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October 7, 2022
File: 21.0056983.00

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

Re: CCR Landfill 2022 Annual Inspection Report
Huntley Generating Station
Tonawanda, New York

Dear Mr. Streit:

GZA GeoEnvironmental of New York (GZA) presents this 2022 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 2021 fill progression survey (see **Figure 1**). Areas designated as future Cell B (located between Cells A and C) and Cell E (located south of Cell A) have not yet been 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 2021 (most recent) fill progression report for the Cells A, C and D indicates the following information.

Landfill Cell	Waste Received in 2021 (cy)	Current Ash Volume (cy)	Volume Remaining (cy)
A	0	509,432	196,108
C	0	415,185	363,858
D	0	537,869	47,791
Totals for A, C & D	0	1,462,486	607,757*

cy = cubic yards

*The Wendel report identified a total volume deficit of 2,233 cy from the previous year and included the note "*Records and conversations with Site employees indicate no material was transported into or out of Cells C and D, other than a minor amount of additional cover material added to Cell C. The additional cell volume reported is likely due to a combination of material compacting in place and acceptable measurement uncertainty (<0.6%)"*.

The 2022 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 29th, 2022, 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 area was previously covered with topsoil and seeded for use as a temporary cover and no areas of exposed CCR waste were observed. 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: During our 2022 Site visit, the side slopes and upper portions of the waste areas were observed to be in similar condition to observations made in 2021 although the previously re-graded upper slopes were now observed with a vegetated cover (similar to the upper portions of Cell A) with no observable areas of exposed CCR waste. The recent regrading and installation of a vegetated 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 to be no steeper than 3H:1V and no evidence of rainfall runoff erosion rills were observed. NRG personnel indicated that drainage ditch modifications were completed along the northern and western limits of the landfill to improve stormwater runoff collection and drainage.

Cell D: The temporary soil cover system observed on Cell D appears similar to observations made in 2021 with no observable areas of exposed CCR waste. The previously completed regrading activities and vegetative growth 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. NRG personnel indicated

that drainage ditch modifications were completed in the fall of 2021 to improve stormwater runoff collection and drainage.

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 covered with a sufficient vegetative cover that appears to have been recently mowed and the slopes 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 2021, this inspection identified no areas of concern or areas evident of structural instability. No significant changes pertaining to the design, operation and maintenance have been made to the active landfill cells within the last year with the exception of the recent drainage ditch improvements along the northern slope of Cells C and D. In general, the ongoing maintenance (grass cutting) and temporary cover system over the CCR waste appear to be in compliance with the cell design and permit requirements. No areas of exposed CCR waste were observed within Cells A, C and/or D during our 2022 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 7, 2022
PE Registration State: New York
PE Registration Number: 081139-1
Professional Engineer Seal:

We trust this information satisfies your needs for this project.

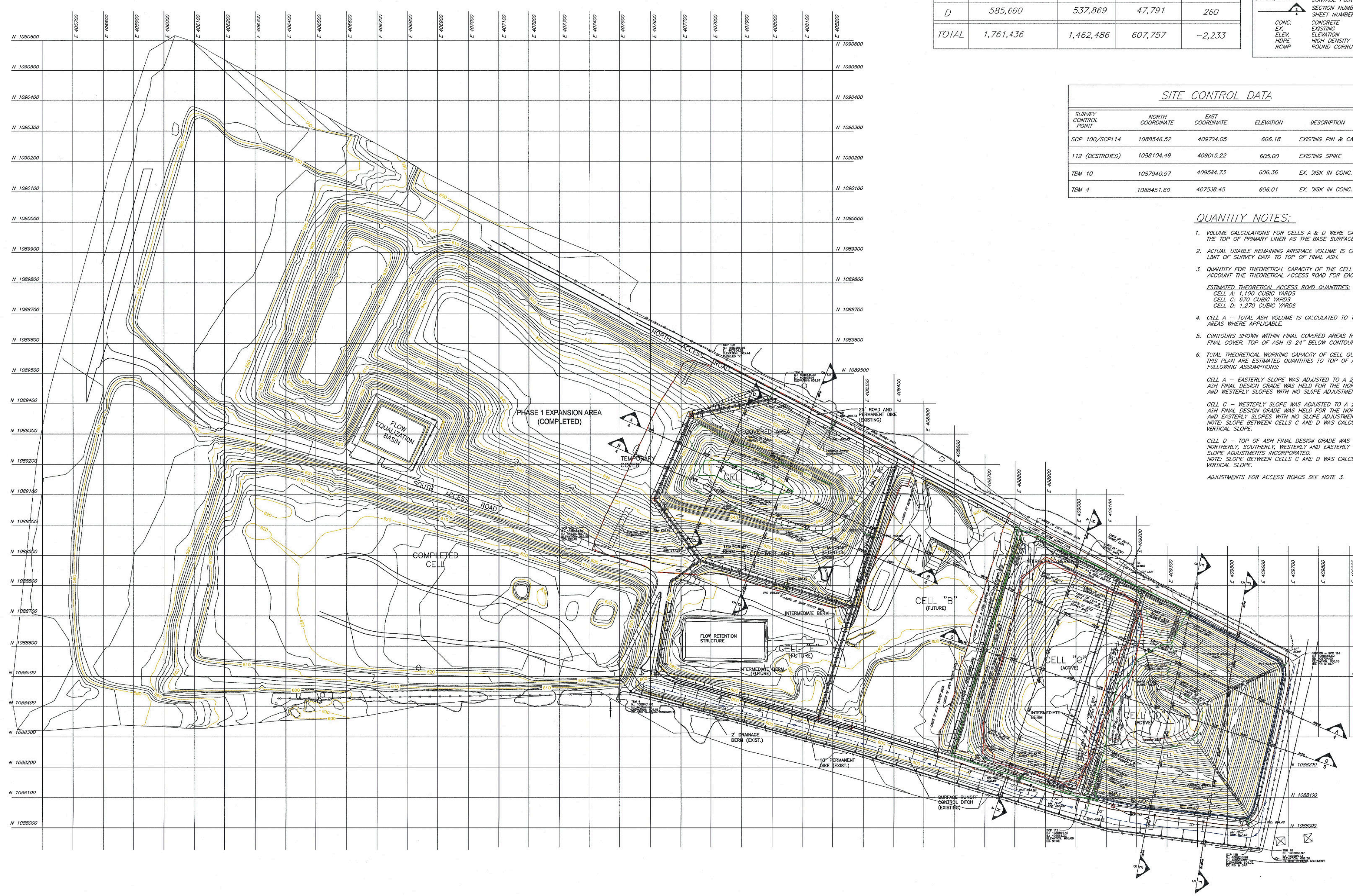
Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

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

Bart A. Klettke, P.E.
Principal

Attachments: Figure - 2021 Huntley Fill Progression Survey – General Plan



GENERAL NOTES:

1. EXISTING TOPOGRAPHY SHOWN FROM MAPS PREPARED BY STERNS & WHELER, LLC ENVIRONMENTAL ENGINEERS AND SCIENTISTS. PROVIDED BY NRG
2. UPDATED TOPOGRAPHY IN CELLS C AND D IS BASED ON FIELD SURVEY PERFORMED BY WENDEL IN NOVEMBER 2020.
3. HORIZONTAL & VERTICAL CONTROL REFERENCED TO SITE DATUM(S) PROVIDED BY NRG.
4. RECORDS AND CONVERSATIONS WITH HUNTLEY EMPLOYEES INDICATE NO MATERIAL WAS TRANSPORTED INTO OR OUT OF CELLS C AND D, OTHER THAN A MINOR AMOUNT OF ADDITIONAL COVER MATERIAL ADDED TO CELL C. THE ADDITIONAL CELL VOLUME REPORTED IS LIKELY DUE TO A COMBINATION OF MATERIAL COMPACTING IN PLACE AND ACCEPTABLE MEASUREMENT UNCERTAINTY (<0.6%).

CELL	TOTAL THEORETICAL WORKING CAPACITY OF CELLS AT PRESENT DEVELOPMENT STAGE (CUBIC YARDS)	TOTAL ASH VOLUME IN CELL (CUBIC YARDS)	ACTUAL USABLE REMAINING AIRSPACE AFTER DEVELOPMENT OF ADJACENT CELLS (CUBIC YARDS)	ASH RECEIVED IN 2020 (CUBIC YARDS) (SEE NOTE #4)
A	573,849	509,432	196,108	−150
C	601,927	415,185	363,858	−2,343
D	585,660	537,869	47,791	260
TOTAL	1,761,436	1,462,486	607,757	−2,233

LEGEND:

- LIMIT OF 2021 SURVEY DATA
- LIMIT OF ASH 2019 & 2020 SURVEY DATA
- LIMIT OF ASH 2018 SURVEY DATA
- LIMIT OF ASH 2016 & 2017 SURVEY DATA
- LIMIT OF ASH 2015 SURVEY DATA
- LIMIT OF ASH 2014 SURVEY DATA
- LIMIT OF ASH 2013 SURVEY DATA
- LIMIT OF 2012 SURVEY DATA
- LIMIT OF 2009 SURVEY DATA
- LIMIT OF 2006 SURVEY DATA
- 000 — 10' CONTOUR INTERVAL (MAJOR)
- 000 — 2' CONTOUR INTERVAL (MINOR)
- SURFACE RUNOFF CONTROL DITCH
- DITCH
- MH 10 — MANHOLE
- CULVERT
- SLOPE DOWN
- BRUSH ROW
- UTILITY POLE
- UUV — UNKNOWN UTILITY VALVE
- SCP 000/WCP 000 — CONTROL POINT
- 2 / 4 — SECTION NUMBER / SHEET NUMBER
- CONC. — CONCRETE
- EX. — EXISTING
- ELEV. — ELEVATION
- HDPE — HIGH DENSITY POLYETHYLENE PIPE
- RCMP — ROUND CORRUGATED METAL PIPE

SITE CONTROL DATA

SURVEY CONTROL POINT	NORTH COORDINATE	EAST COORDINATE	ELEVATION	DESCRIPTION
SCP 100/SCP114	1088546.52	409704.05	606.18	EXISTING PIN & CAP
112 (DESTROYED)	1088104.49	409015.22	605.00	EXISTING SPIKE
TBM 10	1087940.97	409584.73	606.36	EX. DISK IN CONC. MONUMENT
TBM 4	1088451.60	407538.45	606.01	EX. DISK IN CONC. MONUMENT

QUANTITY NOTES:

1. VOLUME CALCULATIONS FOR CELLS A & D WERE CALCULATED USING THE TOP OF PRIMARY LINER AS THE BASE SURFACE.
2. ACTUAL USABLE REMAINING AIRSPACE VOLUME IS CALCULATED FROM LIMIT OF SURVEY DATA TO TOP OF FINAL ASH.
3. QUANTITY FOR THEORETICAL CAPACITY OF THE CELL HAS TAKEN INTO ACCOUNT THE THEORETICAL ACCESS ROAD FOR EACH CELL.

   ESTIMATED THEORETICAL ACCESS ROAD QUANTITIES:
   CELL A: 1,100 CUBIC YARDS
   CELL C: 670 CUBIC YARDS
   CELL D: 1,270 CUBIC YARDS

4. CELL A – TOTAL ASH VOLUME IS CALCULATED TO TOP OF COVERED AREAS WHERE APPLICABLE.
5. CONTOURS SHOWN WITHIN FINAL COVERED AREAS REPRESENT TOP OF FINAL COVER. TOP OF ASH IS 24" BELOW CONTOURS SHOWN.
6. TOTAL THEORETICAL WORKING CAPACITY OF CELL QUANTITIES SHOWN ON THIS PLAN ARE ESTIMATED QUANTITIES TO TOP OF ASH BASED ON THE FOLLOWING ASSUMPTIONS:

   CELL A – EASTERLY SLOPE WAS ADJUSTED TO A 2/1 SLOPE. TOP OF ASH FINAL DESIGN GRADE WAS HELD FOR THE NORTHERLY, SOUTHERLY AND WESTERLY SLOPES WITH NO SLOPE ADJUSTMENTS INCORPORATED.

   CELL C – WESTERLY SLOPE WAS ADJUSTED TO A 2/1 SLOPE. TOP OF ASH FINAL DESIGN GRADE WAS HELD FOR THE NORTHERLY, SOUTHERLY AND EASTERLY SLOPES WITH NO SLOPE ADJUSTMENTS INCORPORATED. NOTE: SLOPE BETWEEN CELLS C AND D WAS CALCULATED AS A VERTICAL SLOPE.

   CELL D – TOP OF ASH FINAL DESIGN GRADE WAS HELD FOR THE NORTHERLY, SOUTHERLY, WESTERLY AND EASTERLY SLOPES WITH NO SLOPE ADJUSTMENTS INCORPORATED. NOTE: SLOPE BETWEEN CELLS C AND D WAS CALCULATED AS A VERTICAL SLOPE.

   ADJUSTMENTS FOR ACCESS ROADS SEE NOTE 3.

nrg
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HUNTLEY POWER, LLC

ENGINEERING SERVICES

ANNUAL FILL PROGRESSION SURVEY FOR THE HUNTLEY LANDFILL

RECORD DRAWING

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STATE OF NEW YORK · RICHARD NATHAN JOHNSON · 051043 · LICENSED LAND SURVEYOR

NO.	REVISIONS	DATE

DWG. TITLE

HUNTLEY

2021 FILL PROGRESSION SURVEY

GENERAL PLAN

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

DATE	11/03/2021
SCALE	NOT TO SCALE
DWN.	NPL CHK. RNJ
PROJ. No.	419426
DWG. No.	