RETURN TO 1998 ROD AR INDEX

13.4.3B

New Bedford Harbor Superfund Forum
Meeting
March 26, 1996
6:00
Ford Middle School
Acushnet, MA
AGENDA

Superfund Records Center
SITE: NEW BEDFORD
BREAK: 13.04
OTHER: 47596

* Opening Remarks-agenda review

* Treatability Study- Report from IONICS

* Report of navigational/remedial dredging linkage subcommittee

* ROD - Discussion of EPA document
  - Impact of proposal on salt marsh
  - Volume in CDF's as proposed

* Next steps- Draft agreement
  - Other

SDMS DocID 47596

Summary of the Meeting Held March 26, 1996
of the New Bedford Harbor Superfund Forum

In attendance at the session were:

Facilitators
Michael Keating
Jane Wells

Concerned Parents of Fairhaven
Claudia Kirk

DEP
Paul Craffey
Helen Waldorf

Remaind Coalition
Neal Balboni
Diana Cobbold
Carol Sanz

EPA
David Dickerson
Harley Laing

New Bedford City Council
George Rogers

NOAA
Ken Finkelstein

New Bedford Mayor's Office
Molly Fontaine

State Elected Officials
Bill Straus

Waterfront Businesses
Joe Forns

Town of Acushnet
Roland Pepin

Approximately five members of the public attended the meeting, which was videotaped for subsequent broadcast on cable television.

The meeting began with a reiteration of the preliminary results of the bench scale test of the solidification technology, which turned out to be disappointing, at least in so far as the possible use of solidification as an initial form of treatment of the hot spot sediments is concerned. Some potential use for this technology for the immobilization of metals may still remain after treatment of the sediments with other technologies.

The report on the bench-scale study was followed by a lengthy, and more upbeat, introduction to the first pilot study for the feasibility of the treatment of the hot spot sediments from a representative of Ionics/RCC. The presentation included information on the history of the company and the technology and an explanation of the process. The technology, known as the B.E.S.T. Solvent Extraction Process, results in three outcomes, clean, dry soil that will meet the contamination limits imposed by EPA for this project; water clean enough to meet any applicable NPDES standards; and a residual oil that will need to be further treated for the destruction of PCBs by Ionics' subcontractor. The purpose of the pilot study will be to see whether the contractor can sufficiently reduce the level of soil contaminants in sediments from the hot spots to meet EPA specifications, as well as test the subcontractor's ability to successfully dechlorinate the PCBs left in the residual oil. The cost for Ionics' portion of the process will be

somewhere around $150.00 to $200.00 a ton; one unit will require about a day to process 100 tons of sediment (a hundred tons is roughly equivalent to a hundred cubic yards). Forum members had many questions on the process and its particulars and concluded with an expressed wish to be briefed by the Ionics subcontractor.

The agencies are working with Ionics to develop a work plan for the pilot study. It is anticipated that the field study for both extraction and dechlorination will occur in mid-May.

There will be a meeting of the treatability subcommittee on Wednesday, April 24, 1996, at 12:30 p.m. in the trailer at the Sawyer Street site.

Bill Straus reported on the work of the subcommittee on remedial and navigational dredging linkage. The subcommittee met on March 6 and discussed at length and fruitfully with Coastal Zone Management the impact of passage of the Sea Port Bond Bill. Negotiations for an allocation for New Bedford Harbor under the new statute are currently underway. The subcommittee requested the Forum to urge all of the governmental agencies, federal, state and local, with any role in either the navigational or remedial dredging to work closely together to coordinate and expedite their actions in meeting all of the many regulatory and permitting issues involved in the project. The Forum unanimously endorsed the subcommittee's request.

The Forum then considered the materials provided by the EPA in response to some of the concerns raised at the last Forum session about the revised configuration of CDF 1B. Representatives of Acushnet and Fairhaven had questioned the impact of the greatly enlarged CDF 1B on the wetlands on the east shore of the Acushnet River. EPA prepared data to respond to those concerns, and, as a result of analysis of that data, altered the configuration of the southern portion of CDF 1B to reduce further any adverse impact on water flow. With the new configuration, the agency is relatively confidant that there will be no harmful impact on the salt marshes on the east bank. In addition, EPA pledged that, as more detailed engineering data became available during the course of the project, care will be taken to ensure that the integrity of the salt marshes is preserved. In response to questioning by Roland Pepin, the agencies reiterated that the Phase II ROD could, and would, contain a stipulation conceding that whatever adjustments may be required to preserve the integrity of the salt marshes will be made.

At the conclusion of this discussion, the Forum directed the facilitators to prepare in advance of the next Forum meeting another draft of a final ROD-II agreement, which will be sent out with these minutes, incorporating the various language changes suggested by Forum members to date and a proposed final version of provisions on the location of CDFs and cooperation on the dredging issue. (Language changes from the last draft are underlined in the latest, attached version). The hope was expressed that Forum members would review the draft accompanying these minutes and get back to Michael Keating with any further comments or suggestions in advance of the April 10th meeting of the Forum.

The meeting was adjourned at 8:32 p.m.

The next Forum meeting is scheduled for Wednesday, April 10, 1996, at 6:00 p.m. at the Greater New Bedford Vocational High School.

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New Bedford Harbor Superfund Site Community Forum

AGREEMENT

The New Bedford Harbor Superfund Site Community Forum has been meeting since April 25, 1995 on issues related to the Phase 2 Record of Decision (ROD) for remediation of contamination in New Bedford Harbor. After extensive review and discussion of the agencies' original proposal, the Forum met on April 10, 1996, and agreed to the following:

1. The PCBs and heavy metals presently contaminating the Acushnet River and New Bedford Harbor need to be removed from the river and harbor as quickly as possible. The health and ecological risks associated with their continued presence are unacceptable.

2. The Forum prefers the treatment and destruction of the PCBs and heavy metals rather than their storage in long-term or permanent confined disposal facilities (CDFs) along the shore of the river and harbor.

3. While the use of CDFs does not destroy the PCBs and heavy metals, the Forum agrees that the employment of CDFs for storage of the dredged and contaminated sediments accomplishes their removal and reduces the risks to human health and the environment.

4. The Forum acknowledges that the use of CDFs for permanent storage of the dredged and contaminated sediments, however, involves some risks associated with leakage and the long-term integrity of the containers, as

well as issues of long-term cost allocation for their maintenance.

5. The Forum also acknowledges that existing treatment alternatives for such a large amount of sediments with such high levels of contamination are neither technically nor economically feasible at this time.

6. The agencies are committed to a continuing literature review of the applicability and feasibility of treatment alternatives developed during Phase 1 of the remediation process for the materials stored in the CDFs. Beginning after the signing of the ROD and subject to available funding, the agencies also agree to continue the literature review of viable treatment alternatives during the early stages of the Phase 2 remediation, before the CDFs are permanently capped. The Forum agrees that one of the treatment alternatives to be evaluated will be bioremediation.

7. If no technically and economically feasible alternative treatment is developed prior to the permanent capping of the CDFs, the agencies pledge to a literature review, no less frequently than every five years, or more frequently upon receipt of significant new information, of developments in alternative technologies that, in the future, may become technically and economically feasible for application to the stored materials.

8. The Forum supports the utilization of some portion of the remediation CDFs to store navigational dredging spoils from the harbor.

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9.. The Forum agrees to the use of CDF 1A, the northern and southern portions of CDF 1B, and CDF 7 for the storage of contaminated sediments and such other dredging spoils from New Bedford Harbor for which there may be space. The Phase II ROD will expressly require that the final configuration of both portions of CDF 1B be so designed and engineered as to ensure the integrity of the salt marshes on the eastern shore of the Acushnet River.

10. If treatment becomes technically and economically feasible, the agencies commit themselves to seek funding for such treatment, consistent with Superfund legislation.

11. The Forum urges all governmental agencies, federal, state and local, with a role in either remedial or navigational dredging in New Bedford Harbor to work closely together to coordinate and expedite their actions in meeting all of the many regulatory and permitting issues involved in the dredging operation.

12. There is a strong commitment on the part of all its members to the continuance of the Forum to participate actively in the development of the engineering design of any CDFs, the design and implementation of monitoring plans, the planning and implementation of dredging activity, the development of appropriate uses for any capped CDFs, the review of alternative treatment developments, and all other aspects of the development of the Phase 2 remedy.

Signatures of Forum representatives are attached on separate signature pages.

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203

Forwarding and address correction requested

NB - Fe2UM

Region I
Office of External Programs (REA)
John F. Kennedy Federal Building
Boston, Massachusetts 02203

Official Business
Penalty for Private Use
$300

First Class Mail
Postage and Fees Paid
EPA
Permit no. G-35

New Bedford Harbor Superfund Site Community Forum
Phase 2 Questions Raised at the 2/28/96 Forum

3/22/96

1. Will the new addition to CDF-1B harm the salt marshes on the eastern shore of the Acushnet River?

At the 2/28/96 Forum meeting, EPA proposed a revised configuration of CDFs for phase 2 which did away with use of the cove site CDF 1. This new proposal, as with the 2/11/96 proposal for use of half of CDF 1, called for an additional CDF north of the cove location (this CDF has been called the CDF-1B annex). As a result, questions were raised about the potential for harmful impacts to the salt marshes on the other side of the river from this new CDF.

EPA's project team looked into this issue, with the help of newly implemented computer software. Similar to the process outlined in the 11/29/95 Forum handout (which answered questions about salt marsh impacts from the original CDF 1B), the central focus of the analysis was whether the "cross-sectional" areas of the river would be reduced as a result of dredging. In other words, if these areas were to be smaller after dredging, water velocities would be greater, and there would be a risk of riverbank erosion over time. To summarize, the analysis indicated that the newly proposed CDF-1B annex - as originally configured - WOULD pose a threat of erosion and salt marsh impact at least at the narrowest point of the river. Thus the team went "back to the drawing board" to develop a smaller CDF-1B annex which would NOT cause erosion concerns. The footprint of this reconfigured CDF-1B annex is now approximately 750 feet shorter and 70 feet narrower as a result.

An overhead view showing this new footprint as well as the other two CDFs in the upper harbor (1A and 1B) is attached as Figure 1. The original footprint of the CDF-1B annex is shown as a dotted line at the 1B annex location. The locations of the two cross-sections used to calculate the "flow-through" areas in this analysis are also shown on Figure 1. A scale-drawing poster board will be available at Forum meetings to show what it would look like if one were to "cut through" the River at these two locations and view these areas from the side (i.e., like looking at the layers of a piece of layer cake). Figure 2 attached illustrates the revised footprint for CDF-7 in the lower harbor.

The end result of this preliminary hydrologic assessment was computer-generated calculations of the cross-sectional areas in square feet at the narrowest (i.e., worst case) locations of CDF 1B and the new 1B annex. These areas were calculated for both high and low tide conditions at the two cross-sections A-A and B-B (again, see Figure 1). These results are listed below:

	before dredging	after dredging
Section A-A at high tide	3342 ft^2	3332 ft^2
Section A-A at low tide	573 ft^2	1463 ft^2
Section B-B at high tide	4285 ft^2	3970 ft^2
Section B-B at low tide	1724 ft^2	1963 ft^2

These results indicate that erosional scouring of the river banks should not be a cause for concern after the dredging program is complete. Once the final designs of the CDFs are established during the design phase of the remedy, additional comprehensive hydrologic modeling of the river system will be performed to verify the predictions of this initial assessment. The bottom line is that the project will be designed to ensure that the integrity of the salt marshes is not jeopardized. For example, since the section B-B area at high tide is slightly (7%) lower after dredging, this area could be dredged slightly deeper if need be to create a larger cross-sectional area. The local communities will be invited to be fully involved in this design process.

2. <u>What will be the volumes of each CDF as currently proposed?</u>

The approximate storage volumes for dredged material at each CDF, as currently configured, are shown below:

CDF 1B (northern half)	56,400 yd^3
CDF 1B (southern half)	50,700 yd^3
CDF 1A	93,800 yd^3
CDF 7	435,000 yd^3

The attached table shows the process one needs to go through to understand why such a large volume of storage is required. The term "bulking factor" under the heading "Required Storage Volume" on the table refers to the fact that the dredged sediment expands or "bulks" by about 40% upon being dredged from the river bottom. Thus, the 451,700 yd^3 of sediment on the sea floor which has to be dredged requires a disposal volume 1.4 times that, or 632,400 yd^3.

FIGURE 1

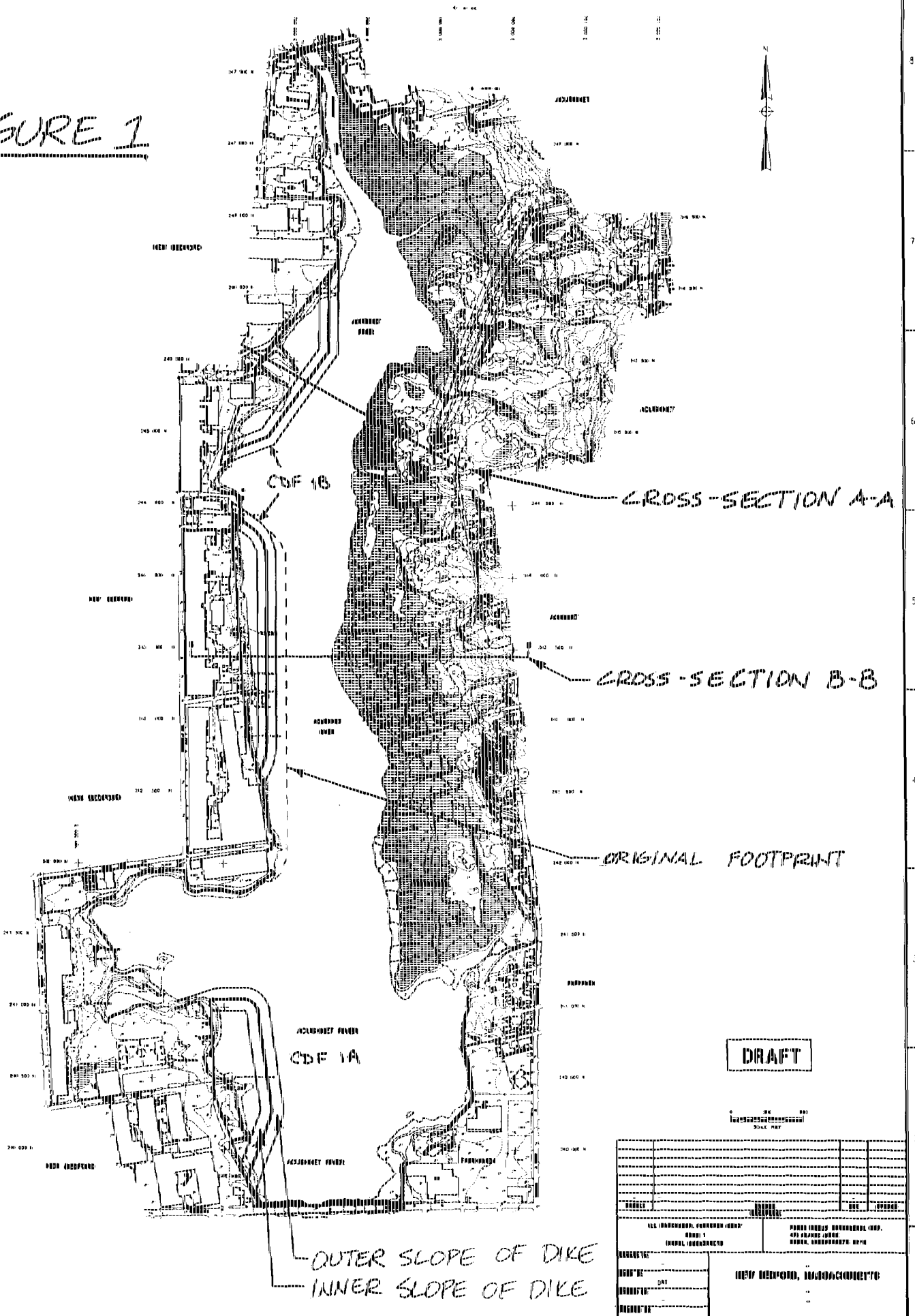
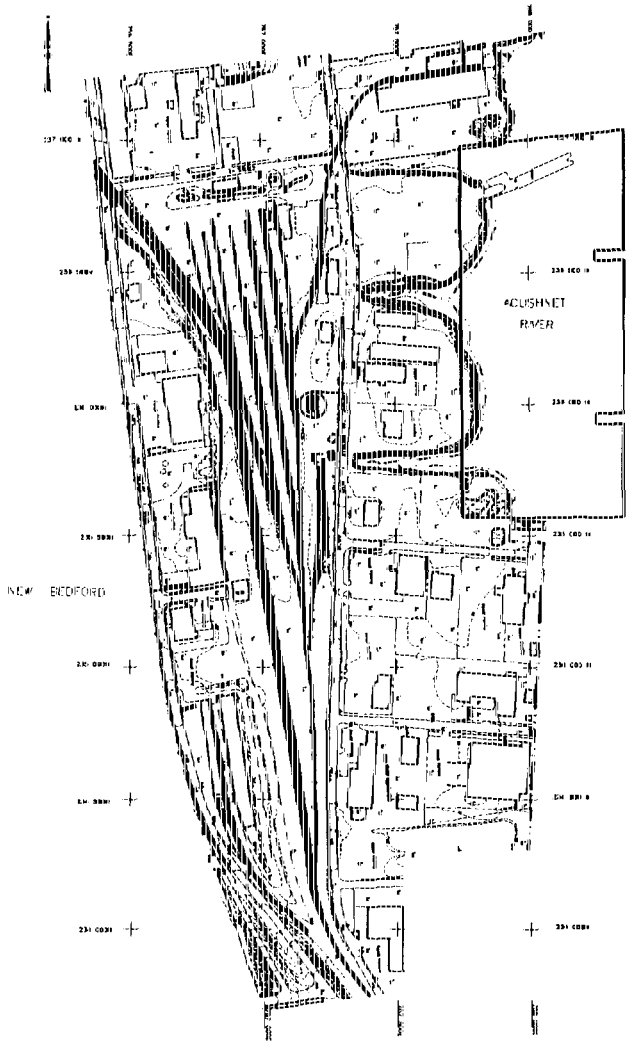
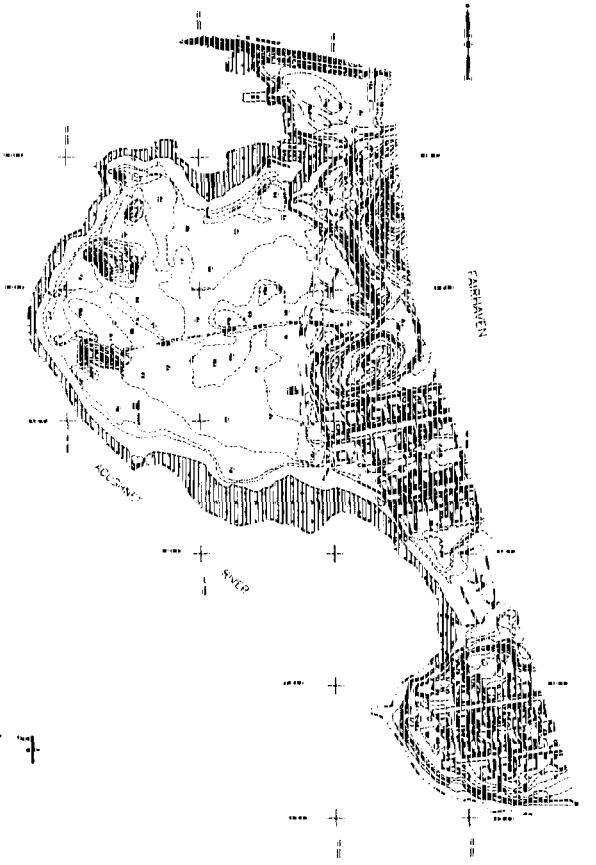
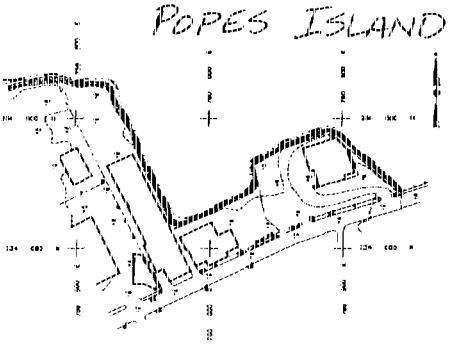

CDF 1B
CDF 1A
CROSS-SECTION A-A
CROSS-SECTION B-B
ORIGINAL FOOTPRINT
OUTER SLOPE OF DIKE
INNER SLOPE OF DIKE
DRAFT
NEW BEDFORD, MASSACHUSETTS
PLAN VIEW

FIGURE 2





CDF 7



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NEW BEDFORD, MASSACHUSETTS

PLAN VIEW

NEW BEDFORD HARBOR PHASE UNIT II
DREDGING VOLUME AND CDF STORAGE CAPACITIES

Volume of Contaminated Sediment

Estuary	528,000 yd^3
Lower Harbor	48,000 yd^3
Total Volume of Contaminated Sediment	**576,000 yd^3**

CDF Foot-Print Corrections

CDF 1B (Northern Half)	26,800 yd^3
CDF 1B (Southern Half)	30,100 yd^3
CDF 1A	38,000 yd^3
CDF 7	29,400 yd^3
Total Foot-Print Correction	**124,300 yd^3**

Dredging Volume

Dredging Volume = Contaminated Sediment Volume - Foot-Print Correction

Dredging Volume = 576,000 yd^3 - 124,300 yd^3 = **451,700 yd^3**

Required Storage Volume

Required CDF Storage Volume = Dredged Volume x Bulking Factor

Required CDF Storage Volume = 451,700 yd^3 x 1.4 = **632,400 yd^3**

CDF Storage Volumes

CDF 1B (Northern Half)	56,400 yd^3
CDF 1B (Southern Half)	50,700 yd^3
CDF 1A	93,800 yd^3
CDF 7	435,000 yd^3
Total Available Storage Volume =	**635,900 yd^3**

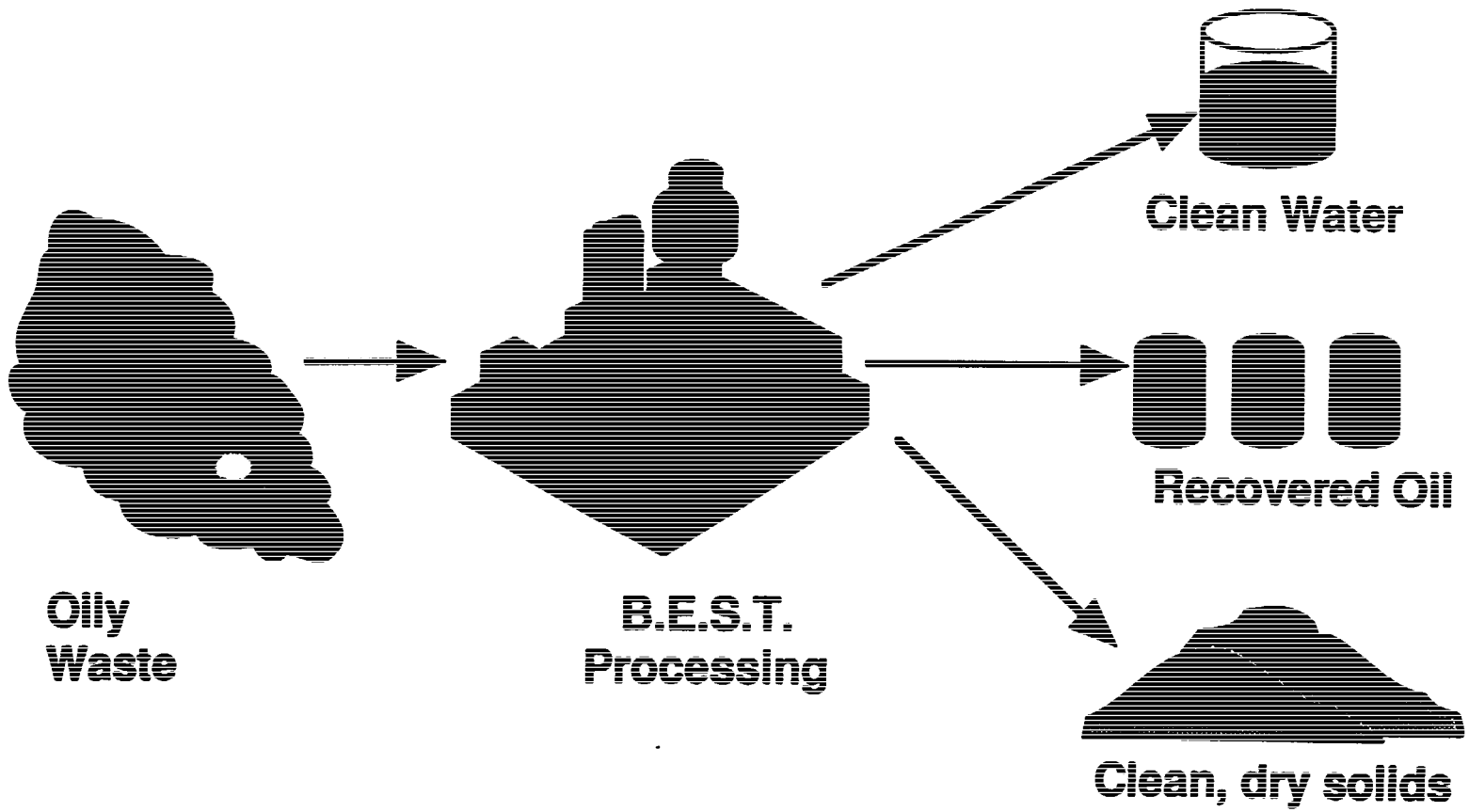
Ionics Presentation to forum 3/26/96

Removing Hazardous Waste from Soil, Sludge & Sediment Using the B.E.S.T.® Solvent Extraction Process

IONICS

RCC

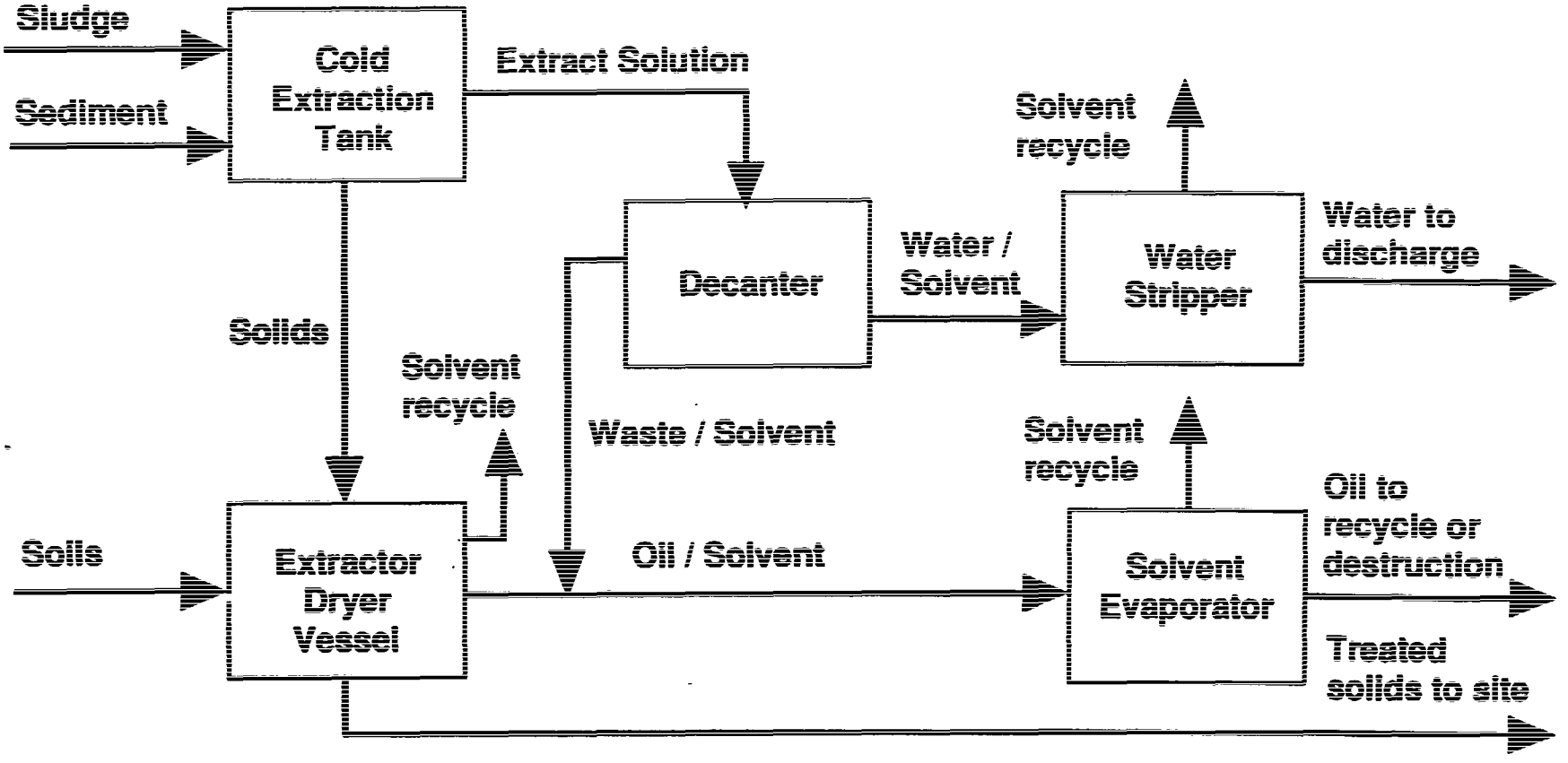
B.E.S.T.® SOLVENT EXTRACTION PROCESS



IONICS

RCC

B.E.S.T. SOLVENT EXTRACTION PROCESS



IONICS

RCC Construction Company

B.E.S.T. SOLVENT EXTRACTION PROCESS

- Cost-effectively treats soils, sediments & sludges
- Removes PCBs, PAHs, pesticides
- Extensively tested:

  15 years of laboratory research & development

  200 bench scale tests

  12 pilot scale tests

  Commercial scale remediation at Superfund site
- US EPA SITE demonstration-Grand Calumet River
- 'Best Demonstrated Available Techology' for petroleum refining oily wastes, says US EPA

IONICS

RCC

11

MEMORANDUM

TO: New Bedford Harbor Superfund Site Community Forum
FROM: Hands Across the River Coalition
RE: Clarifications to Draft Agreement
DATE: March 21, 1996

Hands Across the River Coalition (HARC) is pleased with the direction of the discussions regarding Phase II of the Harbor Clean-up. Overall, the Draft Agreement looks good. HARC does seek clarification on a few issues.

(1) Review of Alternative Remedies

The EPA has committed to performing extensive research on alternative technologies each year and to meet with the Forum once a year at the least to discuss emerging technologies. HARC would like the language in section nine to be redrafted to take account of this commitment. As such, section seven should indicate that the agencies agree to continue the search "each year" for an alternative and section nine should read: "the agencies pledge to review each year developments in alternative technology that, in the future, may become economically and technically feasible for application to the stored material." In addition, in recognition of the commitment to finding an alternative, HARC would like to remove the word "permanent" in front of the word "capping" in section 9.

(2) Implementation of Treatment Technologies

(a) Economic Feasibility

The EPA has agreed that the sediments will be stored in the CDFs only until a technically and economically feasible technology is discovered. HARC believes that the Forum must provide some definition for the phrase "economically feasible." This will provide the Forum with a benchmark for reviewing alternative technologies in the future.

(b) Funding

EPA has stated that simply putting the sediments in the CDFs will deplete the settlement money that was to be used to clean up the Harbor. As such, when a feasible alternative technology comes along there will be no money to implement that technology. Therefore HARC seeks some assurances in the agreement that the DEP and the EPA will work with the citizens to find funds from the Federal Superfund program or other sources to implement the alternative when the time comes. Specifically, HARC would like to see:

(1) Language in the ROD for Phase II indicating that the CDF solution is only

temporary;
(2) An express commitment that the site will remain on the National Priority List until an alternative technology is found and/or that when an alternative technology is found, the EPA will automatically find that further action is appropriate at the site as required by the Superfund law to implement additional technologies;
(3) An express commitment in the agreement that the agencies will make funding the alternative a priority.

(3) Future Role of the Forum

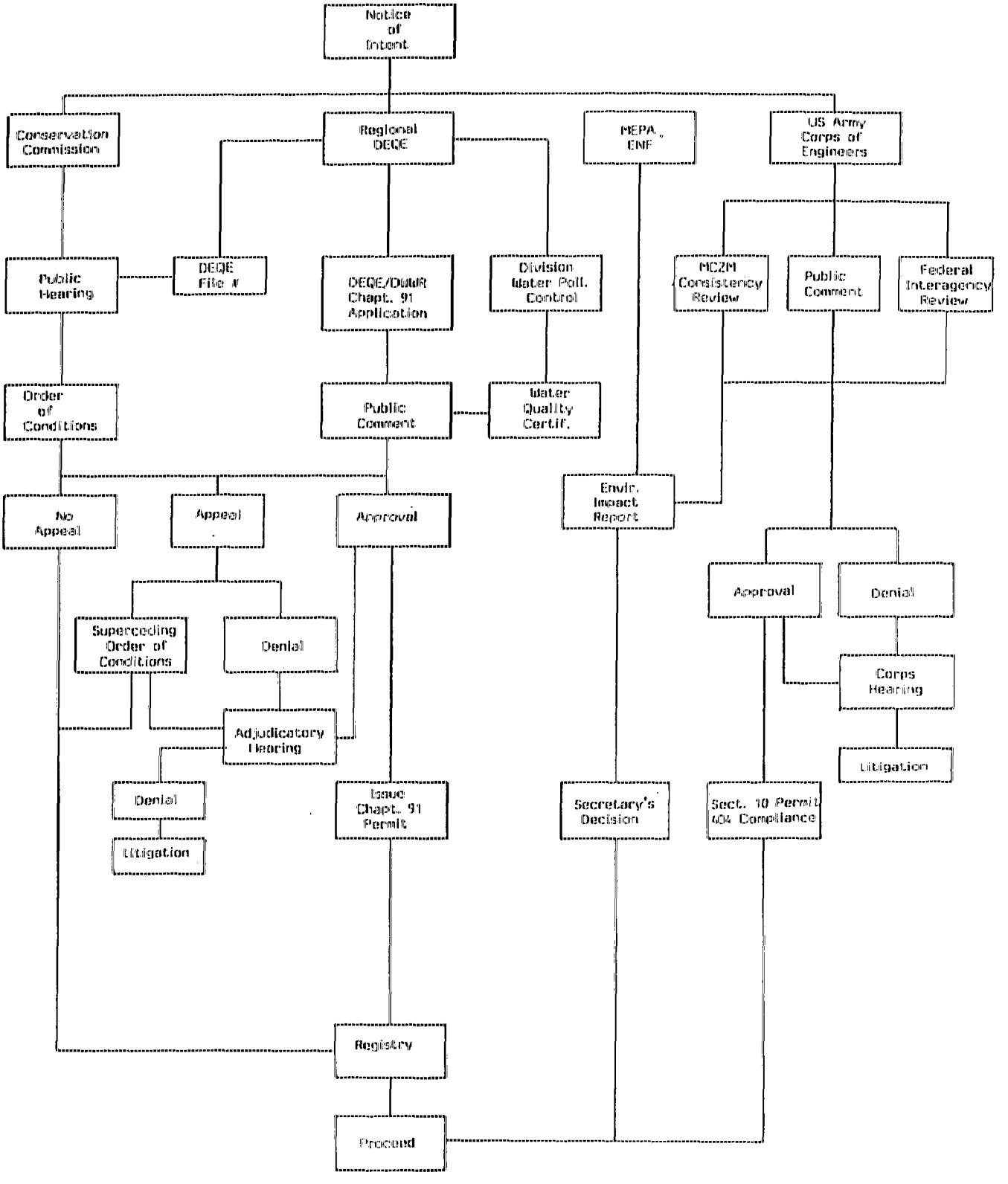
HARC would like to see some more specificity in the language regarding the future role of the Forum. Perhaps section 12 could set a minimum meeting schedule for the first five years.

New Bedford Harbor Superfund Forum
Superfund/Maintenance Dredging Subcommittee

The dredging sub-committee met on March 6 to discuss specifics of formalizing a dredging/disposal linkage between EPA Superfund disposition of hazardous and contaminated materials within CDF's and disposal alternatives for maintenance dredging of navigational waterways within the immediate New Bedford Harbor/Acushnet River System. Members of the sub-committee were informed that CZM will be acting as the primary coordinator/planner for maintenance dredging activities within the New Bedford Harbor Designated Port Area (DPA). It is likely that the US Army Corps of Engineers will implement the formal design engineering plans and specifications and may undertake the actual maintenance dredging through formal contract agreement with the State. Funding for the maintenance dredging activities within the New Bedford Harbor DPA may be available through the Seaport Bond Bill.

Given these circumstances, the Dredging Sub-Committee believes the Forum should formally request that EPA establish a linkage mechanism to cost-effectively coordinate identification and designation of proposed maintenance dredging areas and potential disposal sites. This linkage must open appropriate dialogue between the relevant local, state and federal regulatory agencies. Not withstanding jurisdictional issues, the Forum should request EPA provide, through its contractors and assisting governmental agencies, a sediment classification of the New Bedford Harbor DPA. Included in this tiered classification should be essential information, data and testing results regarding water quality, sediment physical and chemical characteristics and delineation of resource areas. This information can then be used to qualitatively and quantitatively describe and characterize dredge volumes, methodology and coordinate the overall dredging/disposal actions within the New Bedford Harbor DPA.

Organization of this material into a standardized format will expedite the environmental regulatory permit process. With this information, the attached table provides a systematic matrix for implementation of the dredging/disposal permit process.


Notice of Intent
Conservation Commission
Regional DEQE
MEPA, ENF
US Army Corps of Engineers
Public Hearing
DEQE File #
DEQE/DWWR Chapt. 91 Application
Division Water Poll. Control
MCZM Consistency Review
Public Comment
Federal Interagency Review
Order of Conditions
Public Comment
Water Quality Certif.
No Appeal
Appeal
Approval
Envir. Impact Report
Approval
Denial
Superceding Order of Conditions
Denial
Corps Hearing
Adjudicatory Hearing
Litigation
Denial
Issue Chapt. 91 Permit
Secretary's Decision
Sect. 10 Permit 404 Compliance
Litigation
Registry
Proceed