

VPDES Permit No. VA0002071 Dominion - Possum Point Power Station

State Water Control Board Meeting
January 14, 2016





Presentation Overview

- Background
- Public Participation Process
- Major areas of concern and DEQ responses

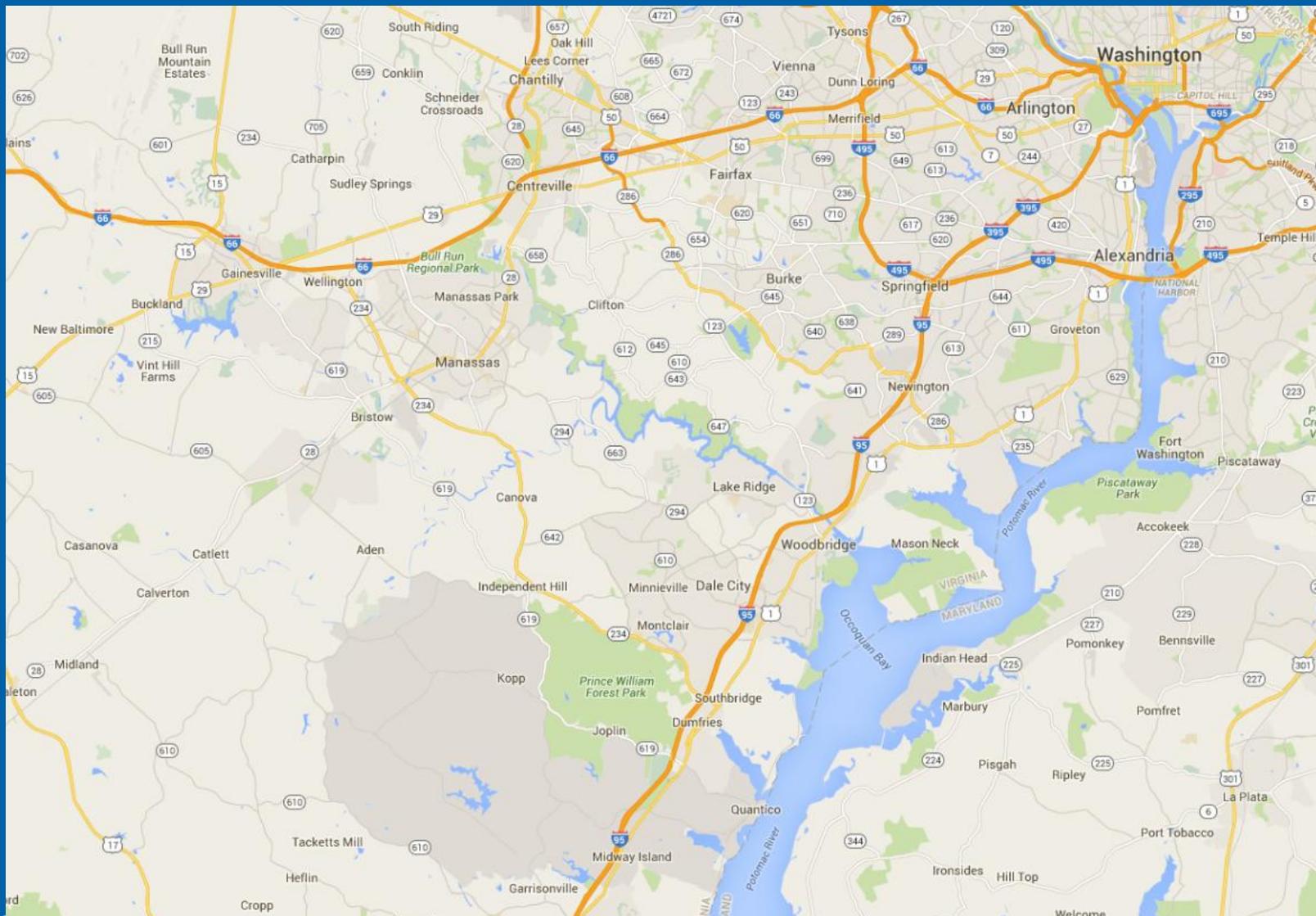
VPDES Permitting Action

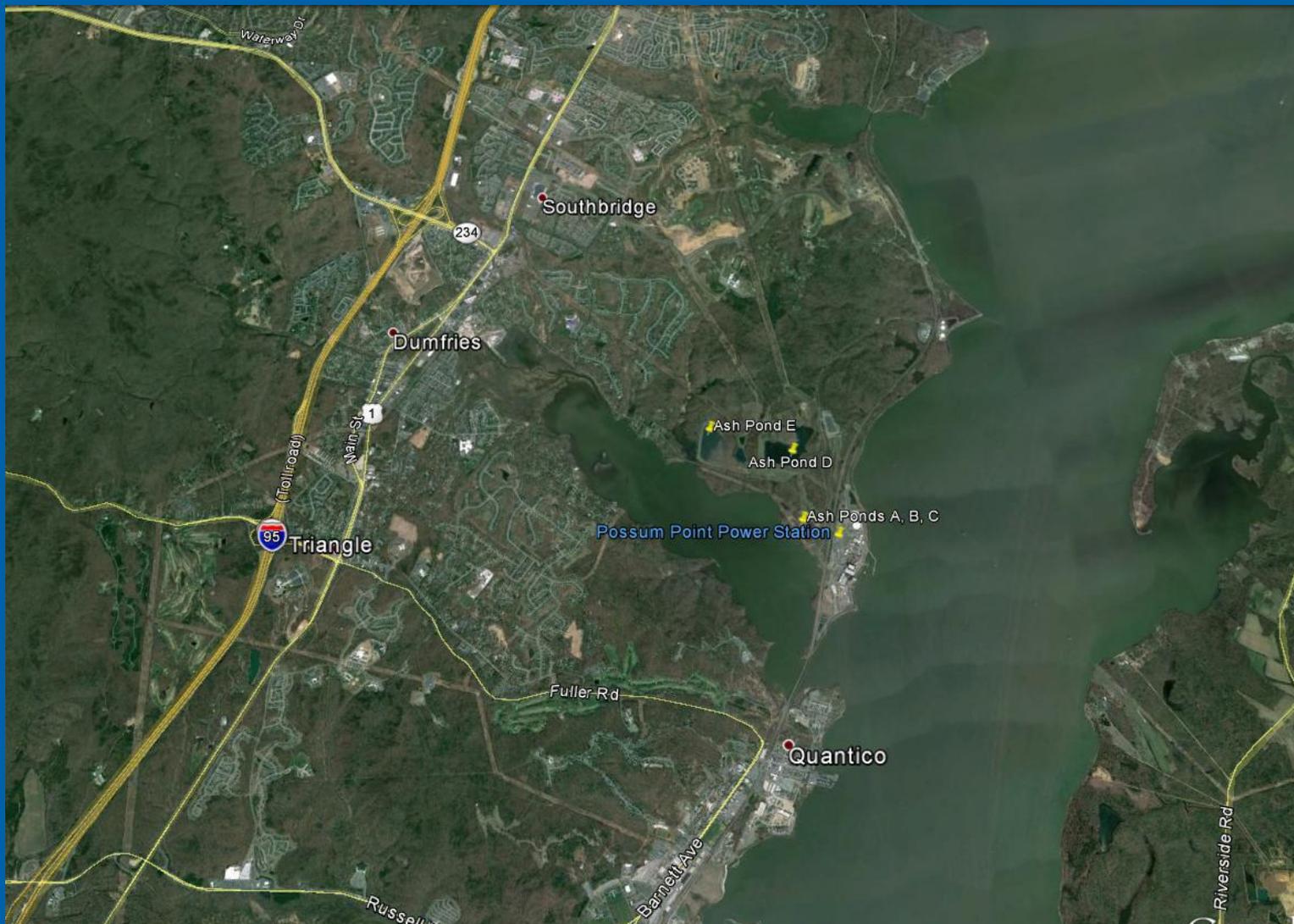
- Applicant: Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion)
- Modification of the existing VPDES permit issued April 3, 2013
- Addresses those items requested by Dominion
- Primary focus is dewatering to allow closure of ash ponds



Dominion – Possum Point Power Station

- Existing 1845 MW natural gas and oil fired steam electric generating station
- Ceased using coal in March 2003
- Five ash ponds
 - Ash Pond A, B, C Complex
 - Ash Pond D
 - Ash Pond E







Proposed Dewatering Discharges

- Dewatering needs to occur regardless of type of closure
- Dewatering will entail:
 - Initial draw-down of the impounded waters
 - » Approximately 150 MG to occur over 45-60 days
 - » Maximum flow of 2.88 MGD
 - Continued dewatering over the closure period
 - » Spring of 2018
 - Compliance with effluent limits prior to discharge

Public Participation

- Notice of the Draft Permit and Public Hearing was published in *The Washington Times* on October 29, 2015 and November 5, 2015.
- A public hearing was held on December 8, 2015 with Mr. Joseph Nash serving as the hearing officer.
- Approximately 125 people attended the public hearing; 36, including the applicant, provided oral comments.
- During the public comment period, which ran from October 30, 2015 through December 14, 2015, there were 465 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 not protective
 - Not adequate protection of fishery and wildlife
 - No limits on discharge volume
 - Discharge will contribute to the existing impairment
 - Insufficient monitoring
 - Ash Pond D toe drain

Major Areas of Concern

Sufficiency of Permitting Documentation

- **Comments**

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

- **Response**

- While initial documentation was sufficient, details expanded upon and updated with revised permit and fact sheet
- Inclusion of a final Conceptual Engineering Report special condition
- Maximum flow rate limit established at 2.88 MGD for dewatering discharges
- Dewatering discharge must cease if there is an effluent limit exceedance. Corrective action must be implemented and written authorization from DEQ is required before resuming discharge

Major Areas of Concern

Technology-Based Effluent Limits

- **Comments**

- 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, as required by Federal Effluent Guidelines

Major Areas of Concern

Protection of Water Quality & Beneficial Uses

- **Comments**

- Effluent limits are not protective
 - Toxicity
 - Instream mixing
- Not adequate protection of the fishery and wildlife

- **Response**

- Proposed effluent limits are protective of Water Quality Standards supporting all beneficial uses
 - Protective of aquatic life and human health
- Conservative assumptions applied
- Revised mixing assumptions for Outfall 005 resulting in more stringent limits

Major Areas of Concern

Protection of Water Quality & Beneficial Uses

- **Comments**

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

- **Response**

- Revised permit includes a maximum flow limit of 2.88 MGD for dewatering discharges.
 - Average daily flow rate is unchanged at 2.53 MGD
- Revised permit includes a special condition limiting the draw-down rate to no more than 6 inches/day unless otherwise approved in writing by DCR Dam Safety Program

Major Areas of Concern

Protection of Water Quality & Beneficial Uses

- **Comments**
 - Discharge will contribute to existing impairment of Quantico Creek
- **Response**
 - Proposed effluent limits are protective of water quality
 - Discharges will not contribute to existing impairments:
 - Fish consumption impairment due to elevated levels of PCBs
 - Aquatic life use impairments
 - Low solids (TSS) and metals limits prevent deposition
 - DEQ special study monitoring of Quantico Creek

Major Areas of Concern

Protection of Water Quality & Beneficial Uses

- **Comments**

- 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

Major Areas of Concern

Protection of Water Quality & Beneficial Uses

- **Comments**

- Concern that no limits or requirements to treat the Ash Pond D toe drain discharge were included, and no enforcement for the existing discharge

- **Response**

- Draft permit included monitoring requirements, but no effluent limits consistent with DEQ procedures
- Uncertainty as to the nature and characterization of the discharge
- Due to limited time period for closure, effluent limits are included in the revised permit

Coordination with EPA

- EPA was provided the draft permit, fact sheet and application on November 3, 2015 for a 30-day review
- EPA was provided the revised permitting documentation on January 5, 2015
- EPA did not object to the permitting action