

Responses to EPA Responses to Response to Comments
Final Site 2 Expanded Remedial Investigation Report
St. Juliens Creek Annex
Chesapeake, Virginia

PREPARED FOR: Tim Reisch, NAVFAC Mid-Atlantic
Walt Bell, NAVFAC Mid-Atlantic
John Burchette, EPA Region III
Karen Doran, VDEQ
Jim Cutler, VDEQ

PREPARED BY: CH2M HILL

DATE: March 12, 2009

Comments from EPA, provided 19 December 08.

**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?)

Response: Soil associated with Building 279 was investigated during the Site 17 Supplemental Investigation. Four surface soil samples (SJS17-SO01 through SO04) were collected near or underneath the building foundation to address the releases. These data were included in the Expanded RI but missing from Figure 3-1. The sample locations will be added to the Figure 2-4. No further investigation in the area adjacent to former Building 279 is necessary.

EPA RPM Response: Thank you for adding these locations to the figure. Were these samples included in the HHRA? Further, it appears that surface soil has only been assessed (through the HHRA) for trespassers or landscapers. Were future residents exposure to surface soil considered (not clear in Section 7.6.1)? This area seems to have significant level of SVOC’s and Pesticides/PCB’s.

Response to EPA RPM Response: Because soil samples were collected at Site 17 prior to inclusion of Site 17 with Site 2, the HHRA for Site 2 was revised to include the Site 17 soil samples in the ERI report, as stated in Section 7.1.1. The potential future exposure scenarios assume that the subsurface soil may be disturbed during construction and excavation activities and may be mixed with surface soil and placed on the surface. Therefore, risk to potential future receptors (residents, construction workers, and

industrial workers) from exposure to soil was calculated using combined surface and subsurface soil data. An explanation is included in Section 7.2.1 of the ERI report. Therefore, no additional changes have been made to the text.

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.

Response: Vertical delineation continued until waste was no longer encountered or test pitting could no longer continue (e.g., water table was encountered). It is possible that waste may be present deeper than the bottom of the test pits and will be acknowledged in the text and on the associated figures as an uncertainty. In instances where DPT were used for waste delineation the bottom extent of the waste was always identified and provides a reasonable of comfort with the maximum depth of waste present across the site. In instances where the outermost DPT or test pit location identified waste, physical features (e.g., current or former buildings or roads) and review of historical aerial photographs supported the horizontal delineation.

EPA RPM Response: Have the historic Areal Photographs that distinctly show the extent of waste been included in the ERI?

Response to EPA RPM Response: The historic aerial photographs are not included within the ERI report because the aerial photograph review was not an ERI activity. The photograph review was conducted during the RI and is therefore included in that report (discussed in Section 2.3.6 of the ERI report). No changes have been made to the ERI because the document was issued as final prior to receipt of these comments.

Section 7.4.2, Future Lifetime Resident/Industrial Worker:

EPA Comment 18

Although the majority of the contaminants at Site 2 are VOCs, 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.

Response: There are currently no buildings on site in order to evaluate current risk from vapor intrusion. The vapor intrusion pathway for future scenarios will be qualitatively evaluated in the risk assessment. The risk assessment already indicates that there are unacceptable risks associated with exposure to groundwater and further action will be

necessary for the groundwater. The indoor air pathway will be considered further during the FS in making decisions on future site use and development of remediation levels, if necessary.

EPA RPM Response: EPA suggests LUC's are implemented to prevent future buildings from being constructed without the presence of a vapor barrier.

Response to EPA RPM Response: Comment noted. Land use controls will be documented in the upcoming Record of Decision for Site 2 and developed within the Land Use Control Remedial Design. In the meantime, the SJCA Environmental Restoration Program Geographical Information System (GIS) identifies areas of past or present environmental concern. The information is provided to the facility personnel annually with the Site Management Plan update and throughout the year when conditions change. Facility personnel use the tool during operational planning and decision-making, and consult with the NAVFAC Remedial Project Manager when base operations may be modified within the environmental areas.