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October 9, 2020
File: 21.0056811.00

Mr. George Streit
george.streit@nrgenergy.com
Huntley Power LLC
3500 River Road
Tonawanda, NY 14150

Re: CCR Landfill 2020 Annual Inspection Report
Huntley Generating Station
Tonawanda, New York

Dear Mr. Streit:

GZA GeoEnvironmental of New York (GZA) presents this 2020 Annual Landfill Inspection report to Huntley Power LLC (Huntley) for the existing coal combustion residuals (CCR) landfill units at the Huntley Generating Station landfill located in Tonawanda, New York (Site). This annual inspection is required by the United States Environmental Protection Agencies (USEPA) Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule, as presented in the Federal Register Volume 80 No 74 dated April 17, 2015. In accordance with the CCR Rule (40 CFR 257.84), owners/operators of CCR landfill units are required to be inspected on a periodic basis by a qualified professional engineer to check the design, construction, operation and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards.

Document Review

The required periodic inspections presented in the CCR Rule are intended for open and active landfills and are not required for closed or inactive landfills. As such, the active/open ash waste cells for the Huntley Power Site are identified as upper portions of Cells A and D, and all of Cell C. The remaining landfill cells at the Site are considered inactive (i.e., closed) and are not included with this annual inspection report. The limits of the active cells requiring this annual inspection report are shown on the attached figure prepared by Wendel for the 2019 fill progression survey (see **Figure 1**). An area designated as future Cell B (located between Cells A and C) and Cell E (located south of Cell A) were never constructed.

The Huntley Power landfill is currently permitted (ID#9-1464-00089/000010) with the New York State Department of Environmental Conservation (NYSDEC) to accept residual coal ash waste generated from the Huntley Power facility through January 3, 2023. We note that the Huntley Power plant has ceased electrical generation operations and is in the process of being shut down. A review of Wendel's 2019 (most recent) fill progression report for the Cells A, C and D indicates the following information.



Landfill Cell	Waste Received in 2019 (cy)	Current Ash Volume (cy)	Volume Remaining (cy)
A	0	509,582	195,958
C	0	417,528	361,515
D	0	537,609	48,051
Totals for A, C & D	0	1,464,719	605,524

cy = cubic yards

NRG indicated that no waste material was placed in any of the active cells since November 27, 2018.

The 2020 weekly landfill inspection forms prepared by Huntley Power Site personnel did not identify any concerns or complaints related to the operation and/or maintenance of the active ash landfill cells.

Site Observations

GZA visited the Huntley CCR Landfill Site on September 18th, 2020 to make observations of the active portions of landfill Cells A, C and D. The following is a summary of our observations made at each active cell.

Cell A: This cell apparently received no waste since November 27, 2018. This area was previously covered with soil and seeded for use as a temporary cover. The cell A side slopes at the lower elevations were observed with final cover systems previously constructed in general accordance with its intended design (side slopes not exceeding 33% or 3 Horizontal: 1 Vertical (3H:1V)) and included intermittent benches and rip-rap lined drainage channels at select locations of the cell. The upper elevations were observed generally consisting of a vegetated temporary cover system with approximate 5% slopes. In general, although there have been slight modifications to the grades and upper slopes of the Cell A, no deficiencies or structural concerns were observed.

Cell C: The 2019 fill progression survey indicated that Cell C received no ash waste since November 27, 2018. During our Site visit, the side slopes and upper portions of the waste areas were observed to be in similar condition to observations made in 2019 although the previously re-graded upper slopes were now observed with a vegetated temporary cover (similar to the upper portions of Cell A). The construction done in Cell C, including regrading and installation of a temporary cover system, appears to be in general accordance with intended designs and overall appears to be stable without evidence of structural instability issues (e.g., slumps, cracks, settlement, etc.). The cell side slopes were observed as not steeper than 33% (3H:1V). Some areas of small erosion rills were observed within the temporary cover system and were reportedly due to previous rain events. The observed erosion rills did not extend into the underlying ash waste and the impacted areas were being repaired and reseeded to promote vegetative growth to secure the cover and minimize erosion concerns.

Cell D: A review of the most recent fill progression survey indicated that no waste was placed since November 27, 2018. The temporary soil cover system observed on Cell D appears similar to observations made in 2019. The previous regrading activities observed within the cell appears to be in general accordance with intended designs and overall appears to be stable without evidence of structural instability issues (e.g., slumps, cracks, settlement, etc.). The northern, eastern and southern side slopes of Cell D were observed having final cover systems, including interim benches and drainage features. The cell side slopes were observed to be no steeper than 3H:1V.



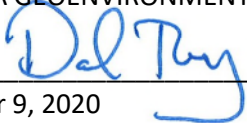
Overall, the work face areas of the active cells appeared to be graded in general accordance with the proposed design configurations. The side slopes and other areas were observed in good condition with no evidence of actual, or potential for, structural instability or erosion or unsafe conditions. Similar to the most recent annual inspection made at the end of 2019, this inspection identified no areas of concern or areas evident of structural instability. Other than the recent grade modifications and temporary cover systems of the active Cells A, C and D, no significant changes pertaining to the design, operation and maintenance have been made to the active landfill cells. In general, the ongoing maintenance and grading of the ash waste appear to be in compliance with the cell design and permit requirements. No areas of exposed ash waste were observed within Cells A, C and/or D during our site visit.

PROFESSIONAL ENGINEER CERTIFICATION

The undersigned registered professional engineer is familiar with the requirements of §257.84 and has visited and examined the Huntley Station Landfill or has supervised examination of the facilities by appropriately qualified personnel. The undersigned registered professional engineer attests that this Annual Inspection Report has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and meets the requirements of §257.84, and that this Report is adequate for the Huntley Station. This certification was prepared as required by §257.84(b)(2).

Name of Professional Engineer: Daniel J. Troy, P.E.

Company: GZA GEOENVIRONMENTAL OF NEW YORK

Signature: 

Date: October 9, 2020

PE Registration State: New York

PE Registration Number: 081139-1

Professional Engineer Seal:



We trust this information satisfies your needs for this project.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK



Daniel J. Troy, P.E.
Senior Project Manager



Bart A. Klettke, P.E.
Principal

Attachments: Figure - 2019 Huntley Fill Progression Survey – General Plan

