U.S. Environmental Protection Agency (EPA) - Region I
RCRA Corrective Action Program

Statement of Basis
For a
Corrective Action Completion Determination

FOR

Fort Barton Industries/JGR Associates
33 Graystone Street, Warwick, Rhode Island
EPA ID No. RID089351472

October 27, 2009

Based upon environmental investigations conducted at the former Fort Barton Industries facility, located at 33 Graystone Street in Warwick, Rhode Island, EPA is announcing its Completion Determination remedy proposal that Corrective Action obligations under the Hazardous and Solid Waste Amendments of the Resource Conservation and Recovery Act are "Complete without Controls."

Introduction

The U.S. Environmental Protection Agency - Region I (hereafter, "EPA") is announcing its Completion Determination remedy proposal under the Hazardous and Solid Waste Amendments (HSWA) of the Resource Conservation and Recovery Act (RCRA).[1] This proposal states that Corrective Action obligations at the former Fort Barton Industries facility, located at 33 Graystone Street in Warwick, Rhode Island (hereafter, "Facility" or

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[1] "Completion Determination" is a regulatory phrase that refers to a final disposition of a facility subject to Corrective Action obligations under the Resource Conservation and Recovery Act. In this case, the Completion Determination proposed for the Facility is one that is "Complete without Controls." More information on this category of Completion Determination can be found in the Federal Register notice entitled, Final Guidance on Completion of Corrective Action Activities at RCRA Facilities, 68 Fed. Reg. 8757 (Proposed Rule; Tuesday, February 25, 2003). This proposed rule is summarized for convenience on EPA's website at http://www.epa.gov/swerffrr/documents/guidance_on_completion_rcra.htm (accessed October 16, 2009).

"Site") are "Complete without Controls". Environmental investigations conducted at the Facility demonstrate that releases of hazardous wastes or hazardous constituents are below State clean up standards and do not pose an unacceptable risk to human health and the environment under current and future site uses. EPA's proposed Completion Determination is based on the results of investigations conducted by the Facility under direct State oversight during 1993 and 1994 and site visits and record reviews conducted by EPA in 2008 and 2009.

This document summarizes the regulatory status of the Facility, the results of various investigation and remediation activities performed at and around the Facility, and the reasons for proposing that a Completion without Controls determination is appropriate. EPA is publishing this document to provide an opportunity for public review and comment. EPA will consider all public comments as part of its decision making process.

This Statement of Basis is intended to:

- Explain the opportunities for **public participation**, including how the public may comment on this proposed Completion Determination and where the public can find more detailed information;
- Provide a brief **description and history of the Facility**;
- Present the principal **findings of investigations and remediation activities** performed to date; and,
- Present **EPA's rationale** for proposing that Corrective Action obligations under the Hazardous and Solid Waste Amendments of the Resource Conservation and Recovery Act are Complete without Controls for the proposed current and future land use of the Site.

THE PUBLIC'S ROLE IN EVALUATING THIS CORRECTIVE ACTION PROPOSAL/ RECOMMENDATION

All interested persons are invited to express their views on this proposal. Public comment on Corrective Action Determination proposals is an important contribution to EPA's decision making process.

Public Comment Period
Written comments on this proposal will be accepted throughout the public comment period.

The public comment period will last thirty (31) days from October 27, 2009 thru November 27, 2009. During this public comment period, the public is invited to review this Statement of Basis and supporting information, and to submit comments to EPA.

A final decision regarding this proposed Completion Determination will not be made until the public comment period has closed and all comments received by EPA have been evaluated and addressed. EPA may modify this proposal based on any new information or substantive comments received from the public.

Written Comments
If, after reviewing the information on the Facility, you would like to comment in writing on this proposal, or on any other issues related to this proposal, you should mail your written comments (postmarked no later than **November 27, 2009**) to:

U.S. Environmental Protection Agency
One Congress Street
Boston, Massachusetts 02114-2023

Attention: Frank Battaglia, Suite 1100-HBT

Please be sure to clearly indicate that you are commenting on this proposal.

Questions may be directed to Frank Battaglia at (617) 918-1362, or battaglia.frank@epa.gov

EPA Review of Public Comments; EPA's Decision Making Process
EPA will review comments received from the public as part of the process of reaching a final decision regarding the most appropriate action at the Facility.

If EPA receives comments, then a brief decision making document (Decision Document) will be prepared by EPA to address all significant comments received during the public comment period. If the comments result in significant changes to this proposal, EPA will seek additional public comments on a revised proposal.

If no comments are received that result in significant changes to this proposal, EPA's final decision will be issued in a brief letter to the Facility and any interested parties of record.

Additional Public Information

This Statement of Basis provides only a summary description of the facility investigation and other activities performed at the Facility. Therefore, the public is encouraged to consult the **Administrative Record**. As explained in more detail below, the Administrative Record is that collection of information (including data, reports, etc.) that EPA relied upon for its proposed remedy decision. In this case, the Administrative Record contains this Statement of Basis, the results of site sampling investigations, the hazardous waste closure plan and the closure notification letter from the Rhode Island Department of Environmental Management (RIDEM).

The Administrative Record is available for review at the following locations:

EPA Records Center
One Congress Street
Boston, Massachusetts 02114
(617) 918-1420

The Warwick Public Library, Reference Department
600 Sandy Lane
Warwick, Rhode Island 02889
(401) 739-5440

The RI DEM Office of Waste Management
235 Promenade Street
Providence, Rhode Island 02908
Contact Yan LI (401) 222-2797 x7529 for an appointment

BACKGROUND

Facility History

The Fort Barton Industries/JGR Associates facility located at 33 Graystone Street in Warwick, Rhode Island (EPA ID # RID089351472) is currently listed as a closed RCRA hazardous waste treatment, storage and disposal (TSD) facility. The facility was officially closed under RIDEM oversight in 1995. The facility closure included removal of all hazardous waste and cleanup and/or removal of all floors, storage drums and treatment equipment within the building, all conducted pursuant to a RIDEM approved closure plan.

The facility originally was in operation under the name Keltek Processing from 1978 to 1981. At that time it had a silver recovery process for x-ray film. Facility operations also included collecting oils, oil/water mixtures, alcohols, some non-chlorinated solvents and metal bearing solutions and sludge. The facility accepted these wastes from other facilities and stored the materials in tanks and drums. The various treatment technologies utilized included metals recovery, oil/water separation and cyanide neutralization/destruction. There were no known underground tanks at the facility. In addition, the facility recovered energy from oils and solvents using a rotary kiln boiler. The Fort Barton facility was formed in 1981 when it acquired land, 2 buildings and the operations from Keltek Processing.

During the late 1980's, the facility split into 2 entities, the current building at 33 Graystone Street which is the Fort Barton facility, and the remaining building which became the Eticam/Stablex (Eticam) facility, which is not part of this Statement of Basis.

In the late 1980's, the facility applied to RIDEM for a RCRA permit to continue to operate as a hazardous waste management facility. This permit was never issued by RIDEM and as a result the facility ceased operations and closed. JGR Associates is the current property owner and Fort Barton Industries is no longer a viable entity. The site is presently leased by Droitcour Company and is utilized for the manufacturing of metal parts. The facility is no longer a RCRA hazardous waste management facility.

Facility Setting

The facility is approximately 1.5 acres located in an industrial zoned area. Abutting land use is zoned commercial/industrial and there are no direct residential abutters. The facility is bordered to the east by the Day One site at 31 Graystone Street, to the south by the former Eticam site, to the north by an electric company easement and to the west by a wooded area. The only structure on the

property is the Fort Barton building which is a poured concrete slab on grade with concrete block walls. Asphalt paving surrounds the building.

The groundwater is classified by RIDEM as GB which is not for human consumption without treatment. There are no known drinking water wells in the area and drinking water is provided by the Providence water supply system for both businesses and residences. Groundwater flow is generally from the east to the west across the site and is about 25 feet below the ground surface. Bedrock is encountered at 90 feet below grade. **See the attached figure for the facility location.**

Hazardous Waste Operations and Release History

In 1978, the facility operated under the name of Keltek Processing and accepted oils, cyanides, acid/alkali solutions and metal bearing solutions/sludge. The Facility managed hazardous waste at three (3) Solid Waste Management Units (SWMUs). SWMU 1 was an oil/water separator. SWMU 2 was a rotary kiln waste heat boiler with scrubber which dried sludge and burned oil for heat recovery. SWMU 3 was a 55 gallon drum storage area. The floor underlying all these SWMUs was of poured concrete construction and there were no visible cracks or imperfections. There was a containment system for each SWMU that would prevent a spill of waste from escaping the area. **See the attached figure for a floor plan of the facility.**

There were no reported releases to the environment from SWMUs 1 & 3. There was a minor release of acidic water from SWMU 2, within the building, which was found by RIDEM in a 1981 facility inspection. The release did not impact the environment and was corrected as reported by RIDEM in 1981. Since that release there have been no known releases at the facility.

Results of Remediation and Groundwater Sampling

There has been no on-site remediation of hazardous waste releases conducted at the facility since there are no known releases to the environment. As part of the TSD requirements, the facility installed four (4) groundwater monitoring wells, one on each side of the facility. These wells were sampled several times during the early 1990s and analyzed for metals and volatile organic compounds. The last groundwater sampling event was in October of 1993. Sampling results indicated levels of Tetrachloroethylene (PCE) at 635 parts per billion (ppb) in MW-3. This well is on the north side of the building and the level is above the current RIDEM GB Objective of 150ppb of PCE in groundwater. The other wells did not have any contaminants above the RIDEM GB or GA Objectives. **See the attached figure for monitoring well locations.**

A review of previous groundwater sampling results at MW-3 showed that the levels of PCE were much higher in 1992. This indicated that the levels of PCE were trending down over time and is indicative of a one time release. There is no recorded release of PCE or the use of PCE at the facility. EPA discussions with the current property owner and a review of the RIDEM files identified an up-gradient release of PCE at the adjacent property on 31 Graystone Street. This release was approximately 50 feet up-gradient of the MW-3 well on the Fort Barton property. A site investigation report in 1998 of the 31 Graystone Street facility indicated a release of polyurethane resin and PCE containing solvents occurred at the former Mearthane Products Corporation located at 31 Graystone Street. According to Warwick Fire Department records, this release occurred in 1978. These chemicals were stored in drums and were possibly released during a fire at the Mearthane facility since damaged drums were found within the fire debris along the north wall of the building.

The first site investigation at 31 Graystone Street, now named Day One building, was conducted by Lincoln Environmental in 1989. Results of the investigation indicated the highest levels of PCE contamination at 24,160 ppb in the well located at the northwest corner of the Day One building. This well is 50 feet hydraulically up-gradient of the Fort Barton MW-3 well, which is the only Fort Barton well with levels of PCE above the RIDEM standard. A soil vapor extraction system was installed at the Day One Building in January 1990 and operated until June 1991. It reduced levels of PCE in groundwater down to 6100 ppb, but the levels fluctuated. A subsequent site investigation report for the Day One Building was prepared by Hoffman Engineering in 1998, and was updated in 2004, to assess other clean up options. In 2006, RIDEM approved the most recent clean up which used a new soil vapor extraction system. This system operated from October 2006 until March 2009. RIDEM has required the owners of the Day One building to conduct groundwater monitoring to assess compliance with the RIDEM GB Groundwater Objectives. The first of four (4) quarterly groundwater sampling events was conducted in the summer of 2009. Results indicated that the RIDEM GB Groundwater Objectives have been met. Sampling will continue into 2010 to verify that the GB Groundwater Objectives continue to be met.

Conclusions

EPA believes that the contaminated well at the Fort Barton facility was contaminated by the hydraulically up-gradient release at the Day One Facility located at 31 Graystone Street. EPA believes that the release at the Day One Facility has been cleaned up and that groundwater meets RIDEM GB Objectives at

the Day One Facility and at the Fort Barton Facility. Therefore, no further action including groundwater monitoring is necessary at the Fort Barton Facility.

EPA'S PROPOSAL

Regulatory Basis and RIDEM Role

RIDEM has adopted regulations pertaining to RCRA Corrective Action that allow for the use of the RIDEM Remediation Regulations at RCRA Corrective Action facilities seeking a RCRA hazardous waste permit. The Fort Barton facility is a closed RCRA TSD facility and is not seeking a permit from RIDEM, therefore, it is necessary that EPA be involved in this remedy decision. EPA has reviewed and authorized the State's regulations and is using the GB Groundwater Objectives within these regulations as a basis for its determination that Corrective Action is Complete at the Fort Barton facility.

The facility has conducted closure of its hazardous waste operations under direct State oversight, in accordance with its approved closure plan. The facility has received closure approval by the RIDEM.

EPA Proposed Decision

EPA has used all available information in formulating its proposed decision. Based on the above information, EPA is proposing a Completion without Controls Determination for the Facility. In accordance with EPA guidance on Completion Determinations, EPA believes a Completion without Controls Determination is appropriate because:

(1) a full set of corrective measures has been defined;
(2) The up-gradient facility has completed construction and installation of all necessary remedial actions;
(3) site-specific media cleanup objectives have been met; and
(4) There are no operation and maintenance and monitoring actions, and/or institutional controls required at the Facility.

Final Guidance on Completion of Corrective Action Activities at RCRA Facilities, 68 Fed. Reg. 8757, 8762 (Proposed Rule: Tues., February 25, 2003) (hereafter, "**Final Guidance on Completion Determinations**"). [2]

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[2] Other EPA guidance that informs today's proposal includes: Announcement of Availability and Request for Comment on "Recognizing Completion of Corrective Action Activities at RCRA Facilities" Guidance. 66 Fed. Reg. 50195, 50197 (proposed Oct. 2, 2001) (hereafter, "**Corrective Action Completion Guidance 1**") and Announcement of Availability and Request for Comment on "Completion of Corrective Action Activities at RCRA Facilities" Guidance; Notice. 67 Fed. Reg. 9174 (proposed Feb. 27, 2002) (hereafter, "**Corrective Action Completion Guidance 2**").

Note: Notwithstanding this Completion Determination, EPA or an authorized State may conclude additional cleanup is needed if, subsequent to this Completion Determination, EPA or an authorized State discovers evidence of unreported or misrepresented releases. *See* Corrective Action Completion Guidance 1 at 50197; Corrective Action Completion Guidance 2 at 9177 n15.

EPA'S RATIONALE FOR DISCONTINUATION OF THE FACILITY'S CURRENT CORRECTIVE ACTION OBLIGATIONS

As briefly described above, EPA believes a Corrective Action "Complete without Controls" Completion Determination is appropriate for the following reasons: [3]

1. A full set of corrective measures has been defined and completed.
As a result of a sequence of investigation and remediation activities conducted both on-site and off-site under the purview of the RIDEM, the off-site contaminant source area and the nature and extent of contamination in groundwater has been identified. The source area has been remediated and no further remedial activities are necessary at the Fort Barton facility.

2. The up-gradient facility has completed construction and installation of all required remedial actions.
Remediation of the up-gradient source of contamination using a soil vapor extraction system was completed in 2009 and groundwater monitoring confirmed that the up-gradient facility was successful in reaching the RIDEM GB Groundwater Objective.

3. Site-specific media cleanup objectives have been met.
Following remediation, the RIDEM GB Groundwater Objectives were met at the up gradient site. Cleaning up to these Objectives does not pose a risk to human health or the environment under current or future use.

It is important to note that this Completion Determination proposal in no way affects the ongoing requirement of any property owner to conduct Corrective Action for any future releases found at the facility. *See* Final Guidance on Completion Determinations at 8761 n7.

Evaluation of Remedy with respect to Standards and Decision Factors

[3] Again, these decision making criteria may be found in the Final Guidance on Completion Determinations at 8762.

Significant flexibility is accorded to EPA in making completion determinations. *See* Corrective Action Completion Guidance 2 in 67 Fed. Reg. at 9177. EPA New England believes that, in addition to the rationale presented above, evaluation of the Facility with respect to Remedy Selection Criteria set forth in available EPA guidance provides a framework for measuring the effectiveness of a proposed remedy. *See* Corrective Action for releases from Solid Waste Management Units at Hazardous Waste Management Facilities, 61 Fed. Reg. 19432, 19449 (proposed May 1, 1996). These Remedy Selection Criteria are presented below:

Threshold Criteria:

Overall Protection. This completion determination proposal provides protection of human health and the environment. Specifically, the investigative work conducted by the facility demonstrates protection of human health and the environment for current and future use as an industrial manufacturing facility consistent with local zoning and applicable State groundwater uses.

Attainment of Media Cleanup Standards. This proposed completion determination attains Method 1 Soil Objectives and GB Groundwater Objectives established by RIDEM.

Controlling Sources of Releases. The available information demonstrates that there are no known historical on-site releases of hazardous materials to soil or groundwater that resulted in levels of contamination above the applicable State standards established by RIDEM. The up-gradient source of release affecting the facility is not the responsibility of the facility but it has been remediated to appropriate levels by the up-gradient property owner.

Compliance with Waste Management Standards. The proposed remedy complies with all applicable requirements for the management of solid wastes.

Balancing Criteria:

Long-term Reliability and Effectiveness. This remedy is effective and reliable with respect to the long-term since no institutional and/or engineering controls are needed. Therefore, this proposed Completion Determination provides for long-term reliability and effectiveness.

Reduction of Toxicity, Mobility, or Volume of Wastes. The toxicity, mobility and volume of waste impacting the environment as a result of Facility operations is at appropriate levels for the current and future use of the site.

Short-term Effectiveness. The proposed remedy is comprehensive in the short-term since there are no immediate risks to human health or the environment.

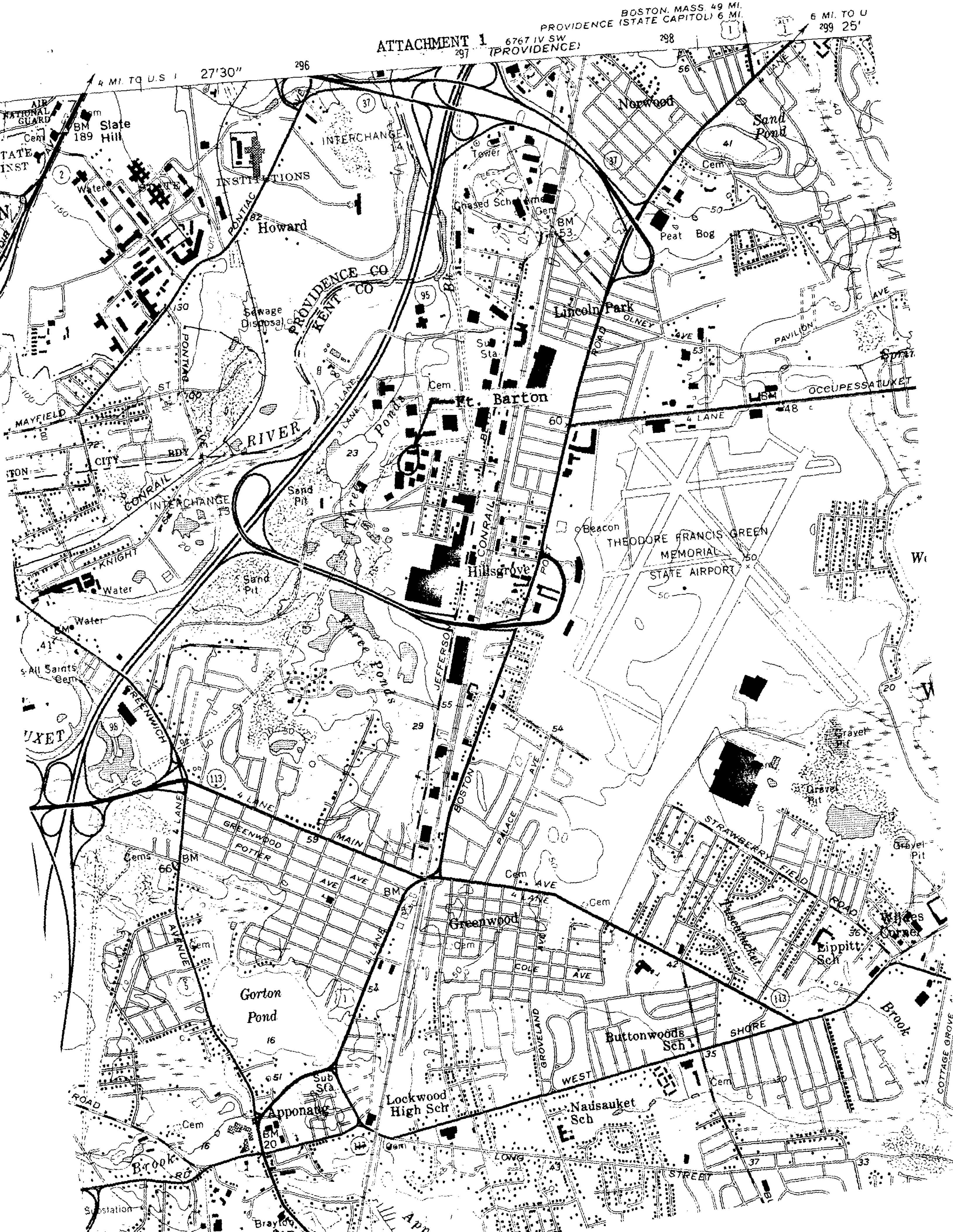
Implementability. This remedy is easily implemented since no further actions are required to protect human health and the environment other than compliance with the existing town zoning and State groundwater use regulations.

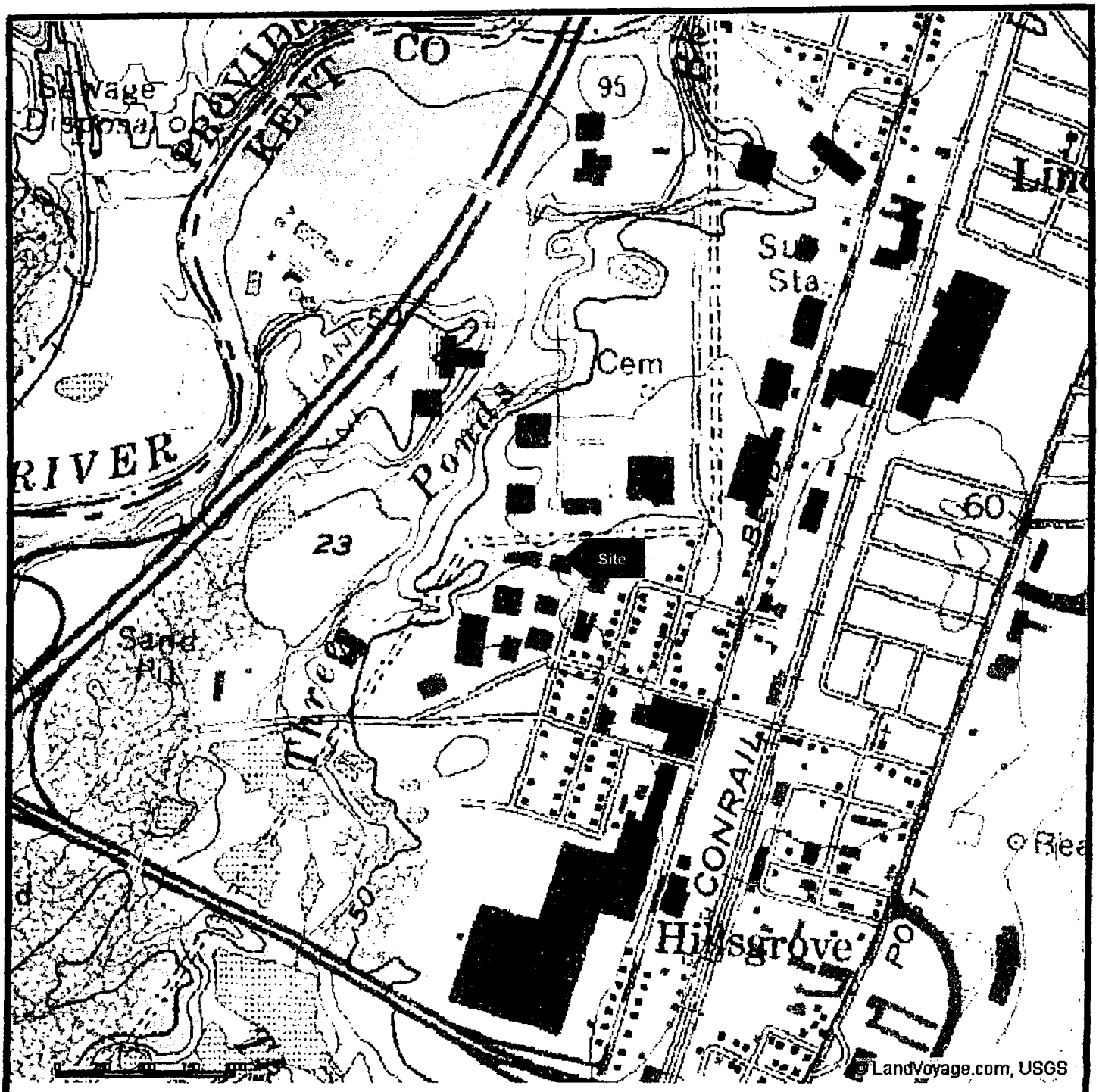
Cost. The Facility has spent significant time and money to demonstrate compliance with the State's cleanup and facility closure regulations. A Completion without Controls determination is appropriate for the facility given that there has been no release from the facility that required remediation.

In summary, EPA, using all available information, is announcing its Corrective Action "Completion without Controls" Determination remedy proposal. Since investigations performed at and around the Facility demonstrate that any hazardous constituents remaining on-site are below the GB Groundwater Objectives promulgated by the RIDEM and do not pose an unacceptable risk to human health or the environment under current and future site uses, a Completion without Controls Determination is reasonable and appropriate

c:\wp\data\Fort Barton-Statement of Basis

ATTACHMENT 1





HEI

HOFFMAN ENGINEERING, INC.
640 Ten Rod Rd.
North Kingstown, RI 02852

LOCUS MAP

Day One Manufacturing
31 Graystone Street
Warwick, Rhode Island

N

Date: 10-25-05

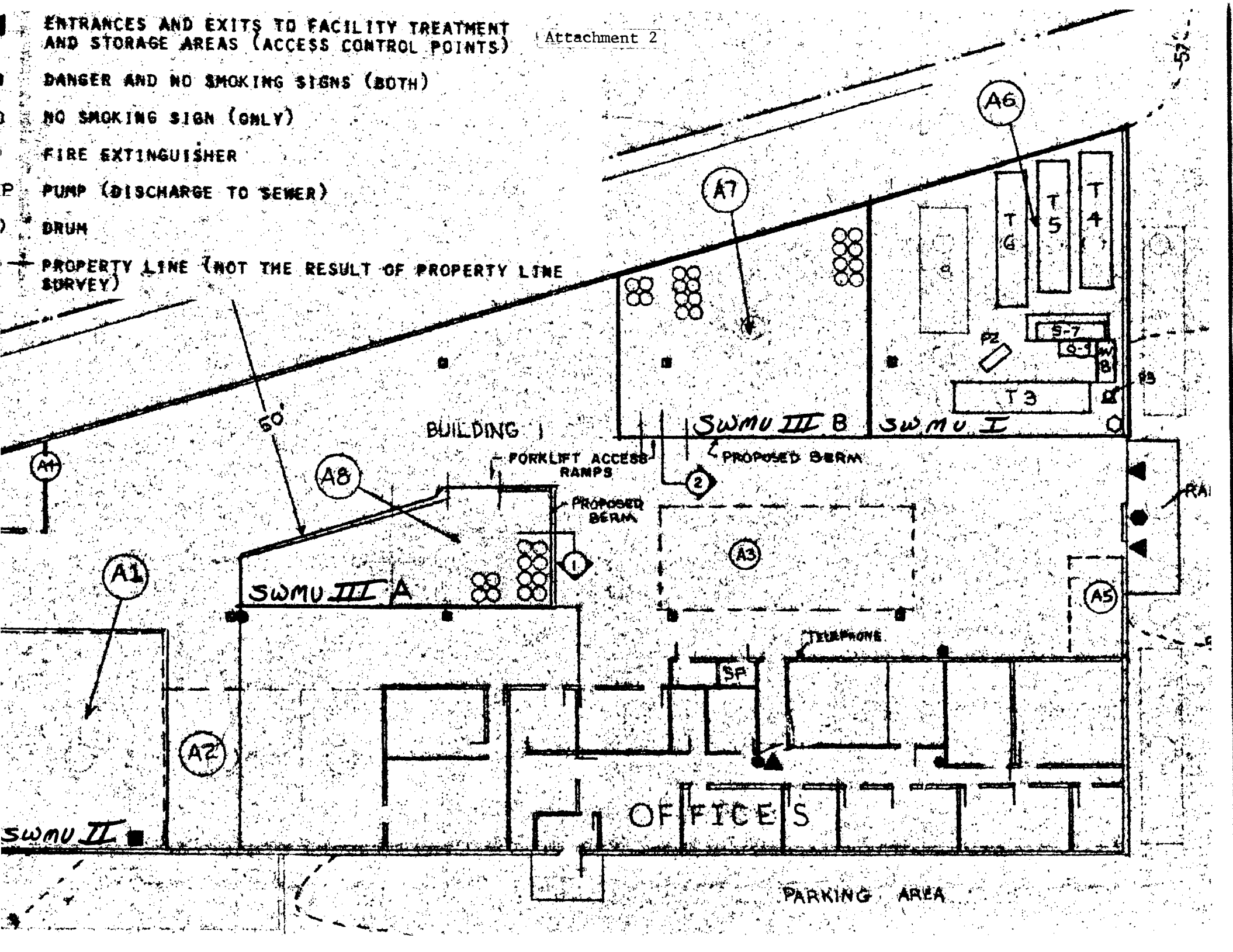
By: BLR

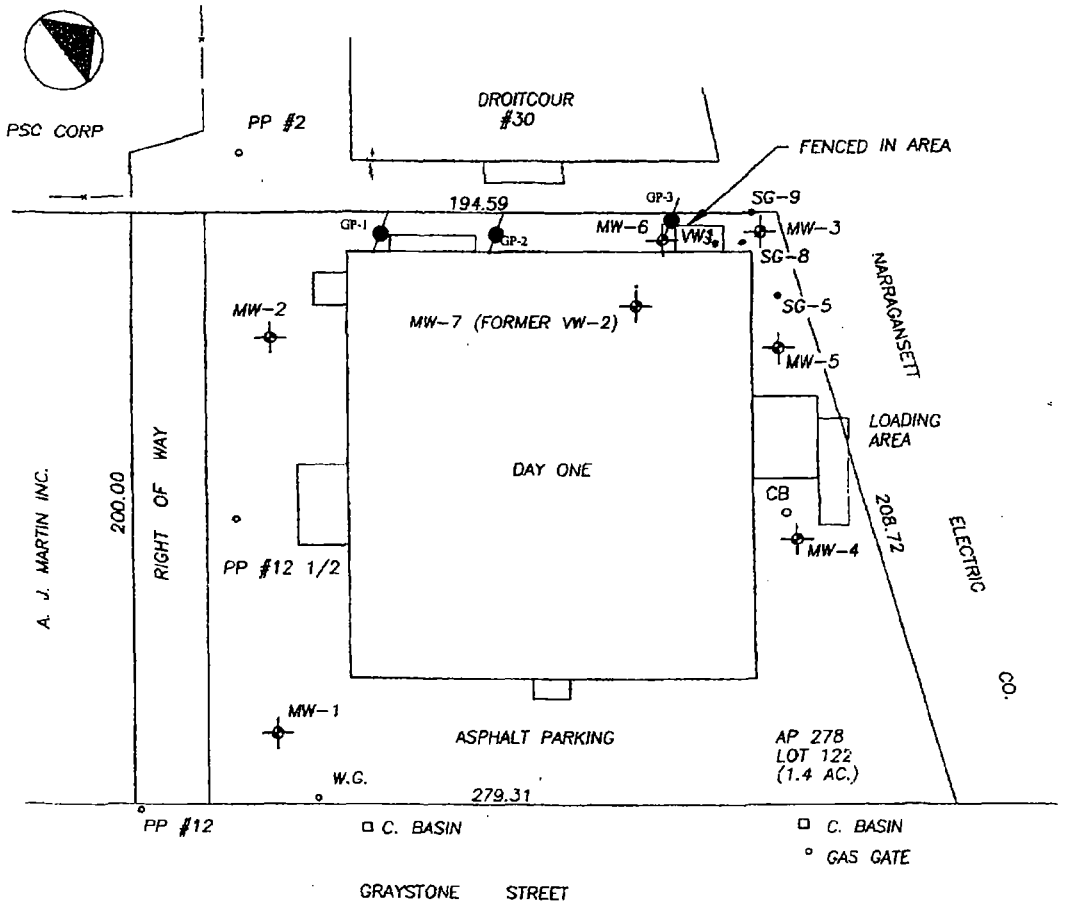
Base Map USGS

Scale: ±1:2400

Figure 1

Attachment 2





KEY

- MONITORING WELL LOCATION
- SOIL GAS POINTS
- Geoprobe well installed 6/05

NOTE: VW-1 THROUGH VW-3 DESIGNATIONS DEDUCED FROM PREVIOUS LINCOLN ENVIRONMENTAL WORK

HEI
HOFFMAN ENGINEERING INC.
NORTH KINGSTOWN, RHODE ISLAND

MONITORING/SITE PLAN
DAY ONE MANUFACTURING CO.
31 GRAYSTONE STREET
WARWICK, RHODE ISLAND

Scale: 1" = 40'
Date: 12/22/97
By: BERGDEN
FIGURE 2