TECHNICAL MEMORANDUM

DATE October 23, 2026 **Project No.** 31406779.0108

TO Jeff Loewe, Joe Kutch, Justin Barrett
Northern Indiana Public Service Company LLC

CC John Puls

FROM Danielle Sylvia Cofelice **EMAIL danielle.sylvia@wsp.com**

RE: NORTHERN INDIANA PUBLIC SERVICE COMPANY LLC
R. M. SCHAHFER GENERATING STATION, WASTE DISPOSAL AREA
40 CFR §257.103(F)(2)(X) PART A DEMONSTRATION ANNUAL PROGRESS REPORT #01-26

On October 30, 2020, in accordance with the requirements of 40 Code of Federal Regulations (CFR) §257.103(f)(2), Northern Indiana Public Service Company LLC (NIPSCO) submitted to the United States Environmental Protection Agency (USEPA) the "*NIPSCO LLC RMSGS Demonstration of Site-specific Alternative Deadline to Initiate Closure of CCR Surface Impoundment Due to Permanent Cessation of Coal-Fired Boilers by a Date Certain*" (Golder, 2020a; Demonstration) for the Coal Combustion Residuals (CCR) Rule-regulated surface impoundment referred to as the Waste Disposal Area (WDA). The WDA impoundment is part of the NIPSCO R.M. Schahfer Generating Station (RMSGS), 2723 E 1500 N Road, Wheatfield, Jasper County, Indiana (Site). NIPSCO submitted *Addendum 1* (Golder, 2020b) to the Demonstration on November 30, 2020. Both the Demonstration and Addendum 1 anticipated permanent cessation of coal-fired generation in May 2023.

Subsequent electric generation and regional grid reliability needs required continue coal-fired generation and consequent use of the WDA. As a result, NIPSCO submitted *Addendum 2* to the Demonstration on August 18, 2022 (Golder, 2022). The Demonstration and its addenda are currently under review by USEPA.

Although the WDA is the primary focus of the Demonstration and its addenda, 40 CFR §257.103(f)(2) specifies that the facility (*emphasis added*) complies with all other requirements of the CCR Rule, including the requirement to conduct any necessary corrective action. Neither the WDA nor the Landfill Phases V, VI, VII, and VIII are subject to corrective action provisions. However, for three other RMSGS surface impoundments known as the Material Storage Runoff Basin (MSRB), Metal Cleaning Waste Basin (MCWB), and Drying Area (DA), collectively referred to as the Multi-Cell Unit (MCU), NIPSCO has implemented a compliant groundwater remedy, post-closure cover system operation and maintenance (O&M) activities, and corrective action groundwater monitoring.

The Demonstration, Addendum 1, Addendum 2, and 40 CFR §257.103(f)(2)(x) require completion of an annual report documenting the continued lack of alternative disposal capacity and the progress toward the closure of the WDA surface impoundment. This Demonstration Annual Progress Report #01-26 (2026 Progress Report) fulfills the 40 CFR §257.103(f)(2)(x) regulatory requirement and provides updates on select additional RMSGS CCR Rule compliance and Demonstration-related actions completed by NIPSCO subsequent to previously submitted Demonstration, addenda, and prior progress reports.

Progress Toward Closure/Permanent Cessation of Coal-Fired Boiler Operations

As of October 1, 2021, NIPSCO permanently retired Units 14 and 15, representing two of the four formerly operating coal-fired boilers at RMSGS. Remaining Units 17 and 18 have continued to operate when not in outage, with management of CCR and non-CCR waste streams produced from the Units being provided by the WDA. The formerly planned retirement schedule, presented in Addendum 2, included cessation of all coal-fired generation by the end of Q4 2025. On December 23, 2025, the United States Department of Energy (DOE) issued a 90-day emergency order under Section 202(c) of the Federal Power Act requiring RMSGS Units 17 and 18 to continue operating until March 23, 2026. DOE has subsequently extended the order through additional 90-day renewal periods. The continued operation requires, by extension, continued operation of the WDA to manage the CCR and non-CCR waste streams being generated. Because NIPSCO has no control over, nor the ability to predict, when the Section 202(c) emergency order will be allowed to lapse, the timing for initiating retirement activities for Unit 17 and 18 remains uncertain.

Ongoing Need for Operation of the WDA

Units 17 and 18 continue to operate under the DOE emergency order, generating substantial volumes of CCR and non-CCR waste streams, as detailed in the Demonstration and discussed below. Thus, the need remains for existing capacity and continued WDA operation to meet both ongoing coal-fired generation and current and future decommissioning demands related to the boilers. As the only remaining operational CCR Rule-regulated impoundment, on-site discharge to the WDA is the only viable alternative for the management of the high-volume effluent.

As designed and constructed, most of RMSGS's wastewater and stormwater systems operate through a network of common sumps which ultimately discharge to the WDA. Until CCR Rule-regulated and non-regulated waste streams are no longer being generated, separation of the various sumps and pipelines is impractical. Therefore, until boiler cessation and plant decommissioning actions are fully completed, continued operation of the WDA remains essential to the management of these waste streams. However, NIPSCO has already begun preparations for the eventuality of ceasing all discharge to the WDA in anticipation of closure. In July 2025, WSP USA Inc. (WSP) completed a design for the separation and rerouting of sump and stormwater drain lines away from the WDA into alternative non-regulated (under the CCR Rule) receiving water bodies. Construction, testing, and commissioning of the new discharge system are currently on hold pending potential renewals of the Section 202(c) emergency order, prior to initiation of WDA closure activities.

Continued Lack of Alternative Capacity

At the time of preparation of this 2026 Progress Report, the measurable reduction in Site-wide generation of CCR and non-CCR waste streams resulting from the retirement of Units 14 and 15 could not be definitively quantified due to the absence of flow metering capacity in individual feed and discharge lines. To estimate the volume, WSP relied on a February 2023 revision of the RMSGS water balance, which provided estimates of wastewater flow volumes, prepared for NIPSCO by the Ramboll Group, and information provided by NIPSCO operations and environmental compliance personnel regarding operational changes and impacts on waste stream generation. Based on review of this information, individual CCR effluent waste stream volumes from ongoing Site operations were estimated to be approximately 0.680 million gallons per day (MGD) and 1.105 MGD, and individual maximum non-CCR effluent stream volumes were estimated to be 0.925 MGD, for a combined estimated maximum daily discharge of 2.71 MGD to the WDA.

Consistent with the requirements of 40 CFR §257.103(f)(2)(x) and employing processes consistent with those used in the evaluation of alternate disposal capacity for the Demonstration, WSP, on behalf of NIPSCO, performed a re-evaluation of its previous assessments. The continued lack of alternative capacity is supported by the following conditions/conclusions:

- No other existing on-Site impoundment system can accept partial or total flows of CCR waste streams that are currently discharging into the WDA
- No existing transport conduit nor alternative disposal capacity is available for CCR and non-CCR waste streams in the existing on-Site wastewater treatment plant (WWTP)
- No existing off-loading or conveyance piping infrastructure to support on or off-Site alternative disposal of CCR or non-CCR waste streams is in place and, as a practical matter, commercial tanker truck capacity for individual waste streams of between 0.680 and 1.105 MGD, up to a combined estimated daily maximum volume of up to 2.71 MGD is not possible to dependably source considering equipment and driver availability, impairments due to seasonal weather conditions, etc.
- An employee and public health and safety risk associated with off-Site disposal would exist due to the additional truck traffic both on-Site and on the public roads as well as an increased carbon footprint with added truck traffic
- An increased risk of release that could harm the environment would exist each time the wastewater is handled (i.e., pumped for off-Site transport, unloaded at off-Site receiving facilities)

NIPSCO previously evaluated the feasibility of constructing new alternative CCR and non-CCR waste management options on-Site, even though RMSGS will cease all coal-fired generation with the intention to close the WDA no later than October 17, 2031. As in 2020 and confirmed in 2022 (Addendum 2), due to Site-specific factors (e.g., space limitations, shallow depth to groundwater and thus the inability to reasonably achieve the 40 CFR §257.60(a) five-foot separation from the upper limit of the uppermost aquifer), permitting and/or regulatory hurdles including permit application review timeframes, potential supply chain issues relative to equipment and construction materials availability, and building timeframes, construction of new alternative management facilities before the required time to initiate closure of the WDA is infeasible.

Based on current operating conditions and an updated evaluation regarding alternative disposal capacity, WSP concludes that no viable alternative to continued use of the WDA before the required time to initiate closure currently exists.

Additional NIPSCO Demonstration-Related Work Completed Subsequent to October 2020

NIPSCO completed the MCU Assessment of Corrective Measures (ACM) in 2019 and subsequently issued three ACM addenda between 2020 and 2022 to address USEPA feedback, closure design changes, and a focused evaluation of cobalt, the only Appendix IV constituent identified above its groundwater protection standard. In December 2022, NIPSCO selected monitored natural attenuation (MNA) as the corrective remedy for groundwater impacts. Further supporting geochemical modeling was completed in 2023 (WSP, 2023). The remedy was implemented in 2024, following the completion of the closure by removal of CCR material and capping of the MCU. Since implementing the remedy, cobalt concentrations have decreased below the GWPS, and no SSLs have been identified. Groundwater monitoring will continue until compliance with the GWPS is achieved for a period of three consecutive years.

In planning for final closure of the WDA, which will follow permanent retirement of Units 17 and 18 and completion of boiler washdown activities, NIPSCO has retained WSP to evaluate alternative closure strategies and prepare detailed closure design plans in accordance with the applicable requirements of 40 CFR §257.102. NIPSCO has selected a closure by removal approach, with cleanup to site-specific background standards. WSP has prepared a closure plan, and NIPSCO submitted the WDA closure plan to IDEM on December 28, 2023. IDEM issued a notice of completion in Q2 2025; a public comment period was completed, and NIPSCO is currently awaiting issuance of a closure plan permit approval.

NIPSCO continues to perform all CCR Rule-required activities at RMSGS' regulated CCR surface impoundments (i.e., WDA and MCU) and its multi-phase CCR landfill. Based upon its interpretation of the regulatory obligations, NIPSCO reasserts its facility-wide compliance with all applicable Part 257 requirements.

Conclusion

WSP completed the evaluation and prepared this 2026 Progress Report on behalf of NIPSCO. The 2026 Progress Report documents a) the continued lack of alternative capacity on-Site and off-Site, b) NIPSCO's progress toward the closure of the RMSGS surface impoundment referred to as the WDA, and c) additional Demonstration-related actions taken by NIPSCO since the previous Progress Report. Due to the DOE's issuance of a 202(c) emergency order to continue operating past its most recently planned December 2025 retirement date, NIPSCO currently anticipates a delay in the formerly identified final closure date of October 2028 as outlined in the Demonstration and its addenda. In accordance with EPA's proposed rulemaking (FR 54611), modifying 40 CFR 257.103(f)(2), NIPSCO now anticipates a final closure date no later than October 17, 2031.

References

Golder Associates Inc. (2020a), NIPSCO LLC RMSGS Demonstration of Site-specific Alternative Deadline to Initiate Closure of CCR Surface Impoundment Due to Permanent Cessation of Coal-Fired Boilers by a Date Certain, October 30, 2020.

Golder Associates Inc. (2020b), NIPSCO LLC RMSGS Demonstration of Site-specific Alternative Deadline to Initiate Closure of CCR Surface Impoundment Due to Permanent Cessation of Coal-Fired Boilers by a Date Certain – Addendum 1, November 30, 2020.

Golder Associates USA, Inc. (2021), a member of WSP, NIPSCO LLC RMSGS 40 CFR §257.103(f)(2)(x) Part A Demonstration Annual Progress Report #01-21, October 29, 2021.

Golder Associates USA, Inc. (2022), a member of WSP, NIPSCO LLC RMSGS Demonstration of Site-specific Alternative Deadline to Initiate Closure of CCR Surface Impoundment Due to Permanent Cessation of Coal-Fired Boilers by a Date Certain – Addendum 2, August 18, 2022.

WSP USA Inc. (2023), NIPSCO LLC RMSGS Multi-Cell Unit Reactive Transport Modeling, August 10, 2023.