

**RECORD OF DECISION
BOSTON & MAINE WASTEWATER LAGOONS AT IRON HORSE PARK**

**APPENDIX A
RESPONSIVENESS SUMMARY**

FINAL RESPONSIVENESS SUMMARY

**Boston & Maine Wastewater Lagoon Area
Iron Horse Park Superfund Site
Billerica, Massachusetts**

**EPA Work Assignment No.: 33-1157
REM II Document Control No.: 132-CR3-OP-GJLJ-1**

**PREPARED FOR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I
BOSTON, MASSACHUSETTS
SEPTEMBER 1988**

Prepared by the REM II Project Team under EPA Contract No. 68-01-6939

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Preface

The U.S. Environmental Protection Agency (EPA) held a public comment period from June 9, 1988 to July 15, 1988 to provide an opportunity for interested parties to comment on the May 1988 Feasibility Study (FS) and Proposed Plan for the Boston & Maine (B & M) wastewater lagoon area at the Iron Horse Park Superfund site in Billerica, Massachusetts. The FS examines and evaluates various options, called remedial alternatives, for addressing contamination in the lagoon area. EPA identified its preferred alternative for the cleanup in the Proposed Plan issued before the start of the public comment period.

This Responsiveness Summary documents EPA responses to the comments and questions raised during the public comment period. EPA will consider all of the comments summarized in this document before selecting a final remedial alternative for the lagoon area at the Iron Horse Park Superfund site.

This responsiveness summary is divided into the following sections:

- I. Overview of Remedial Alternatives Considered in the Feasibility Study and Proposed Plan - This section briefly outlines the remedial alternatives evaluated in the Feasibility Study and Proposed Plan, including the preferred alternative, bioremediation.

- II. Background on Community Involvement and Concerns - This section provides a brief history of community interests and concerns regarding the Iron Horse Park site, focusing on the lagoon area at the site.

III. Summary of Comments Received During the Public Comment Period and EPA Responses to These Comments - This section summarizes and provides EPA responses to the written and oral comments received from the public during the public comment period. These comments are organized by subject area.

IV. Remaining Concerns - This section describes issues that may continue to be of concern to the community during the design and implementation of EPA's selected remedy for the lagoon area. EPA will continue to address these concerns during the Remedial Design and Remedial Action (RD/RA) phase of the cleanup process.

Attachment A - This attachment is a list of the community relations activities that EPA has conducted to date at the Iron Horse Park site.

I. OVERVIEW OF REMEDIAL ALTERNATIVES CONSIDERED IN THE FEASIBILITY STUDY AND PROPOSED PLAN

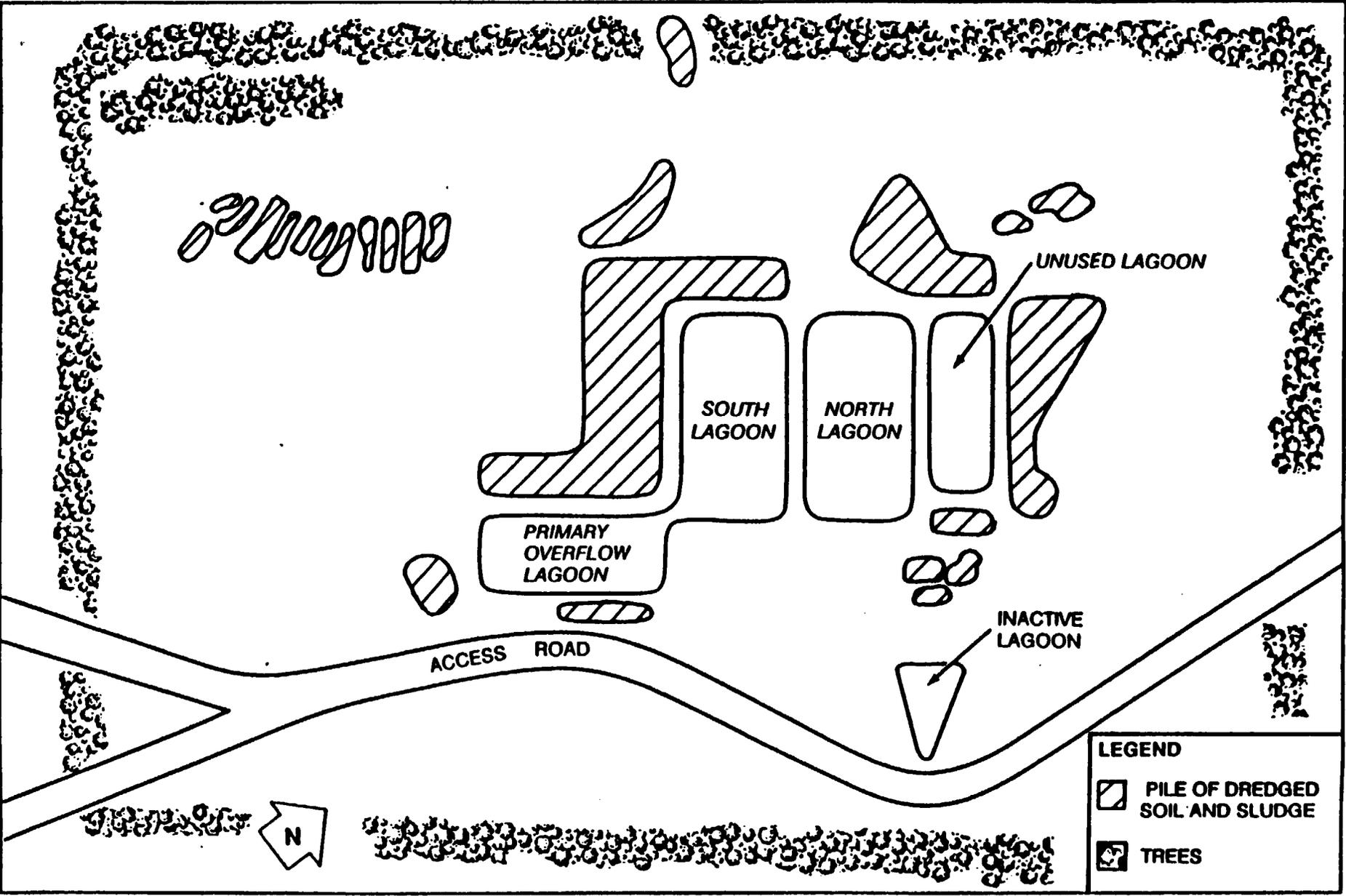
Using the information gathered during the Remedial Investigation and the results of the Endangerment Assessment for the lagoon area at the Iron Horse Park site, EPA identified several cleanup objectives for the lagoon area. (See Exhibit 1 for a map of the lagoon area.) The objectives are: (1) to protect human health and the environment by stopping the ongoing wastewater discharge to the lagoons; (2) to protect human health and the environment by reducing the risks associated with potential exposure to contamination in lagoon area sludges and soils; and (3) to reduce risks due to releases of contaminants into the groundwater, surface water, and the air.

After identifying the cleanup objectives, EPA developed and evaluated potential cleanup alternatives. The Feasibility Study report describes the alternatives considered for addressing contamination in the lagoon area, as well as the criteria EPA used to narrow the list to seven potential remedial alternatives. Each of these alternatives is described briefly below:

Alternative # 1: No Action: The no-action alternative would involve leaving the B & M lagoon area just as it is; that is, once the wastewater discharge to the lagoons has ceased, no action would be taken.

Alternative # 2: Closure of Lagoons with a Permeable Cap: This alternative would involve excavating 23,000 cubic yards of contaminated materials, including all of the piles of dredged materials and contaminated soils from the overflow lagoon and the abandoned lagoon, and placing them on top of the existing sludges in the North and South lagoons. Then, a cover, referred to as a cap, would be constructed over the sludge deposits. This cap would be permeable (i.e., water would be able to pass through it).

Exhibit . 1
15-ACRE LAGOON STUDY AREA
IRON HORSE PARK SITE, BILLERICA, MASSACHUSETTS



- LEGEND**
-  **PILE OF DREDGED SOIL AND SLUDGE**
 -  **TREES**

Alternative # 3: Closure of Lagoons with an Impermeable Cap. This alternative is similar to alternative #2, in that contaminated materials would be excavated and placed in the North and South lagoons. However, under alternative #3, an impermeable rather than a permeable cap would be used. The bottom layer of the cap would be constructed of an impermeable synthetic liner that would be placed directly over the sludge to prevent precipitation (i.e., rain and snow melt) from contacting the waste.

Alternative # 4: Stabilization and Closure. Under this alternative, contaminated soils and sludges would be excavated and treated on-site by stabilization. A stabilization process generally involves mixing a hardening agent, such as cement, with the waste. To implement this alternative, contaminated soils and sludges would be mixed with a hardening agent in a mixing unit that would be set up at the site. After stabilization, the treated material would be placed back in the North and South lagoons and covered by a permeable cap.

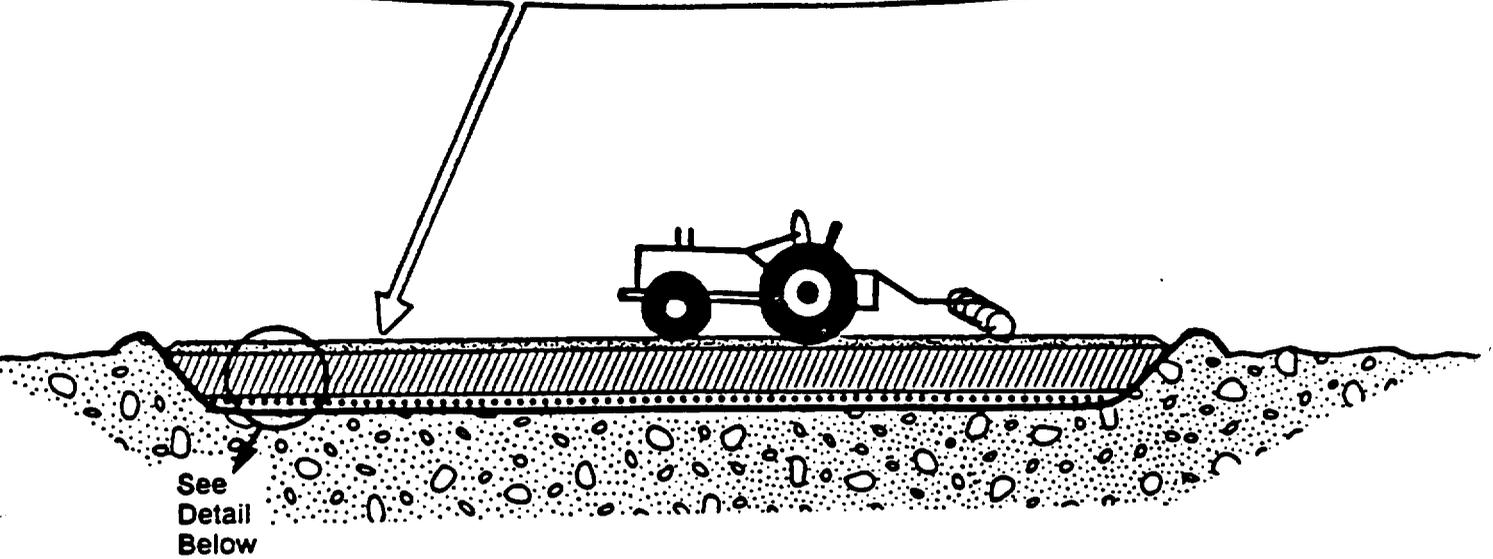
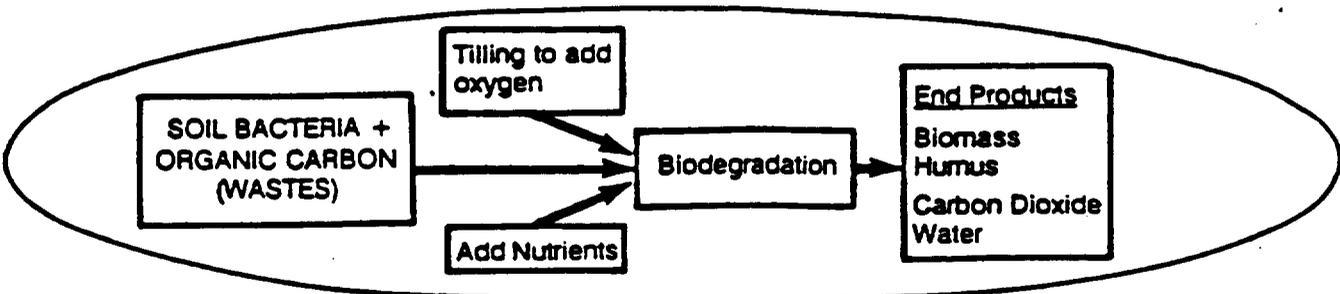
Alternative #5: Bioremediation and Closure. EPA chose this alternative as its preferred alternative when it released its Proposed Plan. After considering public comments on the preferred alternative, EPA officially chooses this alternative as the cleanup remedy for the lagoon area.

A bioremediation treatment process uses naturally occurring microorganisms that exist in soil to degrade, or break down, organic contaminants such as polyaromatic hydrocarbons (PAHs) and other hydrocarbons, into non-toxic, harmless materials such as carbon dioxide, water, biomass, and humus. At the Iron Horse Park site, a five-acre area located near the lagoons will be cleared of trees and excavated to a depth of three feet, and an impermeable synthetic liner will be placed over the area. Once the liner is in place, the contaminated soils and sludges from the lagoon area will be placed into the lined area. The top layer of contaminated soils and sludges will then be tilled to introduce oxygen necessary for the microorganisms to grow, and to degrade the contaminants. (Refer to Exhibit 2 for a schematic representation of the bioremediation process).

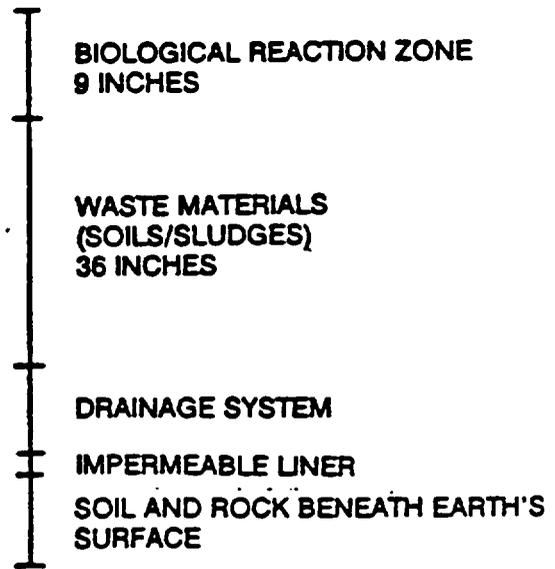
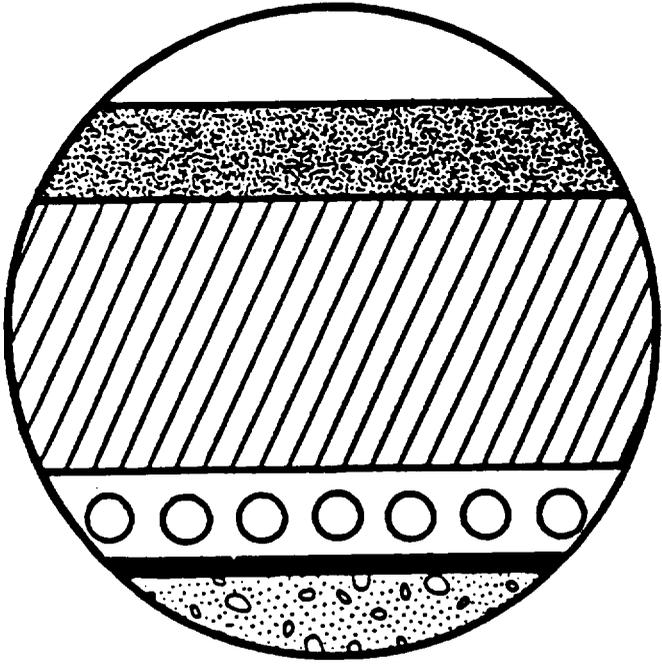
Alternative #6: On-site Incineration. Under this alternative, excavated sludges and soils would be burned in a mobile incinerator that would be set up on the site. The extremely high temperatures in the thermal destruction facility would destroy an estimated 99.99% of the PAHs and volatile organic compounds (VOCs) in the excavated sludges and soils. The exhaust gases from the facility's combustion chambers would be passed through air pollution control devices before being released to the atmosphere.

Alternative # 7: Off-site Disposal in an Approved Hazardous Waste Landfill. This alternative would involve excavating and transporting all sludges and soils from the site to an approved off-site hazardous waste landfill. After the contaminated materials are removed, clean soils would be used to fill in the excavated areas.

Bioremediation Treatment Process



Detail



II. BACKGROUND ON COMMUNITY INVOLVEMENT AND CONCERNS

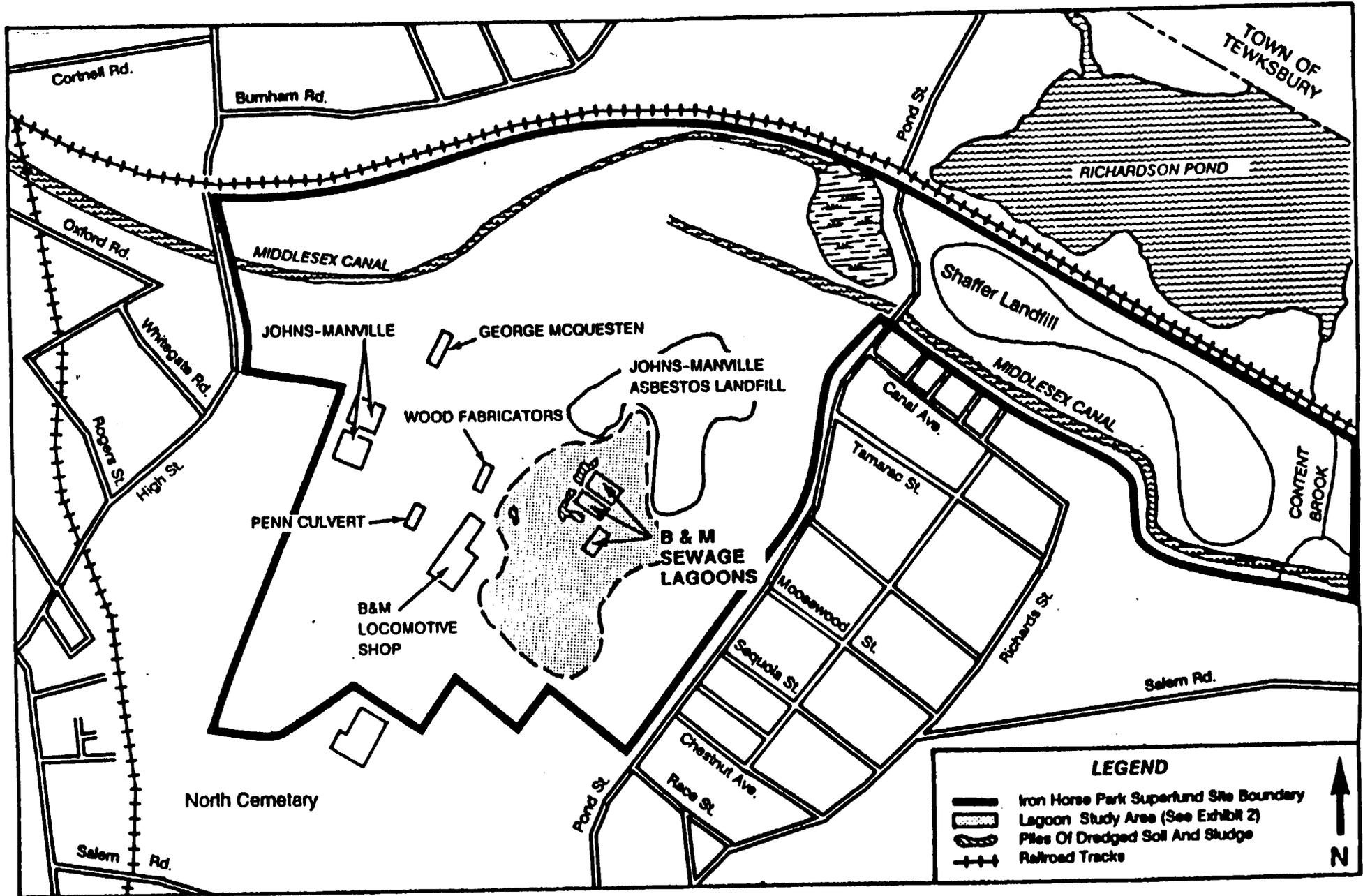
The Iron Horse Park site, which consists of approximately 552 acres of land, is located in Billerica, Massachusetts, near the Tewksbury town line. The site is an active industrial complex with a long history of waste management activities that have resulted in open storage areas, landfills, and lagoons. (See Exhibit 3 for a key site features map.)

The site is surrounded by a densely populated residential area. There is an estimated population of 8,300 residents within a one-mile radius of the site boundary. When the site was added to the National Priorities List (NPL) in September of 1984, several citizen's groups that had originally been organized to address separate issues at the site, merged into the Superfund Action Committee Coalition (now called the Superfund Action Committee, or SAC).

Concerns Relating to the Preferred Alternative, Incineration, and Groundwater Contamination

Members of the SAC are generally supportive of EPA's Proposed Plan for the lagoon area at the Iron Horse Park Site. At the public meeting held on June 8, 1988 to present the Proposed Plan, citizens questioned why EPA did not choose the incineration option presented in the Feasibility Study, but appeared to be satisfied with EPA's response that bioremediation represents the best balance among the criteria that were used to analyze the alternatives. Citizens were interested to know to what extent the lagoons are contributing to groundwater contamination at the rest of the site. Citizens remain very interested in the extent and nature of groundwater contamination

**Exhibit 3
KEY SITE FEATURES MAP
IRON HORSE PARK SITE, BILLERICA, MASSACHUSETTS**



LEGEND

	Iron Horse Park Superfund Site Boundary
	Lagoon Study Area (See Exhibit 2)
	Piles Of Dredged Soil And Sludge
	Railroad Tracks

↑
N

at the entire site, including the direction of groundwater flow.

Oversight

Citizens have expressed their concern that EPA should strictly oversee all aspects of the cleanup of the lagoon area, especially if the Boston & Maine Corporation conducts the cleanup. One citizen expressed concern that, because the bioremediation process will take many years, it is especially important that effective oversight be conducted.

Site Security

In addition, citizens are very concerned about site security. They indicated that there is easy access to the site, and that a fence should be constructed around the lagoon area, as well as around the entire site. Citizens stated that local residents continue to enter the site and ride vehicles on top of the former asbestos landfill, and are worried that people would drive around in the lagoon area. For this reason, citizens stated that security personnel should be posted at the site.

Future-Use

Citizens also expressed concern that once remediation is complete, and the lagoons are backfilled, EPA needs to ensure the lagoon area will never be used for development. At the public informational meeting, EPA explained that the goal of bioremediation is to clean up the lagoon area to a level that would ensure that if the land were to be developed, the risks to human health and the environment would be minimal.

III. SUMMARY OF COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD AND EPA RESPONSES TO THESE COMMENTS

This responsiveness summary addresses the comments received by EPA concerning the Feasibility Study and Proposed Plan for the lagoon area at the Iron Horse Park Superfund site in Billerica, Massachusetts. One written comment was received from the Commonwealth of Massachusetts. There were four oral comments presented at the June 23, 1988 public hearing. Copies of the hearing transcript are available at the information repositories located at the Billerica Public Library, Billerica Town Hall, and the EPA Records Center at 90 Canal Street, First Floor, in Boston, Massachusetts. The oral and written comments are summarized and organized into the following categories:

- A. Questions Regarding the Remedial Alternatives
- B. Questions Regarding Enforcement Issues

EPA responses are provided for each comment, or set of like comments.

A. Questions Regarding the Remedial Alternatives

Bioremediation Process

1. The Commonwealth of Massachusetts indicated its acceptance of the concept of bioremediation for the sediments, sludges and soils from the lagoons. The Commonwealth expressed concern about how bioremediation would affect the site's air and groundwater quality.

EPA Response:

EPA believes that air quality problems will not result. In 1986, DEQE conducted monitoring that found no elevated levels of contamination in air. Additionally, EPA believes that because there

are only low levels of volatile organic compounds (VOCs) in the lagoon wastes, the bioremediation process will not result in contaminant levels that exceed Massachusetts' allowable ambient levels (AALs). Although detectable levels of asbestos were found in four soil samples, the levels were just above the detection limit and well below EPA's action levels or levels that could result in any adverse health effects.

Besides the results of DEQE's and EPA's studies that indicate that air quality will not be adversely affected, the Record of Decision (ROD) contains a provision that calls for the design of the remedy to include a complete assessment of potential impacts associated with air emissions and odors. Based on this assessment, any necessary measures to ensure air quality will be implemented.

Regarding groundwater quality, the bioremediation process will be conducted as a closed system; there will be no discharges to groundwater during implementation. Additionally, results of the toxicity characteristic leaching procedure (TCLP) test conducted during the Remedial Investigation indicated that the wastes will not leach contaminants into groundwater.

2. One commenter asked how EPA will treat the bottom layer of waste without puncturing the impervious liner.

EPA Response:

To make sure that the impermeable liner or containment layer is not

punctured, the bottom layer of waste will be placed on top of a protective bedding layer of soil and not directly on the liner. This bedding layer will ensure that handling of the waste and tilling operations do not damage the liner.

3. One commenter asked whether EPA would capture and treat precipitation that filters through the bioremediation treatment area.

EPA Response:

The bioremediation process will be designed in such a way that no water leaves the system. When it rains, the water will be collected and returned to the treatment area to supply moisture for the organisms that are degrading the wastes.

4. Another commenter asked whether EPA had examined the impact that the cleanup process would have on the rest of the site. Specifically, the commenter asked whether EPA had analyzed what roadways would be used, and whether other parts of the site would be disturbed.

EPA Response:

Other than the five-acre area used to treat the waste, no other parts of the Iron Horse Park site will be disturbed by the bioremediation process. Although the details regarding which roads would be utilized for the bioremediation process will be decided during the design phase of the remedial activities, the present access roads located just south of the lagoons would probably be used.

5. One commenter asked how the design of the cleanup will address the fact that groundwater levels at the site are artificially elevated.

EPA Response:

Groundwater levels (that is, the elevation of groundwater found in the soil and not contamination levels) at the site are elevated because of the large volume of water that continues to be discharged to the lagoons. When the ongoing discharge to the lagoons is stopped, groundwater levels will return to a lower, natural elevation.

Security and Maintenance

6. One commenter indicated that access to the Iron Horse Park site is easy, and people tend to use the site for recreational purposes such as horseback riding and riding off-road vehicles. The commenter expressed concern that if security is not increased (e.g., by installing fences and hiring on-site security personnel), people will continue to enter the site and possibly interfere with the bioremediation process and come into contact with the wastes. The commenter does not believe that security and maintenance should be the responsibility of the Town, since the Town did not create the situation.

EPA Response:

When the bioremediation process is implemented, security to ensure that the process is not disturbed and to ensure that people do not come into contact with the wastes will be put in place. This may

involve fencing the area and using on-site security personnel if necessary.

Other

7. One commenter stated his belief that contaminants have been found in soil outside of the lagoon study area, and that this contamination has spread from the lagoons. He asked if anything has been done to determine how far these contaminants have spread, and how they will be cleaned up.

EPA Response

During the Remedial Investigation for the B & M lagoons, an extensive evaluation of the extent of contamination in the soil of the surrounding area of the lagoons was conducted. Based on this work, EPA believes that contamination from the lagoons is confined to the piles of materials found within the 15 acres that surround the lagoons. EPA does not believe that contamination from the lagoons was dumped outside the fifteen acres, or has spread outside this area.

B. Questions Regarding Enforcement Issues

Requirement for Bonding

1. One commenter was very concerned that if a potentially responsible party (PRP) were to conduct the cleanup, the PRP have full bonding. The commenter noted that at no time during the cleanup procedure should the amount of bonding be reduced by more than 50%. The commenter argued that with such bond assurances, residents could be

sure about the project's continued cleanup without funding delays.

EPA Response:

If a PRP were to conduct the cleanup, EPA would ensure that the PRP has both the technical and financial resources to do the work.

Plans and specifications must be certified by a professional engineer and a reputable contractor or other qualified party must conduct the cleanup work.

IV. REMAINING CONCERNS

During the public comment period, at the public informational meeting held in Billerica on June 8, 1988, and at the informal public hearing held on June 23, 1988, local residents discussed issues that may continue to be of concern as the site moves into the design and implementation phase of EPA's selected remedy for the Iron Horse Park site. These issues and concerns are described below along with statements about how EPA intends to address these concerns.

(A) Odors

Citizens expressed concern that the bioremediation process would result in bothersome and offensive odors.

EPA is aware of this concern and will take measures to decrease the likelihood that bioremediation will cause offensive odors during the design and implementation of the remedy.

(B) Groundwater

Citizens continue to be very concerned about the extent and nature of groundwater contamination at the entire 552-acre site.

At the public informational meeting on June 8, 1988, EPA made a commitment to forward a copy of the survey map to the information repositories. During the Remedial Design/Remedial Action phase, EPA will

be prepared to release new information concerning groundwater contamination when it becomes available and to answer questions concerning this information.

(C) Enforcement

Citizens continue to feel that the cleanup will not be conducted thoroughly unless strict oversight of the cleanup occurs, especially if the remedial action is conducted by a potentially responsible party. Citizens believe that EPA oversight is necessary to ensure that the connection to Billerica's wastewater treatment system is accomplished correctly, that the site is secure from intruders, and that the bioremediation process is carried out effectively.

EPA will oversee the design and implementation of all major aspects of the bioremediation process. The connection to Billerica's wastewater treatment system is being managed by the State and Town engineer.

ATTACHMENT A
COMMUNITY RELATIONS ACTIVITIES
AT THE
IRON HORSE PARK SITE
IN BILLERICA, MASSACHUSETTS

Community relations activities conducted at the Iron Horse Park Superfund site to date have included:

- o August 1985 - EPA released a community relations plan describing citizen concerns about the site and outlining a program to address these concerns and to keep citizens informed about and involved in site activities.
- o October 1985 - At two separate meetings, EPA officials briefed the Billerica Superintendent of Public Works and members of the Executive Committee of the Superfund Action Committee Coalition (SACC) on the status of the site and answered questions about the detection of PCBs on site.
- o December 1985 - EPA released a fact sheet to update the public about the initial Remedial Investigation activities occurring at the site.
- o 1985, 1986 - EPA representatives continued to attend the public meetings of the SAC to update them on the progress of the initial Remedial Investigation.

- o August 1987 - EPA issued a public notice announcing the availability of the Phase 1A RI, and the upcoming public meeting to explain the results of the RI.
- o August 1987- EPA released a fact sheet summarizing the results of the Phase 1A RI.
- o August 4, 1987 - EPA held a public meeting to present the results of the Phase 1A RI and to answer questions from the public.
- o June 1988 - EPA mailed the Proposed Plan announcing EPA's preferred alternative for addressing contamination in the lagoon area to all those on the site mailing list.
- o June 1, 1988 - EPA issued a public notice to announce the time and place of the upcoming FS public informational meeting for the lagoons at the site and to invite public comment on the FS and Proposed Plan.
- o June 8, 1988 - EPA held a public meeting to discuss the results of the lagoon area RI/FS. EPA coordinated the meeting with the local SAC regular committee meeting.
- o June 23, 1988 - EPA held an informal public hearing to accept oral comments on the remedial alternatives evaluated in the lagoon area FS and Proposed Plan.

**RECORD OF DECISION
BOSTON & MAINE WASTEWATER LAGOONS AT IRON HORSE PARK**

APPENDIX B

ADMINISTRATIVE RECORD INDEX

Iron Horse Park
NPL Site Administrative Record
Index

As of September 15, 1988

Prepared for
Region I
Waste Management Division
U.S. Environmental Protection Agency

With Assistance from
AMERICAN MANAGEMENT SYSTEMS, INC.
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**Iron Horse Park
NPL Site Administrative Record**

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Administrative Record Index

Introduction

This document is the Index to the Administrative Record for the Iron Horse Park National Priorities List (NPL) site. Section I of the Index cites site-specific documents, and Section II cites guidance documents used by EPA staff in selecting a response action at the site.

The Administrative Record is available for public review at EPA Region I's Office in Boston, Massachusetts, and at the Billerica Public Library, 25 Concord Road, Billerica, Massachusetts, 01821. Questions concerning the Administrative Record should be addressed to the EPA Region I site manager.

The Administrative Record is required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA).

Section I

Site-Specific Documents

ADMINISTRATIVE RECORD INDEX**for the****Iron Horse Park NPL Site****1.0 Pre-Remedial****1.2 Preliminary Assessment**

1. "Preliminary Site Assessment of the Iron Horse Park Facility," NUS Corporation (May 23, 1983).

1.3 Site Inspection

1. "Final Report for Iron Horse Park Site Inspection Report," NUS Corporation (September 12, 1984).

2.0 Removal Response**2.9 Action Memoranda**

1. Memorandum from Robert J. Ankstus, EPA Region I to Michael R. Deland, EPA Region I (June 26, 1984).
2. Memorandum from Michael R. Deland, EPA Region I to Lee M. Thomas, EPA Headquarters (October 3, 1984).
3. Memorandum from William N. Hedeman, Jr., EPA Headquarters to Lee Thomas, EPA Headquarters (October 12, 1984).

3.0 Remedial Investigation (RI)**3.1 Correspondence**

1. Memorandum from John Gallagher, EPA Region I to Robert Bois, Commonwealth of Massachusetts Department of Environmental Quality Engineering (January 13, 1988).

3.2 Sampling and Analysis Data

The Sampling and Analysis and Contract Laboratory Program (CLP) Data for the Remedial Investigation (RI) may be reviewed, by appointment only, at EPA Region I, Boston, Massachusetts.

3.5 Applicable or Relevant and Appropriate Requirements (ARARs)

1. Letter from Richard Cavagnero, EPA Region I to Madeline Snow, Commonwealth of Massachusetts Department of Environmental Quality Engineering (March 12, 1987).
2. List of State Requirements, Dodie Brownlee, Commonwealth of Massachusetts Department of Environmental Quality Engineering (July 28, 1987).
3. Memorandum from John Gallagher, EPA Region I to Margaret Leshen, Gretchen Muench and Ira Leighton, EPA Region I (March 31, 1988) (CONFIDENTIAL).

3.6 Remedial Investigation (RI) Reports

1. "Draft Phase 1A Remedial Investigation for the Iron Horse Park Site," Camp Dresser & McKee Inc. (July 1987).
2. Appendices A through C for "Preliminary Draft Phase 1A Remedial Investigation for the Iron Horse Park Site," Camp Dresser & McKee Inc. (July 1987).
3. Appendix D for "Preliminary Draft Phase 1A Remedial Investigation for the Iron Horse Park Site," Camp Dresser & McKee Inc. (July 1987).
4. "Draft Phase 1B Remedial Investigation for the Boston and Maine Wastewater Lagoon Area - Iron Horse Park Site," Camp Dresser & McKee Inc. (May 1988).
5. Appendices A through C for "Draft Phase 1B Remedial Investigation for the Boston and Maine Wastewater Lagoon Area - Iron Horse Park Site," Camp Dresser & McKee Inc. (May 1988).
6. Appendices D and E for "Draft Phase 1B Remedial Investigation for the Boston and Maine Wastewater Lagoon Area - Iron Horse Park Site," Camp Dresser & McKee Inc. (May 1988).

3.7 Work Plans and Progress Reports

1. "Work Plan Memorandum for Iron Horse Park Remedial Investigation/ Feasibility Study," Camp Dresser & McKee Inc. (October 18, 1984).
2. "Project Operations Plan for Iron Horse Park Remedial Investigation," Camp Dresser & McKee Inc. (February 27, 1985).
3. "Work Plan for Iron Horse Park Remedial Investigation/Feasibility Study - Volume I: Technical Scope of Work," Camp Dresser & McKee Inc. (May 10, 1985).
4. "Work Assignment Amendment No. 2 - Iron Horse Park Site - Remedial Investigation/Feasibility Study," Camp Dresser & McKee Inc. (May 22, 1986).
5. "Work Plan Amendment No. 3 - Iron Horse Park - Remedial Investigation/ Feasibility Study," Camp Dresser & McKee Inc. (March 31, 1987).
6. "Work Plan Amendment No. 5 - Iron Horse Park - Remedial Investigation/ Feasibility Study," Camp Dresser & McKee Inc. (June 5, 1987).

3.12 Action Memoranda

1. Memorandum from Merrill S. Hohman, EPA Region I to Michael R. Deland, EPA Region I (September 19, 1984).
2. Memorandum from Merrill S. Hohman, EPA Region I to William N. Hedeman, Jr., EPA Headquarters (September 19, 1984).

4.0 Feasibility Study (FS)

4.1 Correspondence

1. Memorandum from John Gallagher, EPA Region I to Robert Bois, Commonwealth of Massachusetts Department of Environmental Quality Engineering (February 26, 1988).
2. Technical Memorandum: "Feasibility Study of a Bioremediation Alternative for the B & M Lagoons, Document #132-FS2-ET-GCEW-1," Richard Christian and Andrea Sewall, Camp Dresser & McKee Inc. (April 26, 1988).
3. Letter from John Gallagher, EPA Region I to Dodie Brownlee, Commonwealth of Massachusetts Department of Environmental Quality Engineering (April 28, 1988).

4.1 Correspondence (cont'd.)

4. Letter from John Gallagher, EPA Region I to Robert Bois, Commonwealth of Massachusetts Department of Environmental Quality Engineering (July 21, 1988).

4.5 Applicable or Relevant and Appropriate Requirements (ARARs)

1. Memorandum from John Gallagher, EPA Region I to File (September 14, 1988).

4.6 Feasibility Study (FS) Reports

Feasibility Study (FS) Reports

1. "Draft Feasibility Study for the Boston & Maine Wastewater Lagoon Area - Iron Horse Park Site," Camp Dresser & McKee Inc. (June 1988).

Feasibility Study (FS) Reports Comments

1. Comments Dated July 7, 1988 from Robert Bois, Commonwealth of Massachusetts Department of Environmental Quality Engineering on the June 1988 "Draft Feasibility Study for the Boston & Maine Wastewater Lagoon Area - Iron Horse Park Site," Camp Dresser & McKee Inc.

4.7 Work Plans and Progress Reports

1. Cross-Reference: "Work Plan Memorandum for Iron Horse Park Remedial Investigation/Feasibility Study," Camp Dresser & McKee Inc. (October 18, 1984) [Filed and cited as entry number 1 in 3.7 Work Plans and Progress Reports].
2. Cross-Reference: "Work Plan for Iron Horse Park Remedial Investigation/Feasibility Study - Volume I: Technical Scope of Work," Camp Dresser & McKee Inc. (May 10, 1985) [Filed and cited as entry number 3 in 3.7 Work Plans and Progress Reports].
3. Cross-Reference: "Work Assignment Amendment No. 2 - Iron Horse Park Site - Remedial Investigation/Feasibility Study," Camp Dresser & McKee Inc. (May 22, 1986) [Filed and cited as entry number 4 in 3.7 Work Plans and Progress Reports].
4. Cross-Reference: "Work Plan Amendment No. 3 - Iron Horse Park - Remedial Investigation/Feasibility Study," Camp Dresser & McKee Inc. (March 31, 1987) [Filed and cited as entry number 5 in 3.7 Work Plans and Progress Reports].
5. Cross-Reference: "Work Plan Amendment No. 5 - Iron Horse Park - Remedial Investigation/Feasibility Study," Camp Dresser & McKee Inc. (June 5, 1987) [Filed and cited as entry number 6 in 3.7 Work Plans and Progress Reports].

4.9 Proposed Plans for Selected Remedial Action

1. "EPA Region I Superfund Program Proposed Plan - Iron Horse Park Site - Billerica, Massachusetts," EPA Region I (May 1988).

5.0 Record of Decision (ROD)

5.1 Correspondence

1. Letter from Margaret Leshen, EPA Region I to Robert Bois, Commonwealth of Massachusetts Department of Environmental Quality Engineering (February 5, 1988).
2. Letter from John Gallagher, EPA Region I to Robert Bois, Commonwealth of Massachusetts Department of Environmental Quality Engineering (August 2, 1988).

5.3 Responsiveness Summaries

1. Cross-Reference: "Final Responsiveness Summary," EPA Region I (September 1988) [Filed and cited as entry number 1 in 5.4 Record of Decision (ROD) as Appendix A].
2. Transcript, Feasibility Study and Proposed Plan Public Meeting for the Lagoon Area at the Iron Horse Park Superfund Site, EPA Region I (June 23, 1988).

5.4 Record of Decision (ROD)

1. "Record of Decision," EPA Region I (September 15, 1988).

10.0 Enforcement

10.3 State and Local Enforcement Records

1. Administrative Order, *In the Matter of Boston & Maine Corporation*, Docket No. 581, (May 29, 1985).
2. Letter from John W. Morris, Town of Billerica Board of Health to Boston & Maine Corporation (December 28, 1987).
3. Administrative Order, *In the Matter of Boston & Maine Corporation*, Docket No. 723, (February 4, 1988).

13.0 Community Relations

13.1 Correspondence

1. Cross-Reference: Letter from John Gallagher, EPA Region I to Dodie Brownlee, Commonwealth of Massachusetts Department of Environmental Quality Engineering (April 28, 1988) [Filed and cited as entry number 2 in 4.1 Correspondence].

13.2 Community Relations Plans

1. "Community Relations Plan - Iron Horse Park - Billerica, Massachusetts," (August 1985).

13.3 News Clippings/Press Releases

1. "Environmental News - Public Meeting to Describe Proposed Cleanup Plan for Lagoons at the Iron Horse Park Superfund Site Announced," EPA Region I (June 1, 1988).

13.4 Public Meetings

1. Cross-Reference: Transcript, Feasibility Study and Proposed Plan Public Meeting for the Lagoon Area at the Iron Horse Park Superfund Site (June 23, 1988) [Filed and cited as entry number 2 in 5.3 Responsiveness Summaries].

13.5 Fact Sheets

1. Cross-Reference: "EPA Region I Superfund Program Proposed Plan - Iron Horse Park Site - Billerica, Massachusetts," EPA Region I (May 1988) [Filed and cited as entry number 1 in 4.9 Proposed Plan for Selected Remedial Action].

13.6 Mailing Lists

1. Mailing List of Media Contacts, Members of the Public, EPA Contacts, and State Officials (May 26, 1988).

16.0 Natural Resource Trustee

16.2 Interagency Agreements/Memoranda of Understanding

1. "Interagency Agreement/Amendment" Form, EPA Region I and U.S. Department of the Interior, Fish & Wildlife Service (September 26, 1985).

16.4 Trustee Notification Form and Selection Guide

1. "Trustee Notification Form," EPA Region I.

17.0 Site Management Records

17.8 State and Local Technical Records

1. "Sewer System Evaluation Study - Iron Horse Park," Green International Affiliates, Inc. (September 1985).

Section II
Guidance Documents

GUIDANCE DOCUMENTS

EPA guidance documents and the Commonwealth of Massachusetts laws and regulations relied upon for this decision document may be reviewed at EPA Region I, Boston, Massachusetts.

General EPA Guidance Documents

1. Comprehensive Environmental Response, Compensation, and Liability Act of 1980, amended October 17, 1986.
2. Memorandum from Francis S. Blake, General Counsel, to J. Winston Porter, Assistant Administrator for Solid Waste and Emergency Response, July 31, 1987 (discussing the scope of the CERCLA petroleum exclusion under sections 101(14) and 104(a)(2)).
3. Memorandum from J. Winston Porter to the U.S. Environmental Protection Agency, July 9, 1987 (discussing interim guidance on compliance with applicable or relevant and appropriate requirements).
4. "National Oil and Hazardous Substances Pollution Contingency Plan," Code of Federal Regulations (Title 40, Part 300), 1985.
5. U.S. Environmental Protection Agency. Office of Emergency and Remedial Response. Community Relations in Superfund: A Handbook (Interim Version) (EPA/HW-6), September 1983.
6. U.S. Environmental Protection Agency. Office of Emergency and Remedial Response. Draft Guidance on Conducting Remedial Investigations and Feasibility Studies under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act), March 1988.
7. U.S. Environmental Protection Agency. Office of Emergency and Remedial Response. Draft Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites (OSWER Directive 9283.1-2), October 1986.
8. U.S. Environmental Protection Agency. Office of Emergency and Remedial Response. Superfund Public Health Evaluation Manual (OSWER Directive 9285.4-1), October 1986.
9. U.S. Environmental Protection Agency. Office of Ground-Water Protection. Ground-Water Protection Strategy, August 1984.
10. U.S. Environmental Protection Agency. Office of Solid Waste and Emergency Response. Additional Interim Guidance for Fiscal Year 1987 Record of Decisions, July 24, 1987.
11. U.S. Environmental Protection Agency. Office of Solid Waste and Emergency Response. Data Quality Objectives for Remedial Response Activities: Development Process (EPA/540/G-87/003), March 1987.
12. U.S. Environmental Protection Agency. Office of Solid Waste and Emergency Response. Guidance on Feasibility Studies under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) (EPA/540/G-85/003), June 1985.
13. U.S. Environmental Protection Agency. Office of Solid Waste and Emergency Response. Guidance on Remedial Investigations under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) (EPA/540/G-85/002), June 1985.

14. U.S. Environmental Protection Agency. Office of Solid Waste and Emergency Response. Interim Guidance on Superfund Selection of Remedy (OSWER Directive 9355.0-19), December 24, 1986.

**RECORD OF DECISION
BOSTON & MAINE WASTEWATER LAGOONS At IRON HORSE PARK**

APPENDIX C

STATE CONCURRENCE



The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

Department of Environmental Quality Engineering

One Winter Street, Boston 02108

Daniel S. Greenbaum
Commissioner

September 13, 1988

Michael R. Deland
Regional Administrator
U. S. EPA
JFK Federal Building
Boston, MA 02203

RE: Billerica - Concurrence with
ROD for Iron Horse Park
Superfund Site - Boston & Maine
Lagoons

Dear Mr. Deland:

The Department of Environmental Quality Engineering (the Department) has reviewed the preferred remedial action alternative that EPA is recommending for the Boston & Maine lagoons at the Iron Horse Park federal Superfund site. The Department concurs with the selection of the preferred alternative for the lagoons.

The Department has evaluated EPA's preferred alternative for consistency with M.G.L. Chapter 21E as amended in November 1986. The Department has determined that the preferred alternative, bioremediation, is consistent with the overall permanency requirements of M.G.L. Chapter 21E. Chapter 21E encourages implementing remedies on portions of a site to address the pressing hazards. A determination, however, that a permanent solution has been achieved can not be made until it has been demonstrated that a selected remedial measure or combination of measures will meet the Total Site Risk Limits as defined in 310 CMR 40.00 for the entire site.

The Department looks forward to working with you in implementing the preferred alternative. If you have any questions or require additional information please contact Dodie Brownlee at 292-5579.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Daniel S. Greenbaum".

Daniel S. Greenbaum

DSG/lgw

cc: Richard Chalpin, NERO



Daniel S. Greenbaum
Commissioner

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Quality Engineering
Division of Hazardous Waste
One Winter Street, Boston, Mass. 02108

September 14, 1988

John Gallagher
U. S. EPA
JFK Federal Building
Boston, MA 02203
Mail Stop: HEC - CAN6

RE: Iron Horse Park
Superfund site -
B & M Lagoons

Dear John:

The following Massachusetts environmental regulations are applicable or relevant and appropriate to the selected remedial action for the B & M Lagoons at Iron Horse Park:

Massachusetts Regulations for the Land Application of Sludge and Septage
(310 CMR 32)
Massachusetts Groundwater Discharge Permit Program (314 CMR 5.00)
Massachusetts Air Quality Regulations (310 CMR 6.00-8.00)
Massachusetts Wetlands Protection Regulations (310 CMR 10.00)

The ROD for the B & M lagoons complies with the above regulations.

Very truly yours,

A handwritten signature in cursive script that reads "Robert Bois".

Robert Bois,
MA Federal Superfund Coordinator

RBB/lgw

cc: Dodie Brownlee
Dick Chalpin