

**EPA Comments**  
**Site 2 Expanded Remedial Investigation Report**  
**St. Juliens Creek Annex**  
**Chesapeake, Virginia**

**EPA General Comments:**

**EPA Comment 1**

**VOC Concentrations:**

It appears that SB-205's VOC concentration has been exaggerated by 1,000 times as having 1,400% of a contaminant concentration is not possible. Please correct this data and determine if this error is only limited to an isolated sample, or if all data needs to be revised (does not appear so). Additionally, please correct the text where these errors were inserted (e.g. page 5-4 final paragraph). If this data was used in the HHRA, please revise is section.

**Areal Photograph:**

**EPA Comment 2**

The ERI states that, adjacent to building 279 there were releases to "nearby soils (page v)". By looking at the available Site 2 sampling figure, it appears that no surface or subsurface soils samples have been taken in this area. Please address this data gap, or provide an explanation of why EPA would not be concerned with the soils or subsurface soils in the nearby area, or under the pad. (staining on pads from areal?)

**Titles:**

**EPA Comment 3**

Please remove one of the double Section # titles that are on the pages throughout the ERI.

**Specific Comments:**

**EPA Comment 4**

**Executive Summary, Page V:**

The Executive Summary starts on Page V. There are no pages in the Report before the Executive Summary; it is not clear if the numbers are incorrect or if additional pages were intended to be included in the Report. Please provide an explanation of this.

**Page ix, Sediment:**

**EPA Comment 5**

"Therefore, the source of these chemical is likely the waste". Please change to chemical"s".

**Section 2.1, Site Description and History, paragraph:**

**EPA Comment 6**

The ERI states that, "Ordinance wastewaters and rinse waters were reportedly discharged into the inlet in the vicinity of former Building 130 and 257." However, sediment samples analyzed at SD01 and SD04, in the area of building 257, do not appear to have been analyzed (not shown in table 5-11, but box is checked on Table 2-1 Sample Summary) for any ordinance related constituents (i.e. TNT, DNT, and RDX). Although

other media have been investigated for these constituents, it is important to sample sediment in these discharge points as TNT is hydrophobic and would not be found in water related media analysis. Composite samples and analysis 8330 B would be recommended when sampling for explosives. Additionally, there does not appear to be an apparent discharge point near Building 130. Please clarify where the discharge point near Building 130 was suspected to be. If additional samples are not taken in this area, please provide an explanation of why EPA would not be concerned with sediment containing explosives/munitions constituents in this area.

**Section 3.2.8, Permanent Monitoring Well Installation and Sampling, Page 3-6  
EPA Comment 7**

The ERI states that “not all wells were sampled during each investigational phase”. Please provide additional details on which wells were sampled when, and what drove the sampling to not include data from all wells during each event (i.e. sampling rounds). Further, final risk-based decisions need to be based on reproducible data points. Please revise the Report to include a table summarizing which wells were sampled when and how often.

**Section 3.3.2, Potential Non-Site-Related Analytical Results, Background Data  
Heading, Page 3-10:**

**EPA Comment 8**

Please revise the ERI to state that the reference background document was approved by regulatory agencies.

**Figure 3-1, Expanded Remedial Investigation Sampling Locations:**

**EPA Comment 9**

Sample location SJS02-SD06 could not be located on this figure. Although showing the storm sewer system is important, the scale need to do this takes away from the sampling locations. Please include a separate figure that shows the immediate Site 2 area where sample locations are discernable.

**Section 4.3.3, Regional Water Usage, Page 4-7:**

**EPA Comment 10**

Page 4-7 states that groundwater at the site is not currently nor expected to be used as a potable water supply and that the City of Chesapeake supplies drinking and industrial water for the site. The source of the City of Chesapeake’s water is not provided. Please provide this information in the revised Report. (Did we follow the supplement?).

**Section 5. Nature and Extent of Contamination, Sentence:**

**EPA Comment 11**

Please change “if the nature” to “of the nature”.

**Section 5.1.2, Site Description and History/Wetland Surface Debris Delineation,  
Page 5-1:**

**EPA Comment 12**

The ERI states that during the wetland surface debris delineation activities, several concrete slabs were located within the tidal inlet. No information on the historical use of the concrete slabs was provided. Please provide this information if it is available.

**Table 5-9, Surface Water Detections and Table 5-12, Sediment Pore Water Detections:**

**EPA Comment 13**

The surface water and pore water detections have not been compared to screening criteria and the levels of contamination are not easily discernable. For surface water, data may be compared to the National Recommended Water Quality Criteria or other applicable screening criteria if background data is not available. Please update the ERI to include a comparison screening criteria for the surface water and sediment pore water detections or provide an explanation of why this should not be done.

**Figure 5-4, Waste Delineation Cross-Section B-B' and Figure 5-5, Waste Delineation Cross-Section C-C':**

**EPA Comment 14**

Based on the cross-sections presented, it appears that the extent of fill/trash was not fully delineated vertically at locations TP-22, TP-23, or TP-14 as no material is listed as being present under the trash layer. Additionally, the DPT-6 and TP-14 the two outmost locations both contain trash. This makes the horizontal extent unclear. Please revise the Report to show areas of “no trash”, or provide an explanation of why we would not be concerned with the nature and extent of the trash/landfill debris.

**Appendix K, Correlation Plots:**

**EPA Comment 15**

Since a major part of the plume delineation and hot spot identification was done using MIP, it is important to see a data correlation between the MIP and standard laboratory analysis. Although it appears the ERI attempts to do this through the last section of Appendix K it does not plot laboratory results versus MIP readings. While the MIP is not a specific number (i.e. 14,000,000ppb), it can still be plotted against laboratory samples taken in the same area using multiple scales.

**Figure 6-2, SJS02-MW07S, Concentration Trends:**

**EPA Comment 16**

Please insert the values in a text box near to data points. Due to the scale of the figure, the actual trend is not apparent.

**Section 7.1.1 Data Evaluation and Selection, Page 7-3:**

**EPA Comment 17**

Please explain how the 1999 shallow groundwater data “are more representative of current conditions” than the 1997 data. Through the historical review section, it appears that no new waste was added to the landfill between 1997 and 1999. It also appears that the data was representative enough of current conditions to be included in the deep groundwater discussion. Please update the ERI to include the 1997 shallow groundwater data or update the historical activities section to include activities that have taken place

since between 1997 and 1999 that would make the shallow groundwater data not representative of current conditions.

**Section 7.4.2, Future Lifetime Resident/Industrial Worker:**

**EPA Comment 18**

Although the majority of the contaminants at Site 2 are Volatile Organic Compounds (VOC's), it does not appear that inhalation was looked at for these receptors in the HHRA. This pathway is identified as complete in the CSM (flow chart). Table 1 of Appendix M also states that inhalation of vapors is an issue. Please update the HHRA to include this information or provide an explanation of why this would not be a concern. It is important to evaluate this pathway as a vapor barrier may be needed for any building constructed within 100' of the CVOC plume.

**Section 9.0 Risk Management Considerations, Page 9-1:**

**EPA Comment 19**

This section states that a subset of COCs were further eliminated from remedial consideration because they are identified as "not site-related or pose minimal risk." The basis of this elimination is not supported by site data. The purpose of the HHRA and ERA was to identify COCs because they are site-related and pose excess risk. If the HHRA and ERA were conducted according to guidance, this qualitative section to further reduce the COCs is unwarranted. If the Navy questions some of the COCs that are shown to pose excess risk then this should be included in the uncertainty analysis section of the HHRA and/or ERA. ((a number of activities could have contributed to the release of PAH's) i.e. open burning of waste, cinder ash burning).