

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) - REGION I  
RCRA CORRECTIVE ACTION PROGRAM

**STATEMENT OF BASIS  
FOR A  
CORRECTIVE ACTION COMPLETION DETERMINATION**

FOR

**FORMER 21<sup>ST</sup> CENTURY ENVIRONMENTAL MANAGEMENT FACILITY  
(PHILIP SERVICES CORP)**  
25 GRAYSTONE STREET, WARWICK, RHODE ISLAND  
EPA ID. No. RID980906986

AUGUST 29, 2013

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Based upon environmental investigations conducted at the former 21<sup>st</sup> Century Environmental facility, located at 25 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."

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## 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).<sup>1</sup> This proposal states that Corrective Action obligations at the former 21<sup>st</sup> Century

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<sup>1</sup> "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 [http://www.epa.gov/swerffrr/documents/guidance\\_on\\_completion\\_rcra.htm](http://www.epa.gov/swerffrr/documents/guidance_on_completion_rcra.htm) (accessed October 16, 2009).

Environmental Management facility, located at 25 Graystone Street in Warwick, Rhode Island (hereafter, "Former Facility" or "Former Site") are "Complete without Controls". Environmental investigations conducted at the Former Facility indicate that hazardous constituents in the groundwater 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. In addition, there were no documented releases of hazardous waste from the Former Facility and the Rhode Island Department of Environmental Management (RIDEM) approved the Former Facility closure on June 11, 2001. EPA's proposed Completion Determination is based on the results of investigations conducted by the Former Facility under direct State oversight during 1999 and 2000 and a site visit and record reviews conducted by EPA in 2013.

This document summarizes the regulatory status of the Former Facility, the results of various investigation and remediation activities performed at and around the Former 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 Former 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 (30) days starting August 29, 2013 thru September 27, 2013.** 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 Former 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 **September 27, 2013**) to:

U.S. Environmental Protection Agency  
5 Post Office Sq. Suite 100  
Boston, Massachusetts 02109-3912

Attention: Frank Battaglia, OSRR07-3

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](mailto: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 Former 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 Former Facility and any interested parties of record.

Additional Public Information

This Statement of Basis provides only a summary description of the Former Facility investigation and other activities performed at the Former 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 groundwater sampling investigations, the hazardous waste final closure report, the closure approval letter from the RIDEM and other pertinent correspondence.

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

EPA Records Center  
5 Post Office Square  
Boston, Massachusetts 02109-3912  
(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 Mark Dennen (401) 222-2797 x7112 for an appointment

## BACKGROUND

### Former Facility History

The former 21<sup>st</sup> Century Environmental Management facility located at 25 Graystone Street in Warwick, Rhode Island (EPA ID # RID980906986) is currently listed as a closed RCRA hazardous waste treatment, storage and disposal (TSD) facility. The Former Facility ceased operations in 1999 and the final closure report was approved by the RIDEM on June 11, 2001. The Former Facility closure included removal of all hazardous waste, decontamination of all equipment and containment surfaces and dismantling and removal of tanks and reactors within the building. All activities were conducted pursuant to a RIDEM approved closure plan and with State oversight.

The Former Facility was in operation from 1986 to 1999 under a RIDEM hazardous waste management permit. The Former Facility received, stored and treated hazardous waste in tanks. The wastes were processed through the Former Facility's treatment system which consisted of filter presses, PH neutralization tanks and reactor vessels. The Former Facility accepted metal hydroxide sludge, cyanide bearing solutions and other corrosives solutions. There were no known underground tanks managing hazardous waste at the Former Facility.

In the late 1980's, Eticam/Stablex was created from a portion of the former Fort Barton Industries, which was located at 25 & 33 Graystone Street in Warwick, RI. Eticam/Stablex occupied the 25 Graystone Street property and Fort Barton Industries continued to occupy the 33 Graystone Street property. Eticam/Stablex subsequently changed its name to 21<sup>st</sup> Century Environmental Management and was later purchased by Philip Services Corporation in 1987. The facility continued operations as 21<sup>st</sup> Century Environmental Management until all RCRA hazardous waste management activities ceased in 1999 and the facility was closed pursuant to the facility's RCRA closure plan in 2001.

In 2001, Philip Services Corp. sold the 25 Graystone Street property to Graystone Investments, LLC. The property is currently occupied by Scott's Lawn Service.

### Former Facility Setting

The Former Facility is approximately 1.5 acres located in an industrial zoned area. The site and all abutting sites are zoned commercial/industrial and there are no direct residential abutters. The Former Facility is bordered to the south and east by industrial buildings, to the north by the former Fort Barton Industries and to the west by a wooded area. The only structure on the property is the operations building which is a poured concrete slab on grade with concrete block walls. Asphalt paving surrounds the building.

Groundwater in the area is classified by the 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 to the west-northwest across the site and is about 25-30 feet below the ground surface. Bedrock is encountered at 90 feet below grade. **See the attached figures #1 & #2 for the Former Facility location.**

#### Hazardous Waste Operations and Release History

The hazardous waste operations consisted of a loading dock, storage tanks, treatment tanks, PH neutralization tanks, filter presses and all associated piping. The hazardous wastes were mainly liquids which were received at the loading dock and piped to the storage tank(s) and then the treatment tank(s) for processing through the Former Facility's treatment system. There was a secondary containment system for each hazardous waste management unit (HWMU) which would prevent a spill of waste from escaping the area. There were no reported releases to the environment from the building. During closure, all containment areas were inspected for leaks, spills and the integrity of the areas and cleaned. Concrete chip samples of the floors were taken and analyzed to verify adequacy of decontamination. There were no reported releases and the areas were cleaned as per the closure plan requirements. **See the attached figure #3 for a floor plan of the Former Facility and concrete floor sampling locations.**

#### Results of Remediation and Groundwater Sampling

There were no reported releases of hazardous waste or hazardous constituents to the environment from the Former Facility. Since there were no known releases to the environment there has been no need for on-site remediation. This was confirmed by sampling groundwater around the Former Facility. The hazardous waste permit required groundwater monitoring at the Former Facility. A total of six (6) groundwater monitoring wells were installed, at least one on each side of the Former Facility. These wells were sampled several times from 1995 to 2000 and analyzed for metals and Volatile Organic Compounds (VOCs). Low levels of dissolved metals and VOCs were detected in groundwater samples during these sampling events in wells up gradient and down gradient of the building. The concentrations in the wells are similar in range and the levels detected did not exceed RIDEM GB Groundwater Objectives. The last groundwater sampling event was in March of 2000. Sampling results identified low levels of metals and VOCs at concentrations far below the RIDEMs GB Groundwater Objectives for GB classified groundwater. **See the attached figure #4 for groundwater monitoring well locations.**

### Conclusions

EPA believes that groundwater at the Former Facility meets the RIDEM GB Objectives. Therefore, no further action including groundwater monitoring is necessary at the Former 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 former 21<sup>st</sup> Century Environmental Management Facility is a closed RCRA TSD facility and is no longer 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 Former Facility.

The Former Facility conducted closure of its hazardous waste operations under direct State oversight and in accordance with its approved closure plan. An Independent Registered Professional Engineer has certified closure and the RIDEM has approved the closure report.

### 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 Former Facility. In accordance with EPA guidance on Completion Determinations, EPA believes a Completion without Controls Determination is appropriate because:

- (1) No remedial actions are needed;
- (2) Site-specific media cleanup objectives have been met; and
- (3) There are no operation & maintenance & monitoring actions, and/or institutional controls required at the Former Facility other than local zoning requirements.

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**").<sup>2</sup>

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<sup>2</sup> 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 FORMER 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:<sup>3</sup>

**1. A full set of corrective measures has been defined and completed.**

As a result of the Former Facility closure and a sequence of groundwater sampling activities conducted under the oversight of the RIDEM, the nature and extent of contamination in the building, receiving area and in groundwater have been identified and are determined to be within acceptable levels. No corrective measures are necessary at the Former Facility;

**2. Site-specific media cleanup objectives have been met.**

The RIDEM GB Groundwater Objectives were met at all surrounding wells on-site. Meeting these Objectives does not pose a risk to human health or the environment under current or future site use consistent with local zoning requirements.

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 Former Facility. *See Final Guidance on Completion Determinations at 8761 n7.*

### Evaluation of Remedy with respect to Standards and Decision Factors

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, Region 1 believes that, in addition to the rationale presented above, evaluation of the Former 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*

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<sup>3</sup> Again, these decision making criteria may be found in the Final Guidance on Completion Determinations at 8762.

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 at the Former 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 GB Groundwater Objectives established by the 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.

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 other than local zoning requirements. 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 the Former Facility's 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 or current 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 Former 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 Former Facility given that there has been no release from the Former Facility that required remediation.

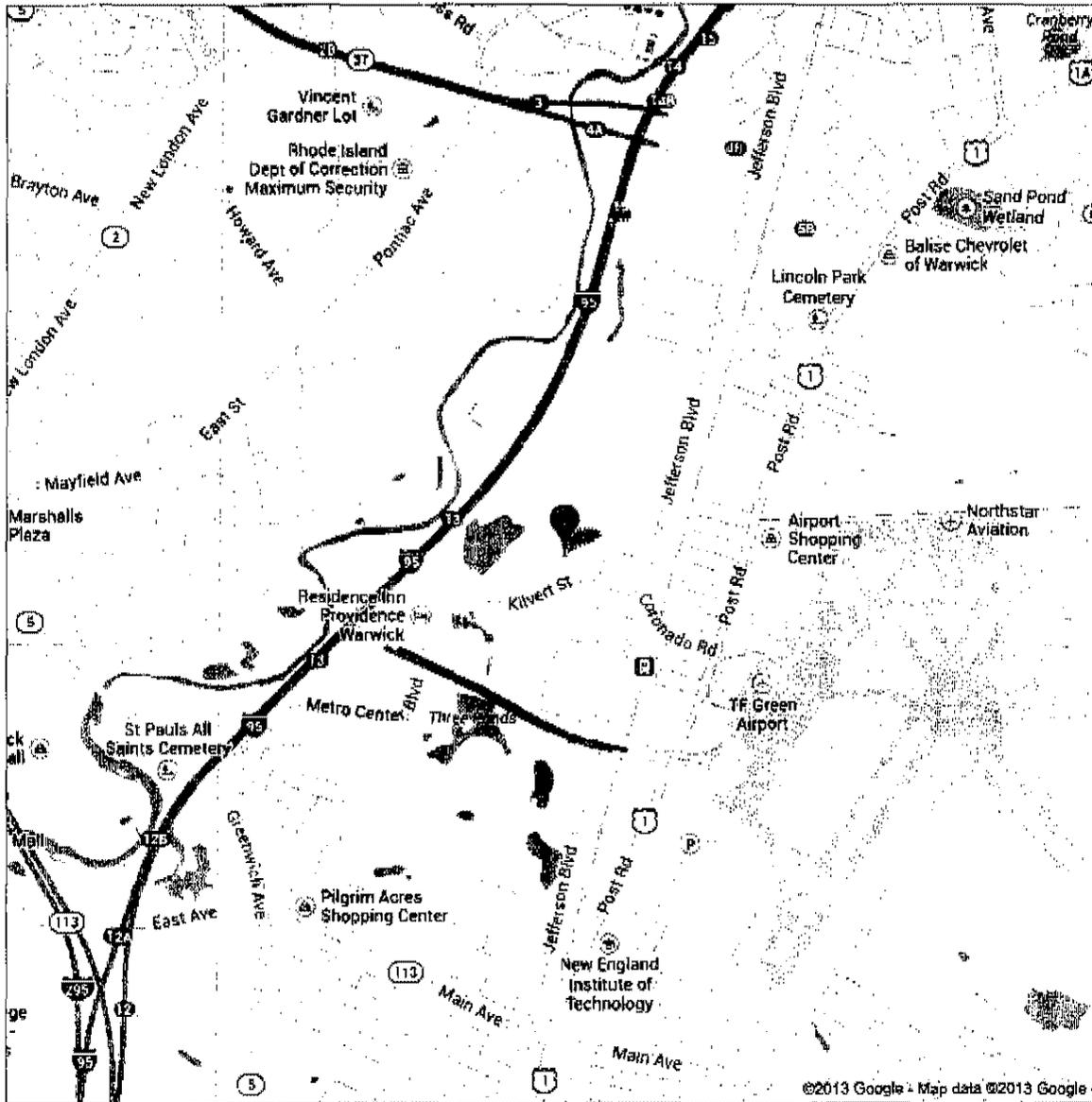
In summary, EPA, using all available information, is announcing its Corrective Action "Completion without Controls" Determination remedy proposal. Since investigations performed at and around the Former Facility demonstrate that any hazardous constituents remaining on-site are below the RIDEM GB Groundwater Objectives 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\Eticam-Statement of Basis

# FIGURE #1

# Google

Address 25 Graystone St  
Warwick, RI 02886





# FIGURE #3

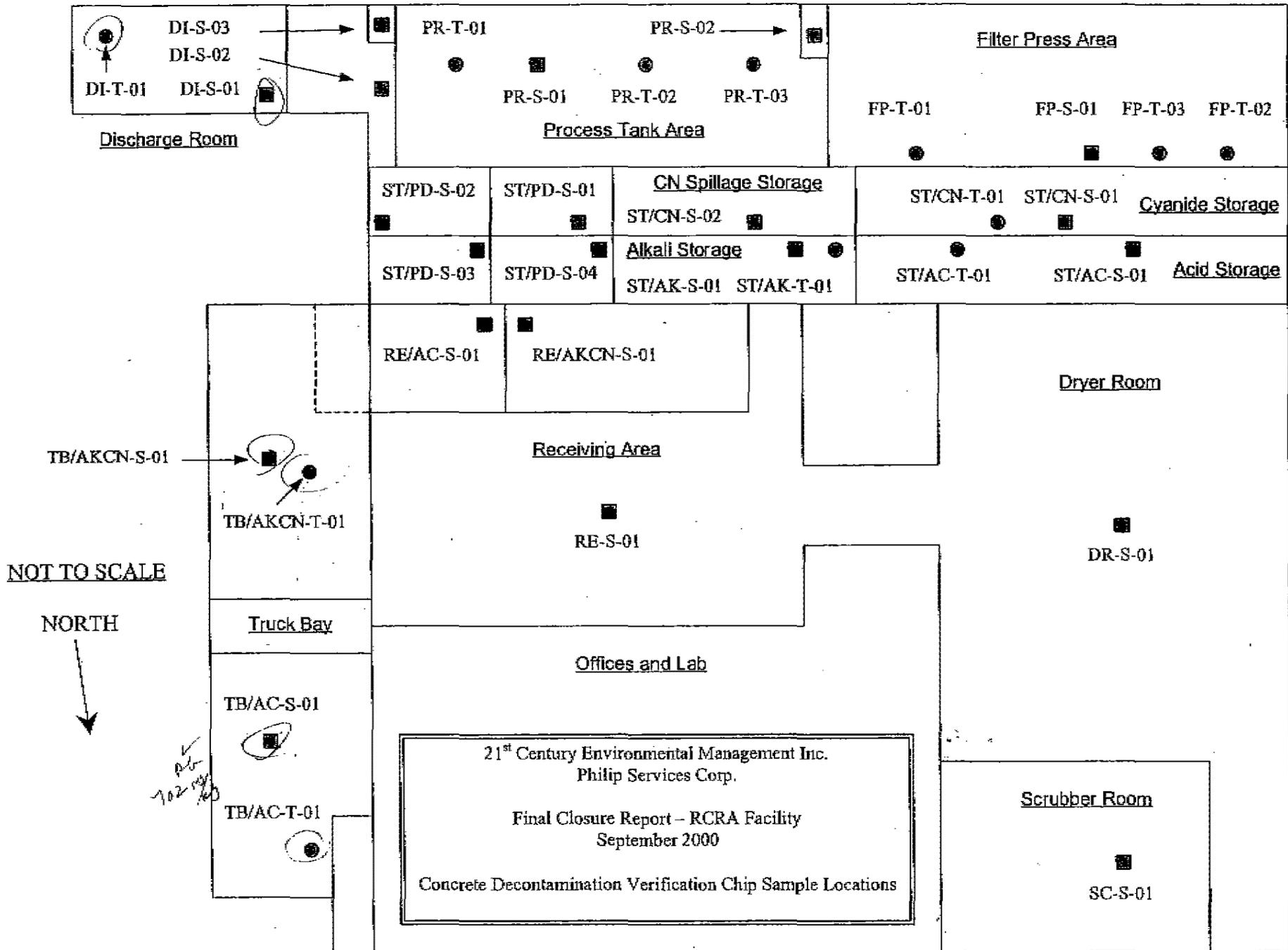
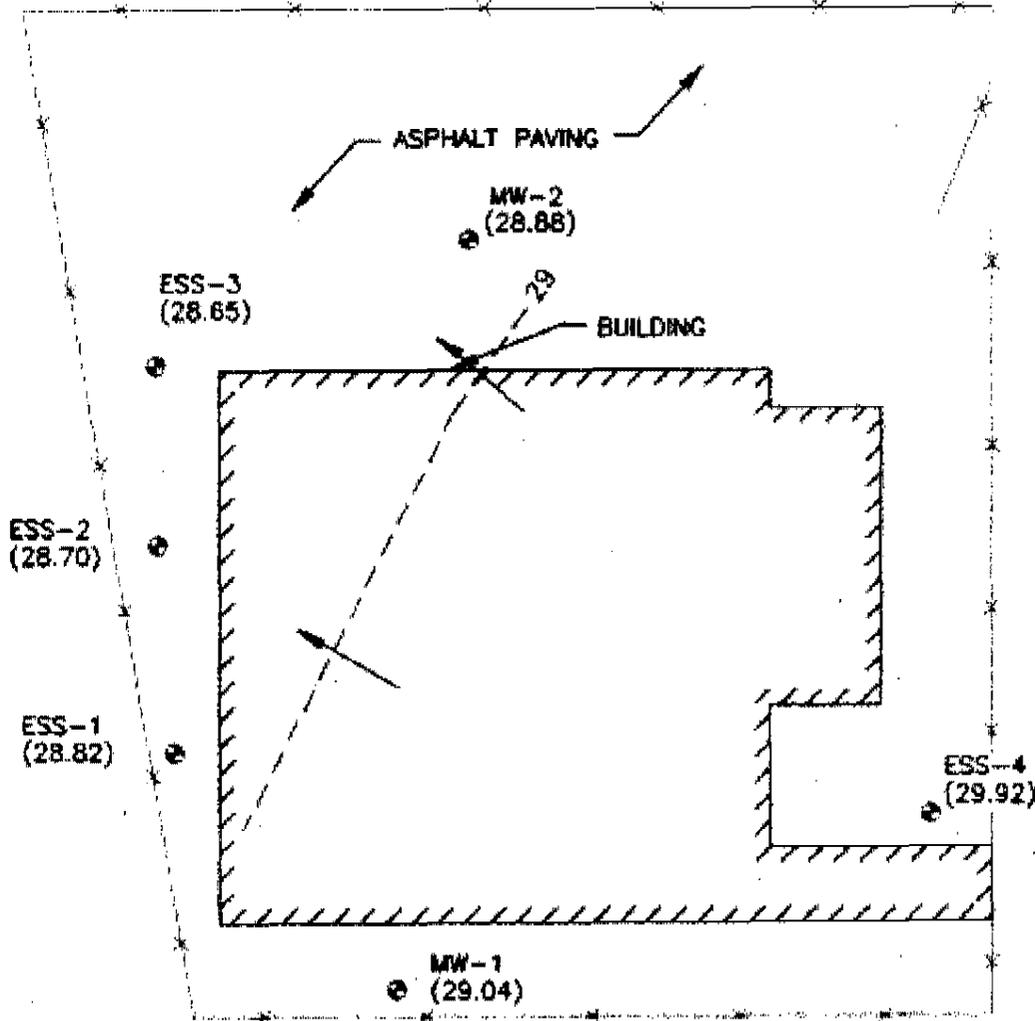


FIGURE # 7

**LEGEND:**

- ESS-3 (27.36) ● MONITORING WELL
- GROUNDWATER ELEVATION (MARCH 30,2000)
- GROUNDWATER FLOW DIRECTION
- - - GROUNDWATER CONTOUR
- FENCE



**NOTES:**

1. BASE MAP DEVELOPED FROM A PLAN BY ENVIRONMENTAL SCIENCE SERVICES, TITLED GROUNDWATER CONTOUR MAP, DATED FEBRUARY 1995.
2. WATER TABLE ELEVATIONS BASED ON WELL ELEVATION SURVEY CONDUCTED BY LFR, INC. IN MARCH 2000.

250 CROWNVILLE ROAD  
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 Fax (401) 732-1886



DATE	BY

**PHILIP SERVICES CORPORATION**  
 25 GRAYSTONE STREET, WARRICK, RHODE ISLAND

**SITE PLAN**