



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

N62578.AR.001059
NCBC DAVISVILLE
5090.3a

November 19, 1997

Mr. Philip Otis, U.S. Department of the Navy
Northern Division - NAVFAC
10 Industrial Highway, Code 1811/PO - Mail Stop 82
Lester, PA 19113-2090

Re: Preliminary Comments on the Preliminary Draft No Further Action Decision Document (NFADD), Building 56, dated November 1997, Former Naval Construction Battalion Center, Davisville, RI

Dear Mr. Otis:

Please find enclosed the Environmental Protection Agency's (EPA) preliminary comments on the above referenced document. These comments should be considered along with additional comments to be submitted before December 19, 1997.

If you have any questions with regard to this letter, please contact me at (617) 573-5736.

Sincerely,

A handwritten signature in cursive script, appearing to read "Christine A.P. Williams".

Christine A.P. Williams, RPM
Federal Facilities Superfund Section

Enclosures

cc: Richard Gottlieb, RIDEM
Walter Davis, CSO
Marilyn Cohen, ToNK
Howard Cohen, RIEDC
Marjory Myers, Narragansett Indian Tribe
Bryan Wolfenden, RI RC&D
Eileen Curry, Dynamac
Jane Connet, EA

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EPA Preliminary Review of Building 56 NFADD

General comment:

The NFADD is based on the expected reuse of the property as designated by the Community Approved Base Re-Use Plan. The conclusions indicate that no exposures will occur to contaminants above the criteria of the expected future use of commercial/industrial, however, EPA agrees with the stated recommendations that the sediments in the manholes should be removed and the valve in the catch basin and the manhole itself should be closed. The soils in the former location of under the building should be evaluated for possible risk to the environment now that these soils are exposed.

This NFADD does not evaluate the risk to human health and the environment that may occur at an unrestricted use level. EPA generally requires unrestricted use exposure assessment of human health and the environment in order to make a determination of No Further Action. This issue was first brought to the Navy's attention in 1995 in discussions related to Site 1 and again earlier this year when I sent a copy of an NFADD to your contractor for their use in preparing this document. I have enclosed the conclusion section for an NFADD signed by the BCT for property with expected commercial re-use at Fort Devens. The enclosure notes that the soils were evaluated for both human and ecological receptors.

The base reuse plan designates the Building 56 Study Area as institutional/office, a commercial reuse. As such the ecological exposure would be expected to be minimal, however, ecological exposures must be evaluated in order to evaluate the risk to the environment.

Specific Comments:

Page 2-2, ¶3, please indicate that the building interior no longer exists as the building has been demolished.

Page 3-2, §3.2.3, please revise the tense of the section to indicate that the sampling was done in the past. Also the Navy should be able to state emphatically that pesticide mixing is no longer being conducted at Building 56.

Page 3-4, §3.5, ¶1, please revise this paragraph to reflect field conditions. The man-hole has only 1 inlet from the former floor-drain in building 56 and 1 outlet to the shutoff valve in the sanitary sewer line.

Page 4-1, add NCBC site specific ecological screening data from the Site 6, 10& 11 NFA recommendation tech memos. The ecological screening should only be applied at the subsurface soil results and the concrete dust results, since this is the only data that is applicable to the area as it exists after demolition.

Page 4-1, provide Lab Data sheets, Form 1s, in an appendix.

EPA Preliminary Review of Building 56 NFADD

Page 4-19, provide results of waste characterization and disposal, completed manifests and certificates of disposal when available.

Pages 5-1 to 5-3, the summary of data evaluations is well written, however an ecological evaluation and an unrestricted human use evaluation of those contaminants remaining after all planned work is completed at the site must be added in order to fully evaluate the residual risks to human health and the environment.

5.0 CONCLUSIONS

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3
4 No further action is recommended for SAs 37A, 37B, 37C, and 37D. This
5 recommendation is based on physical observations, sampling, chemical analysis, results of
6 human health and ecological PREs conducted during the Site Investigation, and, at SA
7 37D, on confirmation sampling conducted following a soil removal action.

8
9 Results of the PREs conducted during the SI indicated that concentrations of SVOCs
10 and inorganic analytes detected in SA 37A soil could potentially pose an unacceptable
11 risk to human health. However, the use of residential soil criteria in the PREs was
12 conservative in this area which will become part of the federal prison/medical complex.
13 The organochlorine pesticides DDD, DDE, and DDT and the inorganic analytes
14 aluminum, arsenic, and lead were detected at concentrations slightly higher than
15 ecologically protective criteria. However, this area of the Main Post is characterized by
16 human activity and does not provide significant wildlife habitat.

17
18 The SI recommended that the former UST area at Building 3622 be designated as
19 Beyond Localized Release under the Fort Devens UST Removal program, but
20 recommended no further action for the remainder of SA 37A. The former UST was
21 designated AREE 63BP and was investigated during the SSE. TPH were not detected in
22 the soil sample collected within the former tank area. A second human health PRE,
23 conducted in support of the SSE, determined that no unacceptable risks to human health
24 are associated with residual contamination in soil and groundwater at the former UST
25 site.

26
27 The one SVOC detected in SA 37B surface soil samples (di-n-butylphthalate) did not
28 exceed its residential criterion; nor did any of the detected pesticides. Of the inorganic
29 analytes detected above Fort Devens background concentrations, only arsenic exceeded
30 its human health criterion, and only arsenic and lead exceeded their respective ecological
31 criteria. Residual contamination in SA 37B does not pose a significant risk to human
32 health or the environment; therefore, no further action is recommended for SA 37B.

33
34 At one SA 37C soil sample location, the SVOCs benzo(a)anthracene, chrysene, and
35 benzo(b)fluoranthene exceeded their respective human health soil criteria. No SVOCs
36 were detected below 0.5 ft bgs. No pesticides exceeded human health criteria, and only
37 chlordane slightly exceeded its ecological surface soil criterion. Arsenic and lead were
38 the only inorganic analytes in soil found to exceed their respective human health criteria;
39 lead was the only inorganic analyte found to exceed its ecological criterion. These PRE

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SECTION 5

1 results were obtained using residential soil criteria which consider potential child
2 exposure. The use of residential criteria at this location is conservative, as the area will
3 become part of the federal prison/medical complex and future child exposure is unlikely.
4 Therefore, no significant risk to human health remains at SA 37C.

5
6 At SA 37D, the highest analyte concentrations in soil were detected south of Building
7 3606, in the vicinity of the waste soil storage shed. Of the SVOCs detected at SA 37D,
8 only 2-methylnaphthalene exceeded its human health criterion. No SVOCs were
9 detected below 0.5 ft bgs. The highest SVOC concentrations were detected at a
10 sampling location in an area later excavated during the 1994 soil removal action at
11 SA 37D. Three of the detected inorganic analytes, lead, manganese, and cobalt,
12 exceeded their respective residential soil criteria. DDT slightly exceeded its ecologically
13 protective criterion in one soil sample, and Aroclor 1260 exceeded its ecological criterion
14 in two samples. Several of the inorganic analytes detected above Fort Devens
15 background concentrations exceeded their respective ecological criteria.

16
17 A soil removal action was proposed for SA 37D to minimize potential risks to human
18 health and the environment. In July 1994 approximately 32 cy of soil containing lead at
19 concentrations exceeding the USEPA interim guidance value of 500 $\mu\text{g/g}$ were removed
20 from the vicinity of the wooden shed located south of Building 3606. The SI sample
21 locations with the highest SVOC and metals concentrations were excavated during the
22 removal action. The lateral and vertical extent of the excavation was determined by
23 screening soil samples collected from the base and walls of the excavation. Excavation
24 continued until confirmation sample analyses indicated that lead concentrations in
25 residual soils were below the target cleanup level. No significant risk to human health or
26 the environment remains at SA 37D.

27
28 Based on the results of the SI, the Supplemental Site Evaluation conducted at
29 Building 3622, and the soil removal action at SA 37D, no further action is recommended
30 for SAs 37A, 37B, 37C, and 37D. Potential exposure scenarios at SA 37 are limited to
31 those involving construction workers at the federal prison/medical complex, workers
32 repairing utilities at the site, and/or prisoners admitted into the complex. Such
33 exposures, however, are unlikely, particularly since contaminated soil at SA 37D has
34 been removed. Residual contamination at SA 37A (Building 3622 Former Golf Course
35 Entomology Shop) is addressed in the SSE Report, 14 Underground Storage Tanks
36 (ABB-ES, 1995). The SI recommended no further action for SAs 37B and 37C. With
37 the demolition of the wooden storage shed behind Building 3606 and the removal of
38 lead-contaminated soil in its vicinity, no further action is recommended for SA 37D.
39

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