

NJ Department of Environmental Protection
Division of Publicly Funded Site Remediation
Bureau of Environmental Evaluation and Risk Assessment

MEMORANDUM

TO: Greg Zalaskus, Case Manager, BFCM

FROM: Jim Kealy, Technical Coordinator, BEERA

SUBJECT: Review of Remedial Action Work Plan for at Picatinny Arsenal Group 1 Sites (Sites 40, 93, 156 and 157) (PICA 079), Document dated August 2010

Date: August 25, 2010

Background

The approved Group 1 Sites ROD included 10 areas of attainment (AAs) in surface soil and subsurface soil to be excavated and disposed off-site. However, based on pre-excavation sampling performed by Arcadis in December 2009, the Remedial Action Work Plan for the Group 1 Sites now includes only 4 Aas: A, B, C, and D that will be excavated and disposed off-site. NJDEP has the following observations and comments regarding the pre-excavation sampling and the resulting changes in the proposed Remedial Action.

Observations:

1. Table 6 Shows 1996 RI data that has the RDX at 770 mg/kg in AA-5S-1, new surface soil data from Dec 2009 indicates that RDX is now ND. This led to Arcadis removing this AA from the remediation plan.
2. 1996 data shows RDX at 7000 mg/kg at SS-4C, new surface soil 2009 data indicates RDX is ND at this location. This area is still included in Excavation Area A.
3. 1996 data shows 2,4,6 TNT at 11,000 mg/kg in 40SS-16C, new surface soil 2009 data indicates RDX is TNT is 11.4 mg/kg at this location. This area is still included in excavation area A.
4. AA1SS-5 had TNT in surface soil at 475 mg/kg in 1996 and ND in 2009. This caused Arcadis to remove this AA from the remediation plan for excavation Area A.
5. AA 1SS-2 had TNT in surface soil as high as 1200 mg/kg. The 2009 sample from this location was ND which resulted in removal of this AA.
6. AA-1SS-3 had RDX go from 5800 mg/kg to ND and 2,4,6 TNT went from 3900 mg/kg to ND resulting in Arcadis removal of this AA

I have the following comments regarding these proposed changes:

Comments:

1. The pre-excavation sampling conducted by Arcadis may not adequately represent current conditions at the site and future post excavation conditions. The pre-excavation samples should have been collected from below the proposed ROD approved excavation areas. Instead Arcadis has attempted to re-delineate the site, by going back to the areas sampled 13 years ago and attempted to resample those hotspots. Based on the new data, Arcadis has redefined the extent of the ROD approved excavations. The 4 redefined excavation areas are all proposed to extend to 2 feet depth. Yet all pre-excavation samples are 0-1' samples. Therefore, the post excavation soil depth (2') has not been properly characterized. To resolve this issue, NJDEP requires post excavation bottom sampling in areas A, B, C, and D as required per the tech regs.
2. Arcadis has made the assumption that the contamination detected in 1996 has not migrated in vertically in the 13 years since the RI sampling. Most of the 2009 pre-excavation samples were collected from the same depth as the 1996 samples. Unless adequate rationale is provided, NJDEP requires that appropriate horizontal and vertical delineation is required before eliminating a previously delineated AA from the remedial action. To resolve this issue, NJDEP requires at least one deeper sample (2-2.5') from each former AA that was removed from the remedial action to confirm that contamination has not migrated vertically.
3. There is insufficient data presented to separate Excavation areas C and D into 2 separate areas as proposed. An additional surface and subsurface sample is required between these 2 areas.
4. Additional post excavation samples are required to delineate the area west of 1-GSS008, including the area beneath the covered walkway.

c. Joe Marchesani, BGWPA