

VPDES Permit No. VA0004138 Dominion - Bremo Power Station

State Water Control Board Meeting
January 14, 2016





Presentation Overview

- Background
- Public Participation
- Major Areas of Concern and DEQ Responses



Dominion – Bremono Power Station

- Applicant: Virginia Electric and Power Company
- Permit Action: Reissuance of VPDES permit for discharge of once-through condenser cooling water, stormwater, and industrial wastewater which includes wastewater from dewatering activities to facilitate the closure of three coal ash ponds and the metal cleaning waste treatment basin at the facility.



Dominion – Bremo Power Station

- Existing natural gas steam electric generating station
- Ceased using coal in September 2013
- Three coal ash ponds
 - West Ash Pond
 - North Ash Pond
 - East Ash Ponds





The Draft Permit Addresses:

- Effluent monitoring and limits to protect water quality
- Ash pond dewatering
- Cooling Water Intake Structure requirements
- Thermal Mixing Zone requirements
- Stormwater requirements
- Continuation of existing Groundwater Monitoring requirements

Major Site Changes During Term of Upcoming Permit

- The West Ash Pond, North Ash Pond, East Ash Ponds, and Metal Cleaning Waste Treatment Basin will be closed.
- A new lined West Treatment Pond will be constructed in a portion of the former West Ash Pond.
- Outfalls 003, 004, and 202 will be retired.
- New Stormwater Outfalls 007, 008, and 009 will be added.

Proposed Dewatering Discharges

- Dewatering needs to occur regardless of type of closure.
- Dewatering will entail:
 - Initial drawdown of the impounded waters
 - » Approximately 8.9 MG from the North Ash Pond over 30 days
 - » Approximately 8.1 MG from the East Ash Ponds over 30 days
 - Continued dewatering over the closure period
 - » Approximately 231.5 MG from the North Ash Pond over 540 days
 - » Approximately 68.4 MG from the East Ash Ponds over 270 days
 - » Approximately 40.9 MG from the West Ash Pond over 270 days
 - Compliance with effluent limits prior to discharge

Public Participation

- Notice of the Draft Permit and Public Hearing was published in *The Daily Progress* on October 30, 2015 and November 6, 2015, and in the *Fluvanna Review* on November 5, 2015, and November 12, 2015.
- The public hearing was held on December 1, 2015 with Chairman Dunn serving as the hearing officer.

Public Participation

- Approximately 60 people attended the public hearing; 16, including the applicant, provided oral comments.
- During the public comment period, which ran from October 30, 2015 to December 14, 2015, there were 630 commenters.

Major Areas of Concern

- Public Process & Extension of Comment Period
- Sufficiency of Permitting Documentation
- Technology-Based Effluent Limits
- Protection of Water Quality & Beneficial Uses
 - Effluent Limits are not Protective
 - Threatened and Endangered Species
 - Instream Mixing
 - Tier 2 Antidegradation Policy
 - No Limits on Discharge Volume
 - Insufficient Monitoring

Major Areas of Concern

Sufficiency of Permitting Documentation

Comment

- Inadequate details on type and quantity of discharge
- Unknown how Dominion will treat the wastewater
- Uncertainty about whether treatment will be effective

Response

- Initial documentation was sufficient. Details expanded upon and updated with revised permit and fact sheet.
- Maximum flow rate limit established at 10.2912 MGD Dewatering discharge must cease if there is a limit exceedance until corrective action is implemented and DEQ authorization to resume the discharge is received

Major Areas of Concern

Technology-Based Effluent Limits

Comment

- DEQ did not require economically achievable technology that can significantly reduce pollutant concentrations
- Clean Water Act requires technology-based limits be developed on a case-by-case basis

Response

- Federal rule-making for this industry was updated and published in November 2015
 - Legacy wastewaters were addressed in this rule
 - Concluded TSS technology-based limits are appropriate
- Revised permit maintains technology-based limits for TSS, pH, and Oil & Grease limits as required by Federal Effluent Guidelines

Major Areas of Concern

Protection of Water Quality & Beneficial Uses

Comment

- Effluent Limits are Not Protective
- Threatened & Endangered Species
- Instream Mixing
- Tier 2 Antidegradation Policy

Response

- Proposed effluent limits are protective of Water Quality Standards supporting all beneficial uses
- Conservative assumptions applied
- More stringent limits were included based on a regulatory mixing zone of 2,000 feet

Major Areas of Concern

Protection of Water Quality & Beneficial Uses

Comment

- Concern with lack of discharge volume limits to protect against toxic discharges and dam integrity issues

Response

- Revised permit includes a maximum flow limit of 10.2912 MGD for dewatering discharges
- Revised permit includes a special condition limiting the draw-down rate of the coal ash ponds to no more than 6 inches/day unless otherwise approved in writing by the Department of Conservation and Recreation Dam Safety Program

Major Areas of Concern

Protection of Water Quality & Beneficial Uses

Comment

- Not sufficient monitoring of the effluent for the weekly and monthly limits established
- Insufficient monitoring to evaluate impacts to the environment

Response

- Revised permit includes increased sampling frequency to 3 days/week for effluent limited parameters with weekly reporting of results
- The revised permit contains the cease discharge requirement
- Self-monitoring and reporting is a cornerstone of the VPDES program
- Discharge monitoring evaluates compliance and associated impacts to the environment

Coordination with EPA

- EPA was provided the draft permit, fact sheet and application on October 30, 2015 for a 30-day review
- EPA was provided the revised permitting documentation on January 4, 2016
- EPA did not object to the permitting action