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Commonwealth of Massachusetts
Executive Office of Environmental Affairs

Department of Environmental Protection

William F. Weld
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Superfund Records Center

SITE: NEW BEDFORD

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May 22, 1992

Ms. Gayle Garman
U.S. EPA Region I
HPL-CANI
J.F. Kennedy Federal Building
Boston, MA 02208

Subject: Estuary/Harbor/Bay Operable Unit
State's Comments on Proposed Plan

Dear Ms. Garman:

The Department of Environmental Protection (DEP) has reviewed the Proposed Plan and August 1990 Feasibility Study (FS) for the Estuary/ Harbor/Bay Operable Unit of the New Bedford Harbor Superfund Site. The State's comments for this operable unit are listed below.

Preferred Alternative

The DEP prefers the dredge/solvent extraction treatment alternative (SW-9a) in the FS. The disposal of the PCB contaminated sediments to the Confined Disposal Facilities (CDFs) without treatment could result in the unlined CDFs becoming point source discharges of PCB contamination over a long period of time. No estimates of the PCB movement through the CDFs were provided in the Proposed Plan, however the DEP recognizes that PCBs bound to organic sediments to be disposed of in the proposed CDFs will leach very slowly in very small amounts over a long period of time.

The Plan states "EPA guidance suggests that PCB concentrations in excess of 500 ppm should generally be treated since they typically represent a principal threat. EPA believes that the statutory preference for treatment at this site is satisfied by the remedy set forth in the Hot Spot Record of Decision." (page 14). The site after the Hot Spot remedy will have PCB sediment concentrations up to 4,000 ppm. The EPA's position seems inconsistent with its own guidance. Only a portion of the site is addressed by the Hot Spot remedy.

In order for the EPA to clarify and justify its preference for the non-treatment alternative, the DEP suggests the Agency estimates the small amounts of PCBs which will leach back into the Harbor over a long period of time (e.g. 30 years). We believe it will be possible to do this, using data from the accelerated leaching tests which were performed by the U.S. Army Corps of Engineers several years ago. This clarification and justification might be appropriate to place in the responsiveness summary.

The Order of DEP Preference of the Other Alternatives

Dredge/Dewater/Solidify/Dispose On-site (EST-4 and LHB-4) - Modified for greater than 500 ppm PCB sediment solidification, with 50 to 500 ppm PCB sediment being removed and not treated. - Treatment is preferred to the non-treatment option.

Dredge/Dispose On-site (SW8) - This alternative is preferred to the incineration, capping, and minimal no-action alternatives. The DEP may be able to concur with this alternative, provided the EPA clarifies, justifies, and defines a reasonable maximum allowable loss of PCBs from the CDFs into the harbor. A maximum loss rate, if exceeded could be used to clearly define remedy failure for each CDF. It seems that there may not be significant exceedance of the allowable loss. Based on this, the EPA will be able to assure the public that PCB recontamination of the harbor will be minimal. In addition, the DEP will be assured there is a "safety measure" so that CDF failures are clearly defined and the Commonwealth's costs for operation and maintenance (O&M) will have a reasonable expenditure limit.

Dredge/Dewater/Incineration/Solidify Ash/Dispose On-site (SW-9b, EST-6, and LHB-6) - The incineration option is the least preferred of the removal/ treatment options. The metals in some locations in the estuary and harbor are higher than the Hot Spot Operable Unit.

Capping (SW-7, EST-2 and LHB-2) - DEP prefers all removal alternatives over capping and may not be able to concur with any capping alternative except in the Bay. Capping would leave the PCB contamination in the estuary, harbor, and bay. PCBs have the potential to migrate along with the sediments in the event of cap failure. Storm and tidal action could move the cap exposing PCBs to the environment and PCBs have the potential to diffuse through the cap. Operation and maintenance is also the most difficult and costly in the capping option. These comments apply to this Estuary/Harbor/Bay Proposed Plan and not to the Bay Remediation where dredging may be difficult and capping the only option for certain locations in the Bay.

Minimal No-action (EST-1 and LHB-1) - The DEP cannot concur with this option, as it does not reduce toxicity, mobility, and volume; and is also not a permanent or temporary solution as defined in the Massachusetts Contingency Plan (MCP).

OTHER ISSUES ON THE PROPOSED PLAN

Locations of Contaminated Sediment Placement - The contaminated PCB sediment should be placed in the CDFs to minimize migration of the PCBs out of the CDFs. The most contaminated sediment should be placed in the middle and near the back of each CDF. The most contaminated sediments should be placed in CDF #1 at the farthest point from the water. The least contaminated sediments should be placed at the edges, bottom, and top of the CDFs.

Metal Contamination - The metal hot spots will be covered by CDFs as per the proposed Plan. Provide information about the residual metals remaining after the implementation of the remedy.

Operation and Maintenance (O&M) - The EPA needs to specify more details on O&M requirements, the costs involved, and present worth in order for the State to make an educated decision on remedy concurrence.

Monitoring - The EPA needs to specify what the long and short term monitoring requirements are for the site including frequency and duration. (Quarterly monitoring planned.) While monitoring CDFs maybe an appropriate O&M activity, for example, monitoring the harbor for the purpose of determining remedy protectiveness and compliance with the 5-year review provisions of CERCLA should not be considered an O&M cost.

New Bedford City Sewer Grit - This issue has been discussed numerous times with the City, EPA, and DEP. Any and all remedial efforts should be consistent with the Consent Decree (U.S.A. and Commonwealth v. The City of New Bedford Civil Action No. 87-2497). The DEP understands the complicated enforcement implications in addressing the PCB contaminated grit from the adjacent sewer system. It may be appropriate to discuss in the ROD, various circumstances under which the remedy could address the sewer grit. In other words, a list of criteria to be met and issues which must be resolved by the City should be clearly stated so the City may make decisions regarding the remediation of the grit.

Cost Estimate Update - The Hot Spot Operable Unit cost estimates are now higher than the original estimates. The EPA should use the most recent and appropriate cost information in this Proposed Plan.

Wetland/Marsh Removal - The State Wetlands Protection Regulations do not allow alteration of a salt marsh. Therefore the wetland resource areas that are removed in the salt marsh areas and which are covered by the CDFs will require replacement on at least a 2:1 basis. The EPA should attempt to minimize the amount of tide flat areas which will be covered by the CDFs. Please see the attached Wetland Division Memorandum for addition comments from the Division of Wetlands and Waterways. A future discussion of the State ARARs will deal with this in more detail at the end of the public comment period.

Waiving of the Liner ARAR and Other RCRA Requirements - Please refer to the attached memorandum for a detailed evaluation of the RCRA requirements delegated to the State.

Contaminated Areas above Wood Street Bridge - The PCB contamination north of the Wood Street bridge should be assessed during design. If the contamination is above the EPA removal level then the evaluated contaminated sediment should be removed.

PCB Air Emissions

Dredging - It may be necessary through monitoring and air quality modeling to demonstrate that the remedial action activities will not cause a significant negative impact on air quality, TELs and AALs.

CDF - Monitoring and Best Available Control Technology may be required to control possible air release from the CDFs in exceedance of AALs.

Remedy Failure - The EPA needs to specify what constitutes remedy failure for the CDFs. See the previous discussion of alternative SW8 for the DEP's suggestion of how to address CDF failure with a "maximum PCB loss" amount. Please clarify the EPA's and State's responsibilities for correcting any remedy failure.

CDF Capping - The EPA needs to specify the type of cap required for the CDFs and the permeability criteria which will be required.

Future PCB Contaminated Dredge Spoils - Some consideration should be given to determine the amount of future dredge spoil space that will be required for the Harbor and Bay, and the location where this material may go.

Water Pollution Control Comments - Comments from the DEP's Water Pollution Control Division will be submitted with our comments to the Addendum Proposed Plan for the Bay Portion of the site.

Page 5
DEP Comment Letter to New Bedford Proposed Plan
May 22, 1992

If you have any questions or comments on this letter, please contact, Paul Craffey at (617)292-5591. Thank you for the opportunity to comment on the Proposed Plan. I would like you to know that we believe you have done an excellent job managing the New Bedford Harbor Project, under sometimes difficult circumstances.

Very truly yours,


Helen Waldorf,
Section Chief

cc: Paul Craffey, DEP Project Manager
Don Nagle, OGC
Madeline Snow, Division Director, BWSC
Paula Fitzsimmons, Section Chief, EPA
Matt Brock, Assistant AG



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MEMORANDUM

DATE: March 4, 1992
TO: Paul Craffey DEP/BWSC - BOSTON
COPY: Jeff Chormann DEP/BWP/HW - BOSTON
FROM: John Carrigan DEP/BWP/HW - BOSTON
PHONE: (617) 292 - 5584
SUBJECT: NEW BEDFORD HARBOR REMEDIATION

Paul:

I have reviewed the documents you supplied concerning EPA's proposal for cleanup of the "second" portion of the New Bedford Harbors Site. There interpretation of the applicability of the Landban Regulations appears to be consistent with current EPA RCRA policy. As long as the CDF(s) is located within the Area of Contamination then movement and consolidation of materials within the AOC is not subject to the Landban Restrictions. Please note that the Commonwealth is not authorized for Landban under RCRA and that EPA CERCLA should consult with EPA's RCRA program for a final decision. EPA contends that since the requirements of TSCA under 40 CFR 761.60(a)(5)(iii) will be met at the site the requirements of 310 CMR 30.501(3)(a) are satisfied. The intent of 310 CMR 30.501(3)(a) is to defer regulation of PCB contaminated waste to TSCA. However, the management of such waste is still subject to the requirements of 310 CMR 30.370 Special Requirements for Waste Containing PCBs:

"(1) Generators of wastes with which contain polychlorinated biphenyls (PCBs) in concentration equal to or greater than 50 parts per million shall comply with the U.S. Toxic Substance Control Act, all applicable requirements of 40 CFR Part 761, and the following:

- (a) 310 CMR 30.001 through 30.009
- (b) 310 CMR 30.060 through 30.064 - notification requirements
- (c) 310 CMR 30.303 - EPA identification number
- (d) 310 CMR 30.304 - offering hazardous waste for transportation
- (e) 310 CMR 30.310 through 30.114 - manifest requirements
- (f) 310 CMR 30.320 through 30.324 - pre-transport requirements
- (g) 310 CMR 30.330 through 30.334 - record keeping and reporting
- (h) 310 CMR 30.361 - international shipments
- (i) 310 CMR 30.750 - land disposal restriction

(2) Notwithstanding any other provision of 310 CMR 30.00, generators of hazardous wastes which contain PCBs in concentration equal to or greater than 50 parts per million shall send such wastes only to facilities which meet all the requirements in 310 CMR 30.501(3)(a)(b) and (c) or shall, with the approval of the Department, otherwise cause such hazardous wastes to be managed in compliance with the provisions of 40 CFR Part 761 and 310 CMR 30.750."

In addition, 310 CMR 30.501(3)(b) requires that "in the case of PCB incinerators or PCB waste landfills, they have been **formally approved** pursuant to 40 CFR Part 761, and such approval is in effect at the time". It is not clear to me whether management of the PCB contaminated dredge materials in the CDFs under 40 CFR 761.60(a)(5)(iii) complies with this requirement. However, it is clear that the intent of 310 CMR 30.501(a) is to defer the regulation of the storage, treatment, and disposal of PCB contained waste that are properly managed under TSCA.

However, despite the waiver under 310 CMR 30.501(3)(a) the standards under 310 CMR 30.620 Landfills, 310 CMR 30.660 Groundwater Protection, 310 CMR 30.580 Closure, and 310 CMR 30.590 Post-closure should be considered appropriate and relevant standards because of the similarity of the CDFs to a hazardous waste landfill. The proposed remedy should satisfy the intent of these requirements.

With regards to applicability of the RCRA minimum design requirements to the CDF, in a April 6, 1990 Memorandum from Sylvia K. Lowrance, Director of the Office of Solid Waste to Stephen D. Luftig, Director of the Emergency and Remedial Response Division, Region II Ms. Lowrance states "EPA believes that it is appropriate generally to consider CERCLA areas of contamination as a single RCRA land-based unit or 'landfill'." Furthermore, in most cases units located within these areas of contamination (AOCs) are not subject to the design and operating requirements for subtitle C landfills (40 CFR 264.301) because they are existing portions of the landfill [AOC]. Any lateral

expansion of the existing unit [construction or expansion of a CDF outside of the AOC], however, would trigger the minimum technology requirements of 40 CFR 264.301(c)." This gives the state (21E) and CERCLA flexibility in applying the design requirements to the CDFs. The basic question becomes whether the CDFs are located within the AOCs.

Based on the limited information you provided me the remedy EPA proposes for the "second portion" of the New Bedford Harbor Cleanup is not inconsistent with the requirements of 310 CMR 30.000 and RCRA. If you have any questions or need additional comments please contact me at extension 5584.



The Commonwealth of Massachusetts
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One Winter Street
Boston, Massachusetts 02108

MEMORANDUM

TO: Helen Waldorf, BWSC

FROM: Christy Foote-Smith, Director, DWW *Christy Foote-Smith*

DATE: October 24, 1990

SUBJECT: Comments on New Bedford Harbor Feasibility Study

The Division of Wetlands and Waterways has completed a review of the draft final Feasibility Study of Remedial Alternatives for the Estuary and Lower Harbor/Bay, New Bedford Harbor, Massachusetts. Based on this review, the Wetlands Protection (WP) and the Waterways Regulation Programs (WRP) offer the following general comments.

The responsibility of the WRP is to protect the public's property rights as well as exercise certain regulatory controls in tidelands, former tidelands, great ponds, and rivers of the Commonwealth. The WRP review process accomplishes this by insuring that proposed projects do not unreasonably interfere with navigation, that they are structurally sound, that they provide public purposes and do not significantly interfere with public rights or the rights of adjacent property owners, and that they will not adversely affect public resources. If any detriments occur, the WRP requires the project to provide adequate water-related public benefits to outweigh such detriments. These provisions should be incorporated into the design and construction of the facilities proposed for the clean up.

Briefly, during the dredging operation and possible capping operation interference with both commercial and recreational boating should be minimized. Commercial boating impacts would occur in the inner and outer harbor, and some recreational boating impacts above the Coggshele Bridge. With the potential capping option, this would limit the amount of available draft, which in turn may impact the integrity of the cap with boats going over it.

The construction of the CDF(s) may also pose a navigation problem by reducing areas of navigable waters. WRP would like to see a

minimal amount of tidal area used for the construction of the CDF. This may be accomplished by using one site and increasing the height of the CDF. The CDF should be designed so as not to 1) cause or contribute to water stagnancy, 2) reduce flushing of waterbodies, and 3) cause or contribute to sedimentation or erosion problems in resource areas.

Wetlands Protection Program comments on the New Bedford Harbor Draft Final Feasibility Study (FS) are as follows.

Volumes I and II of the FS focus on six alternatives developed by the consultants. Volume III is an assessment of three additional alternatives developed by the EPA called site-wide alternatives. In addition to being less costly, the three site-wide alternatives propose to achieve a target clean-up level (TCL) of 50 ppm of PCB, as opposed to a TCL of 10 ppm recommended by the consultants. A TCL of 10 ppm is simply neither cost-effective nor feasible considering the extent of contamination at the site and 50 ppm falls within the EPA risk range. Risk assessment models within the report conclude that there is no significant difference to marine fish, crustaceans and mollusks between 10 ppm and 50 ppm. The Division agrees that a TCL of 50 ppm is acceptable.

All three alternatives propose to dredge and store contaminated sediments. They vary in the extent of dredging and location of the confined disposal facilities (CDF). Since all three propose to dredge, it is appropriate to try and meet the performance standards for Land Under the Ocean found at 310 CMR 10.25. Specifically, the dredging should not result in altering the bottom topography to the extent that storm damage is increased or erosion of nearshore areas is increased. Furthermore, the operation should try to avoid those areas where eelgrass or widgeon grass is present or where the area has a high density of polychaetes, mollusks or macrophytic algae.

Portions of the lower harbor fall within a Designated Port Area, from Marsh Island south to the hurricane barrier. It appears that the project would meet the performance standards for this resource area found at 310 CMR 10.26.

All three alternatives also include the construction of CDFs which are essentially landfills composed of contaminated sediment. Each alternative includes the construction of one or more CDFs, depending on the amount of dredged sediment. After a review of the maps and an on-site inspection, it appears that all of the CDFs will be located within the nearshore areas of the estuary including fringing salt marsh areas and some bordering vegetated wetlands. Thus, the construction, operation and maintenance of these CDFs requires compliance with the performance standards for Land Under the Ocean, salt marsh and bordering vegetated wetlands. Salt marshes are the most

stringently protected wetland resource area and the performance standards essentially require no alteration. It appears unlikely that the project will be able to meet this standard if it proceeds as proposed. The Division recommends that alternative locations be considered for the CDFs, especially since the FS has concluded that even the most contaminated salt marshes are still viable and functioning.

One of the CDFs (CDF 1a) appears to be located partially within a bordering vegetated wetland (BVW), composed primarily of Phragmites sp. State wetlands regulations only allow alteration of up to 5,000 square feet of BVW, unless a variance is granted. The variance provisions requires mitigation of wetland resources. A replicated wetland could be constructed within this area and thus the standard could be met.

As part of the dredging operations, 3 acres of heavily contaminated salt marsh are proposed to be excavated. Clearly this action would not meet the performance standards set forth in 310 CMR 10.32. Although the FS concludes that this area remains viable, EPA has concluded that remediation is appropriate. The Division agrees that allowing the area to remain constitutes a continuing source of contamination and thus is not reasonable. If the contamination is allowed to remain, it will continue to bioaccumulate in the biota and represents a long term risk. The Division recommends, however, that dredging of salt marsh areas only occur as a last resort and only if the area is highly contaminated and represents a continuing source of PCBs.

The FS study implies that funds are available for saltmarsh replication, but without further details regarding restoration efforts, it is impossible to evaluate these plans. In the northeast replication of salt marshes have been marginally successful due to a variety of factors including: improper site conditions, tidal elevation requirements of the salt marsh plant species and insufficient project design and oversight. If relocating the CDFs is not feasible, the Division recommends that salt marsh areas impacted be minimized to the greatest extent possible.

cc: Steve Pearlman, DWW
David Slagle, DWW
Michael Stroman, DWW
Elizabeth Kouloheras, DWW
Lenore White, DWW
Paul Craffey, BWSC
Gary Gonyea, DWW