



TECHNICAL MEMORANDUM

DATE April 24, 2020 **Project No.** 19121569

TO Joe Kutch, CCR Program Manager
Northern Indiana Public Service Company LLC (NIPSCO LLC)

CC Marc Okin (NIPSCO LLC), Joe Gormley, Danielle Sylvia, Jim Peace

FROM Mark Haney **EMAIL** mhaney@golder.com

**RE: NORTHERN INDIANA PUBLIC SERVICE COMPANY LLC
BAILLY GENERATING STATION, CCR UNITS PRIMARY 1, PRIMARY 2, AND SECONDARY 1
CORRECTIVE MEASURES SELECTION OF REMEDY, SEMI-ANNUAL PROGRESS REPORT #20-01**

On behalf of Northern Indiana Public Service Company LLC (NIPSCO LLC), Golder Associates Inc. (Golder) prepared a Coal Combustion Residuals (CCR) Assessment of Corrective Measures (ACM) for three impoundments, Primary 1, Primary 2, and Secondary 1 (collectively the CCR Units). The CCR Units are located at the NIPSCO Bailly Generating Station, 246 Bailly Station Road in Chesterton, Porter County, Indiana (BGS or Site). The ACM, prepared in conformance with applicable requirements of 40 Code of Federal Regulations (CFR) §257.96, was certified by a qualified Indiana-licensed professional engineer May 1, 2019, following which it was placed in the facility operating record and posted to NIPSCO's publicly-accessible CCR website.

NIPSCO LLC intends to close the CCR Units by removing source materials in accordance with the requirements of 40 CFR §257.102(c). The ACM identified five potential Corrective Measure alternatives to be considered for implementation following excavation and closure of the CCR Units. Based upon review of recent data, Golder has identified changes in groundwater flow direction as a result of the shutdown of coal-fired generating activities and consequent modifications in operation of the impoundments. As a result, the groundwater monitoring network has been updated to appropriately monitor groundwater quality immediately downgradient of the CCR Units and to allow for the collection and evaluation of additional information essential to the evaluation of the potential Corrective Measures alternatives.

To update the network, Golder installed six new monitoring wells in September 2019. The six new monitoring wells are located along the southern boundaries of the Primary 1 and Primary 2 impoundments. Additionally, Golder advanced three soil borings to 100 feet below ground surface using sonic drilling methods. The boreholes were continuously sampled in 10-foot runs. Golder logged lithologic conditions and collected samples for grain size analysis and chemistry data. The updated groundwater monitoring network was certified by a qualified Indiana-licensed professional engineer in October 2019.

During the fall 2019-spring 2020 timeframe, Golder evaluated the analytical data collected during the September 2019 drilling event, evaluated the groundwater flow direction based on water levels from the updated monitoring well network, and sampled and evaluated groundwater analytical data collected from the updated monitoring well network. During the spring-fall 2020 timeframe, Golder will continue to measure water levels and evaluate the groundwater flow direction and collect and evaluate analytical data from the updated monitoring well network.

Additionally, Golder will continue to perform an engineering review of the five potential Corrective Measures alternatives. For these reviews, Golder will place emphases on identifying critical data needs, understanding and reacting to impacts of newly gathered information on previous assumptions and/or conclusions, identifying and researching applicability of emerging technologies, and monitoring changing conditions and future plans for the Site and their impacts on the selection of remedy process. In conformance with applicable requirements of 40 CFR §257.97(a) Golder will provide an updated report semi-annually that summarizes NIPSCO LLC's progress and status regarding a selection of remedy.