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No Response

Mr. Frank Ciavattieri  
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Subject: REM III PROGRAM - EPA CONTRACT NO. 68-01-7250  
WORK ASSIGNMENT NO. 04-1L43  
TECHNICAL REVIEW REPORT OF COMMENTS TO THE NUS REPORT  
FEASIBILITY STUDY OF REMEDIAL ACTION ALTERNATIVES  
ACUSHNET RIVER ESTUARY ABOVE COGGESHALL STREET BRIDGE  
NEW BEDFORD HARBOR, BRISTOL COUNTY, MASSACHUSETTS

Dear Frank:

Enclosed is the Technical Review Report of comments to the NUS Draft Feasibility Study of Remedial Action Alternatives of the Acushnet River Estuary above Coggeshall Street Bridge, New Bedford Harbor, Bristol County, Massachusetts.

If you have any questions on the review comments, please call Allen Ikalainen directly.

Very truly yours,

Lindley H. Hall  
Regional Manager

LHH/jg  
Enclosure  
cc: A. Ikalainen  
M. Amdurer

EPA WORK ASSIGNMENT NUMBER 04-1143.

EPA CONTRACT NUMBER: 68-01-7250

EBASCO SERVICES INCORPORATED

TECHNICAL REVIEW REPORT  
OF COMMENTS TO THE  
NUS DRAFT FEASIBILITY STUDY OF REMEDIAL ACTION ALTERNATIVES  
ACUSHNET RIVER ESTUARY ABOVE COGGESHALL STREET BRIDGE  
NEW BEDFORD HARBOR  
BRISTOL COUNTY, MASSACHUSETTS

JUNE 1986

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## 1. INTRODUCTION

The objective of Task 25, Combined Feasibility Study (FS) Report (EBASCO Project Management Plan for New Bedford Harbor), is to produce an FS Report which includes the upper estuary, the "hot spot" in the Acushnet River, and the overall Harbor/Bay. This review was conducted to determine if public comments on the NUS Draft FS Report for the Acushnet River Estuary (August 1984) raised issues that have not yet been addressed in subsequent work by NUS, GCA, or the Corps of Engineers. Such issues will need to be addressed to complete the Combined FS Report. In addition to evaluating if issues raised by the comments have been addressed in subsequent work, the comments were evaluated with respect to the current National Contingency Plan (NCP), 40 CFR Part 300, February 18, 1986. NCP revisions since the August, 1984, Draft FS Report account for a number of E.C. Jordan's comments on methods or procedures utilized in the NUS Draft FS.

## 2. SUMMARY

Jordan has conducted a technical review of the "Response to Comments" for the NUS Draft FS as part of Task 25 of the Draft Project Management Plan for New Bedford Harbor. Each category and subcategory, as presented in this document, lists areas identified for further evaluation under two topics: areas being addressed by ongoing tasks, and areas which have not been addressed to date.

The FS received extensive comments, and a technical review of the "Response to Comments" has identified specific areas of the FS which may warrant further study and evaluation.

If an issue raised by comments is being addressed by an ongoing task, the responsible organization and task number, as identified in the New Bedford Project Management Plan (May 1986), are indicated. Issues identified which have not been addressed to date will be considered by Jordan during preparation of the Feasibility Study Work Plan.

Comments and responses were evaluated in the order presented in the "Response to Comments" document, provided to Jordan by Jackie Prince (USEPA Region I, Regional Project Manager for New Bedford Harbor). Some categories of the "Response to Comments" document did not appear in this report if there appeared to be no need for further work in relation to specific comments and responses. If Jordan recognized any missing elements in the review of the FS, they were documented in the appropriate section.

### 3. ALTERNATIVE SELECTION

#### Hydraulic Control With Sediment Capping

*What about ACE's erosion work?*

The following areas are being addressed by ongoing tasks:

- o A detailed explanation of the feasibility of the channel design, with referenced equations supporting preliminary design parameters (NUS Task 20); and
- o Preliminary evaluation of underwater construction feasibility (NUS Task 20).

*will NUS still be doing Task 20?*

The following area has not been addressed to date:

- o The availability of borrow material.

#### Sediment Dredging with In-Harbor Disposal

The following areas are being addressed by ongoing tasks:

- o The generation of leachate (a primary concern for determining the necessity for, and type of, liner) (USACE Task 16); and
- o Fixing of sediments before placement (NUS Task 21).

*Also, ACE/WES*

The following areas have not been addressed to date:

- o Technical feasibility of the construction of a diked disposal facility design and supported by references to similar work done previously;
- o Potential gas generation; and
- o Referencing of preliminary groundwater calculations, where presented.

#### Sediment Dredging with Upland Disposal

Siting and approval is a primary concern for the feasibility of this option. NUS tentatively identified 5 sites for upland disposal, none of which were supported by the Commonwealth of Massachusetts.

It is unclear in the NUS report:

- o How the sites were screened and selected; and
- o Why the sites were not supported by the Commonwealth of Massachusetts.

The following subject is being addressed by an ongoing task:

- o The ability to site a facility locally (REM III, Task 19).

#### Sediment Dredging with Disposal to In-Harbor Cells

As stated in the NUS addendum to the Draft FS, "This alternative ....was developed and evaluated in response to comments....that at least one alternative be provided for in-harbor disposal.... without destroying wetland areas." It is unclear how this alternative was developed and whether other alternatives exist which meet the above criteria.

The following subject has not been addressed to date:

- o Long-term structural integrity.

The following areas are being addressed by ongoing tasks:

- o Geotechnical and chemical properties of sediments overlying bedrock in subsurface cell area (USACE Tasks 12 and 13);
- o Dredging technologies (USACE Task 17); and
- o Fixation before placement (NUS Task 21).

#### Disposal at an Existing Out-of-State Landfill

The landfill proposed to receive the sediments (Cecos International Facility in New York) has proven to be unacceptable because of cited violations and lack of capacity.

EPA has recently adopted a policy for Superfund response actions involving off-site storage, treatment, or disposal of CERCLA hazardous substances (NCP, February 1986). The policy requires that certain criteria must be met when selecting a hazardous waste management facility to receive CERCLA hazardous substances. The facility must have either a permit or interim status under RCRA. A RCRA compliance inspection must have been performed within six months prior to receiving the hazardous

substances. No Superfund hazardous substances may be taken off-site to a RCRA facility if the facility has significant RCRA violations, or other environmental conditions that affect the satisfactory operation of the facility, unless the owner or operator commits to correct the problem, and disposal occurs within the facility only at a new or existing unit, in compliance with RCRA requirements.

The following subject is being addressed by an ongoing task:

- o Evaluation of facilities which meet the above criteria for comparison to other alternatives (REM III Task 19).

#### Incineration of PCB-Contaminated Sediments

As provided in the NCP (40 CFR Part 300.68), "An analysis of whether.....destruction or other advanced innovative or alternative technologies is appropriate to minimize present or future threats to public health, welfare, or the environment" is the basis for further evaluation of incineration.

The following areas are being initially addressed by NUS under Task 21; more detailed evaluations will be done by Jordan under REM III in the overall FS.

- o Regulation and permitting considerations;
- o Available technologies;
- o Pretreatment of waste before incineration;
- o Fixation of waste residue after incineration;
- o Disposal of incineration residue;
- o Fuel source alternatives analysis;
- o Offshore and onshore incineration; mobile versus stationary incinerators, onsite versus offsite incineration; and
- o "Selective" incineration.

#### Additional Proposed Remedial Action Alternatives

A comprehensive, up-to-date study of destructive technologies is recommended upon review of the comments, and is currently being evaluated by NUS under Task 21. Additional studies will be done by Jordan under REM III in the overall FS.

## No-Action Alternative

A more detailed evaluation of this alternative should be conducted to serve as a baseline comparison of all alternatives in the final New Bedford Harbor Feasibility Study.

Specifically, naturally occurring sedimentation, biodegradation, and physical chemical degradation processes should be evaluated. This "no action" alternative is being addressed in the Endangerment Assessment (GCA Task 06).

## 4. ENGINEERING AND PRELIMINARY DESIGN

Engineering and preliminary design evaluations were considered (by public comments) to be weak in several areas. The comments applied to most, if not all, of the alternatives.

The following areas are being addressed by ongoing tasks:

- o Regulatory and permitting constraints (REM III Task 63); and
- o Preliminary feasibility of identified construction, containment, and destruction technologies, including:
  - Dewatering technologies (USACE Task 16)
  - Wastewater treatment (USACE Task 16)
  - Liner installation (USACE Task 16)
  - Under-water construction (USACE Task 13)
  - Capping (USACE Task 17)
  - Dredging technologies (USACE Task 17)
  - Destruction technologies (NUS Task 21)

A number of the evaluations are being conducted for site specific conditions. The evaluation of alternatives should be based on the total amount of contaminated media to be remediated. In this respect, the need for further data acquisition should be evaluated (USACE Tasks 11, 12, 13, and 14). Fixation technologies for alternatives using removal and containment should be evaluated as part of this process (NUS Task 21).

The following areas have not been addressed to date:

- o Computations relative to preliminary designs should use referenced equations and be based on supporting site specific data, if possible; and
- o Operation, maintenance, and monitoring considerations.

#### 5. PUBLIC HEALTH, WELFARE AND THE ENVIRONMENT

This section of the FS received the majority of comments from reviewers. It provides the foundation for the development of the FS; therefore, it is important that this evaluation be performed according to accepted USEPA guidance.

Upon review of this section of the FS report and Public comments, it is unclear what basis was used for conducting this evaluation. Current USEPA policy states that an endangerment assessment is required to support all administrative and judicial enforcement actions (Section 106(a) CERCLA). An endangerment assessment should, therefore, be conducted (and is part of an ongoing task) according to guidelines presented in the "Endangerment Assessment Guidance" (USEPA, Draft September 20, 1985).

The USEPA draft publication "Public Health Evaluation Manual" identifies two key elements for a public health evaluation: (1) baseline public health evaluation, and (2) public health analysis of remedial alternatives.

A baseline public health evaluation is conducted as part of the endangerment assessment. An organized public health evaluation of alternatives should be conducted according to USEPA guidance.

The following areas identified by comments are being addressed by ongoing tasks:

- o Toxicity assessment supporting references (such as HEA's, GCA Task 06);
- o Substantiated conclusions for human health risks (GCA Task 06);

- o An environmental impact analysis for identified alternatives conducted according to the National Environmental Policy Act of 1969 (Section 102(2)(c)) and complying with procedures set forth by the Council for Environmental Quality (NUS Task 22); (REM III Task 63); and
- o Socioeconomic impacts such as cultural and proposed development should be evaluated. Cultural considerations should comply with Section 101 of the National Historic Preservation Act (33 CFR 800), (REM III Task 63).

The following areas identified by comments are currently being addressed:

- o Heavy metals data (NUS Tasks 03, 05; USACE Task 12);
- o Vertical and areal distribution of contamination (NUS Tasks 03, 05; USACE Task 12); and
- o Identification processes for indicator chemicals (i.e., were any samples submitted for HSL analysis) (NUS Task 03, USACE Task 12).

Also unclear whether a detailed analysis of local groundwater use has been conducted by NUS under Task 02.

## 6. METHODOLOGY

The CERCLA compliance policy is critical to an evaluation of remedial alternatives and, therefore, must be reviewed before remedial options are developed. The NCP (40 CFR Part 300.68 F) requires, to the extent that it is both possible and appropriate, at least one remedial alternative be developed as part of the feasibility study in each of the following categories:

- o Alternatives for off-site treatment or disposal, as appropriate;
- o Alternatives that attain applicable, or relevant and appropriate, Federal public health or environmental requirements;

- o Alternatives that exceed applicable, or relevant and appropriate, Federal public health or environmental requirements;
- o Alternatives that do not attain applicable, or relevant and appropriate, Federal public health or environmental requirements, but will reduce the likelihood of present or future threat from the hazardous substances and that provide significant protection to public health, welfare, and the environment; and
- o The no-action alternative (GCA-Ebasco Task 06).

Also, an evaluation of potentially applicable or relevant and appropriate federal public health standards and requirements has not been completed to date (REM III - Task 63).

7. MISCELLANEOUS

Upon review of the NUS Feasibility Study, Addendum to the Feasibility Study and Response to Comments, it is unclear whether an evaluation of initial remedial measures or immediate removal was done. At the present time, the only area of the site where such measures might be considered is the "hot spot" in the Acushnet River estuary.

8. CONCLUSIONS

As stated in the summary section in this document, areas (identified by comment) which have not been addressed to date will be considered by Jordan in development of the FS Work Plan. Areas which warrant further consideration include:

- o The availability of borrow material for construction actions;
- o Feasibility of underwater construction;
- o Potential gas generation from disposal of dredged material;
- o Operation, maintenance, and monitoring considerations;

- o Public health evaluation of alternatives (including an assessment of data adequacy); and
- o NCP requirements with respect to initial screening and detailed analysis of alternatives.

These will be included in the Feasibility Study Work Plan being prepared by Jordan under REM III for the overall Feasibility Study.