COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
TDD (804) 698-4021
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

November 14, 2011

Environmental Protection Agency
Mailcode: 28221T
(Attention: Docket ID No. EPA-HQ-RCRA-2011-0392)
1200 Pennsylvania Ave, NW
Washington, DC 20460

RE: Virginia Department of Environmental Quality's Comments
Hazardous and Solid Waste Management System: Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities

Dear Sir or Madam:

On behalf of the Virginia Department of Environmental Quality (DEQ), I appreciate this opportunity to provide further comments on EPA's proposed regulations related to the management and disposal of coal combustion residues (CCRs). As we have previously stated, Virginia DEQ still believes that proposed regulations for the dry handling of CCRs continue to be unnecessary. Virginia, like many states, has a comprehensive regulatory program for the management of CCRs.

In response to EPA's Notice of Data Availability and Request for Comment (NODA), the DEQ is providing information on the Virginia cases presented in the report *In Harm's Way: Lack of Federal Coal Ash Regulations Endangers Americans and Their Environment* (August 26, 2010); on our state programs adequacy; and clarifications and correction of the claims and information put forth both the comments submitted by Earthjustice during the proposed regulation public comment period (Document ID: EPA-HQ-RCRA-2009-0640-6315) and the report, *State of Failure: How States Fail to Protect Our Health and Drinking Water from Toxic Coal Ash* (August 17, 2011).

<u>Information on Damage Cases</u>

The *In Harm's Way* report lists two Virginia power plants in its discussion of alleged damage cases. Both of the cases noted, American Electric Power's Clinch River Plant in Russell County and Glen Lyn Plant in Giles County were from many years ago. The Virginia DEQ has reviewed this report and by this letter, is providing clarifying information on the report's summary and conclusions.

<u>American Electric Power Plant (AEP) Clinch River Plant</u>

There is no dispute that the 1967 spill had a huge impact on the river benthic community. Since that spill over 44 years ago, regulations have been put in place to control solid waste and wastewater from the plant and the benthic community has been restored to a fully supporting state.

The State Water Control Board, a predecessor to DEQ, issued the first state Virginia Pollution Discharge Elimination System (VPDES) permit in approximately 1975 requiring monitoring and treatment of the wastewater discharges from the AEP Clinch River Plant. The VPDES permit addresses all potential wastewater sources from the site, and is sufficiently restrictive to protect water quality of the receiving stream. The company has a consistent history of compliance with all provisions of the permit, and the DEQ has confidence that the permit is sufficiently protective of water quality. The *In Harm's Way* report contends that discharges from the facility has high concentrations of copper and aluminum which result in adverse impacts to aquatic life. There are two outfalls at the Clinch River Plant which would have the potential to discharge pollutants which contact waste ash from the two ash handling ponds. Outfall 003 is the final discharge from the advanced wastewater treatment plant which receives all waste water from the ash handling activity; and, Outfall 015 is identified as the collective discharge from seeps along the toe of the embankment of the area which was previously used as ash pond #2 located on the east bank of Dumps Creek.

The wastewater treatment plant, which serves Outfall 003, receives all non-storm water wastewater generated from the facility including ash transport waste, landfill leachate, cooling tower blowdown, and any other miscellaneous wastewaters generated at the facility. As such, it is the principle focus of the VPDES permit for the facility and the DEQ has imposed effluent limitations for a number of potential pollutants including a water quality based Total Recoverable Copper limit of 0.039 mg/l. The effluent limits were developed using currently accepted anti-degradation and mixing zone policies and are sufficiently stringent to preserve the 0.0124 mg/l water quality standard adopted for the Clinch River. During the last permit action in 2010, the staff reviewed the data from the most recent 5-year permit cycle and determined that the maximum reported concentration of total recoverable copper was 0.037 mg/l and the long term average concentration reported in the discharge is 0.016 mg/l.

Similarly, the facility is required to report the concentration of Aluminum in its discharge. The most recent reported Aluminum concentration for outfall 003 is 0.16 mg/l. Although this end-of-pipe concentration is higher than the 0.087 mg/l criteria for Aluminum that is quoted In Harm's Way report, it is not likely to produce instream concentrations which approach the criteria level; because Virginia has not adopted water quality standards for Aluminum, no water quality based effluent limits are contained in the permit. Therefore, the wastewater from Outfall 003 is in compliance with all regulatory water quality standards.

The other potential discharge which may contact ash waste material is regulated in the permit as Outfall 015. Inspections of the facility discovered seepage at the toe of Ash Pond 2 in the late 1980s. As a result, the VPDES permit was modified to include dike stability analysis, chemical analysis, and flow monitoring of the seepage. AEP removed Ash Pond 2 from service in the mid-1990s and the seepage quantity has reduced significantly. DEQ has evaluated the

seepage quality and has repeatedly found no in-stream water quality standard violations from this source.

Furthermore, downstream ambient data from DEQ monitoring stations has confirmed that the Clinch River below the facility meets all water quality standards. A 2007 ambient water analysis which included results for seventeen metal parameters identified no water quality standards violations. Incidentally, the levels of Copper and Aluminum were both low. Copper was determined to be 0.0005 mg/l and Aluminum was detected at a level of 0.0044 mg/l. Therefore, DEQ is confident that the Clinch River Plant is not contributing levels of pollutants in violation of the water quality standards.

DEQ has benthic macroinvertebrate stations on the Clinch River upstream of and downstream of the Clinch River Plant (Stations 6BCL264.27 and 6BCL250.67, respectively). The most recent DEQ data reveals a Virginia Stream Condition Index (VSCI) score of 71 and 73 respectively. If VSCI has a level of below 60 as impaired for aquatic life use and scores of above 70 are indicative of a very health and diverse benthic community.

Researchers have noted mussel decline in certain section of the Clinch and Powell Rivers, namely upstream and near the Towns of Tazewell and North Tazewell. This stretch of the river, however, is far upstream of the Clinch River Plant discharges.

DEQ is signatory to a memorandum of understanding (MOU) between the State of Tennessee, EPA Region 3 and 4 and Virginia Department of Mines, Minerals and Energy for the purpose of studying the reasons for the mussel decline. A product of this MOU is the formation of the Clinch-Powell Clean Rivers Initiative (CPCRI), consisting of federal and state regulatory and resource agencies, environmental advocacy groups, universities and coal companies (see Table 1 below). The purpose of the CPCRI is the study the reason for the mussel decline from a scientific basis. The group determined that studies are needed to define the populations in the various sections of the rivers and to develop a study plan to define the causes of the mussel decline. A scientific study plan is being developed and will be implemented by the partners. As the full plan is being developed now, only a summary is available. DEQ believes that blaming mussel decline on discharges from the Clinch River Plant, or any cause, is premature until the study is complete. The draft 2012 – 305(B/303(D) Water Quality Assessment Report that is now being developed by DEQ also notes this mussel decline in the listing the Clinch Rivers as fully supporting with observed affects for aquatic life use.

Table 1.
Clinch-Powell Clean Rivers Initiative participants.

- Tennessee Department of Environment and Conservation
- Virginia Department of Environmental Quality
- Virginia Department of Game and Inland Fisheries
- Tennessee Wildlife Resources Agency
- Virginia Department of Conservation and Recreation
- Virginia Department of Mines, Minerals, and Energy
- US Environmental Protection Agency Regions 3 & 4
- US Office of Surface Mining Reclamation and Enforcement

- US Fish and Wildlife Service
- US Geological Survey
- US Army Corps of Engineers
- Tennessee Valley Authority
- Alpha Natural Resources
- Arch Coal
- The Nature Conservancy
- Upper Tennessee River Roundtable
- Virginia Tech
- North Carolina State University

American Electric Power Plant (AEP) Glen Lyn Plant

As with the Clinch River Plant, the Glen Lyn Plant also is a regulated facility subject to DEQ review and inspection. The *In Harm's Way* report is not clear on which outfall is responsible for the problems alleged; however, based on the picture associated with the description, it would appear that the report refers to Outfall 007. Outfall 006 is associated with the wet pond system and has not had any discharges from the overflow during the past three VPDES permit cycles (15 years) and Outfall 007 has had discharges and includes the leachate ponds from the existing landfill which currently has its final cap installed and storm water via Outfall 907.

The current VPDES Permit VA0000370 was issued on July 11, 2009, and expires on July 10, 2014. In this permit, Outfall 006 and 007 are required to be monitored for flow, pH, TSS and oil & grease. In past permit cycles, biological toxicity testing, using Ceriodaphnia dubia, was required for both Outfall 006 and 007; however, based on the last 15 years of data, this testing was deemed unnecessary for Outfall 007 and was not included in the most recent renewal. Outfall 006 still requires biological toxicity testing if there is ever a discharge from the system. There is also monitoring of total recoverable copper, nickel, zinc, arsenic, and selenium.

The *In Harm's Way* report references water quality problems from TSS, a rise in pH and elevated levels of the following trace elements: cadmium, chromium and selenium; however, the DMR data submitted to DEQ does not indicate any current issues with TSS or a rise in pH.

Based on the TMDL studies on the New River, the river is impaired with PCBs and perhaps bacteria. Both of these issues are unrelated to CCRs. The following link provides additional information on the current water quality in the vicinity of the Glen Lyn's industrial landfill, which has a DEQ-issued Solid Waste Permit under the Virginia Solid Waste Management Regulations: http://gisweb.deq.virginia.gov/FactSheets2010/FactSheets.aspx?id=VAW-N35R_NEW01A00&style=1

Finally, DEQ is familiar with Dr. Cherry's studies from the 1970s and 1980s as he worked closely with DEQ staff. Based on that working relationship, the following comments are offered on those studies:

- Dr. Cherry's methodology in those early studies was unconventional and could not be used for regulatory purposes.
- The study conditions that existed in the 1970s and 1980s no longer exist. The facility has made many improvements to its operation to reduce pollutant loading and the volume of discharge.

Those studies are not pertinent to today for the above reasons. At this time, the DEQ has no reason to suspect a benthic impairment much less one contributed by the Glen Lyn Plant. In regards to benthic macroinvertebrate samples in the New River, the Virginia Stream Condition Index (VSCI) was not developed as an assessment tool for large rivers such as the New River at Glen Lyn; therefore, the DEQ has not collected any benthic macroinvertebrate samples in the area around Glen Lyn.

Adequacy of State Programs

Virginia has been and continues to be a leader in environmental regulation. Virginia was one of the first states in the nation to regulate water quality with the adoption of the State Water Control Law in 1946. The Virginia Air Pollution Control Law had its beginnings in 1966 and solid waste regulation began in 1971. The following are program overviews which are provided to support the adequacy of our state programs.

Dam Safety and Regulation

The Virginia Department of Conservation and Recreation - Dam Safety Program's purpose is to provide for proper and safe design, construction, operation, and maintenance of dams to protect public safety. Their authority resides in the Virginia Dam Safety Act, Article 2, Chapter 6, Title 10.1 (10.1-604 et seq) of the Code of Virginia and the Dam Safety Impounding Structure Regulations (Dam Safety Regulations), established and published by the Virginia Soil and Water Conservation Board (VSWCB). These regulations were last updated on Dec. 22, 2010. In accordance with the Dam Safety Regulations, no person or entity shall construct, begin to construct, alter or begin to alter an impounding structure until the VSWCB issues a *construction permit* or an *alteration permit*.

All dams in Virginia are subject to the Dam Safety Act and Dam Safety Regulations unless specifically excluded. Dams are classified with a *hazard potential* depending upon the downstream losses anticipated in event of failure.

- *High* - dams that upon failure would cause probable loss of life or serious economic damage
- *Significant* - dams that upon failure might cause loss of life or appreciable economic damage
- *Low* - dams that upon failure would lead to no expected loss of life or significant economic damage. Special criteria: This classification includes dams that upon failure would cause damage only to property of the dam owner.

The owner of each regulated *high*, *significant*, or *low* hazard dam is required to apply to the VSWCB for an *Operation and Maintenance Certificate.* The application must include an assessment of the dam by a licensed professional, an *Emergency Action Plan* and the appropriate fee(s), submitted under separate cover. An executed copy of the *Emergency Action Plan* or *Emergency Preparedness Plan* must be filed with the appropriate local emergency official and the Virginia Department of Emergency Management.

The VSWCB issues *Regular Operation and Maintenance Certificates* to the dam owner for a period of six years. If a dam has a deficiency but does not pose imminent danger, the board may issue a *Conditional Operation and Maintenance Certificate*, during which time the dam owner is to correct the deficiency. After a dam is certified by the board, annual inspections are required either by a professional engineer or the dam owner, and the *Annual Inspection Report* is submitted to the State's regional dam safety engineer.

Surface Impoundment Regulation

Virginia's surface impoundments are regulated under the authority of our State Water Control Law. The provisions of DEQ's VPDES Permit Manual and associated Water Division Guidance (GM 98-2010) address procedures staff are to use to protect state waters in accordance with the groundwater standards provided in regulation under the Virginia Water Quality Standards Regulations, 9VAC 25-260. The manual recognizes the necessity for groundwater monitoring and liner requirements at industrial or municipal facilities and is dependent on the technical evaluation of site specific characteristics. Where potential groundwater impacts are suspected DEQ may require a groundwater monitoring plan through a VPDES permit special condition. The purpose of the groundwater monitoring plan is to determine if the system integrity is being maintained and to indicate if the activities at the site are resulting in violation of the State Water Control Board's Ground Water Standards. Specific language for the special condition is contained in the manual.

In 2009, DEQ conducted inspections at electric utilities with coal ash impoundments. Review of these inspection reports indicates that there are 15 active coal ash impoundments at seven facilities. Of these impoundments, 12 of the 15 impoundments have permit conditions that require groundwater monitoring and reporting, and three of the five closed impoundments also include groundwater monitoring requirements.

Coal Combustion Residuals Regulation

CCRs are regulated as a non-hazardous industrial solid waste in Virginia under the *Solid Waste Management Regulations* (SWMR) which are codified under 9VAC20-81 of the Virginia Administrative Code. The SWMR have been developed over a long history of solid waste management in Virginia. Prior to 1970, open dumping and open burning were a common solid waste management option nationwide. Since 1970, there have been vast improvements, including laws and regulations, which have been promulgated to protect citizens against mismanagement of solid waste. The SWMR regulations have extensive requirements for landfill siting, design, operation, gas and groundwater monitoring, closure, post-closure, and, when necessary, corrective action. Financial assurance is required of owners and operators of solid waste management facilities to cover the costs associated with the closure of the site and its post-closure care. Landfills that dispose only CCRs are regulated as industrial landfills and must adhere to the requirements of the SWMR. Comprehensive requirements for industrial landfills are contained in Part III of the SWMR (9VAC20-81-100 et seq.) and include many requirements that are comparable to the federal requirements for municipal solid waste landfills.

The history of solid waste management in Virginia is a very long one. Prior to 1971, there were no legal requirements for solid waste management in Virginia. In 1967, the Bureau of

Vector Control in the Virginia Department of Health received a U.S. Public Health Service grant to close or consolidate open dumps in Virginia. Without a legal mandate, the Bureau was able to close about 800 open dumps across the state. This phase of the effort was completed in 1971 when the Virginia Health Code was amended and regulations were adopted for the management of solid waste.

This marked the start of Virginia's regulated solid waste program that required landfills to apply for and receive a permit, prohibited open dumping, required daily cover, and established basic siting, operational, and closure criteria. It also required that landfills be designed in a manner that is environmentally acceptable and would not create nuisances. As time went on, the permitting requirements were adjusted under this set of general performance standards to account for technological advances; however, these original regulations did not require corrective action.

It was determined that more specific requirements governing operation of solid waste management facilities were necessary at about the same time the US Congress passed the 1984 Hazardous and Solid Waste Amendments to the Resource Conservation and Recovery Act, which required the Environmental Protection Agency to revise its Guidelines for Open Dumps under 40CFR257. In 1988, the Virginia Waste Management Board adopted comprehensive solid waste management regulations. These regulations established more definitive requirements for solid waste management facilities with respect to siting, design including liner requirements, leachate collection, closure, post-closure care, groundwater monitoring, and corrective action for landfills that were found to adversely affect groundwater. These regulations included specific standards for industrial landfills that manage only industrial waste, such as CCRs.

The SWMR have been amended eight times since the 1988 promulgation as Virginia continues to improve it solid waste management program. Unless specifically exempted by the regulation, facilities that manage solid waste must do so under a permit issued by the DEQ. For industrial landfills, this permitting process is extensive and can take from 18 to 24 months, or longer, to complete. The procedures for permit applications are specified in 9VAC20-81-450 and include:

- Pre-application requirements. This step includes submittal of a notice of intent, which includes, as applicable, disclosure statements and certifications.

- Siting Application (9VAC20-81-460). Under the siting or Part A application process, applicants provide the information essential for assessment of the site suitability for the proposed facility. It requires information on all siting criteria applicable to the facility and a geo-technical and hydro-geological report describing the surface and subsurface conditions at the site. It is accompanied by applicable maps and site descriptions. The geo-technical report must describe the procedures used in drilling and recording of the borings and the results of analyses performed. It should contain interpretations of the data on each soil unit detected underneath the site. The hydro-geologic report must describe water table elevations, direction, and rate of groundwater flow and the methods used in making the measurements. The report also contains the site geologic map based on the data collected during the site investigation. Upon receipt of a complete Part A application, DEQ conducts a technical and regulatory review of the

applications. If the Part A is approved, the applicant is notified to submit Part B portion of the application.

- Part B Application (9VAC20-81-470 or 9VAC20-81-480). The Part B application requires detailed drawings/plans for engineering design and construction including a design report, pertinent operational details, site monitoring, closure and post-closure care. This application is to be accompanied by financial assurance documentation as well. The engineering design plans submitted in support of the Part B application must be complete and sufficient to construct the facility. In addition, details for drainage control structures, access roads, fencing, leachate and gas control systems, if applicable, buildings, signs and other construction details are required. Part B applications must also contain a closure plan that describes those measures to be accomplished to close the facility when the useful life of the units at the facility is reached. The plan must show how the facility will be closed to meet the requirements of the regulations. The closure plan must be accompanied by a closure and a post-closure care cost estimates for closure which are used to determine the level of financial assurance that will be required from the facility.

  The Part B application will be evaluated for administrative completeness, and once found complete, for technical adequacy and regulatory compliance. In the course of this evaluation, the DEQ requires the applicant to provide any additional information necessary for the evaluation. At the end of the evaluation, the department will notify the applicant that the application is technically adequate and in regulatory compliance, or that the DEQ intends to deny the application.

- Permit Issuance. If the DEQ has found that the application is technically adequate and in full compliance with the regulations, a draft permit is developed, based on the information received and its own verification of the data. The draft permit is subject to public comment in accordance with the regulatory provisions. For industrial solid waste management facilities owned or operated by the generator of the waste and managed at the facility, the Director of DEQ is required to determine, after investigation and evaluation of comments by local government, that the proposed facility poses no substantial present or potential danger to public health. After the permit is issued, the permittee may begin construction. When the construction is complete, the permittee must notify the DEQ and submit the necessary Construction Quality Assurance certification and documentation. The DEQ staff inspects the facility to ensure that the facility has been constructed in accordance with the approved permit and issues a certification to operate to the facility if found to be satisfactory. It is then that the operator may start accepting the waste.

In addition to the operational information provided in the Part B application process, all solid waste management facilities are required to keep current operations manuals which include the operations plan, inspection plan, health and safety plan, unauthorized waste control plan, emergency contingency plan, and for landfill, a landscaping plan. This manual is updated and

certified on an annual basis to insure all facilities are up to date with current regulatory operational requirements.

As detailed above, Virginia's regulatory requirements for industrial landfills and the required permitting process are comprehensive. Our regulations have changed and strengthened since their initial adoption over 40 years ago. These regulations exceed current federal requirements which are under 40CFR257. It is with that reasoning, the DEQ continues to believe that our program is more than adequate to protect human health and the environment and that further federal regulation of this program will provide little to no protective benefit but will unnecessarily further strain state budgets.

Clarifications on information in the Earthjustice Comments and the *State of Failure* report

The adequacy of Virginia's regulatory programs was discussed in the comments submitted by Earthjustice and further discussed and criticized in the *State of Failure* report. However, much of the data presented is incorrect, incomplete, or unclear and may be misleading in its representation of Virginia's regulatory requirements.

Response to Earthjustice Comments

In Earthjustice's comments, the SWMR requirements for industrial landfills are discounted due to variance provisions within our SWMR. That representation is misleading and leads to oversimplification of the yes/no responses that Earthjustice presents. While it is true that Virginia does have variance provisions, those provisions are not used in the manner suggested by the Earthjustice comments. General responses to these issues are provided below:

- Groundwater Monitoring. Industrial landfills are required to have groundwater monitoring networks that meet the provisions of 9VAC20-81-250, unless the landfill has been designed with a double liner system. Industrial landfills can use a double liner system in lieu of groundwater monitoring; however, those landfills must then be designed and built with that double liner system which includes a witness zone between the liners. If a leakage action rate within the witness zone is exceeded, then the landfill will commence groundwater monitoring in accordance with 9VAC20-81-250.

  The requirements for groundwater monitoring at industrial landfills include system requirements, such as network specifics for at least one upgradient and three downgradient monitoring well; sampling and analysis criteria including QA/QC, analytical and sampling methods, statistical analysis; establishment of groundwater protection standards; and a specifically designed monitoring program for industrial landfills

- Liner System. Virginia's industrial landfills are built with a bottom liner meeting the provisions of the SWMR. A liner has been required at these landfills since 1988 and any suggestion otherwise is incorrect. The liner provisions are provided in 9VAC20-81-130.J.2. A single liner is the requirement; however, groundwater monitoring is also required to insure the liner's performance. If groundwater monitoring impacts above the protection standards are determined to have

occurred, then the corrective action program under 9VAC20-81-260 is implemented.

- Fugitive Dust. Virginia's landfills are required to adhere to other regulatory provisions, including fugitive dust control as required by our air regulations (see 9VAC20-81-140.A.12). Additionally, a one-foot thick progressive weekly cover is required to minimize infiltration and nuisances.

- Run-on and Run-off Controls. All landfills are designed and constructed with surface water run-on and run-off controls in place. The control system is built to control a 24-hour, 25-year storm (see 9VAC20-81-130.H).

- Groundwater Isolation. Virginia does not have a specific set-back standard from groundwater but that does not mean landfills would be allowed to be built within the groundwater without proper engineering designs in place. Solid waste disposed is not placed in groundwater which is why landfills are engineered with controls including liners and leachate collection, and in some cases, groundwater infiltration controls. Additionally, siting prohibits the location of landfills in 100-year floodplains, requires set-backs from streams, rivers, and springs, and has restrictions from location in wetlands (see 9VAC20-81-120).

- Financial Assurance. Financial assurance for solid waste management facilities is required in accordance with Virginia's *Financial Assurance Regulations for Solid Waste Disposal, Transfer, and Treatment Facilities*, 9VAC20-70, and it is mandatory that all industrial landfills meet the requirements of these regulations.

- Closure Cover Requirement. Virginia has required closure covers for landfills since 1971. The SWMR require that industrial landfill's final cover system meet the performance standards of 9VAC20-81-160.D.2 or use the approved alternate liner which includes a geosynthetic clay or membrane component.

- Post-Closure Monitoring. Virginia requires ten years of post-closure monitoring for industrial landfills; however, if post-closure monitoring is not terminated after ten years if on-going issues, such as groundwater corrective action, have not been resolved.

Response to the State of Failure Report

The *State of Failure: How States Fail to Protect Our Health and Drinking Water from Toxic Coal Ash* report (State of Failure) also provides oversimplification of the regulatory requirements for Virginia's surface impoundments and landfills. The regulatory requirements are summarized in Table 2, Table 3, and Part III of the report. As noted above, Virginia's SWMR have requirements for industrial landfills that manage CCR. These requirements include groundwater monitoring, a liner system, engineering design of landfills to include protection from groundwater intrusion, and financial assurance for the closure and post-closure care of solid waste management facilities. Table 2 of the report incorrectly indicates that these items are not required. Of note, is the fact that the disposal of industrial waste has been regulated in Virginia

since 1971 and comprehensive requirements for industrial waste landfills, from design through post-closure, have been in place since 1988.

Surface impoundments are regulated under the authority of Virginia's State Water Control Law which was first adopted in 1946. The requirements for these impoundments are evaluated by DEQ and may include groundwater monitoring and liners for industrial impoundments depending on the site specific characteristics. Where potential groundwater impacts are suspected, then a groundwater monitoring plan can be implemented through a VPDES permit special condition. The purpose of the groundwater monitoring plan is to determine if the system integrity is being maintained and to indicate if the activities at the site are resulting in violation of the State Water Control Board's Ground Water Standards. Table 2 of the State of Failure report does not acknowledge this aspect of our water program. Table 3 of this report discusses the dam programs. As discussed previously, dams are regulated by the Virginia's Department of Conservation and Recreation (DCR). DCR's Dam Safety Program has regulations governing dam safety and provides a program for inspection, certification, and deficiency correction of these dams. And finally, Part III, of the State of Failure report indicates that 2009 TRI data shows that the majority of releases from electric generation sector are mercury. DEQ has reviewed this data and talking into consideration TRI releases from Virginia power plants and TRI releases from all industry sectors. From our 2009 TRI node data set, it indicates that the primary releases to land was not mercury and DEQ has not been able to recreate the data from this report and cannot confirm its validity.

Contrary to the unsupported claims set forth in the State of Failure report, Virginia's legacy is not one of mismanagement of CCR, but one of continued improvements to better protect our citizens and our environment. In fact, Virginia has a regulatory program for landfills, surface impoundments, and dams that is protective of public health and the environment. DEQ is committed to its mission to protect and improve the environment for the well being of all Virginians.

Thank you for your time and consideration of our comments. It is hoped that these comments will clarify any issues and help EPA to understand the depth and breadth of Virginia's regulatory programs for CCR. As always, if you have any questions or need further clarification, please do not hesitate to contact me at 804-698-4079 or Jeffery.Steers@deq.virginia.gov.

Sincerely,

Jeffery A. Steers

Jeffery A. Steers, Director
Division of Land Protection & Revitalization

cc: James Golden, DEQ Deputy Director
Angie Jenkins, Policy Director