



MARYLAND DEPARTMENT OF THE ENVIRONMENT  
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NSWC INDIAN HEAD  
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William Donald Schaefer  
Governor

David A.C. Carroll  
Secretary

November 29, 1993

Mr. Shawn Jorgensen  
Environmental Section  
Indian Head Division  
Naval Surface Warfare Center  
101 Strauss Avenue  
Indian Head, MD 20640-5035

Dear Mr. Jorgensen:

Enclosed are the Maryland Department of the Environment (MDE), Waste Management Administration (WAS) comments regarding the Draft Final Phase II Site Inspection Report of the Indian Head Facility dated May 20, 1993. This report addresses the ongoing investigations conducted under the Installation Restoration Program.

If you have any questions, please contact myself or Mr. Kim Lemaster at (410) 631-3440.

Sincerely,

Arlene G. Weiner, Chief  
Federal and NPL Superfund Division  
Environmental Response and Restoration Program

AGW:bjg

Enclosure

cc: Mr. Richard W. Collins  
Mr. Robert A. DeMarco  
Mr. Hank Sokolowski, U.S. EPA

Maryland Department of the Environment  
Waste Management Administration  
Comments on the Draft Final Phase II Site Inspection Report  
of the Indian Head Facility (Dated May 20, 1993)

General Comment

The report competently addresses the ongoing investigation conducted under the Installation Restoration Program (IRP). In accordance with the DSMOA, the following comments are offered by MDE:

Section 1.3

Page 1-1:

Enclose left parenthesis about "PA".

Page 1-3:

Separate "...to an SI." from "A supplemental ...".

Section 2.3.2

Page 2-4: Potable water wells

The estimated population served by these wells would be useful information to include in the report.

Section 3.1.1

Page 3-2, second bullet:

Last sentence should read: "... direct measurements were completed...".

The instrument used to conduct this direct measurement should be described.

Section 3.4

What rationale was considered in selecting water as a solvent for the mercury wipe samples?

Section 3.10

The decision to limit analytical parameters for each site based upon historical information is not appropriate at this stage of investigation. Application of a standard scan at each site, i.e., Target Analyte List (TAL) and Target Compound List (TCL) analyses, supplemented with PNC, UDMH, HBNQ, and NE

(explosive derivative analyses) as appropriate, would have been preferred. By analyzing samples for full TCL organic parameters and TAL inorganic parameters, an increased confidence in the range of contaminants of concern at a given site is achieved. Thus, the determination of which sites require further action is made using the same set of criteria for each site, and the number of surprises which may be encountered during subsequent investigations are reduced.

## Section 5

While the information provided in Tables 5-2 through 5-5 certainly provide some insight when compared with on-site concentrations, they cannot be expected to substitute for site-specific background samples. Tables 5-2 through 5-4, which are based for the most part on the proposed revisions to 40 CFR Part 264, Subpart S, provide useful and reasonable comparisons for site-related contamination.

However, Site Inspections conducted under CERCLA, in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP, 40 CFR Part 300), are required to "Collect or develop additional data, as appropriate, to evaluate the release pursuant to the HRS..." (40 CFR Part 300.420(c) (iii), 55 FR 8813, March 8, 1990). In accordance with the HRS (40 CFR Part 300, Appendix A, Section 2.3, 55 FR 51532, December 14, 1990), on-site samples must be compared with background levels when evaluating Observed Release by chemical analysis.

Background levels are typically determined based upon samples of the appropriate medium collected in the vicinity of the site. Such local background concentrations are considered to better represent pre-release conditions for the site than such regional or broad-based data such as that presented in Table 5-5. The selection of appropriate background levels is discussed in the U.S. EPA manual "Hazard Ranking System Guidance Manual", Interim Final, November 1992 (OSWER, Publication 9345.1-07, EPA 540-R-92-026).

The criteria used to determine the "Hits Only" samples (Section C.1) should be explained in clearer terms.

### Section 5.1.4

MDE agrees with the recommendation that future efforts include upstream sampling.

### Section 5.2

In light of the previous handling of unsymmetrical dimethylhydrazine (UDMH) at this site, the rationale to limit

analytical parameters to palladium is not clear and should be explained.

MDE does not agree with the recommendation that no further investigation be conducted at this site. The potential impact of UDMH to the Mattawoman Creek from this site has not been adequately ruled out.

#### Section 5.3.1

It appears that relatively few samples were collected from the transformer storage area. MDE feels that future efforts should include additional sampling of soils in this area.

#### Section 5.3.3

The detection of trichloroethene at concentrations in excess of the MCL benchmarks in groundwater samples is considered to be significant.

#### Section 5.3.4

MDE concurs that additional field investigation is warranted for this site. The presence of PCBs at 47  $\mu\text{g}/\text{L}$  in the ponded water sample indicates the need for further PCB sampling at this site.

#### Section 5.4.3

Page 5-39, second paragraph of section:

First sentence should read "...nor does it suggest the discovery..."

#### Section 5.4.4

MDE agrees with the recommendation that additional soil borings should be collected in the site. In addition, MDE recommends that another soil gas survey be conducted over a larger section of the site.

#### Section 5.5

The location of building 907 should be depicted on Figure 5-7.

The location of samples 44SB01, 44SB05, and 44SB14 should be depicted on Figure 5-7.

Was sampling for mercaptan compounds considered for this site?

## Section 5.6

The text indicates that the drums are approximately 200 yards east of building 674 (page 5-47), but the scale in Figure 5-10 indicates that the drums are closer to 100 feet east of the building.

## Section 5.15.3

It seems premature to state that "no indication of direct contamination" to the aquifer was demonstrated. The detection of tetrachloroethene in PW07 at 3  $\mu\text{g}/\text{L}$  indicates the need for further evaluation of this concern.

## Section 6.0

Page 6-1, paragraph 3:

The decision to use sample location 41DP09 as background is not clear. The location of this sample seems to be unreasonably close to site 41, especially in light of the tidal influences on this portion of the Mattawoman Creek. Because of the potential for contamination from the site to be impacting this location, MDE agrees that future efforts should include background sampling further upstream on the Mattawoman Creek.

## Section 7.0

MDE agrees with the recommendation for further study and groundwater monitoring at the site. As mentioned above, MDE feels that further investigations should include Site 40.

## Appendix C

The legend describing the data qualifiers should appear at the front of this section.

## Supplement "Summary - Groundwater Sampling Sites 41, 42, 44, and Facility Production Wells, April 1993" (dated August 9, 1993)

MDE agrees that this material should be included in the final Site Inspection Report.