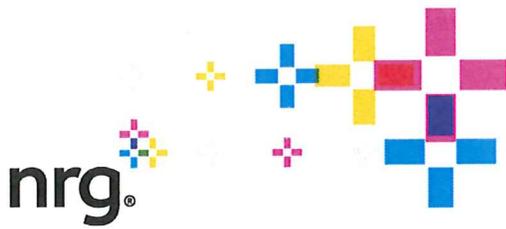


US EPA ARCHIVE DOCUMENT



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

May 15, 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 Power Midwest LP – Elrama Generating Station  
Elrama, Pennsylvania

Dear Mr. Hoffman:

As requested in your April 14, 2014 Letter, NRG Power Midwest LP (NRG) – Elrama Generating Station (Elrama) is providing a summary of our action plan for measures to address recommendations associated with the Coal Combustion Waste (CCW) management units. Our response includes our plans and schedules for implementing each of the recommendations outlined in Enclosure 1 of the April 14<sup>th</sup> Letter.

**Recommendations**

Ash Settling Ponds SPD-1 and SPD-2

The recommended maintenance/improvement actions included:

- Inspect and maintain operable low level outlet structures to maintain a drained condition in the ponds.
- Repair severely eroded areas on the inboard and outboard slopes.
- Fill low areas along the outboard toe of slope and maintain cut vegetation along outboard slopes so they can be inspected for seepage. Mowing equipment that may cause ruts or rills on the embankments should not be used. String trimmers or specialized

arm-mounted slope mowers are a preferred option for cutting embankment vegetation.

- Establish better surface drainage along the outboard toe to eliminate or reduce stormwater ponding.
- A geotechnical investigation and slope stability analysis should be performed, potentially in conjunction with a decommissioning study and closure plan if embankments remain impounding CCW. The analysis should include static and seismic loading conditions along with liquefaction potential analysis.

O'Brien & Gere recommended that additional maintenance of the embankments be performed to correct the erosion, vegetation, drainage, and other miscellaneous deficiencies cited above until such time as the impoundments are closed or all CCW is removed.

### **Monitoring and Future Inspection**

O'Brien & Gere recommended continued internal inspections by personnel trained in dam safety and periodic inspections by independent licensed dam safety engineers on at least a biennial basis until the ponds are formally closed. Regular visual inspections of the entire impoundment perimeter should be conducted weekly and after major rainfall events, to check for deficiencies such as seeps, cracks, holes, and freeboard. Inspections should continue to be performed with the goal of identifying, documenting, and repairing deficiencies early so that they do not develop into more serious problems. All internal inspections should be documented in a report to serve as a record of conditions observed and the recommended action items.

### **Action Plan**

Elrama has completed the following maintenance and improvement measures:

- The erosion on the northwest corner inboard slope of Ash Pond SPD-2 was corrected.
- Erosion on the southern and eastern embankments outboard slopes of Pond SPD-1 was corrected.
- Ponding along the crest roadway was corrected.
- Both ponds will continue to be inspected and maintained in a near drained condition using portable pumps to the existing discharge weir structure. Water conveyed to the existing discharge weir

structures is treated and discharged in accordance with our NPDES permit.

The ponding along the toe of slope, especially at the southeast corner of Pond SPD-1, will be corrected by the end of the third quarter of 2014. Because the Elrama Generating Station is no longer in operation and the ash ponds are maintained in near drained condition at levels much lower than the noted inboard erosion, and are scheduled to be cleaned of the remaining CCW in 2015, Elrama plans to address the remaining maintenance and improvement measures in 2015 as part of this planned cleanout.

Elrama continues to conduct regular visual inspections (Monday through Friday) for perimeter embankment seeps, cracks, holes, and freeboard. Elrama's inspections and regular monitoring are performed with the goal of identifying, documenting, and repairing any new deficiencies so that they do not develop into more serious problems.

The Elrama Generating Station last operated on September 23, 2012 and was retired on November 4, 2013. In conjunction with the retirement, the following activities have been conducted:

- Coal was removed from the bunkers, mills, and feeders.
- Coal yard inventory was reduced to less than 1,000 tons and encrusted to minimized dusting.
- Oil and process fluids were drained from all unnecessary equipment and tanks.
- Unnecessary plant chemical and combustible materials were removed.
- Yard areas were cleaned and additional stormwater controls were installed where necessary.

Pending our request for approval from the Pennsylvania Department of Environmental Protection (PADEP), clean storm water flows will also be directed from sumps and ash ponds directly to our final outfall in preparation for cleanout and closure. Elrama is scheduled to remove the remaining CCW from the ash ponds in 2015. Following cleanout, the water levels in the ash ponds will continue to be maintained using portable pumps to low levels until authorization is received from the PADEP to open and utilize the low level outlet structures in the ponds. To ensure consistency, we anticipate preparing a closure plan and schedule for the ash ponds after the Federal CCW rules are issued final in 2014.

Based on the operating status of the ponds and station, NRG does not plan to have independent inspections conducted by a licensed dam safety engineer on a biennial basis at this time. Elrama will contract with a

Pennsylvania professional engineer trained in dam safety in the future if any evidence of structural deficiencies are identified as part of the routine visual inspections.

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

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Stephen M. Frank". The signature is fluid and cursive, with the first name "Stephen" and last name "Frank" clearly legible.

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

cc: Ethan Russell, Plant Manager, Elrama Generating Station



# pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SOUTHWEST REGIONAL OFFICE

REC'D FEB 13 2014

February 12, 2014

Stephen M. Frank  
NRG Energy, Inc.  
121 Champion Way, Suite 300  
Canonsburg, PA 15317

Re: Sediment Cleanout Frequency  
#2 Ash Settling Pond  
Elrama Generating Station  
Union Township  
Washington County  
WQM Part II No. 6373209

Dear Mr. Frank:

The Department of Environmental Protection (DEP) has reviewed the documentation dated January 21, 2014 regarding the rate of sediment deposition in the #2 Ash Settling Pond at the referenced facility in relation to the limitation on the duration of residual waste storage specified in 25 Pa Code Section 299.113(a). DEP concludes on the basis of that review that the request to extend the cleanout frequency for this structure is justified. DEP hereby approves a cleanout frequency equivalent to once per five (5) years, upon achieving the designated cleanout elevation set forth in WQM Part II No. 6373209 or as otherwise necessary to assure effective operation of the #2 Ash Settling Pond, whichever is soonest.

If you have any questions or require additional information regarding this matter, please contact Denis Strittmatter at 412.442.5800.

Sincerely,

Diane D. McDaniel, P.E.  
Environmental Engineering Manager  
Bureau of Waste Management

Steve,

The intention of the letter was to approve the extension that was being requested. If the contents of the letter are not clear in that regard, please accept this e-mail as clarification that deferral of Ash Pond #2 clean-out until 2015 is approved.

**From:** Frank, Stephen [mailto:Stephen.Frank@nrgenergy.com]  
**Sent:** Thursday, March 06, 2014 9:22 AM  
**To:** Strittmatter, Denis  
**Cc:** Mcdaniel, Diane  
**Subject:** Elrama Ash Settling Pond#2 Sediment Cleanout Request

Denis,

Thank you for your quick review and approval of our request to extend the cleanout frequency for Pond #2 at Elrama. However, I would like to confirm that the approval letter reflects our request. Based on prior discussions with Diane, I believe it does, but wasn't sure.

Specifically, Ash Pond #2 is up for cleaning this year in accordance with our 5 year cleanout schedule previously approved by the DEP in 2011. Ash Pond #1 is due to be cleaned in 2015. We are requesting approval to delay the cleanout Pond #2 until 2015 (which would be 6 years) so that we could clean Pond #1 and #2 at the same time.

Once the 2015 cleanout is complete, we do not anticipate the need to clean the ponds again because we are planning to submit a closure plan for the all of the residual waste impoundments before the next 5 year cleanout is due.

This year we plan to seek and obtain approval from Clean Water to divert storm water currently pumped to the ponds directly to Outfall 001. Once the storm water diversion work is complete, we will be able to initiate decommissioning of the ponds.

Please do not hesitate to contact me with any questions.

Thanks, Steve

**Stephen M. Frank, PE**  
Senior Environmental Specialist  
NRG Energy Southpointe Operations Center  
121 Champion Way, Suite 300  
Canonsburg, PA 15317  
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