special Condition 1 |      |      | 1/Month* | Measure |
|------------------------|-------------------------|------|------|----------|---------|
| рН                     | See Special Condition 2 |      |      | 1/Month* | Grab    |
| Total Suspended Solids |                         | 15.0 | 30.0 | 1/Month* | Grab    |
| Oil and Grease         |                         | 15.0 | 20.0 | 1/Month* | Grab    |
| Iron (Total)           |                         | 2.0  | 4.0  | 1/Month* | Grab    |

<sup>\*</sup>When discharging.

<u>Outfall 020</u> – Discharge Flume (Intermittent Discharge)

The discharge consists of:

- 1. Sewage Treatment Plant Effluent
- 2. Stormwater Runoff\*\*\*
- 3. Emergency Recycle Pond Overflow
- 4. Ponded Free Liquid Wastewater from Recycle Ash Pond 1
- 5. Subsurface Free Liquid Wastewater from Recycle Ash Pond 1

| Flow (MGD)           | See Special Condition 1 |        |           | 1/Month* | Measure |
|----------------------|-------------------------|--------|-----------|----------|---------|
| рН                   | See Special Condition 2 |        |           | 1/Month* | Grab    |
| Mercury****          |                         |        | 12 ng/L** | 1/Month* | Grab    |
| Copper               |                         | 0.017  | 0.0258    | 1/Month* | Grab    |
| Iron (Dissolved)**** |                         | Monite | or Only   | 1/Month* | Grab    |

<sup>\*</sup>When discharging.

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

<sup>\*\*</sup>On a 12-month rolling average.

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

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

<sup>\*\*\*\*\*</sup>See Special Condition 12.

## **Effluent Limitations and Monitoring**

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

|   |                   | OAD LIMITS lbs/day CONCENTRATION  DAF (DMF) LIMITS mg/L |                   |                  |                     |                |
|---|-------------------|---|-------------------|------------------|---------------------|----------------|
| PARAMETER   | 30 DAY<br>AVERAGE | DAILY<br>MAXIMUM  | 30 DAY<br>AVERAGE | DAILY<br>MAXIMUM | SAMPLE<br>FREQUENCY | SAMPLE<br>TYPE |
| Outfall D20 – Sewage Treatment Plant Discharge (Intermittent Discharge) |                   |   |                   |                  |                     |                |
| The discharge consists of:  |                   |   |                   |                  |                     |                |
| <ol> <li>Sewage Treatme</li> <li>Stormwater Rund</li> </ol>             |                   |   |                   |                  |                     |                |
| Flow (MGD)  | See Special Cond  | dition 1  |                   |                  | 1/Month*            | Measure        |
| рН  | See Special Cond  | dition 2  |                   |                  | 1/Month*            | Grab           |
| BOD₅  |                   |   | 30                | 60               | 1/Month*            | Grab           |
| Total Suspended Solids  |                   |   | 37                | 74               | 1/Month*            | Grab           |

400 per 100 mL

1/Month\*

Grab

Fecal Coliform

<sup>\*</sup>When discharging.

## **Effluent Limitations and Monitoring**

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) 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 DAILY 30 DAY DAILY SAMPLE SAMPLE AVERAGE MAXIMUM AVERAGE MAXIMUM FREQUENCY TYPE

<u>Outfall K20</u> – Recycle Ash Pond 1 Discharge\* (Intermittent Discharge)

The discharge consists of:

- 1. Ponded Free Liquid Wastewater from Recycle Ash Pond 1
- 2. Subsurface Free Liquid Wastewater from Recycle Ash Pond 1

| Flow (MGD)             | See Special Condition 1 |         |      | 1/Week** | Measure |
|------------------------|-------------------------|---------|------|----------|---------|
| рН                     | See Special Condition 2 |         |      | 1/Week** | Grab    |
| Total Suspended Solids |                         | 15.0    | 30.0 | 1/Week** | Grab    |
| Boron                  |                         | Monitor | Only | 1/Week** | Grab    |
| Sulfate                |                         | Monitor | Only | 1/Week** | Grab    |
| Mercury***             |                         | Monitor | Only | 1/Week** | Grab    |

<sup>\*</sup>See Special Condition 7.

<sup>\*\*</sup>When discharging.

<sup>\*\*\*</sup>See Special Condition 12.

## **Effluent Limitations and Monitoring**

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

LOAD LIMITS lbs/day DAF (DMF) CONCENTRATION LIMITS mg/L

 ${\sf PARAMETER}$ 

30 DAY AVERAGE DAILY MAXIMUM WEEKLY 30 DAY AVERAGE AVERAGE

DAILY MAXIMUM SAMPLE FREQUENCY SAMPLE TYPE

<u>Outfall 023</u> – GMF Gypsum and Recycle Pond Discharge\* (Intermittent Discharge)

The discharge consists of:

1. Ponded Free Liquid Wastewater from the Gypsum Management Facility Gypsum Pond and Recycle Pond

- 2. Subsurface Free Liquid Wastewater from the Gypsum Management Facility Gypsum Pond and Recycle Pond
- 3. WFGD Reclaim Pond Emergency Overflow\*\*\*\*
- 4. Ponded Free Liquid Wastewater from Recycle Ash Pond 1
- 5. Subsurface Free Liquid Wastewater from Recycle Ash Pond 1

| Flow (MGD)   | See Special Condition 1 |                 |                   |                    | 1/Week** | Measure |
|--|-------------------------|-----------------|-------------------|--------------------|----------|---------|
| рН   | See Special Condition 2 |                 |                   |                    | 1/Week** | Grab    |
| Total Suspended Solids                                   |                         |                 | 15.0              | 30.0               | 1/Week** | Grab    |
| Boron  |                         |                 | 7.6               | 40.1               | 1/Week** | Grab    |
| Manganese  |                         |                 | 2.53              | 5.94               | 1/Week** | Grab    |
| Nickel   |                         |                 | 0.0073            | 0.1202             | 1/Week** | Grab    |
| Selenium   |                         |                 |                   | 1.0                | 1/Week** | Grab    |
| Sulfate  |                         |                 |                   | 1354               | 1/Week** | Grab    |
| Mercury****  |                         |                 |                   | 12 ng/L***         | 1/Week** | Grab    |
| Ammonia (as N)<br>Mar-May, Sep-Oct<br>Jun-Aug<br>Nov-Feb |                         | 4.4<br>3.9<br>- | 1.7<br>1.6<br>4.1 | 9.6<br>11.1<br>9.1 | 1/Week** | Grab    |
| Copper   |                         |                 | 0.017             | 0.0258             | 1/Week** | Grab    |

<sup>\*</sup>See Special Condition 7.

<sup>\*\*</sup>When discharging.

<sup>\*\*\*</sup>On a 12-month rolling average.

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

<sup>\*\*\*\*\*</sup>See Special Condition 12.

## **Effluent Limitations and Monitoring**

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

018 Stormwater Runoff Associated with the Ash Landfill (Intermittent Discharge) 024 Stormwater Runoff Associated with Limestone Runoff Pond (Intermittent Discharge) Outfalls:

See Special Condition 8.

### **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. The monthly average shall consist of the summation of the daily flows divided by the number of days the facility discharged during that month.

<u>SPECIAL CONDITION 2</u>. The pH shall be in the range 6.5 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

<u>SPECIAL CONDITION 3.</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 4</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://www2.illinois.gov/epa/topics/water-quality/surface-water/netdmr/Pages/quick-answer-quide.aspx">https://www2.illinois.gov/epa/topics/water-quality/surface-water/netdmr/Pages/quick-answer-quide.aspx</a>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th 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 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.

SPECIAL CONDITION 6. There shall be no discharge of polychlorinated biphenyl compounds.

<u>SPECIAL CONDITION 7</u>. The Permittee shall monitor the effluent from Outfall K20 for the following parameters on a twice monthly basis during periods of dewatering activity, and on a semiannual basis once all dewatering associated with CCR impoundment closure activities has been completed. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on the information obtained through sampling. The samples collected during dewatering activities shall be 8-hour effluent composite samples except as otherwise specifically provided below. Samples collected outside of dewatering activities shall be grab samples. All sample results shall be submitted on the DMRs to IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

| STORET |   | Minimum         |
|--------|---|-----------------|
| CODE   | <u>PARAMETER</u>                              | reporting limit |
| 01002  | Arsenic                                       | 0.05 mg/L       |
| 01007  | Barium  | 0.5 mg/L        |
| 01027  | Cadmium                                       | 0.001 mg/L      |
| 00940  | Chloride                                      | 1.0 mg/l        |
| 01032  | Chromium (hexavalent) (grab)                  | 0.01 mg/L       |
| 01034  | Chromium (total)                              | 0.05 mg/L       |
| 01042  | Copper  | 0.005 mg/L      |
| 00718  | Cyanide (grab) (weak acid dissociable)        | 5.0 ug/L        |
| 00720  | Cyanide (grab not to exceed 24 hours) (total) | 5.0 ug/L        |
| 00951  | Fluoride                                      | 0.1 mg/L        |
| 01045  | Iron (total)                                  | 0.5 mg/L        |
| 01046  | Iron (Dissolved)                              | 0.5 mg/L        |
| 01051  | Lead  | 0.05 mg/L       |
| 01055  | Manganese                                     | 0.5 mg/L        |
|        |   |                 |

### **Special Conditions**

| 01067 | Nickel  | 0.005 mg/L |
|-------|---|------------|
| 00556 | Oil (hexane soluble or equivalent) (Grab Sample only) | 5.0 mg/L   |
| 32730 | Phenols (grab)  | 0.005 mg/L |
| 01147 | Selenium  | 0.005 mg/L |
| 00945 | Sulfate   | 1.0 mg/l   |
| 01077 | Silver (total)  | 0.003 mg/L |
| 01092 | Zinc  | 0.025 mg/L |
| 09501 | Radium 226  | · ·        |
| 11501 | Radium 228  |            |

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

The Permittee shall monitor the effluent from Outfall 023 for the following parameters on a twice monthly basis during periods of dewatering activity, and on a semiannual basis once all dewatering associated with CCR impoundment closure activities has been completed. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on the information obtained through sampling. The samples collected during dewatering activities shall be 8-hour effluent composite samples except as otherwise specifically provided below. Samples collected outside of dewatering activities shall be grab samples. All sample results shall be submitted on the DMRs to IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

|   | Minimum   |
|---|---|
| <u>PARAMETER</u>                                      | reporting limit   |
| Arsenic   | 0.05 mg/L   |
| Barium  | 0.5 mg/L  |
| Cadmium   | 0.001 mg/L  |
| Chloride  | 1.0 mg/l  |
| Chromium (hexavalent) (grab)                          | 0.01 mg/L   |
| Chromium (total)                                      | 0.05 mg/L   |
| Copper  | 0.005 mg/L  |
| Cyanide (grab) (weak acid dissociable)                | 5.0 ug/L  |
| Cyanide (grab not to exceed 24 hours) (total)         | 5.0 ug/L  |
| Fluoride  | 0.1 mg/L  |
| Iron (total)  | 0.5 mg/L  |
| Iron (Dissolved)                                      | 0.5 mg/L  |
| Lead  | 0.05 mg/L   |
| Oil (hexane soluble or equivalent) (Grab Sample only) | 5.0 mg/L  |
| Phenols (grab)  | 0.005 mg/L  |
| Silver (total)  | 0.003 mg/L  |
| Zinc  | 0.025 mg/L  |
| Radium 226  |   |
| Radium 228  |   |
|   | Arsenic Barium Cadmium Chloride Chromium (hexavalent) (grab) Chromium (total) Copper Cyanide (grab) (weak acid dissociable) Cyanide (grab not to exceed 24 hours) (total) Fluoride Iron (total) Iron (Dissolved) Lead Oil (hexane soluble or equivalent) (Grab Sample only) Phenols (grab) Silver (total) Zinc Radium 226 |

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

### **SPECIAL CONDITION 8.**

### STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

- 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

### **Special Conditions**

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 facility inspection required by paragraph H 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.
  - 3. 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.

## **Special Conditions**

- 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:
  - 1. Storm Water Pollution Prevention Personnel Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
  - 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.
  - 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 clean up 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, byproducts, 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.

### **Special Conditions**

- 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 of 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 thereunder, 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

### **Special Conditions**

### **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 thereunder.
- 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 facility shall submit an electronic copy of the annual inspection report to the Illinois Environmental Protection Agency. The 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.
- V. Annual inspection reports shall be submitted to one of the following addresses:
  - a. Electronic Annual Reports should be submitted to

epa.indannualinsp@illinois.gov

b. If electronic submittal is unavailable, reports should be mailed to:

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

W. The permittee shall notify any regulated small municipal separate storm sewer owner (MS4 Community) that they maintain coverage under an individual NPDES permit. The permittee shall submit any SWPPP or any annual inspection to the MS4 community upon request by the MS4 community.

<u>SPECIAL CONDITION 9.</u> The Agency has determined that the effluent limitations for Outfalls 002, 020, and 023 in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities for purposes of this permit reissuance, and no pollution

## **Special Conditions**

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, 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.

SPECIAL CONDITION 10. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

<u>SPECIAL CONDITION 11</u>. The permittee must submit a request to the Agency to modify this NPDES permit, due no later than one calendar year from the effective date of this permit, so that the Agency may re-evaluate the dissolved iron monitoring requirement at Outfall 020.

<u>SPECIAL CONDITION 12</u>. All samples for mercury must be analyzed by EPA Method 1631E using the digestion procedure described in Section 11.1.1.2 of 1631E, which dictates that samples must be heated at 50°C for 6 hours in a bromine chloride (BrCl) solution in closed vessels.