



United States Department of the Interior

NATIONAL PARK SERVICE
George Washington Memorial Parkway
c/o Turkey Run Park
McLean, Virginia 22101

IN REPLY REFER TO:
3301(GWMP)

February 11, 2015

Mr. Alex Wardle
Commonwealth of Virginia
Department of Environmental Quality
Northern Virginia Regional Office: Remediation
13901 Crown Court
Woodbridge, VA 22193

Re: Potomac River Generating Station - Corrective Action Plan

Dear Mr. Wardle,

Thank you for the opportunity to submit comments on the Potomac River Generating Station – Corrective Action Plan (CAP). On behalf of the National Park Service (NPS), we submit comments to express some concerns about the CAP and request the CAP be refined and strengthened before being approved.

We are encouraged the Virginia Department of Environmental Quality (VA DEQ) is moving forward with efforts to address the leaks from the two 25,000 gallon heating oil tanks at the Potomac River Generating Station operated by NRG Potomac River LLC (NRG). Nonetheless, we are concerned about impacts to United States property under the jurisdiction of NPS including the bed of the Potomac River. Our comments pertain to revolve around specific elements/aspects of the land from the NRG facility toward the Potomac River.

Mount Vernon Trail

- Please include additional subsurface soil testing on NPS land to determine full nature and extent of contamination on NPS land.
- Does the LIF data collected on NPS land indicate heating fuel oil hydrocarbons are in: liquid phase (nonaqueous phase liquid) floating on groundwater, dissolved phase in water, vapor phase in soil, or adsorbed phase bound to particles in soil? How will the identified path forward address all of these potential phases? Are fuel oil hydrocarbons adsorbed to soil in the 'smear zone'?

- What is the risk that the contamination is beyond the identified 3 acres (size provided during public meeting)? Have additional monitoring areas been undertaken beyond the 3 acre boundary to confirm it hasn't extended beyond that? For example, around the screen well pump house toward the south.
- What proposed impacts are anticipated for contaminated areas on GWMP property and the Mount Vernon Trail?
- What mitigation is being proposed for damage to NPS property?
- If biosparging is installed on property managed by NPS how does NRG propose to make sure the system is working as designed and no contamination is reaching the Potomac River?
- Please define 'low to moderate petroleum concentrations' and provide a comparison to fuel oil concentrations found on property managed by NPS.
- Are the heating fuel oil hydrocarbon concentrations high enough on property managed by NPS for biosparging to be an effective alternative?
- How long does the biosparging process take given the time and distance necessary for groundwater to move through property managed by NPS to the Potomac River?

Bulkhead

- Currently there are six small openings in the bulkhead that have evidence of leaking. Where are these six small openings in relation to the tidal fluctuations? How will the bulkhead be treated as part of the corrective action plan? Please provide specific methodology for sealing to DDOE and NPS for approval. The park is concerned that sealing/plugging the leaks will not be enough as subsequent deterioration of this feature can lead to future leaking. What long term strategy (replacement or encapsulation of the bulkhead) can be proposed?
- Please explain methodology to collect samples from the seeps? Please plan to collect additional samples at all six openings to update the conceptual site model and make remedy adjustments as necessary.
- Have any monitoring wells been installed directly adjacent to the bulkhead to inform as to the possible contamination directly behind this feature? Is there enough information to determine what the extent of the contamination is in this location?
- Conduct more testing at either end of the bulkhead to see how contaminants may be migrating along the backside of the wall and going around the ends to reach the Potomac.
- Please explain what data was used to determine there is no groundwater mounding behind the sheet piling? The known material behind the bulkhead (gravel and rip rap) will not prevent transport.

Potomac River

- What negative or positive influence do tidal fluctuations have on the fuel oil release at the interface between the land and river?
- What are the tidal fluctuations seen in wells on property managed by NPS?
- Will there be testing of the river bottom as a result of leakage of contaminants into the Potomac River?

- Please test the riverbed to discern contaminants resulting from the recently discovered heating oil spill and other past NRG spills that reached the Potomac such as the mineral oil spill in 2011.
- Is there any risk for containments moving beyond the identified 3 acres?
- What is the risk of the spread of containments that have leaked into the Potomac River?
- What steps are being taken to prevent surface water movement to the Potomac River?

Overall

- One of the remedial Goals for this project should be to remove contamination from property managed by NPS.
- NPS would like to see the complete transportation (contamination) pathway from the Site to the Potomac River broken. What methodologies will NRG employ to eliminate this pathway?
- It appears that the containment strategies might not be sufficient-what other strategies are available?
- Will recoverable amounts of NAPL be accurately quantified during enhanced fluid recovery moving forward?
- Could NRG provide a more detailed timeline taking into consideration the amount of recovery of contaminants at the site thus far?

Thank you for the opportunity to submit these comments on the Corrective Action Plan. Again, we are encouraged to see this process moving forward, and if these questions are addressed adequately, we believe this portion of Mount Vernon Trail and the Potomac River will be on a positive path toward an effective cleanup. We look forward to working with you to ensure that the Potomac River Generating Station, Mount Vernon Trail, and Potomac River are appropriately and thoroughly characterized and cleaned up to protect human health and the environment.

Sincerely,



FOR
Alexcy Romero
Superintendent

Cc: Jacob Zangrilli, DDOE
Khoadinh Tran, City of Alexandria
Burt McCullough, NRG
Simone Monteleone, GWMP
Brent Steury, GWMP
Claire Rozdilski, GWMP