

CCR Permit No. 2021-CO-100028
Notice No. DCR:23080802.docx

Public Notice Beginning Date: July 1, 2024

Public Notice Ending Date: August 15, 2024

Coal Combustion Residual Impoundment
Permit Program

Draft Permit to Operate a Coal Combustion Residual Impoundment.

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 Permittee:

Midwest Generation, LLC
1800 Channahon Road
Joliet, IL 60436

Name and Address of Facility:

Midwest Generation, LLC
Joliet 9 Generation Station
1601 South Patterson Road
Joliet, Illinois 60436
(Will County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a Permit to Operate a Coal Combustion Residual Impoundment pursuant to 35 Illinois Administrative Code Part 845 and has prepared a draft permit and associated fact sheet for the above named Permittee. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet.

A public hearing on this draft permit will be held on Wednesday, July 31 at 6:00 p.m. at the Weitendorf Agriculture Center at Joliet Junior College in Joliet.

Interested persons are invited to submit written comments on the draft permit to the IEPA at:

Hearing Officer Jeff Guy, Office of Community Relations
Re: Midwest Generation, LLC – Joliet 9 Generating Station
Illinois Environmental Protection Agency
1021 North Grand Avenue East, P. O. Box 19276
Springfield, IL 62794-9276

Comments may also be e-mailed to epa.publichearingcom@illinois.gov and must specify either "Midwest Generation, LLC – Joliet 9 Generating Station CCR" or "2021-CO-100028" in the subject line. E-mail comments originating on third party systems or servers intended for submittal of multiple emails of the same or nearly the same content will not be accepted without prior approval from the hearing officer.

The application, engineer's review notes, 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.

For further information on the draft permit, please call Derek Rompot by phone at 217/782-0610 or by email at Derek.Rompot@illinois.gov.

The applicant operated a steam electric generating station (SIC 4911), until its retirement in June 2023. Joliet 9 historically burned coal and switched to burning natural gas in 2016. The station is in the process of being decommissioned. Wastewater discharges from

Joliet 9 (including from Lincoln Stone Quarry) are permitted under NPDES Permit No. IL0002216.

The applicant placed coal combustion residuals (CCR) generated from Joliet 9 and Joliet 29 into the Lincoln Stone Quarry (LSQ) to manage/store the CCR. The applicant operates LSQ. LSQ is a CCR Impoundment under 35 IAC Part 845, and consists of an inactive West Filled Area, the formerly active Main Quarry, and the North Quarry. Decant water from the Main Quarry is gravity drained to the North Quarry. The North Quarry is not used to manage or store CCR but instead acts as a settling pond used to treat water discharged from the Main Quarry.

LSQ has operated as a landfill since 1962, and is currently permitted as a landfill by the Illinois EPA Bureau of Land, subject to 35 Illinois Administrative Code Parts 811 and 812. Bureau of Land has permitted Lincoln Stone Quarry as a landfill since 1976, and it is subject to the requirements and conditions of Operating Permit No. 1994-241-LFM, Modification No 24. The West Filled Area was used for ash placement before it was closed. The Main Quarry was used for the disposal of CCR until 2019. The North Quarry has never been used to manage or store CCR.

This proposed Coal Combustion Residual Operating Permit will regulate LSQ as a Coal Combustion Residual Impoundment under 35 Illinois Administrative Code Part 845.

Pursuant to 35 IAC Section 845.300, the base of all CCR impoundments must be located at least 1.52 meters (5 feet) above the upper limit of the uppermost aquifer. The Lincoln Stone Quarry is located within the uppermost aquifer and fails to meet this standard. It is therefore subject to the requirements of 35 IAC 845.700 which requires the closure or retrofit of existing CCR Impoundments. Midwest Generation Joliet 9 has submitted a separate CCR closure construction permit application to address the closure of Lincoln Stone Quarry.

The initial Operating Permit Application must contain the information specified in 35 IAC 845.230(d)(2). Information provided in the permit application is summarized below:

A) History of Construction

The exact date of construction for LSQ is unknown. LSQ has been operated as a surface impoundment since 1962 when the West Filled Area (WFA) was used for ash placement. As of 1975, the WFA was closed, and the main quarry was used for disposal of CCR until 2019. The CCR sluicing system was decommissioned in 2016. LSQ was operated for approximately 57 years. The North Quarry was never used to manage or store CCR.

LSQ is an incised surface impoundment with Silurian dolomite bedrock walls and foundation. LSQ was originally constructed by the removal of dolomite from the area, which was used for local construction purposes. A wall of bedrock exists between the North Quarry and the Main Quarry.

Historically CCR was sluiced into the WFA, and then into the Main quarry once the WFA was filled. The WFA is covered with a clay soil liner.

B) An analysis of the chemical constituents found within the CCR to be placed in the CCR surface impoundment.

Chemical Constituent Analysis for the CCR has been provided and is included in the permit application in Attachments 2-1 and 2-2 of the application.

C) An analysis of the chemical constituents of all waste streams, chemical additives and sorbent materials entering or contained in the CCR surface impoundment;

Information and the chemical constituent analysis of other waste streams have been provided and are included in Attachments 3-1, 3-2 and 3-3 of the application.

D) A demonstration that the CCR surface impoundment, as built, meets, or an explanation of how the CCR surface impoundments fails to meet, the location standards in the following Sections:

- i) Section 845.300 (Placement Above the Uppermost Aquifer);
- ii) Section 845.310 (Wetlands);
- iii) Section 845.320 (Fault Areas);
- iv) Section 845.330 (Seismic Impact Zones); and
- v) Section 845.340 (Unstable Areas);

The permittee provided information and certification on the placement being above the aquifer, wetlands, fault areas, seismic impact zones, unstable areas, and floodplains. KPRG and Associates, INC. (KPRG) performed a Location Restriction and Compliance Determination in October 2018.

Above the Uppermost Aquifer – KPRG determined that LSQ is NOT separated from the upper limit of the uppermost aquifer by at least five feet. LSQ is subject to the requirements of 35 IAC 845.700 which addresses the requirements for closure or retrofit of existing CCR impoundments. The proposed operating permit does not address the closure of LSQ.

Wetlands – KPRG determined that LSQ is not located in mapped wetlands.

Fault Areas - KPRG determined that LSQ is not located within 200 feet of the outermost damage zone of a fault that has had displacement in Holocene time.

Seismic Impact Zones - KPRG determined that LSQ that the Ash Bypass Basin is not located within a seismic impact zone.

Unstable Areas - KPRG determined that LSQ is not located in an unstable area.

Floodplain - KPRG determined that LSQ is not located in a floodplain according to the National Flood Hazard Layer FIRMeete Map No. 17179C0280E prepared by FEMA.

- E) Evidence that the permanent markers required by Section 845.130 have been installed.

Photographic documentation of the permeant marker has been provided and is located in Attachment 5 of the permit application.

- F) Documentation that the CCR surface impoundment, if not incised, will be operated and maintained with one of the forms of slope protection specified in Section 845.430;

LSQ is an incised surface impoundment; this requirement is not applicable.

- G) Initial Emergency Action Plan and accompanying certification

The Initial Emergency Action Plan has been Provided. The Emergency Action plan was originally developed in June 2015 by KPRG, and was reviewed and updated for the permit application.

- H) Fugitive dust control plan and accompanying certification

The Fugitive Dust Control Plan has been provided.

- I) Groundwater Monitoring Information:

- i) A hydrogeologic site characterization
- ii) Design and construction plans of a groundwater monitoring system
- iii) A groundwater sampling and analysis program that includes selection of the statistical procedures to be used for evaluating groundwater monitoring data
- iv) Proposed groundwater monitoring program that includes a minimum of eight independent samples for each background and downgradient well

The required Groundwater Monitoring Information has been provided.

- J) Preliminary written closure plan

The preliminary written closure plan has been provided as part of the operating permit application. The closure plan for LSQ is to leave the CCR in place and installing a final cover system. A separate permit application for construction of the final cover has been provided to Illinois EPA. The construction permit application for the final cover has not been reviewed as part of the operating permit application.

- K) Initial written post-closure care plan, if applicable

The written post-closure plan has been provided.

- L) The certification required by Section 845.400(h), or a statement that the CCR surface impoundment does not have a

liner that meets the requirements of Section 845.400(b) or (c);

LSQ does not comply with the liner requirements of 35 Ill. Adm. Code 845.500. The applicant performed flow rate calculations that indicate the base of LSQ does not meet the requirements of 35 Ill Adm. Code 845.500 therefore the surface impoundment is considered unlined.

- M) History of known exceedances of the groundwater protection standards in Section 845.600, and any corrective action taken to remediate the groundwater;

The applicant has provided the history of known exceedances of groundwater protections standards. In addition to the requirements of 35 Ill. Adm. Code 845.500, LSQ is also regulated by Illinois EPA Bureau of Land Permit No. 1994-241-LFM, which contains separate Applicable Groundwater Quality Standards (AGQSS).

- N) A certification that the owner or operator meets the financial assurance requirements of Subpart I;

Financial assurance certification has been provided.

- O) Hazard potential classification assessment and accompanying certification

LSQ is an incised surface impoundment and a hazard potential classification is not required. A hazard potential classification is not included with the operating permit application.

- P) Structural stability assessment and accompanying certification

LSQ is an incised surface impoundment and a structural stability assessment is not required. A structural stability assessment is not included with the operating permit application.

- Q) Safety factor assessment and accompanying certification

LSQ is an incised surface impoundment and a safety factor assessment is not required. A safety factor assessment is not included with the operating permit application.

- R) Inflow design flood control system plan and accompanying certification

An inflow design flood control system plan was previously completed for LSQ in October of 2016. The inflow design control plan was reviewed and updated by Geosyntec, and is included in the operating permit application.

- S) Safety and health plan

The Safety and Health Plan has been provided with the operating permit application.

- T) For CCR surface impoundments required to close under 845.700, the proposed closure priority categorization

LSQ has been designated as Category 3 for the closure plan categorization.

Special Conditions:

The following explains the conditions of the proposed permit:

The special conditions specify that various plans relating to the operation and maintenance of the basins must be maintained and kept up to date, that the permittee must operate and maintain the groundwater monitoring system, specifies the groundwater standards at the waste boundary, and specifies recordkeeping and reporting requirements.

1. Permittee must Comply with Air and Land Regulations
2. Permit does release Permittee from liability from prior violations.
3. All surface water discharges regulated by NPSDES Permit No. IL0002216.
4. Permit does not authorize any construction for closure or corrective actions.
5. LSQ subject to requirements on 35 Ill. Adm. Code 845.700, which require closure or retrofit of the impoundment.
6. Fugitive Dust Control Plan Requirements
7. Permanent Signage Requirements
8. Emergency Action Plan Requirements.
9. Safety and Health Plan Requirements.
10. Written Closure Plan Requirements.

11. Written Post-Closure Plan Requirements.
12. Financial Assurance Requirements.
13. Lateral expansions must be inspected.
14. All impoundments must be inspected annually.
15. Monitoring well information.
16. Groundwater sampling and analysis.
17. Statistical methods for evaluating groundwater requirements.
18. Groundwater monitoring program must be in compliance with 845.
19. Within 90 days, must collect total metals, calcium and turbidity.
20. Within 60 days, specify method for statistical analysis.
21. Within 60 days, must provide analysis of CCR.
22. Analysis of all waste streams in LSQ.
23. Groundwater standards at the waste boundary for Water Table Unit.
24. Groundwater standards at the waste boundary for Silurian bedrock.
25. Hydraulic control system must continue to operate.
26. After hydraulic control system turned off, continued groundwater monitoring.
27. Groundwater standards for the Ordovician bedrock.
28. Written Operating Records.
29. Groundwater monitoring data submission requirements.
30. Annual Groundwater Monitoring and Corrective Action Report requirements.
31. Annual consolidated report requirements.
32. Addresses for report submission.

Public Notice of Draft Permit

Public Notice Number DCR:23080801.docx is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft Coal Combustion Residual Impoundment Permit Number 2021-CO-100028 has been prepared under 35 Ill. Admin. Code 845.250 for Midwest Generation, LLC, 1800 Channahon Road, Joliet, Illinois 60436 for the operation of a coal combustion residual (CCR) impoundment located at the Joliet 9 Power Station, 1601 South Patterson Road, Joliet, Illinois 604361242, Will County. Joliet 9 is a retired natural gas fired steam electric generating, which previously burned coal before switching over to natural gas. The applicant is engaged in the operation of Joliet 9 Power Station which is a retired natural gas fired steam electric generating facility (SIC 4911). Joliet 9 operates a CCR impoundment, the Lincoln Stone Quarry. Lincoln Stone Quarry is subject to the requirements of 35 Illinois Administrative Code Part 845 – Coal Combustion Waste Surface impoundments.

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 CCR Permit and Joint Public Notice numbers must appear on each comment page. All comments received by the Agency not later than 45 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 permit, stating their name and address, the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to these issues in the hearing. Such requests must be received by the Agency not later than 45 days from the date of this publication.

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 45 days before any public hearing.

LSQ is a former dolomite quarry and is currently permitted by the Illinois EPA Bureau of Land Permit No. 1994-241-LFM Modification No. 24. In 2015, LSQ was determined to be regulated under the newly passed Federal Register, Environmental Protection Agency, 40 CFR Parts 257.94 and 257.95 Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals in Surface Impoundments Final Rule, dated April 17, 2015. LSQ is subject to 35 Ill. Administrative Code Part 845: Standards of Disposal of Coal Combustion Residuals in Surface Impoundments.

Coal Combustion Residual Impoundment Permit No. 2021-CO-100028

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

Coal Combustion Residual Impoundment Operating Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

Midwest Generation LLC
1800 Channahon Road
Joliet, IL 60436

Facility Name and Address:

Midwest Generation, LLC
Joliet 9 Generating Station
1601 South Patterson Road
Joliet, Illinois 60438
(Will County)

CCR Impoundment:

W1970450046-01 Lincoln Stone Quarry

In compliance with the provisions of the Illinois Environmental Protection Act and Title 35 of Ill. Adm. Code, Subtitle G, the above-named permittee is hereby authorized to operate a coal combustion residual (CCR) impoundment, identified as Lincoln Stone Quarry, at the above location in accordance with the standard conditions and attachments herein.

Coal Combustion Residual Impoundment Permit No. 2021-CO-100028 authorizes the operation of Lincoln Stone Quarry in accordance with 35 Illinois Administrative Code Part 845.

Coal Combustion Residual Impoundment Permit No. 2021-CO-100028 does not authorize the closure of Lincoln Stone Quarry, corrective action at Lincoln Stone Quarry, or any construction activities associated with the closure of Lincoln Stone Quarry.

Coal Combustion Residual Impoundment Permit No. 2021-CO-100028 does not authorize the discharge of any wastewater to waters of the United States. NPDES Permit No. IL0002216 authorizes this facility to discharge wastewater to waters of the United States.

CCR generated from Midwest Generation's Joliet 9 and Joliet 29 power generating stations were placed into the Lincoln Stone Quarry (LSQ) from 1962 until 2019. LSQ consists of an inactive West Filled Area (WFA), the formerly active Main Quarry, and the North Quarry. The WFA was closed in 1975, and the placement of CCR was shifted to the Main Quarry. CR stopped being placed into the Main Quarry in 2019. Decant water from the Main Quarry is gravity drained to the North Quarry. The North Quarry is not used to manage or store CCR but instead acts as a settling pond used to treat water discharged from the Main Quarry.

Permittee is not authorized to operate after the above expiration date. In order to receive authorization to operate 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

DEL:DCR:23080802

Special Conditions

SPECIAL CONDITION 1: This permit does not relieve the Permittee of the responsibility of complying with the provisions of the State of Illinois Rules and Regulations, 35 Ill. Adm. Code Subtitle B, Air Pollution Control, Chapter 1 and 35 Ill. Adm. Code Subtitle G, Land Pollution Control, Chapter 1. The Permittee may be required to file reports and/or obtain applicable permits through the Illinois EPA's Bureau of Air (BOA) - Division of Air Pollution Control (DAPC) and/or Illinois EPA's Bureau of Land (BOL) – Division of Land Pollution Control (DLPC).

SPECIAL CONDITION 2: Issuance of this permit does not release the Permittee from any liability for prior violations of the Act or Rules and Regulations promulgated thereunder.

SPECIAL CONDITION 3: All discharges to a Water of the United States shall be governed by NPDES Permit No. IL0002216.

SPECIAL CONDITION 4: This permit does not authorize any construction activities necessary for closure and/or corrective action of the CCR impoundment(s) at the site.

SPECIAL CONDITION 5: Pursuant to 35 IAC Section 845.300, the base of all CCR impoundments must be located at least 1.52 meters (5 feet) above the upper limit of the uppermost aquifer. The Lincoln Stone Quarry is an existing impoundment and is located within the uppermost aquifer. Since Lincoln Stone Quarry fails to meet this standard, it is subject to the requirements of 35 IAC Section 845.700 which requires the closure or retrofit of the CCR Impoundments.

SPECIAL CONDITION 6: The operator shall implement methods for controlling dust, including the Fugitive Dust Control Plan included in Application Log No. 2021-100028, so as to prevent wind dispersal of particulate matter off-site.

SPECIAL CONDITION 7: A permanent sign shall be maintained at each CCR impoundment that contains the information required under 35 IAC Section 845.130.

SPECIAL CONDITION 8: The written Emergency Action Plan (EAP) shall be maintained by the facility. The EAP and all amendments must be placed in the facility's operating record. Upon activation of the EAP, the facility must notify Illinois EPA in writing within 30 days of activation and place all corresponding documentation in the facility operating record. The permittee may amend the EAP at any time but must amend the EAP when there is a change in conditions that would substantially affect the EAP.

SPECIAL CONDITION 9: The Safety and Health Plan and accompanying certification has been submitted as part of Permit Application Log No. 2021-100028. The plan must be updated annually and on an as needed basis. The Safety and Health Plan and all amendments must be placed in the facility operating record.

SPECIAL CONDITION 10: The permittee must maintain the written Closure Plan for the site. The Closure Plan and all amendments must be placed in the facility's operating record. The permittee may amend the written Closure Plan at any time, but must amend the written Closure Plan when there is a change in a CCR surface impoundment that would substantially affect the written Closure Plan, before closure activities have started, or unanticipated events necessitate a revision. The closure plan shall be amended at least 60 days before a planned change and within 60 days after an unanticipated event is required.

SPECIAL CONDITION 11: The permittee must maintain the written Post-Closure Care Plan for the site. The permittee may amend the written Post-Closure Care Plan at any time but must amend Post-Closure Care Plan when there is a change in operation of a CCR surface impoundment that would substantially affect the written Post-Closure Care Plan, and when before unanticipated events necessitate a revision. The Post-Closure Care Plan shall be amended at least 60 days before a planned change and within 60 days after an unanticipated event is required. If the Post-Closure Care Plan is revised after post-closure activities have started for a CCR impoundment, the permittee must submit a request to modify the operating permit within 30 days following the trigger event.

SPECIAL CONDITION 12: The permittee submitted financial assurance in accordance with Part 845 Subpart I in their application. The permittee shall provide and maintain financial assurance in accordance with Part 845 Subpart I.

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SPECIAL CONDITION 13: All CCR impoundments and any lateral expansion of a CCR surface impoundment must be inspected by a qualified person on a weekly basis and after each 25-year, 24-hour storm event. All CCR surface impoundment instrumentation must be inspected at least every 30 days. A report for each inspection shall be generated and placed into the facility operating record.

SPECIAL CONDITION 14: Each CCR surface impoundment must be inspected on an annual basis by a qualified Professional Engineer, in accordance with 35 IAC 845.540. An inspection report must be completed and included with the Annual Consolidated Report, as specified in Special Condition 26.

SPECIAL CONDITION 15: The facility must operate and maintain the following monitoring wells:

Background wells for the hydrostatic units:

- a) Water Table Unit—G47WT, G30WT* and G41WT*
- b) Silurian Bedrock Unit—G47S and T03S
- c) Ordovician Bedrock Unit—G45D and G48D.

Downgradient wells for the hydrostatic units:

- a) Water Table Unit—A08WT, G30WT, G41WT, and R16WT.
- b) Silurian Bedrock Unit—G20S, G30S, G31S, G33S, G41S, G42S, G44S, and G45S,
- c) Ordovician Bedrock Unit—R16D, G30D, G31D, G33D, G41D, G42D, G44D, and G45D

* Within 30 days of the effective date of this operating permit, the facility must install and begin to monitor down gradient wells G30WT and G41WT in the water table (WT) groundwater monitoring system.

SPECIAL CONDITION 16: Within 30 days of the effective date of this operating permit, the facility must be performing groundwater sampling and analysis in accordance with 35 IAC Section 845.640 at every well. Compliance with Section 845.640(a) requires the collection and submission of laboratory reports, field documents and records of collection and analysis, and documentation of environmental data compliant with SW 846.

SPECIAL CONDITION 17: Within 30 days of the effective date of this permit, the permittee must select a statistical method for evaluating groundwater monitoring data, pursuant to Section 845.640(f)(1), and notify Illinois EPA of the chosen statistical method. The permittee must use the data from the groundwater monitoring program required by this permit to conduct the statistical analysis. Data to be provided or correction of Attachment 9-4 of the Initial Operating Permit Application is as follows:

- a) Outlier analysis must be struck from Attachment 9-4 or revised to adhere to the following for any laboratory analyzed constituent listed in 35 IAC 845.600:

Outliers cannot be evaluated for exclusion from any dataset without explicit data validation identifying discrepancies from the laboratory and/or field procedures that would qualify a data point to be considered an outlier. The permittee must use the USEPA data validation procedures to determine when or if a data point is to be excluded from a data set. (EPA QA/G-8).

- b) All input data sets for each constituent must be provided in a table in accordance with SW-846 chapter 1, incorporated by reference in 35 IAC 845. Chapter 1 of SW846 states that regulatory decisions must be made with environmental data.

All data sets, used for statistical analysis of background, must be within the last eight consecutive quarterly sampling events in order to validate the statistical methods for recent activity (35 IAC

Special Conditions

845.650(b)); Note: If an impoundment is considered closed by the Agency, the data sets must be used from the eight consecutive quarters after closure or most recent eight consecutive quarters.

- c) Non-parametric statistical analysis must be provided to the Agency for review and approval each time that a non-parametric data set occurs.

SPECIAL CONDITION 18: Within the next quarter after the effective date of this operating permit, the facility must be performing groundwater sampling and analysis in accordance with 35 IAC Section 845.640 at every well. Compliance with Section 845.640(a)(5) requires the collection and submission of laboratory reports, field documents and records of collection and analysis, and documentation of environmental data compliant with SW 846.

SPECIAL CONDITION 19: Within 90 days of the effective date of this permit, the groundwater monitoring program must be in compliance with 35 IAC 845.650 at all wells.

- a) The permittee must analyze each sample for the constituents listed in 845.600(a), calcium and turbidity.
- b) When analyzing groundwater quality, the permittee must measure total recoverable metals pursuant to Section 845.640(i).
- c) The permittee must collect a minimum of eight independent samples from each background and downgradient well within 2 years of well installation.
- d) After background groundwater monitoring has been completed, the permittee must conduct monitoring pursuant to Section 845.650(b).

SPECIAL CONDITION 20: Within 60 days of completion of sampling required in Special Condition 19(c), the permittee must submit statistical calculations using the method selected in Special Condition 17. As part of this submittal, the applicant must provide a groundwater protection standard for each constituent, the statistical evaluations and calculations including the raw data used, and a description of any assumptions used when calculating the groundwater protection standards.

SPECIAL CONDITION 21: Within 60 days of the effective date of the operating permit, the permittee must provide an analysis of the coal combustion residual located in Lincoln Stone Quarry. The samples must be compliant with the sampling requirements of SW 846 pursuant to 845.230(d)(2)(B).

SPECIAL CONDITION 22: Within 60 days of the effective date of this permit, the permittee must provide an analysis of all waste streams entering Lincoln Stone Quarry. Sources that have historically discharged into Lincoln Stone Quarry include: coal pile runoff, gas side metal cleaning waste, plant drains, yard runoff, roof drains, road runoff. For each of these sources and any other sources not identified, the permittee must provide an analysis of the waste stream compliant with the sampling requirements of SW 846 pursuant to 845.230(d)(2)(C) or a statement that the identified source is no longer discharging and the approximate date of the last discharge.

SPECIAL CONDITION 23: The groundwater standards at the waste boundary for the Water Table unit are:

<u>Pollutant</u>	<u>Concentration</u>
Antimony	0.006 mg/L
Arsenic	0.010 mg/L
Barium	2.0 mg/L
Beryllium	0.004 mg/L
Boron	2 mg/L
Cadmium:	0.005 mg/L
Chloride:	200 mg/L
Chromium:	0.1 mg/L
Cobalt:	0.006 mg/L
Fluoride:	4.0 mg/L

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Lead:	0.0075 mg/L
Lithium:	0.04 mg/L
Mercury:	0.002 mg/L
Molybdenum:	0.1 mg/L
pH:	6.5-9.0 units
Selenium:	0.05 mg/L
Sulfate:	400 mg/L
Thallium:	0.002 mg/L
Total Dissolved Solids:	1200 mg/L
Radium 226 and 228 combined:	5 pCi/L

If the statistical analysis performed as part of Special Condition 20 determines a groundwater protection standard that is higher than the currently permitted limits, the applicant may submit a permit application to modify the above standards.

SPECIAL CONDITION 24: The groundwater standards at the waste boundary for the Silurian bedrock unit are:

<u>Pollutant</u>	<u>Concentration</u>
Antimony	0.006 mg/L
Arsenic	0.010 mg/L
Barium	2.0 mg/L
Beryllium	0.004 mg/L
Boron	2 mg/L
Cadmium:	0.005 mg/L
Chloride:	200 mg/L
Chromium:	0.1 mg/L
Cobalt:	0.006 mg/L
Fluoride:	4.0 mg/L
Lead:	0.0075 mg/L
Lithium:	0.04 mg/L
Mercury:	0.002 mg/L
Molybdenum:	0.1 mg/L
pH:	6.5-9.0 units
Selenium:	0.05 mg/L
Sulfate:	400 mg/L
Thallium:	0.002 mg/L
Total Dissolved Solids:	1200 mg/L
Radium 226 and 228 combined:	5 pCi/L

If the statistical analysis performed as part of Special Condition 20 determines a groundwater protection standard that is higher than the currently permitted limits, the applicant may submit a permit application to modify the above standards.

SPECIAL CONDITION 25: The hydraulic control system, monitored and operated by MWG for the purpose of counteracting groundwater drawdown from Laraway Quarry dewatering operations, must continue to be actively operated until Laraway Quarry permanently ceases dewatering operations. The permittee must notify Illinois EPA at least 30 days prior to the cessation of operations.

The existing monitoring network is comprised of the following 45 points:

Upgradient: G38D, G38S, G39S, T01S, T02S, T03S, T04S, T05S, T06S, T07S, and T08S

Close proximity extraction system monitoring: G46WT, G46D, G46S, G47WT, G47D, G47S, G48WT, G48D, G48S,

CCR Impoundment Permit No. 2021-CO-100028

Special Conditions

Wells within the Zone of Attenuation:	A08WT, G20S, G30D, G30S, G44D, G44S, G45WT, G45S, G45D, A08D, A08S, R16WT, R16D, R32S
Compliance Wells:	G31D, G31S, G33D, G33S, G41D, G41S, G42D, G42S
Piezometer:	P40S (water level only)
Surface Water Monitoring Point:	S501 (in Settling Pond north of quarry), Des Plaines River (water level only, nearest USGS staff gage or MWG controlled staff gage adjacent to the site)

SPECIAL CONDITION 26: Once the hydraulic control system, summarized in Special Condition 25, is turned off, MWG must monitor Ordovician bedrock aquifer unit wells labeled with a D in Special Condition 27 from the time that the pumps are shut off along with the Silurian bedrock unit and water table unit wells as a part of this operating permit and any further measures taken in accordance with 35 IAC 845.

SPECIAL CONDITION 27: The groundwater standards at the waste boundary for the Ordovician bedrock unit are:

<u>Pollutant</u>	<u>Concentration</u>
Antimony	0.006 mg/L
Arsenic	0.010 mg/L
Barium	2.0 mg/L
Beryllium	0.004 mg/L
Boron	2 mg/L
Cadmium:	0.005 mg/L
Chloride:	200 mg/L
Chromium:	0.1 mg/L
Cobalt:	0.006 mg/L
Fluoride:	4.0 mg/L
Lead:	0.0075 mg/L
Lithium:	0.04 mg/L
Mercury:	0.002 mg/L
Molybdenum:	0.1 mg/L
pH:	6.5-9.0 units
Selenium:	0.05 mg/L
Sulfate:	400 mg/L
Thallium:	0.002 mg/L
Total Dissolved Solids:	1200 mg/L
Radium 226 and 228 combined:	5 pCi/L

If the statistical analysis performed as part of Special Condition 20 determines a groundwater protection standard that is higher than the currently permitted limits, the applicant may submit a permit application to modify the above standards.

SPECIAL CONDITION 28: The permittee must maintain a written operating record at the facility. Each record must be retained for at least three years past the date the Agency approved the owner's or operator's request to terminate post-closure care, when closure is with a final cover system, or the completion of groundwater monitoring under Section 845.740(b), when closure is by removal. Records for each individual surface impoundment must be identified by name and identification number.

The permittee must place the following information, as it becomes available, in the facility's operating record:

- a. Copies of all permit applications and permits;
- b. Hazard potential classification assessments for CCR surface impoundments (see Section 845.440(a)(3)(D));

Special Conditions

- c. Structural stability assessments for CCR surface impoundments (see Section 845.450(d)(4));
- d. Safety factor assessments for CCR surface impoundments (see Section 845.460(c)(4));
- e. The CCR fugitive dust control plan and any subsequent amendment of the plan (see Section 845.500(b)(6)), except that only the most recent fugitive dust control plan must be maintained in the facility's operating record, irrespective of the time requirement specified in subsection (b);
- f. Inflow design flood control system plans for CCR surface impoundments (see Section 845.510(c)(4)(D));
- g. Emergency Action Plan (see Section 845.520(a)), except that only the most recent EAP must be maintained in the facility's operating record irrespective of the time requirement specified in subsection (b);
- h. Documentation prepared by the owner or operator recording all activations of the EAP (see Section 845.520(f));
- i. Documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR surface impoundment and the local emergency responders (see Section 845.520(g));
- j. Safety and Health Plan (see Section 845.530(a));
- k. Documentation recording the results of each inspection and instrumentation monitoring by a qualified person (see Section 845.540(a)(2));
- l. Annual consolidated report (see Section 845.550), which contains the following:
 - 1. The annual CCR fugitive dust control report (see Section 845.500(c));
 - 2. The annual inspection report (see Section 845.540(b)(3)); and
 - 3. The annual groundwater monitoring and corrective action report (see Section 845.610(e));
- m. All groundwater monitoring data submitted to the Agency and any analysis performed (see Section 845.610(b)(3)(D));
- n. Within 30 days after detecting one or more monitored constituents above the groundwater protection standard, the notifications required by Section 845.650(d) and (e);
- o. USEPA-approved or denied demonstration as required by Section 845.700(d)(2)(F);
- p. The preliminary written closure plan and any amendment of the plan (see Section 845.720(a)) except that only the most recent closure plan must be maintained in the facility's operating record, irrespective of the time requirement specified in subsection (b);
- q. The written demonstrations, including the certification required by Section 845.730(b)(3), for a time extension for initiating closure (see Section 845.730(b)(2)); 22) The notification of intent to close a CCR surface impoundment (see Section 845.730(d));
- r. The preliminary written retrofit plan for a CCR surface impoundment (see Section 845.770(a)(3));
- s. The notification of intent to initiate retrofit of a CCR surface impoundment (see Section 845.770(d));
- t. The most current cost estimates (see Section 845.940(d)).

Special Conditions

SPECIAL CONDITION 29: All groundwater monitoring data and resulting analysis must be submitted to Illinois EPA within 60 days after completion of sampling and must be placed into the facility operating record.

SPECIAL CONDITION 30: The permittee shall prepare an Annual Groundwater Monitoring and Corrective Action Report each year. The Annual Groundwater Monitoring and Corrective Action Report shall be submitted to Illinois EPA as part of the Annual Consolidated Report required in Special Condition 31 and must be placed into the facility operating record. The annual report shall include at a minimum and to the extent available:

- a. A map, aerial image, or diagram showing the CCR surface impoundment, all background (or upgradient) and downgradient monitoring wells, including the well identification numbers, that are part of the groundwater monitoring program for the CCR surface impoundment, and a visual delineation of any exceedances of the groundwater protection standards;
- b. Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;
- c. A potentiometric surface map of each hydrostatic unit (water table, Silurian, and Ordovician) for each groundwater elevation sampling event required by Section 845.650(b)(2);
- d. Monitoring data must include analytical results, documentation of field sampling procedures, and laboratory reports in accordance with 35 IAC 845.640(a).
- e. An assessment of corrective measures, corrective action plans, interim corrective measures and any other corrective action measures conducted during the year must be summarized and/or documented in the submission of the annual groundwater monitoring and corrective action report in accordance with 35 IAC 845.610(e) and 35 IAC 845.550(3).
- f. In addition to all the monitoring data obtained in the year, a summary including the number of groundwater samples that were collected for analysis for each Illinois EPA approved background and downgradient well, and the dates the samples were collected;
- g. In accordance with 35 IAC 845.610(e), a narrative discussion of any statistically significant increases over background levels for the constituents listed in Section 845.600. Any statistically significant increases over background concentrations for one or more constituents listed in 35 IAC 845.600 must be identified and summarized or documented in accordance with 35 IAC 845.610(e)(4). Corrective action assessments, planning, and actions must be documented in accordance with 35 IAC 845.610(e); and
- h. All other information required to be included in the annual report as specified in 35 IAC 845 Subpart F.

SPECIAL CONDITION 31: The Annual Consolidated Report for each calendar year shall be submitted to the Illinois EPA by January 31 of the following year and placed into the facility operating record. The Annual Consolidated Report shall consist of the following:

- a. The Annual CCR Fugitive Dust Control Report.
- b. The Annual Inspection Report, which may include:
 1. Annual Hazard Potential Certification, if applicable.
 2. Annual Structural Stability Assessment Certification, if applicable.
 3. Annual Safety Factor Assessment Certification, if applicable.

Special Conditions

4. Inflow Design Flood Control System Certification, if applicable.
- c. The Annual Groundwater Monitoring and Corrective Action Report.

SPECIAL CONDITION 32: All certifications, logs, reports, plan sheets, notices, and groundwater and leachate monitoring data required to be submitted to the Illinois EPA by the permittee shall be mailed to the following address:

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

Information submittals transmitted by FedEx or UPS shall be mailed to the following address:

Illinois Environmental Protection Agency
Compliance Assurance Section
Bureau of Water
1021 North Grand Avenue East
Springfield, Illinois 62702

Electronic groundwater and leachate monitoring data shall be emailed to Illinois EPA at the following email address:
EPA.BOW.GWS.CCR@illinois.gov

Except for electronic groundwater and leachate monitoring data, the operator shall provide the Illinois EPA with the original and two (2) copies of all certifications, logs, reports, and plan sheets required by this permit.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

217/782-0610

Midwest Generation, LLC
1800 Channahon Road
Joliet, IL 60436

Re: Midwest Generation, LLC
Joliet 9 Generating Station
Coal Combustion Residual Impoundment Operating Permit No. 2021-CO-100028
Bureau ID: W1970450046
Draft Permit

Dear Permittee:

Attached to this letter is a copy of the draft Permit, Public Notice/Fact Sheet for your facility. The Agency proposes to issue the Coal Combustion Residual Impoundment Permit for your facility as shown in the draft Permit.

Fifteen days from the date of this letter, the Agency proposes to distribute the attached Public Notice/Fact Sheet statewide. If you have objections to the content of the Public Notice/Fact Sheet, a written statement must be received by the Agency at the indicated address, attention: CCR PN Clerk within 10 days.

The Agency will receive comments regarding the Permit for a period of 45 days after the Public Notice is issued. If you wish to comment or object to any of the terms and conditions of the Permit, you must state the objections in writing prior to the end of the public notice. The Agency may or may not change the Permit based on comments received from you or the public.

If you should have questions or comments regarding the above, please contact Derek Rompot at 217/782-0610.

Sincerely,

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

DEL:DCR:23080802.docx

Attachments: Draft Permit, Public Notice/Fact Sheet

cc: Records Unit
Compliance Assurance Section



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

MEMORANDUM

DATE:

TO: Manager, DWPC/FOS, Des Plaines Region

FROM: Darin E. LeCrone, Manager, Industrial Unit, Permit Section

SUBJECT: Midwest Generation, LLC
Joliet 9 Generating Station
Coal Combustion Residual Impoundment Operating Permit No. 2021-CO-100028
Bureau ID: W1970450046
Draft Permit, Public Notice/Fact Sheet

Please review the attached copy of the subject documents and notify the Industrial Unit if you take exception to the limitations, sampling frequency, sample type or other requirements therein.

If no response is received within fifteen (15) days from the date of this memorandum, we will assume that you concur in the issuance of the Public Notice.

If you have any questions, please contact Derek Rompot at 217/782-0610.

Thank you for your cooperation.

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Attachments: Draft Permit, Public Notice/Fact Sheet

cc: Records Unit



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

217/782-0610

Municipal Clerk
150 W. Jefferson Street
Joliet, Illinois 60432

Re: Midwest Generation, LLC
Joliet 9 Generating Station
Coal Combustion Residual Impoundment Operating Permit No. 2021-CO-100028
Bureau ID: W1970450046
Public Notice of Permit

Municipal Clerk:

In accordance with the requirements of the Illinois Pollution Control Board regulations of 35 Ill. Adm. Code 845.260, the attached Coal Combustion Residual Impoundment Operating Permit Public Notice is sent to a municipality in the vicinity of the applicant. The Agency understands that the applicant may not be associated with the municipality to which it is sent.

Please post the attached Coal Combustion Residual Impoundment Public Notice for a period of 45 days. In addition, please complete and return the enclosed postcard indicating the date of posting. Should you choose not to post the attached notice, please indicate so on the postcard and return.

Thank you for your cooperation.

Sincerely,

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

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Attachments: Public Notice/Fact Sheet, Post Card

cc: Records Unit

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

217/782-0610

Midwest Generation, LLC
1800 Channahon Road
Joliet, IL 60436

Re: Midwest Generation, LLC
Joliet 9 Generating Station
Coal Combustion Residual Impoundment Permit No. 2021-CO-100028
Bureau ID: W1970450046

Dear Permittee:

Attached is the final Coal Combustion Residual Impoundment Operating Permit for your facility. The Permit as issued covers monitoring and related reporting requirements. Failure to meet any portion of the Permit could result in civil and/or criminal penalties. The Illinois Environmental Protection Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge.

The attached Permit is effective as of the date indicated on the first page of the Permit. Until the effective date of any re-issued Permit, the limitations and conditions of the previously issued Permit remain in full effect. You have the right to appeal any condition of the Permit to the Illinois Pollution Control Board within a 35 day period following the issuance date.

Should you have questions concerning the Permit, please contact Derek Rompot at 217/782-0610.

Sincerely,

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

DEL:DCR:23080802.docx

Attachment: Final Permit

cc: Records
Compliance Assurance Section
Des Plaines Region
Billing
USEPA