



Post-Closure Care Plan for CCR Surface Impoundments

Clover Power Station
Clover, Virginia

October 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.

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Senior Engineer

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Nakia W. Addison
Project Manager

*TRC Environmental Corporation | Virginia Electric and Power Company
Post-Closure Care Plan for CCR Surface Impoundments
Clover Power Station, Clover, Virginia
Final*

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Table of Contents

Section 1 Introduction	1
Section 2 Post-Closure Activities	2
2.1 Post-Closure Period	2
2.2 Post-Closure Contact	2
2.3 Inspection, Monitoring, and Maintenance Plan.....	2
2.3.1 Security Control Devices.....	2
2.3.2 Final Cover Integrity.....	2
2.3.3 Run-on and Run-off Controls.....	3
2.3.4 Leachate Collection System	3
2.3.5 Groundwater Monitoring System.....	3
2.3.6 Landfill Gas Monitoring System.....	3
2.4 Post-Closure Uses.....	3
2.5 Post-Closure Care Cost Estimate	3
2.6 Post-Closure Care Termination.....	4

Section 1

Introduction

This Post-Closure Care Plan (Plan) was prepared by TRC Environmental Corporation (TRC) on behalf of Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion) for the two Coal Combustion Residuals (CCR) surface impoundments at the Clover Power Station¹ (Station) referred to as the North and South Sludge Sedimentation Basins (basins).

This Plan follows the format guidelines for Solid Waste Disposal Facilities as described in the Virginia Department of Environmental Quality's Submission Instruction No. 6. This Plan also meets the Post-Closure Care Requirements of the U.S. Environmental Protection Agency's (USEPA) Coal Combustion Residuals rule (CCR Rule) at 40 CFR 257.104.

Once the basins are no longer in use, Dominion plans to close them in accordance with 40 CFR 257.102(c) and 9VAC 20-81-370(A)(1), closure by removal of CCR. If groundwater monitoring concentrations do not exceed the groundwater protection standards established pursuant to the CCR Rule (40 CFR 257.95(h)), then post-closure care is not required by the CCR Rule. Closure by removal of CCR would consist of removing CCR materials, removing the liner materials, verifying compliance with 40 CFR 257.102(c) and 9VAC 20-81-370(A)(1), backfilling the areas, and providing a vegetative cover that is at a level grade with the top of the impoundment berms. Materials removed from the surface impoundments will be disposed of in the existing on-site landfill or at a permitted off-site disposal facility.

¹ The Clover Power Station and associated CCR units are jointly and equally owned by Dominion Virginia Power and Old Dominion Electric Cooperative (ODEC).

Section 2

Post-Closure Activities

2.1 Post-Closure Period

The post-closure care period required under the CCR Rule (40 CFR 257.104(c)) and 9VAC20-81-170 is 30 years; however, if closure is completed by removal of CCR and groundwater monitoring concentrations do not exceed the groundwater protection standards established pursuant to the CCR Rule (40 CFR 257.95(h)), then post-closure care is not required.

2.2 Post-Closure Contact

The post-closure contact for this facility will be:

Paula A. Hamel
Director, Generation Environmental Services
Dominion Resources Services, Inc.
5000 Dominion Boulevard
Glen Allen, VA 23060
804.273.3024
paula.a.hamel@dom.com

2.3 Inspection, Monitoring, and Maintenance Plan

2.3.1 Security Control Devices

The basins are located within the fenced portion of the Station. The entrances to the access roads to the impoundments are either guarded or secured by locked gates.

2.3.2 Final Cover Integrity

Closure of the basins will consist of removing CCR materials, removing the liner materials, verifying compliance with 40 CFR 257.102(c), backfilling, and installation of vegetative cover. Therefore a final cover system is not installed, and the requirements of 9 VAC 20-81-170 A(1)(a) are not applicable.

2.3.3 Run-on and Run-off Controls

Eroded channels and any ponding of water will be addressed through the final design and construction of the basins closure to ensure proper run-on and run-off of stormwater.

2.3.4 Leachate Collection System

Closure of the basins will consist of removing CCR materials, removing the liner materials, verifying compliance with 40 CFR 257.102(c), backfilling, and installation of vegetative cover. Therefore, a leachate collection system is not necessary, and the requirements of 9 VAC 20-81-210 are not applicable.

2.3.5 Groundwater Monitoring System

Groundwater monitoring will be performed to ensure compliance with 40 CFR 257.102(c). In the event that at the time of closure groundwater sampling results exceed levels established in 40 CFR 257.95(h), Dominion will continue to perform groundwater monitoring. The company may petition to terminate groundwater monitoring after a period of three consecutive years of no exceedance with groundwater protection standards.

2.3.6 Landfill Gas Monitoring System

Closure of the basins will consist of removing CCR materials, removing the liner materials, verifying compliance with 40 CFR 257.102(c), backfilling, and installation of vegetative cover. Therefore a gas monitoring system is not necessary, and the requirements of 9 VAC 20-81-200 are not applicable.

2.4 Post-Closure Uses

The area encompassed by the basins will continue to be utilized by the Station for general station operational purposes (*i.e.*, laydown area, storage area, new building construction, etc.) after the basins are closed.

2.5 Post-Closure Care Cost Estimate

The total estimated cost for groundwater monitoring and area maintenance for 30 years is approximately \$2,610,000.

2.6 Post-Closure Care Termination


The basins are planned to be closed in accordance with 40 CFR 257.102(c), closure by removal of CCR, and therefore post-closure care would not be required by the CCR Rule.

In the event that at the time of closure groundwater sampling results exceed levels established in 40 CFR 257.95(h), Dominion will continue to perform groundwater monitoring. The company may petition to terminate groundwater monitoring after a period of three consecutive years of no exceedance with groundwater protection standards.

Section 3 Certification

I, the undersigned Virginia Professional Engineer, hereby certify that I am familiar with the technical requirements of 40 CFR 257.104. 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 post-closure 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 257.104(a)(2) and (d).

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 Virginia Licensed 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 closure activities.

R. Kent Nilsson	026477
Printed Name of Professional Engineer	Commonwealth of Virginia License Number
	October 3, 2016
Signature of Professional Engineer	Date

