



DEPARTMENT OF THE NAVY

INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
101 STRAUSS AVE
INDIAN HEAD MD 20640-5035

5090
Ser 046/133
4 Oct 00

Mr. Elmer Biles
6315 Indian Head Highway
Indian Head, MD 20640

Dear Mr. Biles:

We are writing in response to your letter of August 31, 2000, concerning the Installation Restoration (IR) Program draft final Feasibility Study Report, Site 12 - Town Gut Landfill and Site 41 - Scrap Yard of July 2000. Once again, we appreciate you taking the time to review this document and provide us your comments and concerns.

Our responses to your specific comments are enclosed with a copy of your letter for reference.

We hope that our responses adequately address your concerns. If you have any additional comments or questions, please contact Mr. Shawn Jorgensen of my staff on (301) 744-2263.

Sincerely,

A handwritten signature in cursive script that reads "Cheryl L. Deskins".

CHERYL L. DESKINS
Acting Director, Air, Water and
Natural Resources Mgmt Division
By direction of the Commander

Encl:

- (1) Response to E Biles ltr of 31 Aug 00
- (2) E Biles ltr of 31 Aug 00

Copy to:

RAB Members

Interested Parties

CH2M Hill (A. Estabrook)

TetraTech NUS (G. Latulippe)

ATSDR (D. Jackson)

**RESPONSES TO ELMER BILES' LETTER OF 31 AUGUST 2000
ON FEASIBILITY STUDY REPORT FOR SITE 12 - TOWN GUT LANDFILL
AND SITE 41 - SCRAP YARD**

General

As stated in section 4.0 of the report, for the current land use, only the contaminants at Site 41 (Scrap Yard) may pose a potential human health risk, and these risks are only to construction workers and full-time employees, not the community at large. However, if a house were built on either of these sites, then a potential human health risk would exist for the people living directly on the site.

Please remember that the purpose of the Installation Restoration (IR) Program is to ensure that unacceptable human health and ecological risks are not present from a site. This can be accomplished by the following: 1) removing contamination (digging up and removing contaminated soil), 2) removing or monitoring a pathway (sampling wells at the edge of a landfill to ensure contamination is not migrating at unacceptable levels), or 3) removing a receptor (fencing off an area so people cannot access it). These are just examples. There are many different ways to accomplish these goals.

Specific Comments

1. The Base Master Plan, a document prepared by our Activity's architect, currently contains general information about our Activity. Public Works Department personnel, including our Activity's architect, use the environmental office's Geographic Information System (GIS) maps, which include Installation Restoration sites, prior to approving any construction work. In addition, through the National Environmental Policy Act (NEPA) our office reviews all construction work for environmental issues, including the location of IR Sites, prior to approving them.

Unfortunately, the Base Master Plan is not currently up-to-date and includes only sparse information on IR sites. However, we plan to meet with personnel from Aberdeen in the future to discuss their use of the Base Master Plan. It is our understanding that Aberdeen's plan accurately addresses IR Site related issues and is a useful document. Until we update our plan, we will continue to use the systems we have in place to ensure that personnel are not put at risk from IR sites.

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(continued)**

2. The "no action alternative" is a requirement of the National Contingency Plan, as stated on page 6-3, section 6.1.3.1, and is used as a baseline comparison with other alternatives. We agree that this alternative for both Sites 12 and 41 is inappropriate and we would be remiss to actually consider it. Modifying this alternative to include establishing a monitoring program would make a separate, additional alternative. However, an alternative to do nothing at this time and establish a monitoring program to determine the extent of any future migration of contaminants was not considered, because it is also an inappropriate alternative for these sites.

3. The 5-year periodic review is required anytime contamination is left in place. The lifetime of this review is typically suggested at 30 years, however, the Record of Decision (ROD) will contain exiting criteria for site cleanup. For example, at the Scrap Yard, the exiting criteria (for shallow groundwater sampling) may include a statement that once all contaminants found in groundwater fall below the Safe Drinking Water Act Maximum Contaminant Levels (MCLs), then shallow groundwater monitoring will cease. This may occur prior to or after the suggested 30-year review period.

For the first five years of monitoring, Environmental Restoration, Navy (ER,N) funds will be used to monitor sites. The Engineering Field Activity Chesapeake will provide this funding, as they currently do for remedial investigations and cleanup of sites. After that time, it is our responsibility, and a requirement set forth in the ROD, to program these reviews into our working budget.

4. Unfortunately, the U.S General Services Administration (GSA) owns all of the land that the Navy uses. The GSA and the Navy will not allow us to put deed restrictions on the land while it is being used by the Navy. However, as stated in your question, and on page 6-13, paragraph 6.3.2.4, a deed restriction will be placed on the land if and when it is transferred.

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(continued)**

5. The appendices that you mention are located in a separate file on the CD-ROM that was sent to you. In particular, Appendix H can be found on page 310 of 351 in the file "FS Report - Sites 12 and 41 Vol II.pdf".

6. Except for Alternative 1 - No Action, groundwater is addressed via administrative controls for all of the remedial alternatives, i.e., restriction of land and groundwater use and long-term monitoring of groundwater. Therefore alternatives 2 through 5 provide the same degree of protection. The only difference of Alternative 5 from the others is that some digging may be allowed on the site, since the waste will have been removed. However, to allow some digging (i.e., to a given depth) would be more difficult to control than requiring no digging at all.

Given our Activity's current mode of operation at this site (i.e., not for residential use), the remedial investigation report identified acceptable human health risks are exceeded only for full-time workers and construction workers. For both scenarios, the hazard index exceeded 1.0. Because there are no full-time workers at Site 12, that exposure does not take place. For full-time workers to enter the site on a daily basis, the site would need to be converted to use for some process or operation. To effect that conversion, the site would need to be modified (e.g., excavation, grading, and building construction). A modified site configuration would render the current risk assessment data set inaccurate.

Potential hazards to construction workers occur when those workers engage in activities that encounter and disturb contaminated soil (e.g., the need to excavate a trench to install a pipe). The differences in depth of cover/cap material among alternatives 2, 3, and 4 are not very great. Therefore, it would be difficult to calculate meaningful differences between these alternatives for the likelihood of construction workers to encounter contaminated soil. The only alternative that removes this potential scenario from consideration is Alternative 5 - Landfill Removal.

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(continued)**

Although it was not mentioned in the report, mammals such as moles, foxes, and skunks are the most common deep-burrowing mammals that could be present on the site. Other deep-burrowing terrestrial animals (e.g., armadillos, gopher tortoises, and woodchucks) do not inhabit the area. It should be noted that, with the exception of moles, foxes, and skunks, most terrestrial animal species at the site would rarely (if ever) be exposed to soils deeper than approximately one foot below the surface. We considered alternate barriers, such as a stone or cobble layer and a steel mesh layer, both of which are extremely costly. Other potential alternatives such as installation of fencing or trapping would likely be unsuccessful due to the opportunistic movement of most small mammals and prohibitive costs, respectively. The EPA's Biological Technical Assistance Group (BTAG), which comprises stakeholders from the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Fish and Wildlife Service, suggested the use of a biotic barrier. The biotic barrier method has been used with success at other Navy sites. Since the ecological stakeholders (the BTAG) considered the biotic barrier method effective, we did not include the other costly methods as alternatives.

7. The scope of the feasibility study report was limited to the boundaries of Sites 12 and 41 and the mitigation of human health and environmental exposures to existing contamination. As you stated, buffer zones are used to safeguard streams and other environmentally sensitive areas. Contaminated sites do not fit this description and would be of no use. Construction and other work, including site cleanup, can be performed at contaminated sites, as long as all Occupational Safety and Health Act (OSHA) requirements are followed, such as the use of proper personal protective equipment.

8. We offer the following responses to your questions concerning page 6-19.

- a. Exposure is discussed in comment number 6 above.
- b. The proposed liner would have no effect on physical hazards.

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(continued)

- c. The presence of the liner in the cap system would essentially eliminate the passage of infiltrated surface water below the liner. However, the benefit would be minimal as evidenced by the finding in past reports that the landfill is not having a negative impact on the adjacent ponds. In addition, a majority of the Town Gut Landfill is currently in the saturated zone.
 - d. At the conclusion of construction, the liner would be positioned below the ground surface and would have no effect on surface erosion.
 - e. At the conclusion of construction, the liner would not be visible from the surface and would have no effect on the aesthetics of the site.
9. Cost estimates are located in Appendix H, which can be found in the CD-ROM sent to you as stated in paragraph 5 above. The cost estimates are prepared based on a conceptual model, rather than a detailed design. Therefore, as stated in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) guidelines, these estimates have an accuracy range of -30% to +50%. Any errors, i.e., underestimates and overestimates, are carried through each alternative. The purpose of the cost estimates is to provide a relative comparison among the alternatives.

The actual contract for the selected alternative will be given to the Navy Remedial Action Contractor (RAC), which is currently OHM Corporation. OHM will prepare a more detailed design and cost estimate for the chosen alternative and complete the construction of the alternative.



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Indian Head, Maryland 20640

FAX 4301 744 4180

Ms. Cheryl L. Deskins, Director
Waste Management and Prevention Division
Indian Head Division
Naval Surface Warfare Center
101 Strauss Ave.
Indian Head, MD 20640-5035

August 31, 2000

REF: Feasibility Study Report, Site 12-Town Gut Landfill and Site 41-Scrap Yard

Dear Ms. Deskins:

I would like to provide comments to the above referenced draft report. I regret the delay in replying.

The importance of what has been found with respect to the above sites, after the many months of study and evaluation, confirms that there are significant residual contaminants that could be released that may pose a potential threat to employees of the base and to the community at large. Chapter 6 of the draft report attempts to evaluate the pros and cons of the various options being considered. My comments will largely focus on this chapter.

1. Reference is made from "time to time" in the report about a "Base Master Plan". I would like to see some description of this plan. Who is responsible for the development of the plan and what kind of distribution does it have? Does it function on the basis of a grid assignment or designation of areas that have various categories of environmental sensitivity or employee safety?
2. On page 6-9 under alternative 1-No action, paragraph 6.3.1.1 states "For this alternative, any existing remedial activities, monitoring programs, and Land Use Controls would be discontinued, and the property could be available for release for unrestricted use." Comment: Such a statement is totally inappropriate. No responsible manager, knowing what we know about the site could ever release the site for "unrestricted" use. This would be morally and ethically wrong. A modification of this option might be to do nothing at this time but to establish a monitoring program to determine the extent of any future migration of contaminants.
3. For various options being discussed a "5 year periodic review" of the site is being suggested as a requirement. Is the life time of this periodic review in all cases limited to 30 years or as long as contaminants remain? Who would pay for this review and what assurances do we have that it will be done?

4. On page 6-13 paragraph 6.3.2.4 mention is made that "any private ownership of the land in the future would be controlled under a deed restriction to control land and groundwater use." I feel that the RAB should urge that such language be developed now with a request that it be added to the existing land records on file. These could be in the form of protective covenants that would run with the land.

5. A number of appendices are listed on page iv. No where in the report can I find these. I would appreciate receiving a copy of appendix "H" Remedial Alternative Cost Estimates.

6. Options 2, 3, and 4 propose various mid range alternatives that provide increasing protection for health and the environment without the actual removal as proposed by option 5. We are left with a decision then as to the cost effectiveness of option 4 over options 2 and 3 or option 3 over option 2. The increase cost for option 3 and 4 (as well as 5) over option 2 is significant. Can we justify this added expenditure? I feel we should cost out the incremental safeguards achieved for both option 3 and option 4. What residual risks are there if we select only option 2? A discussion is made in paragraph 6.3.3.2 that the proposed "biotic" barrier will discourage burrowing animals. But no where in the report is there any discussion of the prevalence of burrowing animals and what alternative options are there for controlling them.

7. I find no mention in the various options of "buffer" zones that would be placed around either of the sites. Why not? Most land use planning to safeguard streams and other environmentally sensitive areas require varying sizes of buffer zones. I would like to see some discussion of such a proposal.

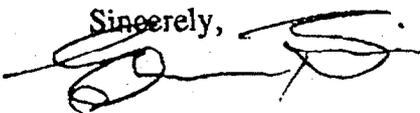
8. On page 6-19 the advantages of an engineering cap as proposed by alternative 4 are mentioned. I would like to see some discussion by the writer as to the residual risk by not having the proposed liner for each of the following:

- a. The possibility of exposure to human and ecological receptors,
- b. Physical hazards
- c. The rate of surface water infiltration
- d. Erosion
- e. Aesthetics

9. Since I have not had a chance to review appendix "H" I cannot comment on the cost estimates for each of the alternatives. How comfortable are we that cost estimates for each alternative are in the "ball park"? I assume the actual contracts would be announced for competitive bid. Do we normally receive a reasonable response for bids? >

Thank you for the opportunity of commenting.

Sincerely,



Elmer S. Biles
301 283 6298