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U S NAVY RESPONSES TO U S EPA COMMENTS ON TECHNICAL MEMORANDUM FOR  
SOIL DELINEATION SAMPLING SOLID WASTE MANAGEMENT UNIT 3 (SWMU 3)  
AMMUNITION BURNING GROUNDS/OLD JEEP TRAIL NSA CRANE IN  
4/15/2014  
U S NAVY

RESPONSES TO EPA COMMENTS RECEIVED APRIL 15, 2014  
(ORIGINAL COMMENTS RECEIVED DECEMBER 4, 2013)

TECHNICAL MEMORANDUM FOR SOIL DELINEATION SAMPLING AT SWMU 3  
(AMMUNITION BURNING GROUNDS/OLD JEEP TRAIL)  
NSA CRANE

**General Comment 1:** You need to be clear on how the excavation limits to known clean points in the vertical and horizontal for the floor and lateral limits of the anticipated excavations will be defined by this sampling. This additional delineation sampling event should ensure that vertical delineation is defined by a clean sample point below the anticipated excavation depth and lateral delineation is defined by clean sample points at the limits of the proposed excavation at the +/- 5 foot and +/- 10 foot horizontal intervals. Using the hot spot 03SB018 delineation as an example, that location identified elevated lead at the 2-4 foot interval. 3SB018S2 is identified as a clean bounding sample point, yet there is no FBL sample and the sampled interval is only at the 2-4 foot depth. If the Navy is proposing to use such a point to represent a clean point for excavation purposes as shown on the revised Figure 4-1, that point must have a FBL result < MCS and the sample interval below that proposed for excavation should also be shown by FBL analysis to be clean. Thus, if the Navy were to excavate the 03SB018 hotspot to 4 feet, in the absence of post-excavation confirmation sampling there needs to be a clean FBL sample at the 4-6 foot depth interval at point 03SB018S2. In looking at Figure 4-1, it seems as if the figures and proposed additional sampling locations may need to be re-evaluated. Please also re-evaluate the need for additional delineation sampling around 03SB019 to ensure you can show a 3 dimensional clean boundary surrounding the hotspot and re-assess the existing samples you are proposing to use as "clean" boundary samples around 03SB022 and 03SB024 (Figure 4-3) to determine whether additional sampling is needed to ensure you have a clean FBL based sample at the proper depths to act as your verifications samples at the perimeter and floor of the anticipated excavation.

**General Comment Response:** Additional depth intervals are proposed at sample locations representing excavation limits to ensure lower depth is clean. For example, if excavating down to 4 feet bgs at sample location X, a 4 to 6 foot sample would be required at this location to ensure "clean" point below.

For current excavation boundaries around "hot spots" 03SB018, 03SB018E2, and 03SB018N2 additional samples at the 4 to 6 foot interval will be collected at:

- 03SB018N3
- 03SB129
- 03SB018E3
- 03SB018S2
- 03SB018S1

The following three newly proposed locations will also be sampled at 2 to 4 and 4 to 6 feet bgs:

- 03SB165
- 03SB166
- 03SB167

For current excavation boundaries around 03SB019, additional samples at the 4 to 6 foot interval will be collected at:

- 03SB019N2

- 03SB019W1
- 03SB019S1
- 03SB019E1

The following newly proposed location will also be sampled at 2 to 4 and 4 to 6 feet bgs:

- 03SB168

For current excavation boundaries around 03SB048, additional samples down to 10 feet bgs will be collected at:

- 03SB048N1
- 03SB048W1
- 03SB048S1
- 03SB048E1

The following two newly proposed locations will also be sampled down to 10 feet bgs:

- 03SB169
- 03SB170

The RDX/TNT contamination around sample locations 03SB022 and 024 varies from 2 feet bgs down to 4 feet bgs. The two original hot spots (03SB022 and 03SB014) indicate that contamination is bounded at 4 feet bgs. All of the samples collected during the Round 2 field event were collected at a maximum depth of 4 feet bgs, with many of those samples exhibiting contamination at the 2 to 4 foot depth. Since there is no indication from these samples that the 4 to 6 foot depth interval is "clean", several of the locations will be re-evaluated at the 4 to 6 foot depth to confirm the contamination does not exist below the 4 foot depth throughout the area. All of the newly proposed samples in this area are for 0 to 2, 2 to 4, 4 to 6, 6 to 8, and 8 to 10 feet bgs, with the 6 to 8, and 8 to 10 foot intervals marked to be held at the laboratory and only analyzed upon instruction by Tetra Tech to do so.

Table 4-1 has been updated to reflect the new sample rationales.

**Comment 1:** Referring to Response to Comment 1 (Section 1), the response indicates a new "hot spot" was detected to the east by 03SB018E3; however, I am assuming the response meant to say 03SB018E2.

**Comment 1 Response:** Correct, the new "hot spot" should be identified as 03SB018E2, as location 03SB018E3 was a clean sample. Additionally, sample location 03SB018N2 had an XRF lead reading of 1,400 ppm. This location was not previously marked as a "hot spot", but has now been added and additional samples are proposed around this location to delineate the area both laterally and vertically.

**Comment 2:** The last paragraph of Response to Comment 1 (Section 2) states that additional step-out locations were not always practical to implement in the field, why could those samples not have been relocated during that sampling effort as stated earlier in the response? Rather than remobilizing for a 3rd field sampling effort, how does TetraTech propose to deal with field issues in this sampling event should the original planned locations not be accessible or were these proposed locations already field located for accessibility?

**Comment 2 Response:** All proposed sample locations have been land surveyed; however, a few of the proposed locations are still inaccessible at this time due to the storage of large metal crates, etc. at the

site. Prior to mobilizing to the field for this round of sampling, Tetra Tech will request that the Navy remove the items so the sampling objectives can be met.