

February 11, 2022

Project No. 20368079

Joseph E. Kutch, Manager, Environmental Compliance

Northern Indiana Public Service Company LLC
2755 Raystone Drive
Valparaiso, IN 46383

**RE: NORTHERN INDIANA PUBLIC SERVICE COMPANY LLC, R.M. SCHAHFER GENERATING STATION
WHEATFIELD, INDIANA
CCR SURFACE IMPOUNDMENT NO ALTERNATIVE DISPOSAL CAPACITY DOCUMENTATION –
2022 ANNUAL UPDATE
PURSUANT TO INDIANA ADMINISTRATIVE CODE 329 IAC 10-9-1**

Dear Mr. Kutch:

In February 2019 on behalf of Northern Indiana Public Service Company LLC (NIPSCO), Golder Associates USA Inc. (Golder), a member of WSP, prepared the coal combustion residuals (CCR) Surface Impoundment No Alternative Disposal Capacity Documentation (Documentation) pursuant to 40 CFR §257.103(b)(1) for the NIPSCO R. M. Schahfer Generating Station (RMSGGS) in Wheatfield, Indiana. The 2019 Documentation was prepared for active surface impoundments referred to as the Waste Disposal Area (WDA), Metal Cleaning Waste Basin (MCWB), and Material Storage Runoff Basin (MSRB). Each of these unlined impoundments failed to successfully demonstrate the groundwater separation (location restriction) standard of 40 CFR §257.60 and as a result, must close. As stated in the Demonstration, in accordance with 40 CFR §257.103(b), NIPSCO intended to continue using the WDA, MCWB and MSRB to manage CCR waste streams until a planned shutdown of all coal-fired units in 2023. As part of the 2019 Documentation, Golder evaluated potential disposal options and found that there is no existing alternative disposal capacity on- or off-Site that could accept the flow being impounded in the RMSGGS MSRB, MCWB, and WDA. In April 2021 on behalf of NIPSCO and pursuant to the requirements of 40 CFR §257.103(b)(1), Golder prepared and certified an annual update on progress toward achieving alternative capacity on- or off-Site.

On September 28, 2020, the U.S. Environmental Protection Agency (EPA) enacted new regulations affecting the 40 CFR §257.103 Alternative Closure Requirements, replacing the 40 CFR §257.103(b)(1) option NIPSCO had been pursuing with like, but more substantial, requirements outlined in 40 CFR §257.103(f)(2). The new regulations applicable to NIPSCO's impoundment closure strategy required a similar, yet more rigorous, evaluation of the availability of alternative on- or off-Site disposal capacity as options to the continued use of surface impoundments. In accordance with the new regulatory requirements, NIPSCO submitted a Demonstration of Permanent Cessation of a Coal-Fired Boiler(s) by a Date Certain on October 30, 2020, followed by an Addendum on November 30, 2020, both of which are under review by EPA (hereinafter Demonstration).

Although EPA enacted new regulations which superseded and replaced 40 CFR §257.103(b)(1), Indiana Department of Environmental Management (IDEM), which previously adopted the 257.103(b)(1) regulatory language within Indiana Administrative Code (IAC) 10-9-1, has yet to do so. Therefore, on behalf of NIPSCO, Golder has prepared and is certifying this 2022 annual progress report in accordance with IAC 10-9-1 requirements, as applicable.

This correspondence prepared pursuant to 329 IAC 10-9-1 presents an updated annual report documenting the continued lack of alternative capacity and to report progress toward closure of the coal-fired units and, by extension, the MSRB, MCWB, and WDA CCR surface impoundments.

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

As of October 1, 2021, NIPSCO permanently shut down operations of Units 14 and 15, representing two of the four coal-fired boilers at RMSGS, and has begun washdown operations as a prelude to decommissioning. Remaining Units 17 and 18 continue to operate, with management of CCR and non-CCR waste streams produced from these Units being provided by the WDA. Cessation of operations of the two coal-fired boilers is consistent with overall Site retirement plans and on schedule with NIPSCO's planned permanent cessation of all coal-fired generation activities by Q2 2023, as outlined in the Demonstration (Section 2.4 and Figure 3).

Ongoing Need for Operation of the WDA

As evidenced by the recent shut down of two of its four coal-fired boilers, NIPSCO is progressing toward permanent cessation of all coal-fired generation activities at RMSGS. Although Units 14 and 15 have been shut down, boiler decommissioning and washdown event(s) associated with these two Units will increase the generation of CCR and non-CCR wastewater and resultant discharge to the WDA for a period of time. Furthermore, Units 17 and 18 continue to operate at or near their capacity, 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 operation of the WDA to meet both ongoing coal-fired generation and current and future decommissioning demands.

Aside from ongoing operational and future decommissioning needs, continued availability of the WDA is also a pivotal component in the planned closure of three other inactive CCR Rule regulated surface impoundments (i.e., the MSRB, MCWB, and DA) referred to collectively as the Multi-Cell Unit (MCU). A Closure Application, which has undergone several revisions in response to Indiana Department of Environmental Management (IDEM) reviews, is awaiting final IDEM approval. A key facet of the MCU closure by removal approach is the planned discharge of dewatering fluids to the WDA. As the only remaining operational CCR Rule regulated impoundment on-Site, discharge to the WDA is the only viable alternative for the management of high-volume dewatering effluent. Anticipating IDEM approval will be received, NIPSCO is in the construction contractor procurement stage. Contractor selection is expected within the next few months and closure construction activities, including dewatering, are currently planned for summer 2023. Completion of the 2023 closure activities, shutdown of the remaining coal-fired boilers, and conclusion of decommissioning activities will reduce reliance on the WDA as a CCR and non-CCR waste management unit.

As designed and constructed, most of NIPSCO's wastewater and stormwater systems feature a network of common sumps which ultimately discharge to the WDA. Until such time as CCR Rule regulated waste streams are no longer being generated, separation of the various sumps and pipelines is impractical, especially for a generating station with less than one and one-half years of active generation life remaining. Therefore, until

cessation and decommissioning actions are completed, the WDA remains essential to the management of these high-volume waste streams. Once CCR generation activities cease and boiler decommissioning is complete, ongoing post-generation non-CCR waste streams can be managed in one or more existing NPDES-regulated non-CCR impoundments as an alternative to management in the WDA.

Continued Lack of Alternative Capacity

At the time of preparation of this Report the measurable reduction in Site-wide generation of CCR and non-CCR waste streams resulting from these boiler shutdowns could not be definitively quantified due to the absence of flow metering capacity in individual feed and discharge lines. However, in determination of alternative capacity and reliance for the operation of the WDA, the combined estimated average daily waste stream flow of 5.04 MGD reported in the Demonstration (i.e., October 2020) from Units 14 and 15, has been removed from the combined total waste stream flow considered in this Report. Note that such an approach assumes an instantaneous and maximum waste stream flow reduction (and does not account for the compulsory boiler washdown flow from Units' decommissioning) and is, as a result, considered a conservative compacity demand-based approach to this update. Therefore, due to ongoing Site operations and maintenance activities (e.g., boiler room sump dewatering for both shut down and active Units, stormwater collection and management), volumes of individual CCR and non-CCR effluent being discharged to the WDA are estimated to be between 0.34 MGD and 1.42 MGD, with a combined estimated daily flow of 4.1 MGD.

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, Golder Associates USA Inc. (Golder), a member of WSP, on behalf of NIPSCO, performed a valuation of its previous assessment. The continued lack of alternative capacity is supported by the following conclusions:

- No existing on-Site impoundment system can accept partial or total flows of CCR waste streams that are currently discharging into the WDA
- No alternative disposal is available for CCR and non-CCR waste streams in the existing on-Site WWTP
- No existing off-loading or conveyance piping infrastructure is in place to support on or off-Site alternative disposal of CCR or non-CCR waste streams
- Commercial tanker truck, railcar, on-Site infrastructure, and treatment capacity in the region continue to preclude off-Site transport and/or alternative disposal
- An employee and public health and safety risk associated with off-Site disposal would result 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 result every time the wastewater is handled (i.e., pumped/loaded for off-Site transport, pumped to the on-Site WWTP, unloaded at an alternative treatment facility, if one existed)

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 in about one and one-half years. As in 2020, 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, and building timeframes, construction of new alternative management facilities is infeasible.

Based on current operating conditions and an updated evaluation regarding alternative disposal capacity, Golder concludes that no viable alternative to continued use of the WDA currently exists.

Conclusion

Golder has prepared this report to provide documentation pursuant to 329 IAC 10-9-1, as applicable, that provides an annual update to the existing alternative disposal capacity on- or off-Site, without consideration of increase in costs or inconvenience to NIPSCO. The Report documents a) the continued lack of alternative capacity on-Site and off-Site, and b) NIPSCO's progress toward the closure of the RMSGS surface impoundment referred to as the WDA. NIPSCO currently anticipates no delays in the cease receipt date, or the final closure date as outlined in the Demonstration.

A Statement of Certification is included in Exhibit A as an attachment. It is Golder's opinion that the information contained herein is true, accurate and has been prepared in accordance with good engineering practices and that the documentation provided, in accordance with 329 IAC 10-9-1, supports that there is no existing alternative disposal capacity on- or off-Site that could accept the flow currently being impounded in the WDA at RMSGS.

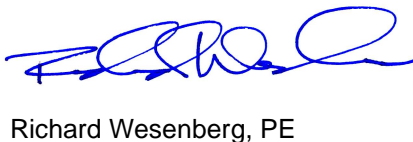
Sincerely,

Golder Associates USA Inc.



Mark Haney

Principal, Senior Program Leader



Richard Wesenberg, PE

Principal and US Mine Waste Group Leader

MH/RW

Attachments: Exhibit A – Statement of Certification

[https://golderassociates.sharepoint.com/sites/134674/project files/6 deliverables/feb 2022 - iac no alt update/no alternative annual update - feb22 iac update.docx](https://golderassociates.sharepoint.com/sites/134674/project%20files/6%20deliverables/feb%202022%20-%20iac%20no%20alt%20update/no%20alternative%20annual%20update%20-%20feb22%20iac%20update.docx)

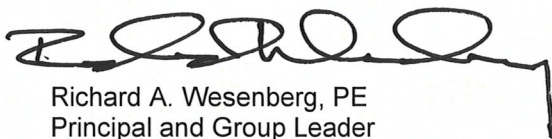
Northern Indiana Public Service Company LLC (NIPSCO) R.M. Schahfer Generating Station (RMSGs)
Wheatfield, Jasper County, Indiana
Waste Disposal Area

STATEMENT OF CERTIFICATION**NIPSCO RMSGs WASTE DISPOSAL AREA****DOCUMENTATION FOR NO ALTERNATIVE DISPOSAL CAPACITY FOR EXISTING CCR SURFACE
IMPOUNDMENTS – 2022 ANNUAL UPDATE**

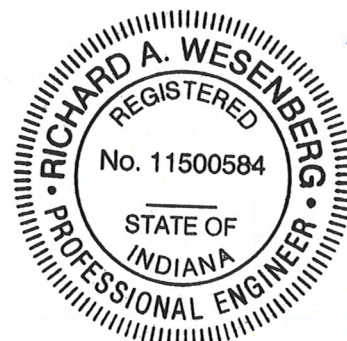
Indiana Administrative Code, 329 IAC 10-9-1

Golder Associates USA Inc. (Golder), a member of WSP, understands that NIPSCO intends to continue using coal-fired Units 17 and 18 at RMSGs for a limited remaining period, with a planned shutdown of all coal-fired boilers announced for 2023. Until then, Units 17 and 18's coal-fired boilers will continue to generate CCR waste streams that, in compliance with the conditions of 329 IAC 10-9-1, can be managed in existing on-Site CCR impoundments. The MSRB and MCWB impoundments, previously addressed in a 2019 Documentation and annual updates, are no longer in active service, ceased receipt of CCR waste streams in October 2020, and NIPSCO has submitted a Closure Application to IDEM, which is under review. The WDA is the only remaining surface impoundment at RMSGs that is regulated as a CCR surface impoundment and continues to accept CCR waste streams. The WDA will continue to operate as a CCR surface impoundment through the cessation of all RMSGs coal-fired boilers in 2023 and will complete closure activities no later than October 17, 2028.

I, Richard Wesenberg, certify that I have personally examined and am familiar with the applicable provisions of Indiana Administrative Code, 329 IAC 10-9-1 and with the information submitted in the NIPSCO RMSGs CCR Surface Impoundment No Alternative Disposal Capacity Documentation – 2022 Annual Update, prepared by Golder Associates USA Inc., dated February 2022. I believe that the information contained therein is true, accurate and has been prepared in accordance with good engineering practices and that the documentation provided in accordance with 329 IAC 10-9-1 supports that there continues to be no existing alternative disposal capacity on- or off-Site that could accept the flow currently being impounded in the WDA at RMSGs.



Richard A. Wesenberg, PE
Principal and Group Leader
Registered Professional Engineer
State of Indiana No.: PE11500584



2-11-2022