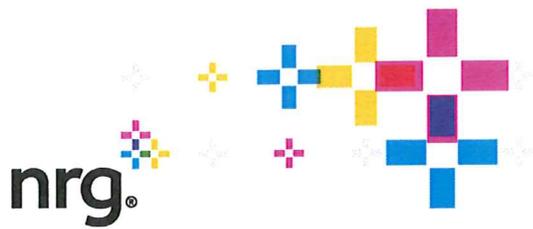


US EPA ARCHIVE DOCUMENT



**NRG Energy**  
121 Champion Way, STE 300  
Canonsburg, PA 15317  
Phone: 724-597-8310

February 10, 2014

**Transmitted via E-mail**

Mr. Stephen Hoffman  
U.S. Environmental Protection Agency (5304P)  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Re: **Action Plan to Address Recommendations**  
Dam Safety Assessment of CCW Impoundments  
NRG REMA LLC - Shawville Generating Station  
Shawville, Pennsylvania

Dear Mr. Hoffman:

As requested in your January 13, 2014 Letter, NRG REMA LLC (NRG) - Shawville Generating Station (Shawville) is providing our plans for measures to address recommendations, which could affect the structural stability of the Coal Combustion Waste (CCW) management units. According to the assessment, none of the recommendations were considered to be urgent because the issues identified did not appear to threaten the structural integrity of the impoundments in the near term.

Our response includes specific plans and schedules for implementing each of the recommendations outlined in Enclosure 1 of the January 13<sup>th</sup> Letter.

Based on the findings of the visual assessment and review of the available records for Ash Ponds A and B, O'Brien & Gere recommended that additional maintenance of the embankments be performed to correct the deficiencies cited in the Conclusions of the final report. The deficiencies include the following:

- Heavy vegetation along the outer slope of the southwestern embankment of Ash Pond B limits visual inspection and may encourage animal burrowing.

- Heavy vegetation, including large trees, exists along outer slope of the northwestern embankment of Ash Ponds A and B. This limits visual inspection and may encourage animal burrowing.

To address these deficiencies, Shawville has improved the existing inspection program by increasing the frequency and scope of inspections. Specifically, a documented visual inspection will be conducted on a monthly basis. The inspection program will be facilitated and tracked using our Intelex environmental, health, safety, and quality management software. Our improved inspection program is designed to assess the inboard & outboard slopes of the embankments for signs of:

- Seepage
- Sliding/Movement
- Erosion
- Animal burrowing
- Heavy vegetation (e.g., large trees, woody vegetation, diseased and dead trees).

These inspections will also include coordination with our contractor, R&L Development Company of New Alexandria, Pennsylvania to:

1. Trim heavy vegetation at least once per year to facilitate inspections
2. Remove (if observed primarily above the impoundment bottom elevation) large trees, woody vegetation, diseased and dead trees in April and November of each year, and
3. Repair minor damage to the impoundments in accordance with an engineered design, as needed.

### **Long Term Improvement:**

The recommended maintenance/improvement actions identified in the assessment are summarized below and followed by our planned actions:

#### **Ash Pond A & B**

- Inboard slopes - Continue to monitor all inboard slopes for signs of erosion. Repair in accordance with an engineered design.
- Outboard slopes - Continue to monitor the outboard slopes of the embankments, primarily the northwestern and northeastern sides, for signs of seepage, sliding, erosion, and animal burrowing.

- Increase maintenance activities to control the heavy vegetation along the outer slope of the northwestern embankment adjacent to the gravel access drive for improved visual inspection of the diked portion of this embankment.
- Evaluate the condition of the large trees along the outboard slope of the northwestern embankment, primarily those above the impoundment bottom elevation. Diseased or dead trees should be removed.

### **Ash Pond B**

- Outboard slopes - Increase maintenance activities to control the heavy vegetation on the outboard slope of the southwestern embankment above the stormwater management area to facilitate visual inspection of the slope for signs of erosion, movement, seepage or animal burrows.
- Continue to monitor the stormwater management area for signs of erosion due to stormwater runoff from upstream areas. Repair in accordance with an engineered design as needed.

As indicated above, Shawville's plan to address these recommendations include increasing the frequency of inspections to monthly, trimming heavy vegetation at least once per year to facilitate inspections, and scheduling, as needed, the removal of large trees, woody vegetation, diseased and dead trees in April and November each year.

### **Additional studies:**

- Perform a hydrologic and hydraulic analysis of the impoundment for the 1-year through 100-year, 24-hour duration design storm events to determine the adequacy of the provided freeboard, the gravity emergency overflow between Pond A and Pond B and the upslope diversion swales.
- Perform a hydrologic and hydraulic analysis of the West Branch of the Susquehanna River at this location in order to determine the 100-year flood elevation and anticipated flow velocities.
- Perform ground run survey at the cross-section modeled in GeoSyntec's slope stability analysis to confirm the assumption that the existing embankment geometry is the same as the design geometry.

NRG plans to deactivate the Shawville Generating Station in April 2015. As a result, Shawville has no long-term plans for continued operation of the ponds as CCW impoundments. Therefore, no additional hydrologic and hydraulic studies of Pond A and Pond B or the West Branch of the Susquehanna River are planned. In the event Shawville Generating Station plans to continue long-term coal-fired operations at the station, NRG will re-evaluate the need for the additional studies at that time.

Once the Shawville Generating Station discontinues burning coal, CCW will be removed from the impoundments in accordance with Pennsylvania Residual Waste requirements and landfilled. However, the impoundments may continue to be used to facilitate treatment of industrial storm water runoff, miscellaneous low volume waste, and landfill leachate in the future.

### **Monitoring and Future Inspections**

The EPA contractor recommended consideration of independent inspections by licensed dam safety engineers on at least a biennial basis until the plant is decommissioned and a closure plan is implemented.

NRG plans to deactivate the Shawville Generating Station in April 2015. As a result, Shawville has no long-term plans for continued operation of the ponds as CCW impoundments. Therefore, NRG does not plan to have independent inspections conducted by a licensed dam safety engineer on a biennial basis at this time.

If the Pennsylvania Department of Environmental Protection determines that these impoundments are regulated under Title 25 Pa Code Chapter 105 (Dam Safety and Waterway Management), Shawville will inspect the impoundments in accordance with these requirements.

Please do not hesitate to contact me at (724) 597-8310 if you have any questions or require additional information.

Respectfully Submitted,



Stephen M. Frank, P.E.  
Senior Environmental Specialist

cc: Murray Kohan, General Manager, Shawville Generating Station