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LETTER AND U S EPA REGION III COMMENTS TO DRAFT SITE INSPECTION REPORT
SITE 7 OLD DUPONT DISPOSAL AREA FISC WILLIAMSBURG VA
2/1/2012
U S EPA REGION III



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029**

February 1, 2012

Ms. Krista Parra
NAVFAC MIDLANT, Building N-26
Hampton Roads Restoration Product Line, Code OPHREV4
9742 Maryland Avenue
Norfolk, VA 23511-3095

Subject: Draft Site Inspection Report for Site 7-Old DuPont Disposal Area. September 2011.

Ms. Parra:

Thank you for the opportunity to review the subject document. EPA would like to provide the following comments at this time.

EPA RPM Comment 1: The idea that COC's in groundwater can be screened out simply because they are less than the upgradient well is an incorrect use of background and/or screening techniques regardless of what was in the SAP. This is also inconsistent with what we are doing at all other sites. EPA agrees that the technique could be used to determine if detected chemicals are site related, but contaminants detected that are lower the upgradient wells should not be screened out unless the groundwater is going to be deferred to another operable unit. Detections exceeding screening criteria (not including less than upgradient wells) should be carried through.

EPA RPM Comment 5 Response. What was the TEQ for the 2004 sample?

EPA RPM Comment 13 Response. Are the pesticide detections below the new "rule of thumb for intended use" number we have been using?

EPA RPM Comment 14 Response. Please clarify this in the text.

EPA BTAG Comment 1 recommended that sediment samples be collected in the York River to more directly assess the migration pathway from the site. As a result of a brief discussion with yourself and Krista Parra (Navy RPM), BTAG learned that discussions about sampling in the York River will occur after completion of the Watershed Contaminated Source Document which is expected in a few months (e.g., March-April 2012). However, no such agreement is presented

in these RTC. In fact, the RTCs actually provide considerable discussion on why sampling in the York River is not needed in the response to EPA RPM Comment # and EPA BTAG Comment 1. Several arguments were made for not wanting to sample in the river adjacent to the site. BTAG has comments on each of these statements.

- a. The response to EPA RPM Comment 7 states that any material transported into the York River during storms would likely be widely dispersed and buried relative to pre-storm contaminant concentrations in the landfill area. This is entirely speculative, and no information is presented to support this statement. The sampling strategy must take transport of the material into account in order that potential risk may be assessed.
- b. The response also states that there is uncertainty that contaminated material from the former landfill area remains in place today in the river adjacent to the site and at concentrations posing environmental risk. This uncertainty is exactly why sampling is needed. Sampling sediment is the most direct way to determine one way or the other whether contaminants were transported to the river.
- c. The response also states that there are potential non-site related and non-Navy sources of contamination to the York River that would make it extremely difficult to determine if any identified York River sediment contamination originated at Site 7. No information is presented to support that there are other sources of contamination in the vicinity of Site 7. Therefore, this is not a valid argument for not sampling in the river off the site. BTAG is not aware of any other sources of contamination, particularly non-Navy sources, in this area of the river. Difficulty associated with the investigation and assessment does not preclude the need for it to occur.
- d. The response to EPA BTAG Comment #1 states that there was likely a small lobe of potentially landfilled debris, contaminated fill material and ash that eroded into the York River, but there is no confirmation as to the amount of material within that lobe. The suspected erosion of this material further supports the need to sample sediment in the York River.

You emailed us a copy of a Table 3-5 Site 7 Decision Summary. This summary indicates that seven contaminants (endrin, arsenic, lead, manganese, mercury, selenium, thallium) had concentrations that exceeded background and ecological criteria. The conclusion is that an expanded SI would be completed to confirm selenium and thallium concentrations. The report needs to explain why concentrations of the other five contaminants listed above do not need to be confirmed.

The response to EPA BTAG Comment 1: It is not clear how much uncertainty exists in comparing soil concentrations to sediment screening values using post Hurricane Isabel (2003) data. If there were only a lobe of the landfill that was adjacent to the eroding bank, it is not clear that any of the soil data collected was from this lobe. The amount of material in this lobe is

unknown. It is uncertain if the highest concentrations were detected with the sampling that did occur. An adequate discussion of these issues needs to be added to the report. This uncertainty further supports additional sampling in the York River.

The response to EPA BTAG Comment 2 states "...all 2008 post-removal samples (bottom and side wall) were within the 0 to 24-inch depth range relative to the current (backfilled) site elevation." From this description, it is not clear why all samples within the 0 to 24-inch depth range would not be backfill material. The text needs to be clarified. The text needs to be clarified.

The response to EPA BTAG Comment 3: One purpose of an SI is to determine if a release has occurred. Limited samples were collected in the SI to make this determination. This limited sampling may be inadequate to properly assess risk to ecological receptors. The Navy needs to document that the spatial coverage of samples is adequate to support the screening level ecological risk assessment and the use of "...more reasonable assumptions to select refined COPCs."

The response to EPA BTAG Comment 4: With the uncertainties that have been identified by the Navy, it is unclear whether the site presents a risk to ecological receptors in and adjacent to the York River. The Navy identified debris from this site that was scattered far from the site in the river. What was released from this site to the York River is unknown and cannot be accurately estimated from existing data.

The response to EPA BTAG Comment 5 does not adequately address the BTAG recommendation.

The response to EPA BTAG Comment 7: There are enough uncertainties with the data and the methodologies used that it is likely the data could only be reasonably used to assess risk to ecological receptors at the screening-level stage.

The response to EPA BTAG Comment 11 needs to adequately explain why UTLs were used in one instance and UCLs were used in another instance. The Navy needs to clearly explain why background 95% UTLs were used instead of 95% UCLs and why 95% UCLs were used for exposure point concentrations and not UTLs.

The response to EPA BTAG Comment 12: While the data shown in this response does indicate that the marine and freshwater screening criteria used do exceed the maximum concentration of nitroglycerin. However, uncertainty still exists because there is no marine screening value for this contaminant. This uncertainty needs to be addressed.

The response to EPA BTAG Comment 13: The text needs to identify how many and which locations had multiple depths sampled. Using text like "...concentrations in the surface strata were generally similar to, or higher than, the corresponding subsurface strata..." can be interpreted to mean that some concentrations in the subsurface exceeded the concentrations in the surface strata.

The response to EPA BTAG Comment 15: The Navy suggests the use of the lead ER-M means the incidence of adverse effects is 35.8 percent. This means that over 1/3 of the organisms would experience adverse effects. This incidence of adverse effects is too high to be considered acceptable

The referred responses to EPA BTAG Comment 18 do not address this comment.

The response to EPA BTAG Comment 20 does not adequately address the potential for contamination from Site 7 to have entered the York River or its shoreline.

The response to EPA BTAG Comment 21: The confirmation sampling results and backfill contaminant concentrations need to be compared to screening values for terrestrial receptors (e.g., plants, invertebrates, birds, and mammals) to ensure that risk is not still present at this site.

The response to EPA BTAG Comments 22, 23, and 27: Information (e.g., shoreline erosion rate (0.58 meters per year), approximately 15 to 20 feet of erosion to the eastern bank of the landfill occurred in 2003, and Site 7 debris being found far from the site in the York River) needs to be used to plan additional sampling in the York River and adjacent shoreline areas.

The response to EPA BTAG Comment 25: There are sufficient uncertainties with the use of terrestrial data taken after the erosion occurred to support the collection and analysis of sediment and/or surface water samples from the York River and adjacent shoreline.

If you have any questions, please contact me at 215-814-3378.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Burchette', is centered on the page. The signature is fluid and cursive, with a large loop at the end.

John Burchette
Remedial Project Manager

cc: Wade Smith, VDEQ