

4/29/98-00450

Jackson, Randy M.

From: BOB THOMSON [THOMSON.BOB@EPAMAIL.EPA.GOV]
Sent: Wednesday, April 29, 1998 11:55 AM
To: dmharris@deq.state.va.us; JacksonRM@efdlant.navfac.navy.mil
Cc: KNIGHT.PETER@EPAMAIL.EPA.GOV; OKORN.BARBARA@EPAMAIL.EPA.GOV
Subject: RE: St. Julien Creek Annex - Work Plan -Reply

**** High Priority ****

Randy:

I received the additional copies of the draft sampling plan, and will forward them to the technical folks for review.

I glanced at the draft Sampling Plan, and already see major flaws in the document as follows:

1. The draft Background sampling plan repeatedly refers to "upgradient" sampling locations. As EPA has pointed out in previous comment letters, the term "upgradient" is meaningless in the context of establishing facility-wide background concentrations. The location of background sampling locations should never be accomplished on the mere notion of upgradient or downgradient in relation to any particular site or Operable Unit at a facility. The current boundaries of all of the OUs or sites at St. Juliens is still unknown. The proper way to locate sampling locations for the purpose of establishing inorganic background concentrations in soil relies on the following:
 1. Thorough review of historic aerial photography to determine where undisturbed, i.e. no human impact, areas exist. Thus, we are looking for areas where there was no significant human activity, not just an upgradient location in relation to a site. We want to locate background sampling locations in areas where there are or has not been any significant human activity, including residential areas, golf courses, office buildings, training areas, etc. Such areas may not exist at St. Juliens. If so, we may need to locate sampling off-site.
 2. The background sampling locations need to be divided amongst soil types across the facility. Please see the Naval Weapons Station-Yorktown Background Sampling Plan for details. Major soil types need to be identified on a map in the draft Sampling Plan. Soils with higher clay content will have a different naturally-occurring inorganic background concentration than those soils that are sandy. If fill soils are present, no determination of naturally-occurring inorganic soil concentrations can be made where the fill is present, i.e. similar to Naval Base-Norfolk. No background samples should be taken in fill material.
 3. The number of soil background sampling locations needs to be accomplished statistically. Please see the Naval Weapons Station-Yorktown background sampling report for details. Additional background sampling plans/information from the Radford Army Ammunition Plant was previously given to the Navy by EPA as well. If there are not enough sampling locations present at St. Juliens Creek Annex to statistically determine what naturally occurring inorganic soil background concentrations, then background cannot be established.

Given the above, EPA does not concur with the draft Background Sampling Plan for the USN St. Juliens Creek Annex. Significant issues need to be addressed and the Sampling Plan re-written.

Full comments on the draft Sampling Plan, including ecological comments, will be submitted to the Navy by May 29. The above is being forwarded to the Navy so that work on re-evaluating, re-writing the Plan can begin soon. Please look over the Naval Weapons Station-Yorktown background sampling plan and Radford Army Ammunition Plant information previously provided.



RE: St. Julien Creek
Annex - W...

Rob