



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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Hazardous Sites
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Date: January 4, 2000

Mr. Robert Schirmer, PE
Atlantic Division, Naval Facilities Engineering Command
Environmental Quality Division
Code: 1822
Building N 26, Room 54
1510 Gilbert Street
Norfolk, Va 23511-2699

Re: Cheatham Annex Site - Naval Weapons Station Yorktown, Va.
Former Penniman Shell Loading Plant
EPA's *Site Inspection Narrative Report*
Response to the Navy's 12/20/99 letter

Dear Mr. Schirmer:

The U.S. Environmental Protection Agency (EPA) has received the Navy's December 20, 1999 letter regarding EPA's *Site Inspection Narrative Report* for the former Penniman Shell Loading Plant (Penniman), located in Williamsburg, Virginia. It is important to note that a portion of the former Penniman Shell Loading Plant is currently located on the Cheatham Annex Site - Navy Weapons Station Yorktown (Cheatham Annex), which is owned by the Navy. Remaining portions of the Penniman facility are also located on U.S. Department of the Interior property and property owned by the Commonwealth of Virginia.

EPA appreciates the time and effort the Navy put into compiling the comments contained in the December 20, 1999 letter, and the Region will consider the information contained therein when evaluating the former Penniman Shell Loading Plant. In light of the December 20, 1999 comments submitted by the Navy, EPA believes it necessary to respond to those comments in general as outlined below:

It was not the intent of EPA's *Site Inspection Narrative Report* to fully characterize the nature and extent of the contamination associated with the former Penniman site, nor was it designed to fully characterize the risks associated with such contamination. The characterization of the nature and extent of contamination associated with the Penniman site, as well as defining the risks associated with such contamination, is properly addressed by the performance of a remedial investigation.

The intent of EPA's *Site Inspection Narrative Report* was to identify contamination that may have been left at the former Penniman site. Based upon the limited sampling performed at biased areas at the former Penniman site, EPA has identified four areas of concern at the former Penniman site that are currently located on Navy property, including:

1. The TNT graining house sump. (Pb - 7580 mg/kg)
2. The TNT catch box ruins. (TNT- 620 mg/kg, Pb - 813 mg/kg)
3. Underground mixing tank(s) (Pb - 1,720 mg/kg)
4. Metallic slag - (Pb - 2,600 mg/kg, Arsenic - 33.4 mg/kg, Antimony- 4.6 mg/kg)

Based upon the sampling results obtained from the four areas of concern, EPA believes it prudent that a remedial investigation be performed at these four areas. This point was brought to the Navy's attention in EPA's October 14, 1999 letter regarding the review of the Navy's draft *Fiscal Year 2000 Site Management Plan* for the Cheatham Annex site.

Additionally, background constituents were considered in EPA's *Site Inspection Narrative Report*. However, given the level of contamination found at the four areas above, EPA does not believe that the contamination detected at the former Penniman areas is in any way connected to naturally occurring background concentrations. Also, it may or may not be appropriate to utilize background concentrations established for the Naval Weapons Station-Yorktown site proper for the Cheatham Annex site. Irrespective, on-site background concentrations were established for each of the four areas of concern in accordance with HRS evaluation procedures.

It is extremely important to note the intent of EPA's *Site Inspection Narrative Report*, which was to investigate areas at the former Penniman site. EPA's *Site Inspection Narrative Report* was not all encompassing and was not intended to answer all questions regarding the nature and extent of contamination left at the former Penniman site. EPA believes that there may be yet additional areas of concern at the former Penniman site that have not been located, including former burning grounds, former landfills, and other disposal areas associated with former munitions-related activities.

The Navy's letter indicates that, with a "few" exceptions, EPA's *Site Inspection Narrative Report* indicates that contamination detected at Cheatham Annex is similar to background. Based upon the above, this may or may not be true. However, it is significant to note that where there are exceptions, i.e. the four areas of concern, EPA is recommending that additional investigation be performed. Perhaps more important is the fact that the EPA's *Site Inspection Narrative Report* focuses on the former Penniman site, and not on the Cheatham Annex facility. As mentioned above, the sampling locations selected for EPA's *Site Inspection Narrative Report* were biased towards former Penniman features, and are not all encompassing with regard to the Cheatham Annex site. Therefore, it is extremely premature to attempt to evaluate the

condition of the remaining unsampled areas at Cheatham Annex, especially in light of the activities associated with the former Penniman site.

It is also important to note that EPA is not relying solely on the data contained in the *Site Inspection Narrative Report* to score the Cheatham Annex facility for inclusion on the NPL. EPA is utilizing as much data as possible in evaluating the Cheatham Annex site, including data provided by the Navy. Thus, the evaluation of the Cheatham Annex site for inclusion on the NPL will include both Navy data and EPA data.

This concludes EPA's response to the Navy's December 20, 1999 letter regarding EPA's *Site Inspection Narrative Report* for the former Penniman Shell Loading Plant. If you have any questions regarding the above, please feel free to call me at (215) 814-3357,

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Thomson". The signature is written in a cursive, flowing style.

Robert Thomson, P.E, AEP
Hazardous Sites

cc: Sharon Wilcox (VDEQ, Richmond)