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U S NAVY RESPONSE TO U S EPA REGION IV AND NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES COMMENTS REGARDING DRAFT TIME
CRITICAL REMOVAL ACTION MEMORANDUM MCB CAMP LEJEUNE NC

04/06/2011
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Response to Comments
Draft Site 6 TCRA Action Memorandum
Marine Corps Base Camp Lejeune, North Carolina

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Introduction

The purpose of this document is to address comments on the Draft Action Memorandum for the Site 6 Storage Lots 201 and 203 Time-Critical Removal Action. The United States Environmental Protection Agency (USEPA) and North Carolina Department of Environment and Natural Resources (NCDENR) Superfund Section provided the comments listed below. The responses to comments are provided in bold.

USEPA Comments (dated March 24, 2011)

General Comment

Document should specify the cleanup level in the soil for residual concentrations of chlorobenzene. Also, given the site's location within a former range, please indicate if munitions constituents (e.g., lead, arsenic) were detected in the soil at what are the concentrations. EPA expects that any soils contaminated with D021 that have to be treated to meet RCRA LDRs will also need to address any underlying hazardous constituents (UHCs) that are present in the soil and that require treatment due to exceeding 10X the universal treatment standard. The ARARs table includes the RCRA regulations that apply to UHCs.

The cleanup goal for this TCRA is to remove the grossly contaminated chlorobenzene soil/waste equaling 42 cubic yards of material. Samples will be collected from the excavation prior to backfilling. The analytical results will be evaluated after the TCRA has been completed as part of the ongoing supplemental groundwater investigation. The overall remedy for Site 6 will be revisited to ensure continued protection of human health and the environment.

No munitions-related items were encountered during the initial Test Pit 10 excavation. Preliminary analytical results from Test Pit 10 indicate that no explosives compounds were detected and no metals were detected at concentrations exceeding background and regulatory screening levels.

The ARARs, including the applicable RCRA regulations, were added as suggested.

Specific Comments

1. Page 2, Section 2.2 - Remove "of" from the end of the second to last sentence.

The sentence was corrected.

2. Page 4, Section 2.6 - Add language to Section 2.6 that better describes that this site is part of OU [insert] that underwent a remedial action pursuant to the ROD issued in 1993. Summarize the remedy selected as provided in Section 5.1.2.

2.6 Other Actions to Date

No other actions have been conducted on Site 6 other than the previous investigations and actions presented above in Table 1.

Text was added to Section 2.6 to explain that Site 6 is part of OU 2 and that the remedial action was implemented pursuant to the 1993 ROD.

3. Page 5, Section 5.1.1 - Revise the following text to indicate that: "Due to high concentrations of Chlorobenzene the soils would be considered RCRA hazardous waste for toxicity characteristic and carry the Code (D021)." Also, add the following sentence: "Drums contaminated with D021 residuals will be managed as RCRA hazardous debris."

The proposed removal action is the excavation of the buried drums and chlorobenzene contaminated soil from Test Pit 10. The excavated drums and soil will be disposed of offsite at a RCRA, Subtitle C landfill. This removal action was selected to provide an immediate action to prevent further migration of contamination to soil, groundwater, and potentially Wallace Creek resulting in risks to human health and the environment.

The recommended text was added to Section 5.1.1, page 5.

4. Page 6, Section 5.1.1 - See comment above and revise text below consistent with statement about types of RCRA hazardous waste.

The recommended text was added to Section 5.1.1, page 6.

5. Page 6, Section 5.1.3 - Revise the first sentence to include reference to NCP citation and language which better reflects the regulation. For example: "In accordance with 40 Code of Federal Regulations (C.F.R.) § 300.415(j) of the National Oil and Hazardous Substances Pollution Contingency Plan on-site removal actions conducted under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, are required to attain 'applicable' or 'relevant and appropriate' requirements (ARARs) to the extent practicable, considering the exigencies of the situation. In determining whether compliance with ARARs is practicable, the lead agency may consider appropriate factors, including: 1) the urgency of the situation; and 2) the scope of the removal action. The Navy has determined that compliance with all of the identified ARARs is practicable"

Consider adding the following text to this Section:

Under CERCLA Section 121(e)(1), federal, state, or local permits are not required for the portion of any removal or remedial action conducted entirely on-site as defined in 40 C.F.R. § 300.5. See also 40 C.F.R. §§ 300.400(e)(1) & (2). Also, CERCLA actions must only comply with the "substantive requirements," not the administrative requirements of a regulation. Administrative requirements include permit applications, reporting, record

keeping, and consultation with administrative bodies. Although consultation with state and federal agencies responsible for issuing permits is not required, it is recommended for determining compliance with certain requirements such as those typically identified as Location-Specific ARARs."

5.1.3 Applicable or Relevant and Appropriate Requirements

The NCP requires that removal actions attain applicable or relevant and appropriate requirements (ARARs), with limited exception, to the extent practicable. ARARs are divided into three categories: Chemical-, Location- and Action-Specific. Chemical-specific ARARs apply to individual contaminants. Location- specific ARARs depend upon the location of the contamination and potential restrictions on activities conducted in these areas (i.e., wetlands, flood plains, etc.). Action-specific ARARs govern the removal action and are usually technology- or activity-based directions or limitations that control actions taken at CERCLA sites. In addition to ARARs, the lead and support agencies may, as appropriate, identify other advisories, criteria, or guidance "to-be-considered" (TBC) that may be useful in developing CERCLA remedies. Table 2 presents the ARARs for the TCRA. There are no Chemical-Specific ARARs that are applicable or relevant and appropriate to the action. A Location-Specific ARAR identified is the Migratory Bird Treaty Act. The primary Action-Specific ARARs include Federal and State requirements related to the management of solid waste and fugitive dust emissions. The TCRA will comply with these ARARs.

The first sentence in Section 5.1.3 was revised as suggested.

6. Page 7, Section 6 – Sentence is worded incorrectly.

The wording was corrected.

NCDENR Comments (dated March 29, 2011)

1. We also need to take a bottom sample (preferably a composite sample 5 aliquots) for confirmation in addition to the side-wall samples proposed on page 5. This will provide information for documenting the concentration remaining in the shallow groundwater below the excavation. I assume that a detailed sampling and analysis plan will be included in the work plan. The work plan should also provide for excavation or sampling of stained or otherwise highly contaminated soil during the excavation work.

A bottom sample at the time of removal may not be possible because the excavation will be conducted to the depth of the groundwater table. Because of this, only saturated soil will remain and any exposed groundwater will be turbid based on mixing at the soil-to-groundwater interface due to the excavation activities.

Groundwater is known to be contaminated with chlorobenzene. To provide a data point in the vicinity of the excavation, a future shallow monitoring well is recommended within and/or downgradient of the TCRA area. Following the TCRA and ongoing supplemental groundwater investigation, the remedy for Site 6 will be revisited to ensure continued protection of human health and the environment.

A work plan will be prepared that includes a sampling and analysis plan and provides specifications for excavation or sampling of stained or otherwise highly contaminated soil during the TCRA.

2. The contaminated soil should be screened with appropriate real time monitoring equipment to confirm the boundaries of the excavation. Screening equipment (organic vapor analyzer) may also be used to assist in determining whether the soils may be clean or contain low levels of VOCs that would allow them to be disposed in a solid waste landfill. This would need to be confirmed by laboratory analysis. This is especially important to minimize disposal costs since the area is being over excavated an additional 2.5 feet in every direction (see Figure 3). Much of the over excavated soil may be clean.

Real-time monitoring will be conducted during the excavation activities and will be presented in the work plan. Based on the small volume of soil and expedited schedule for the TCRA, all of the soil for disposal is assumed to be hazardous.

3. The remedial goals should also be noted in the Action Memorandum and further clarified in the work plan.

See above response to EPA General Comment.

4. Sediment and erosion control standards should also be included in the ARAR Tables (15A NCAC 4A & 4B, NC Sediment and Erosion Control regulations). General Statute N.C.G.S 113A: 51-66, Article 4 also provides for appropriate erosion control during land disturbing operations.

The ARARs were added to the table.

5. Due to the high concentration of Chlorobenzene in soil, it is important that all stockpiles and containers be lined and covered during storage and transport. All hazardous waste rules involving handling, storage, and transport should be followed (15A NCAC 13A .0007 - .0012).

Soil will be directly loaded into lined, covered trucks and these details will be included in the work plan. The ARARs for handling, storage, and transport of hazardous waste were added to the table.

6. In addition to the fugitive dust emissions the NC Air Pollution Control regulations also apply (15A NCAC 2D .0100-.1100 and 15A NCAC 2Q .0700). Please include as ARARs.

The ARARs were added to the table.

NCDENR Comments (dated April 1, 2011)

1. Regarding the response to the NC Superfund comment number 1; Including a shallow monitoring well at a later date is good, however, this tell us very little about the absorbed contaminants on the soil particles. We can get the absorbed contaminant information from the excavation, while it is open, or take soil samples at the water table - pore water interface during well installation. This is valuable information that can be used to help make decisions regarding future action in the area. If we have stained soil or pure product in the soil, will we not excavate these soils, (during this removal) even if they are in the groundwater? However, we can get this information and do additional excavation at a later date if necessary.

A bottom sample can be collected and included in the Final Action Memo and Draft Work Plan.

2. Regarding response to comment #2; How much does it cost to dispose of a cubic yard (or ton) of hazard waste? Because of budget constraints, we all need to know this information in order for the team to make an informed decision regarding this issue. If only 2.5 feet (horizontally) of the excavation, up-gradient of the drums, is clean or has very low levels of chlorobenzene (2.5ft.X15ft.X5ft. deep = 7 cubic yards). If the 2.5 feet of soil at the outer edge of the excavation, all the way around, is uncontaminated [(15+12.5+12.5+10) X 2.5 X 5 /27 = 23 cubic yards]. I recommend that we excavate this potentially clean boundary starting up-gradient of the drums and dispose of it, for free, at the base landfill if possible. If or when we get high OVA readings we can put it in the roll-off box for disposal at the hazardous waste facility.

Comment noted. If based on field conditions and waste characterization sampling results, non hazardous disposal is cost effective, it will be considered.