Post-Closure Care Plan Former OGS Zero Liquid Discharge Pond Amendment No. 1

Ottumwa Generating Station 20775 Power Plant Road Ottumwa, Iowa 52501

Prepared for:

Interstate Power and Light Company 20775 Power Plant Road Ottumwa, Iowa 52501



25225176.00 | June 10, 2025

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PE CERTIFICATION

PROFESSION AL	I, Eric J. Nelson, hereby certify that Post-Closure Care Plan meets the rec 257.104(d) and 40 CFR 257.102(c)(2)(me or under my direct supervision, ar licensed Professional Engineer under of Iowa.	quirements of 40 CFR iv), was prepared by nd that I am a duly
ERIC J. NELSON	2 Muh	6/10/2025
ALL ALL	(signature)	(date)
WWA WWW	Eric J. Nelson	
MINIMUNICO.	(printed or typed name)	
	License number 23136	
	My license renewal date is Decembe	er 31, 2026.
	Pages or sheets covered by this seal:	
	Post-Closure Care Plan, Former OGS Pond – Amendment No. 1 (all pages)	

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1.0 INTRODUCTION AND PROJECT SUMMARY

On behalf of Interstate Power and Light Company (IPL), SCS Engineers (SCS) has prepared this Post-Closure Care Plan for the former Ottumwa Generating Station (OGS) Zero Liquid Discharge (ZLD) Pond coal combustion residual (CCR) unit at the OGS in accordance with 40 CFR 257.104(d) and 40 CFR 257.102(c)(2)(iv) as follows.

<u>40 CFR 257.104(d)</u>. "Written post-closure plan – (1) Content of the plan. The owner or operator of a CCR unit must prepare a written post-closure plan that includes, as a minimum, the information specified in paragraphs (d)(1)(i) through (iii) of this section."

<u>40 CFR 257.102(c)(2)(iv)</u> "Amend the written closure plan required by paragraph (b) of this section and the written post-closure care plan required by § 257.104(d);"

The OGS facility includes two CCR surface impoundments (OGS ZLD Pond and OGS Main Ash Pond) that are subject to the post-closure care requirements outlined in 40 CFR 257.104. Post-closure care for the OGS Main Ash Pond is described in the September 8, 2016, Post-Closure Plan for CCR Surface Impoundments prepared by Sargent & Lundy. This post-closure care plan amends the 2016 Post-Closure Plan by focusing on the former OGS ZLD Pond, which was not included in the 2016 Post-Closure Care Plan due to the plan to close the impoundment by removal of CCR and complete removal and decontamination activities during the active life of the unit.

CCR was removed from the OGS ZLD Pond as described in the written closure plan for this CCR unit amended in June 2025 (SCS, 2025). However, decontamination activities are ongoing and will continue as a requirement of post-closure care along with other post-closure care requirements in accordance with 40 CFR 257.102(c)(2) and 40 CFR 257.104(b).

The purpose of this Post-Closure Care Plan is to incorporate groundwater corrective actions that will occur during the post-closure care period as required by 40 CFR 257.102(c)(2)(iii) and amend the written post-closure care plan per 40 CFR 257.102(c)(2)(iv).

Figure 1 shows the site location. **Figure 2** shows the site layout and location of the former OGS ZLD Pond.

2.0 MONITORING AND MAINTENANCE ACTIVITIES

<u>40 CFR 257.104(d)(1)(i)</u>. "A description of the monitoring and maintenance activities required in paragraph (b) of this section for the CCR unit, and the frequency at which these activities will be performed."

The table below lists anticipated monitoring and maintenance activities along with their planned or anticipated frequency, including activities associated with groundwater corrective action that will be completed as a requirement of post-closure care per 40 CFR 257.102(c)(2)(iii).

Monitoring and Maintenance Activities	Frequency
Inspections by Licensed Professional Engineer	As requested by Owner/Operator
Inspect Groundwater Monitoring System	Quarterly
Repair Groundwater Monitoring System	As needed, determined by inspection

Monitoring and Maintenance Activities	Frequency
Environmental Monitoring (groundwater)	Semi-Annually
Groundwater Corrective Action	
Remedy Design	
Extraction System Design	One-time
Treatment System Design	One-time
Facilities, Process, and Control Design	One-time
Remedy Implementation	
Permitting	One-time
Construction and Commissioning	One-time
Remedy Operation and Maintenance	
System Operation, Maintenance, and Monitoring Visits	As needed, determined by permits and/or system-specific maintenance requirements
Remedy Completion Notification	One-time

The owner/operator will perform quarterly inspections of the groundwater monitoring systems. If issues are noticed during the inspection, action will be taken to remedy the situation. Repairs or replacements will be performed on groundwater monitoring system components as needed.

2.1 GROUNDWATER MONITORING AND SYSTEM MAINTENANCE

Groundwater monitoring wells MW-301, MW-307, MW-308, MW-309, MW-315, and MW-318 have been installed in accordance with 40 CFR 257.90-98 for the former OGS ZLD Pond. These and future wells installed for groundwater corrective action for the former OGS ZLD Pond must continue to be maintained and sampled in accordance with 40 CFR 257.90-98 until the post-closure care period has been completed pursuant to 40 CFR 257.104(c)(3).

2.2 GROUNDWATER CORRECTIVE ACTION

Groundwater samples from wells installed to monitor the OGS ZLD Pond contain cobalt at a statistically significant level (SSL) above the Groundwater Protection Standards (GPS) established in 40 CFR 257.95(h). The groundwater remedy has been selected, and implementation, including final design and construction, is currently underway. Groundwater corrective action will be completed as a post-closure care requirement as specified in 40 CFR 257.102(c)(2)(iii) and 40 CFR 257.104(g).

The selected remedy includes groundwater extraction, which will likely require treatment prior to discharge. The final design of the groundwater "pump and treat" system is in development, so the post-closure care plan will be updated, if needed, once the system design is finalized, permitted, and constructed. Updates to the post-closure care plan may include system-specific maintenance and monitoring requirements. Updates may also be required to the corrective action groundwater monitoring program established by IPL in accordance with 40 CFR 257.98(a)(1).

Once the remedy for groundwater corrective action is complete, IPL will prepare a notification stating that the remedy has been completed, as required by 40 CFR 257.98(e). The notification will include the certification of a qualified professional engineer that the remedy has been completed in compliance with 40 CFR 257.98(c).

3.0 POST-CLOSURE CARE PERIOD CONTACTS

<u>40 CFR 257.104(d)(1)(ii)</u>. "The name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure period."

The contact information for OGS during the post-closure care period is as follows:

Ottumwa Generating Station Attn: Plant Manager 20775 Power Plant Rd. Ottumwa, IA 52501 (800) 255-4268 <u>CCRProgram@alliantenergy.com</u>

4.0 POST-CLOSURE CARE PERIOD SITE USE

<u>40 CFR 257.104(d)(1)(iii)</u>. "A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other component of the containment system or the function of the monitoring systems unless necessary to comply with the requirements of the subpart..."

The final use of the OGS ZLD Pond is a non-CCR wastewater treatment pond at a privately-owned facility. With this use, there is no disturbance of the groundwater monitoring system components and no interference with corrective action activities.

5.0 CERTIFICATIONS

<u>40 CFR 257.104(d)(4)</u>. "The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written post-closure plan meets the requirements of this section."

Eric J. Nelson, PE, a licensed professional engineer in the State of Iowa, has overseen the preparation of this Post-Closure Care Plan. A certification statement is provided on **page iii** of this plan.

6.0 **RECORDKEEPING AND REPORTING**

<u>40 CFR 257.104(b)(2)(iii)</u>. "The owner or operator has completed the written post-closure plan when the plan including the certification required by paragraph (d)(4) of this section, has been placed in the facility's operating record as required by Section 257.105(i)(4)."

This Post-Closure Care Plan will be placed in the facility's operating record and on Alliant Energy's CCR Rule Compliance Data and Information website, as will all future amendments, if any.

In accordance with 40 CFR 257.104(d)(3), IPL will amend the Post-Closure Care Plan if there is a change in operation of the CCR unit that affects the written Post-Closure Care Plan or, if after post-closure activities have started, unexpected events cause a revision of the plan.

In accordance with 40 CFR 257.104(e), IPL will provide notification of completion of the post-closure care no later than 60 days following the completion of the post-closure care period. The notification will include certification by a qualified professional engineer verifying that post-closure care has been

completed in accordance with the plan. The notification will be placed in the facility's operating record and on the website, as required by 40 CFR 257.104(e) and (f), respectively.

7.0 **REFERENCES**

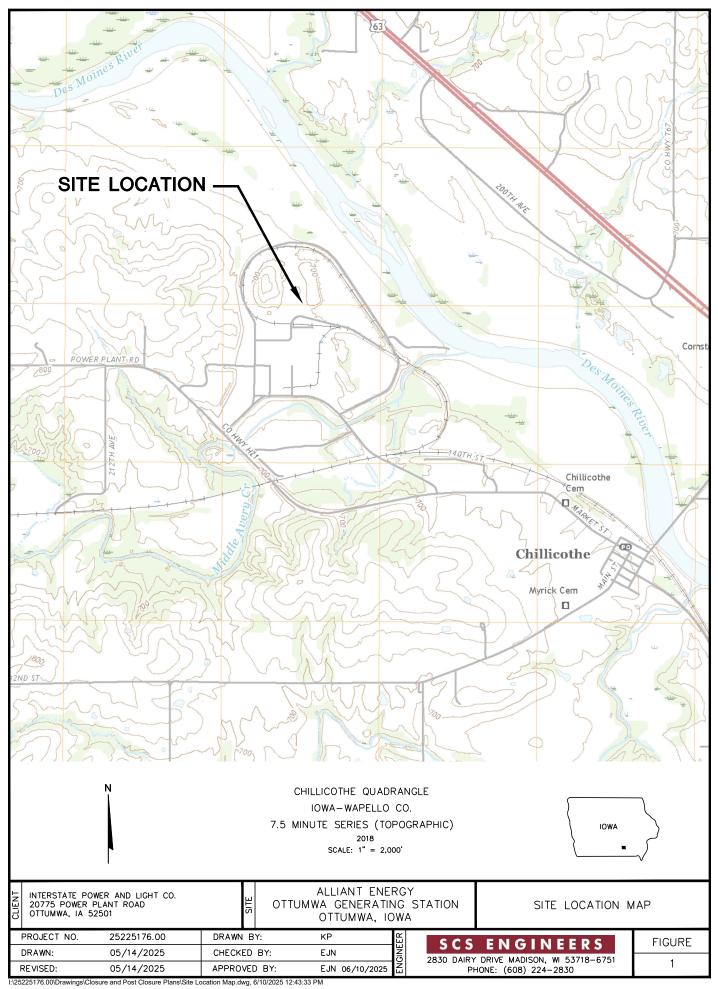
40 CFR Part 257, Subtitle D – Environmental Protection Agency Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities.

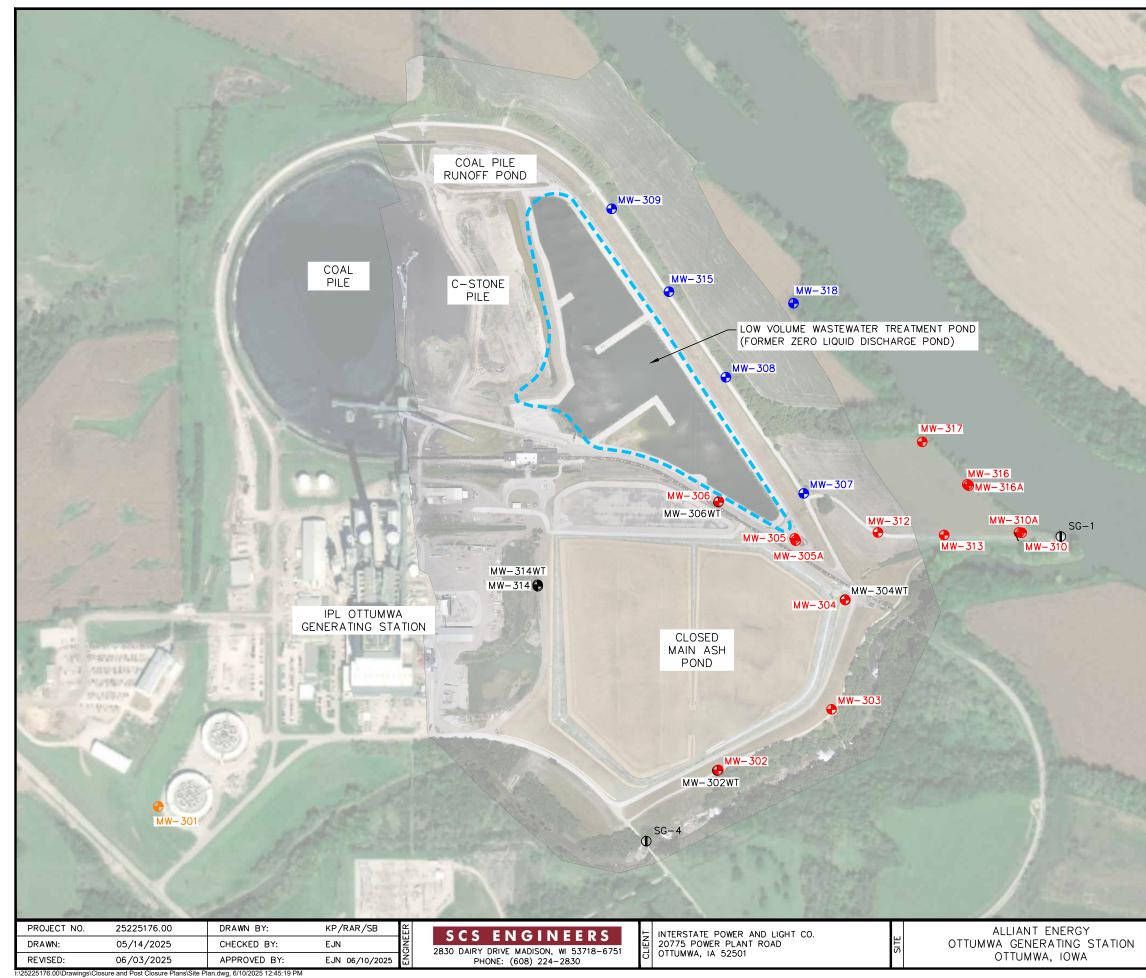
Sargent & Lundy, L.L.C., 2016, Post-Closure Plan for CCR Surface Impoundments, Interstate Power and Light Company Ottumwa Generating Station: Chicago, IL, September 8, 2016.

SCS Engineers (SCS), 2025, Closure Plan, Former Zero Liquid Discharge Pond – Amendment No. 1, Interstate Power and Light Company, June 10, 2025.

Figures

- 1 Site Location Map
- 2 Site Plan and Closure by CCR Removal Area

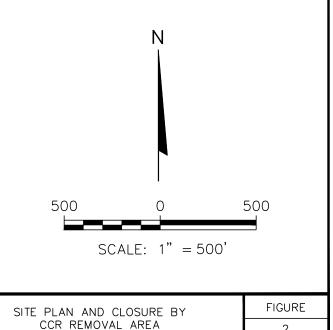




	LEGEND
•	CCR ZLDP MONITORING WELL
•	CCR ASH POND MONITORING WELL
•	CCR BACKGROUND MONITORING WELL
•	WATER LEVEL WELL (NOT PART OF CCR RULE MONITORING SYSTEM)
Ф	SURFACE WATER ELEVATION MEASUREMENT LOCATION
	CCR REMOVAL AREA



- 1. THE BACKGROUND MONITORING WELL FOR THE OGS ASH POND IS MW-301.
- BACKGROUND AERIAL IMAGE IS A COMPOSITE OF A PHOTOGRAPH FROM ESRI DATED 2014 AND DRONE PHOTO BY RYAN INCORPORATED CENTRAL INC. DATED JUNE 19, 2023.
- MONITORING WELL LOCATIONS REFLECT EXISTING CONDITIONS AS OF MAY 2025. LOCATION OF MW-318 IS APPROXIMATE.



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