



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
US ARMY ENVIRONMENTAL COMMAND
1835 ARMY BOULEVARD
FORT SAM HOUSTON, TX 78234-2686

March 10, 2011

Cleanup and Munitions Response Division

Ms. Angela Carpenter
Chief, Special Projects Branch
U.S. Environmental Protection Agency Region 2
290 Broadway
New York, NY 10007-1866

Dear Ms. Carpenter,

As discussed during the 22 February 2011 Picatinny Arsenal cleanup project meeting, the Army is pleased to provide this written summary of our position regarding CERCLA drivers for actions at sites included in the "multisite Feasibility Studies" at Picatinny Arsenal. These multisite documents include:

1. The Proposed Plan and Feasibility Study for the PICA 1 LUC Group for 25 Sites
2. The 25 Site Feasibility Study
3. The 45 Site Feasibility Study
4. The Non-Lakes Feasibility Study
5. The 5-Site Feasibility Study
6. The PICA 111 Proposed Plan

Over the past several years the Army has been negotiating in good faith with USEPA and New Jersey Department of Environmental Protection (NJDEP) to agree on remedies and solutions to issues at these sites. Such negotiations and discussion have been required as most sites (all except the 5-Site FS sites) fall within the generally accepted risk range for the current and reasonably anticipated future user, yet have constituent concentrations observed above the NJDEP Soil Remediation Standards (SRS). Several agreements have been made that go well beyond the requirements of CERCLA and, on a case-by-case basis, we have agreed to remove soil hot spots, to install soil covers, and maintain existing vegetative covers at certain sites.

In an attempt to move cleanup forward, further negotiations in December 2009 resulted in the Army agreeing to refer to the NJDEP SRS as ARARs in our Feasibility Study documents under the provision that the agreed remedies would not change (generally Land Use Controls, to include a combination of Institutional Controls defined as administrative actions/notation in the Installation Master Plan, an Annual Land Use Certification Report for all sites with RODs, and a GIS system that includes LUC areas and chemical data plus Engineering Controls defined as minor soil removals, fences, maintenance of existing soil or vegetative cover, and signage as noted above). This agreement was made solely to break a deadlock on language with the intent to move forward with agreed upon remedies.

As you correctly pointed out in your 12 May 2010 letter to NJDEP, site specific baseline risk assessments are used to determine whether a current or potential threat to human health or the environment exists and requires remediation. However, in your 7 October 2010 letter, your conclusion that the implementation of land use controls, to ensure future land use remains industrial (which posed no unacceptable risk), would trigger the need to address ARARs (NJDEP SRS) is counter to the position that unacceptable risk drives the requirement for remedial actions. This position is also inconsistent with the agreements made at the project level. Therefore, unless the agreements made at the project level to date and reflected in the summary table provided to the USEPA and NJDEP on 3 December 2010 can be upheld, the Army will remove all language referring to the NJSRS as ARARs in future revisions to the subject documents, except in the few cases where risks are above the generally acceptable range. The Army will remove language reflecting all agreements made to remove hot-spot areas, install soil covers, or maintain existing vegetative covers and propose Institutional Controls (ICs) only at these sites for which risks to human health fall within the generally accepted risk range. The basis for this position is outlined below.

Picatinny Arsenal is an NPL site that is under the authority of CERCLA, which takes a risk based approach to the selection and application of remedial actions, as noted in your 12 May 2010 letter to NJDEP. Protection of human health and the environment is a statutory requirement of CERCLA and the NCP preamble specifically discusses land use assumptions regarding the baseline risk assessment. The baseline risk assessment provides the basis for taking remedial action at an NPL site and supports the development of remedial action objectives. *'Current land use is critical in*

determining whether there is a current risk associated with a Superfund site and future land use is important in estimating potential future threats. The results of the risk assessment aid in determining the degree of remediation necessary to ensure long-term protection at NPL sites” (OSWER directive No. 9355.7-04)

Under CERCLA, remedial actions address risks to the current and reasonably anticipated future use, not to unrealistic or hypothetical uses ⁽¹⁾. Where the existing site conditions are protective of the current and reasonably anticipated future use, no remedial action or cleanup is required to alter site-specific conditions for protection of human health and the environment. However, Institutional Controls (ICs) would be implemented to prevent the hypothetical residential use of the site. When risks and hazards at sites are within the acceptable range for *the current and reasonably anticipated future use* no ARAR analysis is triggered, and the promulgated NJ soil remediation standards--which would be potential chemical-specific ARARs in cases where the risk is unacceptable for the current and reasonable anticipated future use--would not be identified as ARAR. Since no soils are required to be actively remediated or cleaned up in order to be protective of industrial use, there are no chemical-specific standards to be identified as “clean up criteria or ARAR”.

In cases where the risks or hazards are above the generally acceptable risk range, or hazard index, ARAR analysis is triggered and the *risk drivers* for the site are identified as chemical specific ARARs and would be addressed by an action.

¹ The NCP preamble defines “potential” in the context of 40 CFR 300.430: When potential is “used to describe risk exposure, exposure pathways, or threats, it means a reasonable chance of occurrence within the context of the reasonable maximum exposure scenario developed for that particular site” (55 FR 8717, March 8, 1990). As the NCP discusses, there may be instances where the residential scenario is not a reasonable future land use (55 FR 8710, March 8, 1990). In the preamble, USEPA clarifies in several instances that the reasonable maximum exposure should be based on realistic or likely exposures:

- > “Under this policy, USEPA defines ‘reasonable maximum’ such that only potential exposures that are likely to occur will be included in the assessment of exposure” (55 FR 8710, March 8, 1990)
- > “USEPA does agree with a commenter that recommended against the use of unrealistic exposure scenarios and assumptions” (55 FR 8710, March 8, 1990)
- > “The risk assessment guidance referenced above (RAGS) is designed to focus the assessment on more realistic exposures” (55 FR 8710, 1990)

Risk assessment under the NCP is to be based on reasonable future use (i.e., reasonable chance of occurrence within the context of the reasonable maximum exposure scenario) (55 FR 8717; 55 FR 8710, March 8, 1990). “The assumption of residential land use is not a requirement of the program but rather is an assumption that may be made, based on conservative but realistic exposures, to ensure that remedies that are ultimately selected for the site will be protective” (emphasis added) (the NCP preamble, 55 FR 8710, March 8, 1990). “In general, the baseline risk assessment will look at a future land use that is both reasonable, from land use development patterns and may be associated with the highest (most significant) risk in order to be protective.” (55 FR 8710, March 8, 1990)

To summarize the CERCLA required process at the subject sites:

1. For soils that have risk assessment results less than 1E-4 risk for unrestricted use, the site conditions will be protective for an unrestricted use scenario and no action will be required under CERCLA.
2. For soils that have risk assessment results greater than 1E-4 risk for the current and reasonably anticipated future use, a CERCLA response action will be taken with the NJ Soil Remediation Standards (SRS) being identified as applicable for the constituents identified as *risk drivers* (i.e. contributing the majority of the risk and/or hazard).
3. For soils on sites that do not pose an unacceptable risk (i.e., have a risk lower than 1E-4) under the current or intended future use (e.g., industrial use), but would exceed the NJ promulgated residential or non-residential standards, the Army will implement Institutional Controls to ensure that land-use does not change in the future to a use that would result in unacceptable risks.

The Army remains optimistic that remedies negotiated to date at the project level for the subject sites can be concurred with at USEPA and NJDEP's management level, and we can move forward with our mutual goals of achieving remedy-in-place at these sites as expeditiously and responsibly as possible. We must recognize that should we be unable to come to agreement at the project level significant delays could occur as we move forward with the processes outlined in the Federal Facility Agreement to resolve disagreements at higher levels.

I am forwarding a copy of this letter to Environmental Office at Picatinny, Mr Gabel.

We look forward to continued dialogue on these subject sites. The point of contact for this action is Mr. James Daniel, (210) 424-8863, email: james.daniel@us.army.mil.

Sincerely,



James D. Daniel
Chief
Cleanup and Munitions Response Division