

GOVERNMENT OF THE DISTRICT OF COLUMBIA  
Department of Energy and Environment

August 29, 2016

Mr. Phil Toomajian,  
Chair, Advisory Neighborhood Commission 6A  
Box 75115  
Washington DC 20013

RE: Letter Dated April 15, 2016

Dear Mr. Toomajian

*Phil*

Thank you for providing detailed and thoughtful comments on the Draft Remedial Investigation (RI) Report for Pepco Benning Road Facility. I greatly appreciate the time and effort you invested in reviewing the Draft RI and your commitment to restoring the Anacostia River and protecting the health of neighboring residents. I share your commitment and look forward to working with you as we move forward.

Attached please find a detailed response letter from the technical staff managing this project. If you have any questions about these responses, the Project as a whole, or any other areas please feel free to contact me or my staff.

Best,

  
Tommy Wells  
Director

CC: Wesley McNealy (Pepco)

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A detailed response for each of the comment along with each comment is provided below:

- **Comment #1:** Since the current RI/FS is provisional or preliminary, the DOEE should provide an additional public comment period when the new necessary studies and evaluation have been completed. Additionally, Pepco and DOEE should provide another public presentation that incorporates any new findings from the upcoming new Field Investigation.

*Response: After DOEE and Pepco perform the work required to address data gaps in the draft RI report, they will issue a revised draft RI report. The revised draft RI report summarizing the additional investigation results will also be made available for public review and comment. During that public comment period, Pepco and DOEE will hold a public meeting to present additional remedial investigation findings and answer questions regarding the results.*

- **Comment #2:** A fuller explanation is needed of the movement of pollutants within and adjacent to the site from this time forward. What will 25, 50, 100 year floods do to pollutants currently under the river bed or under the new hard-surface top cover of the Plant site? Will flood damage to the ground cover (vegetation or rock/cement) carry covered and buried pollutants from the Pepco site into the River?

*Response: A portion of the northwestern part of Pepco property is within a 100-year flood event zone. The cooling tower basins are located in this portion of the property and are known to contain caulk affected by polychlorinated biphenyls ("PCBs") and PCB-impacted soils. A removal action plan approved by DOEE includes demolition and removal of the concrete basins, excavation, and off-site disposal of impacted soils. This removal action will eliminate the possibility of PCBs from this area entering the Anacostia River under 100-year flood event conditions.*

*The available data on the Anacostia River, which is subject to 100-year storm events, indicates that subsurface sediment concentrations of contaminants tend to be higher than the surface sediment concentrations. This indicates that there is a strong degree of sediment stability in the riverbed. This finding will be further tested by high resolution cores, radio isotope analysis, and other methods and the results will be presented in the Final RI Report.*

*There is also strong evidence that the ongoing deposition of cleaner sediment on top of the existing sediment will help prevent the scenario described in your comment. The ongoing Anacostia River Sediment Project includes development of a hydrodynamic and contaminant fate and transport model that will provide additional ability to evaluate this*

*concern. This model will be calibrated to include flow, stage, and other parameter data. The data collected will be used to assess various remedial options for contaminated sediment during a feasibility study. This model will be used to identify portions of the river bottom that may be susceptible to erosion or deposition with particular attention to areas where subsurface sediment is contaminated.*

- **Comment #3:** DOEE/Pepco should provide a brief explanation near the beginning of the RI/FS document about why the deposition of the substantial air pollutants from the Power Plant is not included in this study. This is probably the greatest neighborhood adverse-effect of the many years of uncontrolled pollution from coal burning. An explanation seems required for the community to understand why this is not being considered in this Remedial Investigation.

*Response: DOEE carefully considered the air depositional pathway, and addressed this matter substantially in responses to public comment on the RI/FS work plan. Ultimately, DOEE concluded that it is not appropriate to expand the scope of the RI/FS sampling program to include air deposition, a conclusion supported by the pertinent guidance from the U.S. Environmental Protection Agency (“EPA”). In reaching this conclusion, DOEE considered the following factors:*

- a) Health effects from power plant emissions have been the subject of extensive, long-term studies by EPA, as documented in a report to Congress that has formed the basis for EPA’s subsequent regulatory actions: Study of Hazardous Air Pollutant Emissions from Electric Utility Steam Generating Units – Final Report to Congress, EPA-453/R-98-004a, February 1998. This study identified inhalation as the primary exposure pathway of concern, and the deposition of materials via the smoke stack exhaust was not a significant pathway affecting human health. The Benning power plant ceased operating in June of 2012 and therefore no longer contributes to any potential exposure from inhalation of airborne contaminants. Since 1976, the facility exclusively burned fuel oil and was operated only 10 to 15 days annually to ensure sufficient available power during peak demand periods. Fuel oil burns much cleaner than coal, and produces air emissions similar to many other sources (e.g., automobiles, combustion engines).*

*Furthermore, studies conducted in 2005 and 2007 by the Agency for Toxic Substances and Disease Registry (“ATSDR”)<sup>1</sup>, to assess health effects from ambient air concentrations in the River Terrace neighborhood from all sources, concluded that “overall, levels of metals, PAHs, and VOCs are not expected to result in harmful health effects for exposed residents in and near the River Terrace community.”*

- b) DOEE recognizes airborne particulate emissions from coal combustion at the Benning Road Power Plant may have deposited in the surrounding properties over the period of time the facility used coal to generate electricity. These*

*residuals would have been deposited prior to 1976 when coal was burned at the facility. Although modern chemical analyses and environmental forensic techniques may provide the ability to separate fuel oil and coal-sourced soil polycyclic aromatic hydrocarbon (PAH) contamination from other sources of PAH contamination, DOEE believes identifying and delineating specific plant-related impacts in soil from neighboring properties would be subject to significant uncertainty and would likely be scientifically inconclusive. There is no conclusive scientific basis to distinguish soil impacts that may be attributable to emissions from the Benning power plant from soil impacts attributable to any number of other sources of air emissions in the area (including point sources, such as the coal fired power plant at the U.S. Capitol, and mobile sources, like traffic on Interstate 295 and other nearby roadways), or from naturally occurring background soil constituents. In fact, the emissions from the Benning power plant, and the potential soil impacts resulting from deposition, would be expected to be relatively modest compared to other sources affecting the ambient air in the vicinity of the plant site.*

- **Comment #4:** The EPA has cited and continues to fine Pepco for the amount of heavy metal pollutants transiting from the Benning Road site. Do the measured levels of metal pollutants found at Outfall 13 indicate that this is a sufficient catch basin for all of the metals moving offsite? The investigation has found heavy metals at no other location. Why is there no evidence of a downstream plume of heavy metal deposition from Outfall 13?

*Response: Stormwater discharges from Pepco's Benning Service Center facility are similar to stormwater discharges from any other urbanized environment. Controls installed by Pepco over the years have significantly reduced metal concentrations in the facility's stormwater discharges. Pepco is working with EPA to install additional controls to ensure consistent compliance with the stringent permit limits.*

*The RI conducted by Pepco and work completed by others to date demonstrate that metals are present in Anacostia River sediments, both upstream and downstream of Outfall 013, at concentrations above screening levels. For the most part, the majority of metals present in the Outfall 013 area were present at concentrations consistent with upriver background concentrations, indicating that discharges from Outfall 013 are not a major source of metals in the river sediments. However, the RI data collected to date does indicate concentrations of several metals may be slightly elevated in the Outfall 013 area. Note that, Total organic carbon (TOC), which is a measure of organic matter, was found to be relatively elevated in the Outfall 013 area sediments compared to the rest of the study area. Sediment contaminant concentrations typically exhibit a correlation with TOC concentration. Given appropriate geochemical conditions, metals can bind to organic matter and, in that process, become immobilized. Metals also readily sorb to fine silt and clay sized sediment. The lower flow rates in the cove will promote the precipitation of particulate-bound metals before they enter the river. These two*

*phenomena may explain the slightly elevated levels found in the outfall area compared to the rest of the study area.*

*It is also important to note while the issue of metal exceedances in discharges emanating from the facility was brought to DOEE's attention several times, DOEE is not a delegated authority. In other words, the fines issued by EPA are solely within their purview. DOEE has no authority to enforce the terms of EPA's National Pollutant Discharge Elimination System ("NPDES") permits.*