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DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION, CORPS OF ENGINEERS
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REPLY TO
ATTENTION OF
Regulatory Branch

January 25, 1985

Dear Hackler/Hackler
Prime

Mr. Michael R. Deland
Regional Administrator
U. S. Environmental Protection Agency
J. F. Kennedy Federal Building
Boston, Massachusetts 02201

Dear ~~Mr. Deland~~ Mike:

I appreciate your staff briefing me last Thursday on the New Bedford Superfund Study. Hopefully EPA's question of the need for a Corps permit will be resolved in Washington shortly.

If we are involved in a permit decision, project changes may be required due to our Section 404(b)(1) compliance determination and our public interest review procedures. These changes seem to fit into the superfund process described to me. Attached are our previous comments on the Feasibility Study and additional comments on its use as a functional equivalent to an Environmental Impact Statement. I was relieved to hear that the project is still in a conceptual stage and that there will be additional studies and reviews before final design is started.

We will continue our close coordination on these studies to insure that all of our requirements are met. Depending on the outcome of the Washington meeting on the permit process we may have to meet again to discuss how to meet our regulatory requirements and your schedule for this project.

Sincerely,

Carl

Carl B. Sciple
Colonel, Corps of Engineers
Division Engineer

We all share the same objective!

Enclosure

Copy furnished:
Omaha District

ADDITIONAL COMMENTS ON USE OF STUDY AS AN EIS

The following is a list of review comments focusing on the use of the Feasibility Study as a functional equivalent to an EIS. These comments address the main body of the Feasibility Study and its addendum. The preceding set of comments made by Regulatory Branch with respect to information needed to process a Section 404 permit application are applicable to the needs of this document as an EIS functional equivalent but will not, for the most part, be repeated here. This is not a complete list of all comments that could have been made on this document, but it does cover the more important items.

A. The following general comments are emphasized areas on the Feasibility study with respect to its ability to function as an EIS equivalent.

1. The discussion in Sections 2.5.1 and 2.5.2 which deal with the affected biological environment should be greatly expanded. These discussions need to give this topic much broader coverage and should characterize the presently existent environment in much greater detail.

2. Impacts to the wetlands in the estuary should be better defined. It is difficult to determine the environmental cost associated with various alternatives when it is not clear whether or not the wetland areas must be included as part of the area to be dredged due to PCB contamination.

3. Endangered species coordination shold be conducted with Fish and Wildlife and National Marine Fisheries.

4. Sections dealing with historical and archaeological resources should focus on the potential for the existence of such resources within the project impact area. Coordination should be conducted with the Massachusetts Historical Commission.

5. The potential environmental effects of the various alternatives should be better characterized and quantified. In view of the selection of dredging with in-harbor disposal in a partially lined site and dredging with disposal in an upland site as preferred alternatives particular attention should be paid to the following items:

a) Demonstrate your ability to control sediment dispersal during dredging.

b) Characterize and quantify the potential for release of PCB laden oily films during dredging and your ability to control these releases.

c) Characterize and quantify the effects of exposure of the contaminated sediments to the open air before permanent disposal (i.e. will sediments oxidize, will there be

release of PCB's, will birds and terrestrial biota be exposed to direct contact, will this contact have serious effects?)

d) Decide what will happen to the temporary containment areas.

e) Show what wetland areas will be left after remedial action has been taken.

f) Show what areas will be suitable for reestablishment of wetlands.

g) Characterize what sort of aquatic community is expected to become established in the project area after remedial action has been taken. State how long recovery should take.

h) Characterize what sort of terrestrial community is expected to become established in the project area after remedial action has been taken. State how long recovery should take.

i) Justify the use of partially-lined site vs. a fully-lined site.

j) Demonstrate that the lack of long term monitoring plans is justified.

k) Demonstrate that PCB's and heavy metals will remain immobilized inside the disposal site.

B. Main report specific comments:

1. Section 1.2.1: The level of clean-up to be achieved by each alternative remains unclear. This issue is addressed, but fails to identify a single PCB level which all alternatives must reach to be "adequate".

2. Page 1-5: the "established minimum cost-effectiveness criteria" which is referenced in the last paragraph should be fully defined.

3. Section 2.1: the historical setting, as written, is inappropriate being an industrial history focusing on pollution sources rather than discussing prehistoric resources which may have existed in the project impact area.

4. Page 2-5: Cadmium should be included in the list of heavy metal contaminants present in the hot spot.

5. Sections 2.5.1 and 2.5.2: which characaterizes the reversal and aquatic biota in the study area are inadequate. Merely listing the species that are or probably are present in the various available habitats is insufficient. These sections should delineate, and characterize the habitats available in the

project area showing where they are located and their areal extent. The vegetation existing in these areas should be listed and dominant and/or significant species identified. Fauna should not merely be listed but information on the overall size of the populations, population densities, etc. should also be included. A table listing species present in the project area and showing scientific as well as common names would be helpful.

The presence or absence of rare, threatened and endangered species should be documented by coordination with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service.

6. Page 2-15 & 2-16: it is identified that groundwater wells at the Aerovox site are PCB contaminated. Nearby wells should be tested to confirm that the problem is confined to the Aerovox site.

7. Section 2.6.1: References previously conducted test borings a figure should be included showing their location.

8. Section 2.6.2: Figures should be included showing subsurface profiles developed from existing borehole data.

9. Page 3-3: Cadmium is listed as being a public health risk yet is not listed as a principle heavy metal contaminant. Why not?

10 Page 3-8: a number of species of sportfish are mentioned as probably present in the estuary. It is also identified that anadromous fish use the estuary. Why was this not covered in Section 2.5.2.

11. Page 3-8: In Section 3.2.3 why are no plans to collect data in the saltmarsh areas identified?

12. Page 3-9: Section 3.2.4.1 We are concerned with how deep the PCB's go not just if they reach the depth presently to resuspension.

13. Page 3-2 Why are the number of Arocolors identified as being detected in New Bedford sediments greater than the number of Arecolors identified as being used in the area?

14. Page 2-13: In the first paragraph cadmium should again be listed as a principle contaminant. It is present at lower levels than other heavy metal but is more toxic.

15. Section 3.2.5: What is the significance of the high levels of PCB's in the water column it does not seem to be addressed elsewhere.

16. Section 3.3.3: Dealing with heavy metal effects on air quality. Why were the most toxic forms of these metals via inhalation not analysed?

17. Page 5-1: If the objective of the secondary screening of removal action is that they provided adequate protection, what constitutes "adequate protection" for the purposes of this study?

18. Section 5.5: the discussion on sediment disposal control fails to adequately quantify the ability of the silt curtains to control sediment disposal and to control PCB laden oily films.

19. Page 5-11: The statement is made that sediment resuspension caused by cutterhead dredging is average. Exactly how much resuspension of sediments during dredging can be expected?

20. Page 6-7: Statement is made that the public's perception of an alternative must be considered in developing the alternatives. The document purpose should be to identify to the public what the best technical alternatives available are and to respond to there informed concerns, not to develop alternatives on the basis of existing perceptions.

21. Page 6-8: The first paragraph deals with the criteria used to evaluate each alternatives the ability to mitigate effects on public health, welfare and the environment. This section should be expanded and quantified. It is too vague.

22. Section 6.5.1 and the first paragraph of Section 6.6: What is the point behind these sections? Why are single and double embankment channels being compared? They are only component parts of entirely separate alternatives.

23. Pabe 6-15: In the second paragraph you identify a partially-lined in-harbor disposal site as having the greatest risk of failure. Why? How great is this risk? If this is true then defend this opinion as it is your preferred alternative.

24. Page 6-15: In the last paragraph you state that all three post dredging options will achieve a level of clean-up which is "essentially complete". What constitutes "essentially complete"?

25. Page 7-1: In the second paragraph you state that a section of the embankment in the hydraulic control alternative will be lowered to allow tidal flow. Won't this allow tidal flooding? Won't it allow sediment dispersion from sediment cap area?

26 Page 7-3: And in subsequent sections where it appears you should quantify how well silt curtains will work. Also if silt curtains can go no deeper than 10 feet down from the water surface, won't they be some 10-15 feet from the bottom?

27. Page 7-6: Can you show that allowing tidal flow of half of tidal prism at the top of the embankment will create the

necessary water circulation to prevent stagnation at the bottom of the water column.

28. Page 7-9: What further studies will be conducted to determine the approximate cap thickness.

29. Page 7-9: In the last paragraph 1) What are the design standards for the temporary containment site. 2) What will happen to the embankment earthfill when removed? Will some of it then be contaminated?

30. Page 7-10: explain the advantage of a fully lined site. Is one necessary?

31. Page 7-19: At top of page why might surface water control be necessary?

33. Page 7-19: Second paragraph explain why dewatering of site is necessary to place bottom liner.

34 Page 8-4: You state hydraulic control option will eliminate shallow water, slow velocity areas. What about areas outside of channel (e.i. sediment capped areas)? Also can you demonstrate that areas outside of hydraulic control channel will not become relatively stagnant brackish areas.

35. On page 8-4 in the third paragraph is the flooding being discussed only riverine or it is both riverine and tidal flooding.

36. On page 8-5 how much wetland area will be permanently lost? How much can be expected to reestablish itself. How fast?

37 On page 8-6- here and in other applicable sections, quantify the magnitude of the PCB laden oily film problem. How much resolubilization of PCB's can we expect? How well can we control disposal of oily films?

38. On page 8-7 characterize the new communities you expect to become established in the dredging impact areas after remedial action is complete.

39. On page 8-7 in paragraph 2 you should know what kind of terrestial biota utilize the impact area and how they utilize it.

40 Page 8-7 paragraph 3 what is the significance of birds and other animals coming into contact with contaminated sediments during project implementation?

41. Page 8-8 paragraph 2, it should be specified what will be done with the temporary containment area. Not left an open question.

42. Page 8-8 paragraph 4 the impacts of constructing a single embankment are not at all the same as those in constructing a double embankment in the hydraulic control alternative.

43. Page 8-9: How much undeveloped shoreline will remain after project completion? Won't dredging have to remove all saltmarsh areas? Aren't they contaminated?

44. Page 8-10 paragraph 3: Is there already a protected terrestrial habitat next to the proposed containment site? You should show it on your figures if it is there.

45. Page 8-10 paragraph 4: To what extent will sediments be dewatered before capping final disposal?

46. Page 8-11: will supernatant waters be treated for PCB's only? Why?

47. Page 8-12: You can put constraints on future development as part of your remedial action plan to allow wetlands to reestablish.

48. Page 8-16: See comment #45, will dredged material be saturated or not?

49 Page 8-21: The statement that no impacts on cultural resources will occur appears extremely premature. Examination of landmark listings is compliance with Section 106 of the National Historic Prevention Act (33 CFR 800) require Federal Agency coordination with the applicable State Historic Preservation Officer (SHPO). Cursory examination of the project location maps indicates high potential for presence of archaeological resources, we recommend early coordination with the Massachusetts Historical Commission (the SHPO of Massachusetts) to determine need and scope for any necessary studies.

50 Page 8-22: I thought that on page 8-10 you stated the in-harbor site would ultimately be attached to a terrestial preserve. Here you state that it might be possible to make it into a parking lot.

51. Page 8-22: Possible expansion of the hot spot disposal site to accommodate material from the lower estuary should be recognized as a possible future impact.

52. Page 8-23: Why were provisions for long term monitoring programs not included in any of the alternatives?

53. Page 9-3 paragraph 2: You state that a major impact of the dredging with in-harbor disposal options is the loss of wetlands. Won't all alternatives cause a major loss of wetland areas?

54. Page 9-3 paragraph 3: You state that a fully lined in-

harbor disposal site will be less risky than a partially lined one. You should quantify the risks and benefits involved in this question.

C. Comments on Addendum

1. Page 2-3: You state that geogrids or geotextiles are under consideration instead of a sand blanket to support any embankments. Are these now under consideration for other alternatives.

2. What guarantees that "clean" sediments underlying contaminated sediments are in fact clean?

3. Page 2-22 paragraph 1: What will happen to material used to construct temporary embankments? Especially the material used in the contaminated sediments containment site? Will it still be suitable to use as fill?

4. Page 2-22 paragraph 4: You should quantify the expected release of PCB's, quantify the expected relased of PCB laden oil films, and quantify how well you can control these oil films.

5. Page 2-22 paragraph 3: You should characterize what new aquatic communtiies you expect to become established after remedial action is complete.

6. Page 2-23 paragraph 4: You should know what kind of terrestrial biota utilize the impact area and how they utilize it.

7. Page 2-24 paragraph 2: You state that marsh areas under the temporary containment sites will be temporarily destroyed. Won't all marsh areas be temporarily destroyed?

8. Page 2-24 paragraph 3: You should better characterize the effects of dewatering the contaminated sediments in the temporary containment sites.

9. Page 2-25: Will silt curtains be used around discharge pipe into the subsurface cells? How effectively can you control dispersion of the material discharged into the subsurface cells?

10. Page 2-26: Can you better demonstrate that release of contaminated water during filling of the subsurface cells is not a concern?

11. Page 2-27: What guarantees that failures of the sediment cap will be localized?

12. Page 2-28 paragraph 1: Is there a long term monitoring plan?

13. Page 2-28, paragraph 3: You state that the dredged material will be in a wet state at all times. On page 2-24 you

say that they will be dewatered and possibly oxidized. Which is true?

14. Page 2-28 paragraph 4: You should quantify how well you can control PCB laden oily films.

15. Page 2-24: You once again state that some sediments will dry out in the temporary containment structure. Which is true?

16. Page 2-30: You state that "clean" sediments underlying PCB contaminated sediments may have been contaminated by earlier industrial activity. How can you consider the subsurface cell disposal option viable until you know the answer to this question?

17. Page 3-7 paragraph 3: You state that incineration may result in production and undetected release of polychlorinated dibenzofurans or dioxins. Why would these be undetected? Can't you monitor for these contaminants?

18. Page 3-7 paragraph 4: Comment same as above Re: heavy metals.

19. Page 3-10: Comment same as above.

20. Page 4-3: Will water obtained during secondary dewatering of dredged materials be treated? If so, you should state that here.

21. Page 4-4: You should expand on the discussion of risks involved in shipment of dredged material and quantify these risks where possible.