



Retrofit Plan for the Pyrite Pond

**Mount Storm Power Station
Mount Storm, West Virginia**

May 2016

*Prepared For
Virginia Electric and Power Company*

A handwritten signature in blue ink, appearing to read "R. Kent Nilsson", written over a horizontal line.

R. Kent Nilsson, P.E.
Senior Engineer

A handwritten signature in blue ink, appearing to read "Nakia W. Addison", written over a horizontal line.

Nakia W. Addison
Project Manager

*TRC Environmental Corporation | Virginia Electric and Power Company
Retrofit Plan for Pyrite Pond
Mt. Storm Power Station, Mount Storm, West Virginia
Final*

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Table of Contents

Section 1 Introduction	1
1.1 Regulatory Background	1
1.2 Site Information	1
Section 2 Retrofit Plan	2
2.1 Retrofit Description.....	2
2.2 Schedule of Retrofit Activities	2
2.3 CCR Removal Volume and Area Estimate	2
2.4 Notifications.....	3
Section 3 Certification.....	4

List of Appendices

Appendix A Retrofit Schedule

Section 1

Introduction

Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion) owns and operates the Mount Storm Power Station (Station). The Station operates five low volume waste settling ponds (LVWSP) (Pyrite Pond and Ponds A, B, C, and D), which meet the definition of coal combustion residual (CCR) surface impoundments under the United States Environmental Protection Agency (USEPA) Disposal of Coal Combustion Residuals From Electric Utilities Final Rule (CCR Rule). This Plan describes the activities associated with the retrofit of the Pyrite Pond to meet the requirements of 40 Code of Federal Regulations (CFR) 257.102(k)(2) in the CCR rule. This Plan was prepared for Dominion by TRC Environmental Corporation (TRC).

1.1 Regulatory Background

The Pyrite Pond has previously been regulated through the Station's West Virginia Department of Environmental Protection (DEP) National Pollutant Discharge Elimination System (NPDES) permit. Following the retrofit, the Pyrite Pond will continue to be regulated under the existing West Virginia NPDES permit. This Plan details how the retrofitting of the Pyrite Pond will occur.

1.2 Site Information

The Station is located in Union District, Grant County, West Virginia. The station is located at approximate latitude 39°12'2"N, longitude 79°15'47"W. The area surrounding the LVWSP is approximately 9 acres with ground surface elevations ranging from 3300 feet North American Vertical Datum 1988 (NAVD88) to 3245 feet NAVD88. The topography is high on the northwest side of the LVWSP sloping down toward Mount Storm Lake to the east and south. The normal water elevation for Mount Storm Lake is approximately 3245 feet NAVD88 with a maximum elevation of 3248.3 feet NAVD88.

Section 2

Retrofit Plan

2.1 Retrofit Description

The current Pyrite Pond will be retrofitted in compliance with 40 CFR 257.102(k)(1) through the removal of subsoils and installation of a composite liner system compliant with 40 CFR 257.72. Retrofitting will be conducted during the 2016 construction season as described below.

In 2016, CCR materials will be removed from the basins as part of routine Station maintenance. Prior to retrofit activities, plant flows into the Pyrite Pond will be diverted to the existing Pond A. The Pyrite Pond will be retrofitted by removing any remaining sludge materials and visually impacted subsoils. CCR and impacted subsoils will be disposed of at the Station's on-site permitted landfill. After removal of CCR materials and impacted subsoils, the Pyrite Pond will be retrofitted by establishing new subbase grades, and constructing the new liner system. The new liner system will be composed from top to bottom of the following elements:

- 10-inch thick concrete cover on the base and riprap on the sideslopes,
- Geotextile cushion,
- 60-mil high density polyethylene (HDPE) geomembrane,
- Geosynthetic clay (GCL) liner, and
- 8-inch thick compacted soil layer.

2.2 Schedule of Retrofit Activities

As discussed in Subsection 2.1, retrofit activities will occur during the construction season of 2016 and is anticipated to be completed in 2016. A detailed schedule for completing retrofit activities for the Pyrite Pond is provided in Appendix A.

2.3 CCR Removal Volume and Area Estimate

It is estimated that a maximum of 10,000 cubic yards (CY) of soils, sediments, and CCR material will be removed from the Pyrite Pond prior to and during retrofit activities. This material will be excavated from an area of approximately 0.86 acres (approximate Pyrite Pond footprint). In total, approximately 2 acres will be affected by the retrofit operation.

2.4 Notifications

In accordance with the CCR Rule (40 CFR 257.102(k)), Dominion will post an Intent to Initiate Retrofit notice to the operating record prior to initiating retrofit activities. This plan will become part of the Station's operating record. In addition, a Notification of Completion of Retrofit with an engineer's certification will be posted to the operating record within 30 days of completion of retrofit activities (40 CFR 257.102(k)). The retrofit plan and notifications will also be posted to Dominion's publicly accessible internet site.

Section 3 Certification

I, the undersigned WV Professional Engineer, hereby certify that I am familiar with the technical requirements of 40 CFR 257.102. I also certify that it is my professional opinion that, to the best of my knowledge, information, and belief, that the activities outlined in this retrofit plan are in accordance with current good and accepted engineering practice(s) and standard(s) appropriate to the nature of the project and the technical requirements of 40 CFR 257.102 (k)(2).

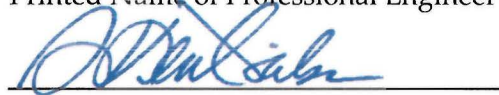
For the purpose of this document, "certify" and "certification" shall be interpreted and construed to be a "statement of professional opinion". The certification is understood and intended to be an expression of my professional opinion as a WV Registered Professional Engineer, based upon knowledge, information, and belief. The statement(s) of professional opinion are not and shall not be interpreted or construed to be a guarantee or a warranty of the retrofit activities.

R. Kent Nilsson

21543

Printed Name of Professional Engineer

State of West Virginia License Number



May 5, 2016

Signature of Professional Engineer

Date



Appendix A

Retrofit Schedule

Mt Storm Pyrite Pond Conceptual Retrofit Schedule

ID	Task Name	Duration	Start	Finish	2016											
					Jun	Jul	Aug	Sep	Oct	Nov	Dec					
1	Pyrite Pond - Retrofit	76 days	Wed 6/8/16	Wed 9/21/16												
2	Pyrite Pond Maintenance Cleaning	30 days	Wed 6/8/16	Tue 7/19/16												
3	Excavate CCR Material from Pond	24 days	Wed 6/8/16	Mon 7/11/16												
4	Material Solidification/Load Out/T & D	25 days	Wed 6/15/16	Tue 7/19/16												
5	Pyrite Pond Retrofit	48 days	Tue 7/12/16	Thu 9/15/16												
6	Place Backfill	10 days	Tue 7/12/16	Mon 7/25/16												
7	Install New Pyrite Pond Lining	37 days	Tue 7/26/16	Wed 9/14/16												
17	Pyrite Pond Retrofit Complete	1 day	Thu 9/15/16	Thu 9/15/16												
18	Demobilization	5 days	Thu 9/15/16	Wed 9/21/16												



CERTIFIED MAIL
RETURN RECEIPT REQUESTED

May 13, 2016

Mr. Randy Huffman
Cabinet Secretary
West Virginia Department of Environmental Protection
601 57th Street, SE
Charleston WV 25304

RE: Dominion Mount Storm Power Station: CCR Rule Agency Notification Under 40 CFR 257.106(j)(1) and (5)

Dear Mr. Huffman:

Pursuant to 40 CFR 257.106(j)(1) and 40 CFR 257.106(j)(5) of the Federal *Disposal of Coal Combustion Residuals from Electric Utilities Final Rule*, we are submitting this letter to inform you of Dominion's intent to initiate retrofit of a CCR unit at the Mount Storm Power Station. A written retrofit plan required under 40 CFR 257.102(k)(2) and a notification of intent to initiate retrofit of a CCR unit required under 40 CFR 257.102(k)(5) for the Mount Storm Power Station have been placed in the facility's operating record and on Dominion's publicly available internet site at www.dom.com/ccr.

Please contact me at (804) 273-2929 if there are any questions.

Sincerely,

A handwritten signature in black ink that reads "Cathy C. Taylor".

Cathy C. Taylor
Director, Electric Environmental Services