

Response to Comments Site-specific Work Plan Addendum for Intrusive Investigation at the 202K MILCON Areas at Site UXO-08 Former Cantonment Area Bazooka Range MCB Cam Lej, North Carolina

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Introduction

The purpose of this document is to address comments on the Draft Site-specific Work Plan Addendum for Intrusive Investigation at the 202K MILCON Areas at Site UXO-08 Former Cantonment Area Bazooka Range. No comments were received from the North Carolina Department of Environment and Natural Resources (NCDENR). The United States Environmental Protection Agency provided the comments listed below. The responses to comments are provided in bold.

United States Environmental Protection Agency Comments (dated April 28, 2010)

Comments

1. The Environmental Protection Agency (EPA) has completed its review of the above subject document, dated April 2010. It is stated in the document that one sample will be taken directly below the location of an item and/or in the middle of the resulting crater if an item is blown-in-place (BIP). One sample is not sufficient to identify if surrounding soils have been impacted from BIP. Soil samples should also be collected along the spray pattern of the explosion to ascertain if there is any additional impact as a result of the BIP activities.

The sampling strategy will be changed. Since this site was part of a larger preliminary assessment/site inspection (PA/SI) where the soils across the site have already been sampled and analyzed for explosives residues, sampling pre-BIP (or below the location of an item) is not necessary. Therefore, samples will only be collected from the location of BIP (post-BIP).

Two post-BIP samples will be collected: one inside of the crater and one outside of the crater. The sample collected inside of the crater will utilize the TR-02-01 sampling method. The sample collected outside of the crater will utilize the incremental sampling method.

The decision unit for the post-BIP sample collected outside of the crater will be roughly circular and centered upon the crater, with a radius of up to 15 meters; to encompass the visible ejecta pattern. The maximum radius of 15m is based on work conducted by the US Army Engineer Research and Development Center entitled “*Explosive Residues from Blow-in-Place Detonations of Artillery Munitions*” (Pennington, 2008). This paper concluded that the majority of the explosives residue mass falls within 15 meters of the detonation center. At least 30 aliquots of soil will be collected from this sampling unit, homogenized, and analyzed for explosives residues, perchlorate, and metals.

2. Also, please add a signature page to the QAPP that includes the appropriate personnel signatures. The crosswalk table identifies the “Title and Approval Page” as “QAPP Page i” however, a signature/approval page is not included.

This comment is noted and a signature will be included on the QAPP title page.

Reference

Pennington, Judith C. *et al.* Explosive Residues from Blow-in-Place Detonations of Artillery Munitions. *Soil & Sediment Contamination* 17:163-180, 2008.