



Proactive by Design

GEOTECHNICAL  
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CONSTRUCTION  
MANAGEMENT

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October 14, 2016  
File: 21.0056797.00

Mr. Kevin Schroeder  
Kevin.schroeder@nrenergy.com  
Dunkirk Power LLC  
106 Point Drive North  
Dunkirk, NY 14150

Re: CCR Landfill Post Closure Care Plan  
Dunkirk Generating Station  
Pomfret, New York

Dear Mr. Schroeder:

GZA GeoEnvironmental of New York (GZA) presents this post closure care plan to Dunkirk Power LLC (Dunkirk) for the existing coal combustion residuals (CCR) landfill located at the Dunkirk facility in Pomfret, New York (Site). This plan is required by the United States Environmental Protection Agency's (USEPAs) 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 §257.104(d)), owners/operators of a CCR unit must prepare a written closure plan that includes, at a minimum, information specified in paragraphs (d)(1)(i) through(iii) of the Section. This plan is required for CCR units subject to closure requirements under §257.102 when CCR remains in place and has a final cover system meeting the requirements of §257.102(d)(3).

### Site Background

The active/open CCR landfill cells for the Site are identified as Phase II, Cells A and B1 and the remaining landfill cells at the Site are considered to have been closed prior to the CCR Rule. Portions of the top deck and side slopes of Cell A have previously been closed with a final cover system. An area designated as Phase II, Cell B2, located adjacent to Cell B1, was constructed, although never received CCR waste and the facility has no plans to place CCR in this cell. The limits of the active cells included in this post closure care plan are shown on the attached Figure 1.

The Dunkirk facility's CCR landfill is currently permitted (Part 360 permit ID#9-0658-00021/00008) with the New York State Department of Environmental Conservation (NYSDEC) to accept CCR and associated waste generated from the Dunkirk Power facility through May 22, 2021.

Information required by §257.104(d)(i) through (iii) for the required post closure care plan is as follows.



- i) Monitoring and Maintenance - §257.104(d)(1)(i)** – *A description of the monitoring and maintenance activities required in paragraph (b) of this section for the CCR unit, and the frequency at which these activities will be performed.*

The owner/operator of the Dunkirk CCR landfill will perform inspections of the landfill surface final cover on a regular, periodic basis. Concerns identified during the inspection process will be remedied in accordance with the requirements specified in the NYSDEC issued Part 360 permit. Repairs and/or maintenance to the existing groundwater monitoring system (i.e., monitoring wells) will be made as needed/identified.

The Dunkirk CCR landfill has a leachate collection system associated with the active Phase II Cells A and B1 and will monitor and record leachate flow rates on a daily basis. Additionally, leachate lines will be inspected via camera survey (and cleaned, if necessary) on an annual basis in accordance with the requirements of the NYSDEC issued Part 360 permit. Lift pumps and operation cycles for the primary and secondary leachate system pumps will be monitored on a daily basis and repairs/maintenance will be made on an as-needed basis upon identification of pump system malfunction.

Mowing of the grass cover system is reportedly performed on a weekly basis during the growing season although will be based on the rate of growth. Areas of erosion or lost vegetation will be repaired and reseeded on an as needed basis as identified during routine inspections.

Groundwater monitoring wells for the facility will be maintained and sampled on a quarterly basis for the specified parameters as identified in the NYSDEC Part 360 permit as well as for the parameters specified in Appendix III to Part 257 and in accordance with 257.90-98.

- ii) Post Closure Contacts - §257.104(d)(1)(ii)** – *The name address, telephone number. And e-mail address of the person or office to contact about the facility during the post-closure period.*

The contact information for the CCR landfill during the post closure period is as follows.

Dunkirk Power, LLC  
Attn: Plant Manager  
106 Point Drive North  
Dunkirk, New York 14048  
(716) 673-6347 - Gatehouse number  
www.nrg.com

- iii) Planned Use During Post Closure Period** – *A description of the planned uses of the property during the post-closure period. Post closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other component of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements of this subpart.*

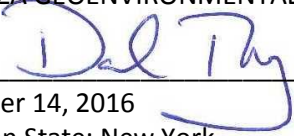
The final use of the Dunkirk CCR landfill will be a privately-owned, green space that will be secured with perimeter fencing. As such, disturbances to the final cover system (in accordance with §257.102(d)(3)) and other related landfill systems is anticipated to be negligible due to the anticipated planned use of the area during post closure.

## PROFESSIONAL ENGINEER CERTIFICATION



The undersigned registered professional engineer is familiar with the requirements of §257.104 Post Closure Care Requirements. The undersigned registered professional engineer attests that this CCR Landfill Post Closure Care Plan has been prepared in accordance with good engineering practice, including consideration of applicable state regulatory requirements and meets the requirements of §257.104(d), and that this plan is adequate for NRG - Dunkirk Power. This certification was prepared as required by §257.104(d)(2)(iii).

Name of Professional Engineer: Daniel J. Troy, P.E.  
Company: GZA-GEOENVIRONMENTAL OF NEW YORK

Signature:   
Date: October 14, 2016  
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 1 – Dunkirk CCR Landfill Site Plan



**NOTES:**

1. DIGITAL AERIAL PHOTOGRAPHY ADAPTED FROM AN IMAGE DOWNLOADED FROM GOOGLE EARTH PRO.
2. THE SIZE AND LOCATION OF SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.



NO.	ISSUE/DESCRIPTION	BY	DATE

**DUNKIRK POWER CCR LANDFILL  
DUNKIRK, NEW YORK  
LANDFILL CLOSURE PLAN**

**SITE PLAN**

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PREPARED BY: <b>GZA GeoEnvironmental of N.Y.</b> Engineers and Scientists 535 WASHINGTON STREET 11th FLOOR BUFFALO, NEW YORK 14203 (716) 865-2300	PREPARED FOR: <b>NRG DUNKIRK POWER, LLC</b>		
PROJ MGR: DJT DESIGNED BY: DATE: SEPT. 2016	REVIEWED BY: DRAWN BY: TAK PROJECT NO.: 21.0056798.00	CHECKED BY: SCALE: AS SHOWN REVISION NO.	FIGURE <b>1</b>