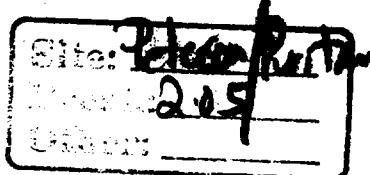


US EPA ARCHIVE DOCUMENT

Site: Peterson
**REMOVAL
RECORD**



ON-SCENE COORDINATOR'S REPORT
J.M. MILLS LANDFILL
(Peterson/Puritan Inc. NPL Site)
CUMBERLAND, RHODE ISLAND

September 25, 1991 - April 14, 1992

**United States
Environmental
Protection Agency**



Region I

NEW ENGLAND REGIONAL LABORATORY

80 WESTVIEW AVE., LEXINGTON, MASSACHUSETTS 02421

**ON-SCENE COORDINATOR'S REPORT
J.M. MILLS LANDFILL
(Peterson/Puritan Inc. NPL Site)
CUMBERLAND, RHODE ISLAND**

September 25, 1991 - April 14, 1992

**U.S. Environmental Protection Agency
Region I
Emergency Planning and Response Branch
Response and Prevention Section
60 Westview Street
Lexington, Massachusetts 02173
(617) 860-4308**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
ENVIRONMENTAL SERVICES DIVISION
60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173-3185

April 27, 1992

Barbara Ramsey, Executive Secretary
National Response Team (OS-120)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Dear Ms. Ramsey:

Enclosed please find the On-Scene Coordinator's Report for the Fund-financed Removal Action conducted at the J. M. Mills Landfill (Peterson\Puritan NPL Site) located in Cumberland, Rhode Island. It covers the removal action involving the installation of a security fence and the removal of drum activities from September 25, 1991 through April 14, 1992.

This OSC Report is being submitted to you in accordance with Section 300.165 of the National Oil and Hazardous Substance Pollution Contingency Plan which states, "the OSC shall submit to the RRT a complete report on the removal operation and the actions taken. The OSC shall at the same time send a copy of the report to the Secretary of the NRT."

If you have any questions, please contact me at (617) 860-4308.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul R. Groulx".

Paul R. Groulx
On-Scene Coordinator
Site Evaluation and Response Section I

Enclosure

pc: Leonard B. Wallace IV, RRT Coordinator, Lexington, MA
David J. Newton, Remedial Project Manager, Boston, MA
Pat Hawkins, Region 1 Coordinator, EPA ERD, Washington, DC
Linda B. Wofford, State of Rhode Island, DEM
Robert M. Steele, Esq., Attorney for Joseph Marzalkowski
Harold Audet, Berkeley Fire Department, Cumberland, RI
Edgar R. Alger, Mayor, Town of Cumberland, RI
Site File, ESD, Lexington, MA
David McIntyre, Chief, SERS 1, EPA, Lexington, MA

April 27, 1992

Prepared by:

**Paul R. Groulx, On-Scene Coordinator
U.S. Environmental Protection Agency**

and

**David Strzempko, Field Project Geologist
Roy F. Weston, Inc.
Technical Assistance Team**

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- Appendix B** - **J.M. Mills Landfill Action Memorandum, dated September 25, 1991**
- Appendix C** - **Notice of Potential Liability and Invitation to Perform or Finance Proposed Cleanup Activities Letter**
- Appendix D** - **OHM Remediation Services, Inc., CERCLA Off-Site Waste Management Report, dated January 20, 1992**
- Appendix E** - **Chain of Custody Log 2/26/92 Sampling**
- Appendix F** - **Personnel List**

1.0 EXECUTIVE SUMMARY

The following On-Scene Coordinator's (OSC) Report for the J. M. Mills Landfill Site, Cumberland, Rhode Island, is a chronological summary of the United States Environmental Protection Agency (EPA), Region I, Emergency Planning and Response Branch (EPRB) response operation. The report details the situation as it developed, the actions taken, the resources committed, the effectiveness of the removal action, the problems encountered and recommendations.

This OSC Report was prepared according to the Code of Federal Regulations (CFR), Title 40, Protection of the Environment, Part 300, Subpart B - Responsibility and Organization for Response.

The EPA EPRB performed a Removal Preliminary Assessment/Site Investigation (PA/SI), pursuant to 40 CFR 300.410 and OSWER Directive No. 9200.2-03 on May 23, 1991, to determine if conditions at the site warranted a CERCLA removal action. Prior to the PA/SI, EPA Remedial Project Manager (RPM) David Newton had requested emergency removal assistance at the site. Concerns over site access and ongoing underground fires at the landfill were cited by RPM Newton and state and local officials.

As part of the Removal PA/SI, pertinent sections of a 1988 draft Remedial Investigation were reviewed and indicated that the landfill contained heavy metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and polychlorinated biphenyls (PCBs).

The PA/SI sampling identified contaminant emissions (acetone, methylene chloride, ethyl acetate, toluene and n-propylbenzene) from vents and the base of the landfill. Water samples indicated contaminants including lead, zinc, copper, barium, chromium and VOCs. Soils collected from areas along the base of the landfill indicated the presence of similar heavy metals, VOC's, and SVOCs.

Also found on the site were two drums and piping consistent in design with asbestos type piping. Analyses of the drum's contents indicated the presence of SVOC's including naphthalene, dimethylphthalate, and acetophenone, and heavy metals including arsenic, barium, cadmium, lead and mercury. Please refer to the Removal Program PA/SI and the Removal Program PA/SI Analytical Data Summary, for the J.M. Mills Landfill Site, Cumberland, Rhode Island, which were prepared to obtain the ranges of contaminant concentrations. These documents and others related to the site are listed in Appendix A and can be found on file at the Region 1 U.S. Environmental Protection Agency (EPA) offices at 60 Westview Street in Lexington, Massachusetts.

The above factors resulted in the EPRB Site Investigator (SI) recommending that a fence be constructed around the site to limit access, and that drums and asbestos be removed to prevent release of the materials off site.

Due to the imminent and substantial threat to human health, and potential for long term human exposure based on site access, it was proposed that actions include installation of a 7-foot high fence to restrict public access to the landfill, and removal of drums found on the property.

On September 26, 1991, EPA Planning and Management Division member Patricia Meaney signed an Action Memorandum for Regional Administrator Julie Belaga authorizing \$108,000 to mitigate the threat to public health or to the environment resulting from actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances in the surface soils and waters. See Appendix B for a copy of this document.

Site activities were completed on April 14, 1992 at an estimated cost of \$ 90,070 (see Section 2.7 for cost details).

2.0 SUMMARY OF EVENTS

2.1 Participating Agencies and Personnel

U.S. Environmental Protection Agency

Emergency Planning and Response Branch

Site Evaluation and Response Section I

On-Scene Coordinator (OSC) Paul Groulx

Enforcement Coordinator Lee MacMichael

Office of Regional Counsel Brian Rohan, esq.

Waste Management Division

RI Superfund Section Chief Richard Boyton

Remedial Project Manager David Newton

Community Relations Lisa West

Roy F. Weston, Inc.

Technical Assistance Team (TAT) David Strzempko

Joseph Resca

AT&T Fiber Optic Cable George Bousquet

U.S. Sprint Communications Cable Mark Jarvis

Blackstone Valley Sewer Commission Phillip Albert
Robert Zonfrillo
Shelly Regan

Rhode Island Department of Environmental Management

Division of Solid Waste James Ashton
Linda Wofford

Division of Air and Hazardous Materials Warren Angell II

Town of Cumberland

Mayor Edgar R. Alger
Administrative Assistant John Macqueen, Jr.
Cumberland City Councilors Lucille Walsh
John Jackson
David Chenevert

Berkeley Fire District

Chief Harold Audette

Emergency Response Cleanup Services Contractor (ERCS)

OHM Remediation Services, Inc.
Response Manager Joseph Overend
Project Control Technician Mike Evanko

Providence/Worcester Railroad Company

General Counsel Heidi Eddins
Chief Engineer Scott Conti
Right of Way Office Arthur Fallon
Flagman Rick Proctor
E. Richard

<u>Subcontractors:</u>	<u>Service</u>
National Engineers-Land Surveyors, Inc.	Norbert A. Therien, President
	Mark Lyon Field Coordinator
Clean Harbors, Inc.	William R. Howard Operation Supervisor
	Scott Sullivan Chemist
	Todd Legg Foreman
Fence World Inc.	Mark Loffredo Business Manager

2.2 Site Location and Description

The property is owned by Linda and Joseph Marszalkowski, and is commonly referred to as Marszalkowski's dump, or as J.M. Mills Landfill.

The J.M. Mills Landfill property is part of the Peterson/Puritan, Inc. NPL Site and is located off 4 Mendon Road (Route 122) in Providence County, Cumberland, Rhode Island (Figure 1 page 5 - Site Location Map). The area of concern is located southeast from several manufacturing buildings (including Peterson Puritan), and is identified as a large burial mound (landfill area) measuring approximately two-tenths of a mile in width by seven-tenths of a mile in length. The height of the landfill is over 100 feet. Figures 2 and 3 which follow on pages 6 and 7 provide a street location map and a depiction of the Peterson/Puritan NPL site area, respectively.

The area is bound to the east and northeast by the Providence-Worcester railroad tracks, to the northwest by the Blackstone Valley Electric high tension transmission lines, and to the west by the Blackstone River.

Access to the site was not restricted and evidence of incidents at the landfill have been documented by the local police department and the RI DEM.

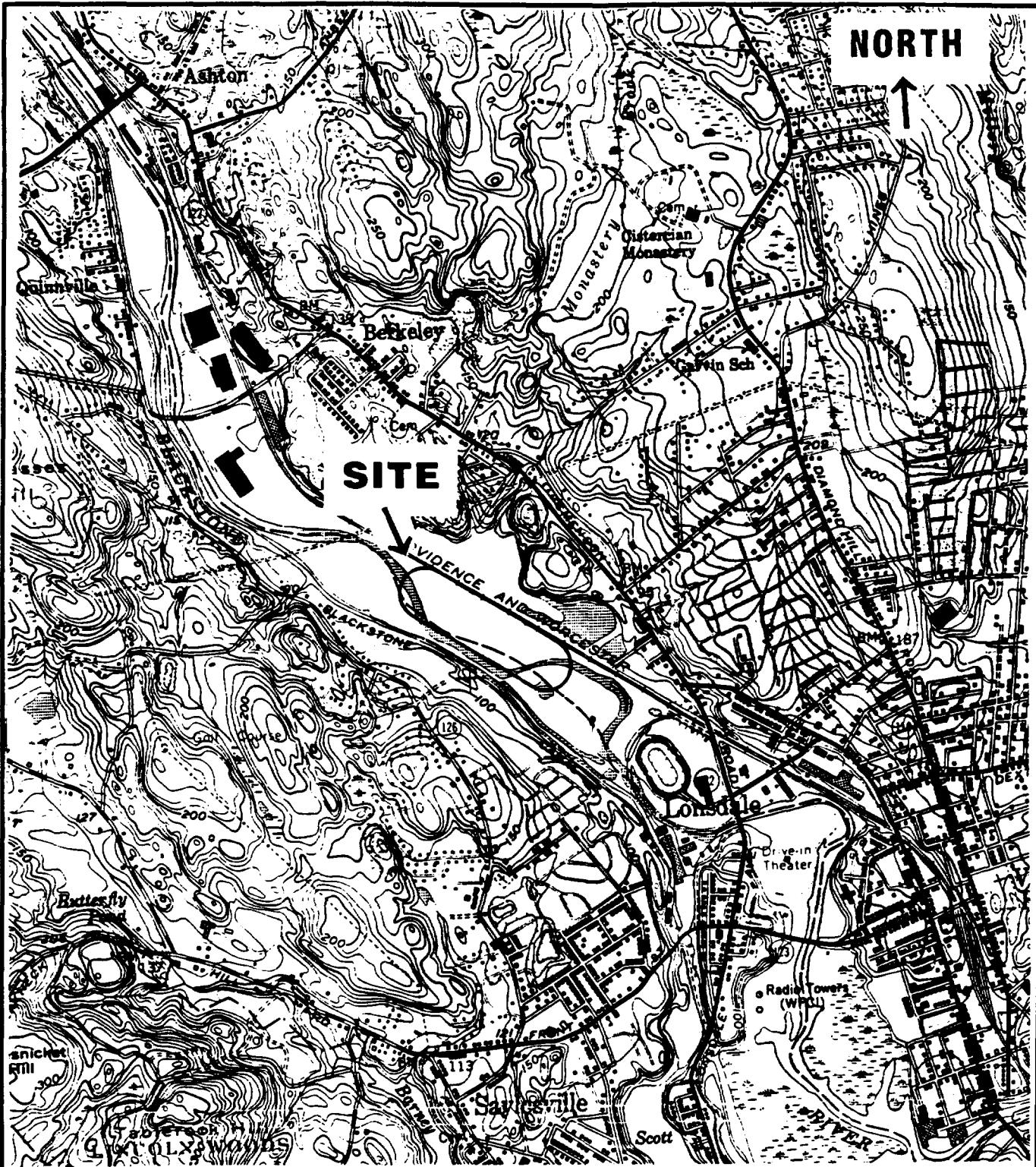


FIGURE 1
SITE LOCATION MAP
J.M. MILLS LANDFILL SITE
CUMBERLAND, RHODE ISLAND

PAWTUCKET, RI - MA 1949 USGS TOPOGRAPHIC QUADRANGLE MAP. PHOTO-
 REVISED 1970 AND 1975. SCALE 1:24000 (7.5 MINUTE SERIES).

WESTON

REGION I TECHNICAL ASSISTANCE TEAM

DRAWN D. STRZEMPKO	DATE 2/92	PCS/Filename 1695AAF1.DRW
APPROVED <i>TCJ</i>	DATE 2/92	TDD # 01-9109-05B

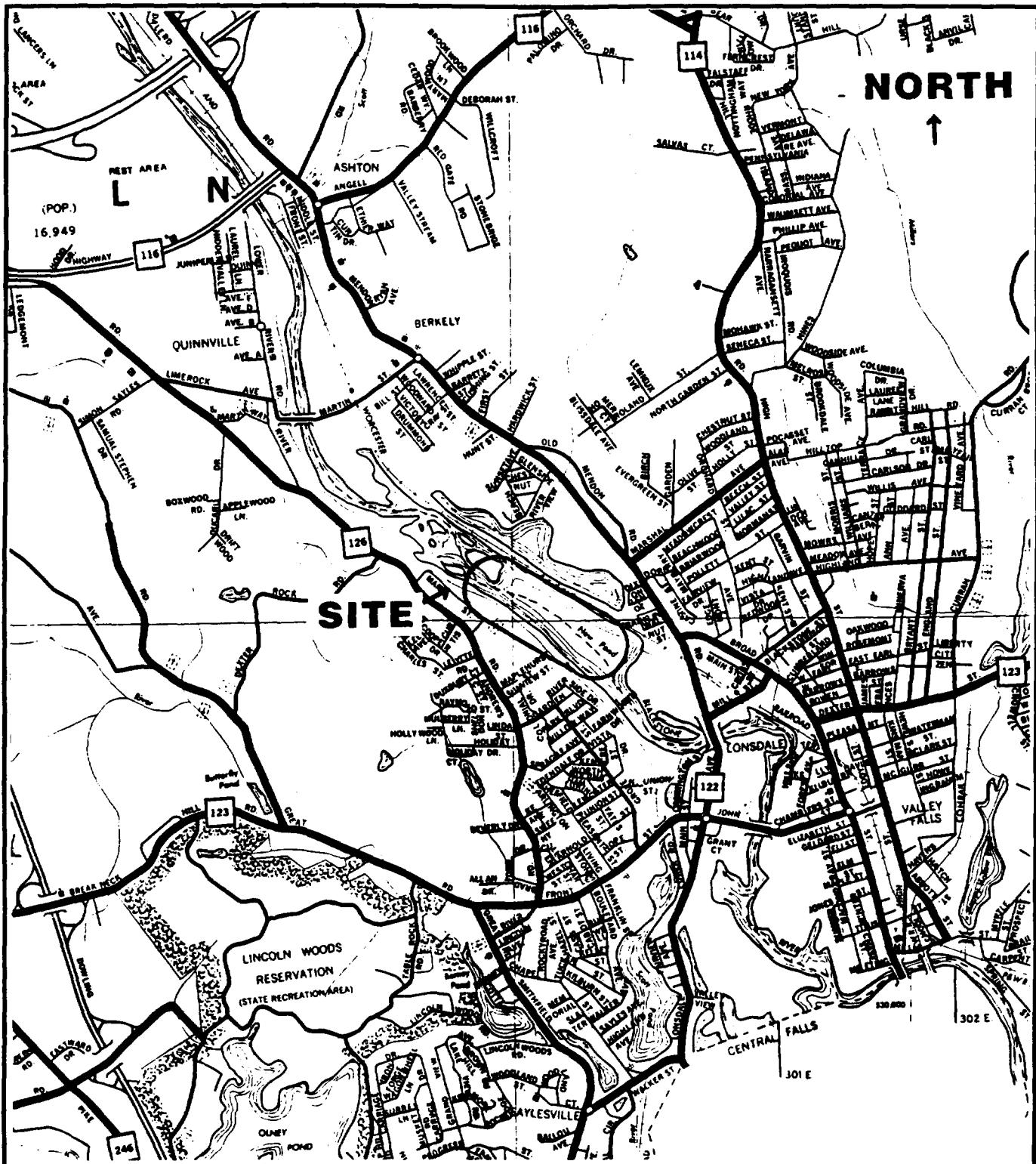


FIGURE 2
SITE STREET LOCATION MAP
J.M. MILLS LANDFILL SITE
CUMBERLAND, RHODE ISLAND

CUMBERLAND, R.I. 1988 UAAI MAP. NO PUBLISHED SCALE

WESTON

REGION I TECHNICAL ASSISTANCE TEAM

DRAWN D. STRZEMPKO	DATE 2/92	PCS/Filename 1695AAF2.DRW
APPROVED <i>pm</i>	DATE 2/92	TDD # 01-9109-05B

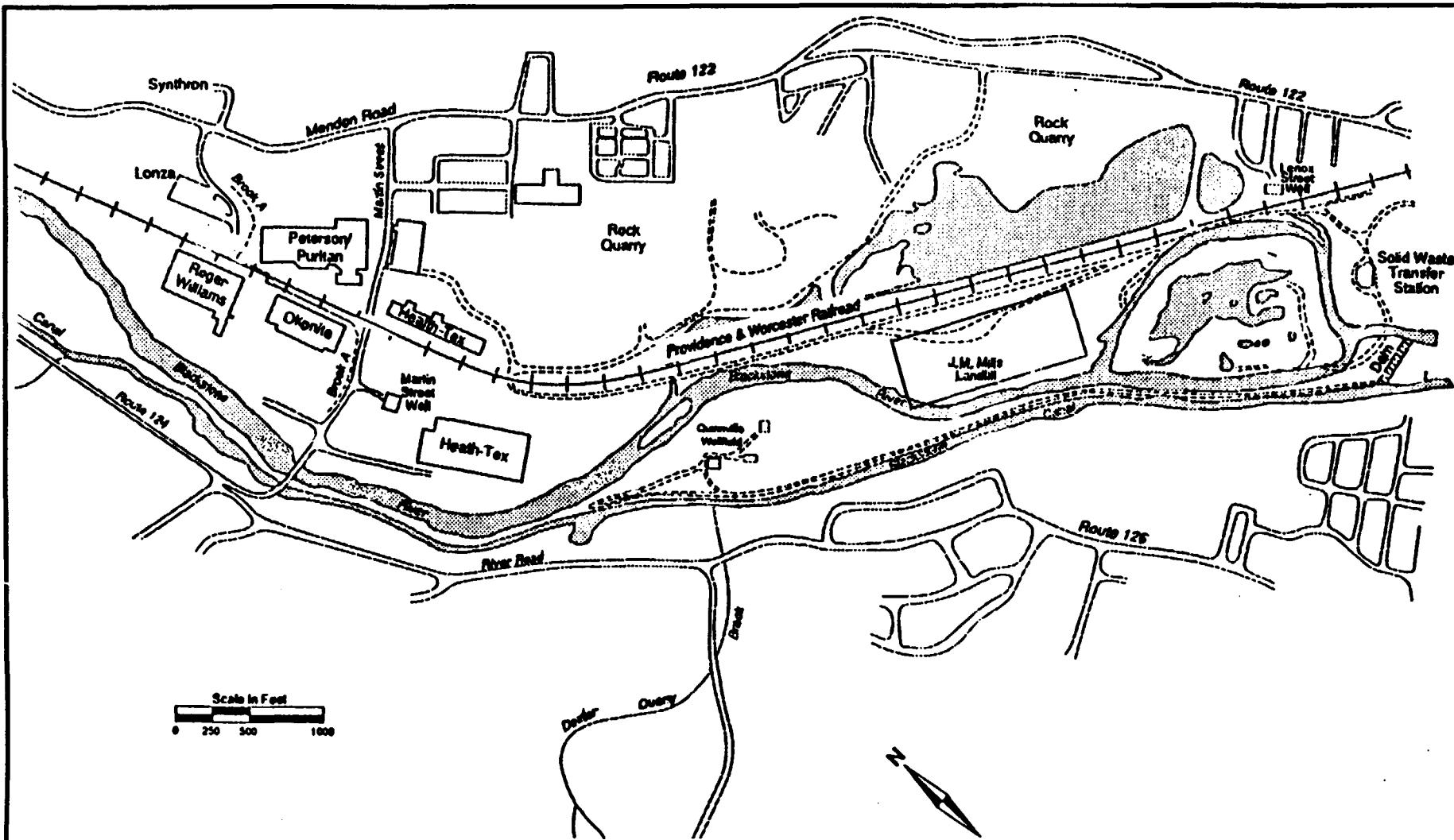


FIGURE 3
PETERSON/PURITAN NPL SITE AREA
INCLUSIVE OF THE J.M. MILLS LANDFILL SITE
CUMBERLAND, R.I.

TAKEN FROM THE BASE MAP DEVELOPED BY LEE PARE AND ASSOCIATES,
 AND FOUND WITHIN THE C-E ENVIRONMENTAL, INC. REMEDIAL INVESTIGATION
 REPORT DATED FEBRUARY 1990.

WESTON

REGION I TECHNICAL ASSISTANCE TEAM

DRAWN D. STRZEMPKO	DATE 2/92	PCS # 1695AAF3.DRW
APPROVED <i>pm</i>	DATE 2/92	TDD # 01-9109-05B

2.3 Cause of Release

EPRB sampling identified contaminant emissions (acetone, methylene chloride, ethyl acetate, toluene and n-propylbenzene) from vents and the base of the landfill. Water samples indicated contaminants including lead, zinc, copper, barium, chromium and VOCs leaching from the landfill. Soils collected from areas along the base of the landfill indicated the presence of similar heavy metals, VOC's, and SVOCs. Two drums were also found on the site. Analyses of the drum's contents indicated the presence of SVOC's including naphthalene, dimethylphthalate, and acetophenone, and heavy metals including arsenic, barium, cadmium, lead and mercury.

2.4 The Initial Situation

The J.M. Mills landfill was not licensed to accept waste after March 1975, and was ordered by the Rhode Island Department of Environmental Management (RI DEM) to cease accepting any waste after June 30, 1982 (Mott 1988/C.E.Environmental Inc. report).

The RI DEM issued a Notice of Violation and an Order of Abatement on December 27, 1985, against Mr. Marszalkowski to stop accepting solid waste at the landfill. In August of 1986, the RI DEM requested a closure certificate for the J.M. Mills Landfill. On September 30, 1986, the RI DEM determined through an inspection that the closure requirement had not been complied with. An additional requirement to restrict access also was not complied with.

In 1986, a memo was drafted by the RI DEM which documented reports that three area youths became sick from exposure to airborne contaminants from the landfill area.

Sampling surveys during 1987 and 1988 involving surface water and ponded/leachate at the base of the landfill have indicated releases of both VOCs and heavy metals. Metals released from the landfill include arsenic, copper, lead, and zinc (Versar/C.E.Environmental Inc. report). In April 1991, a concern was raised by the Cumberland Town Councilors to the RI DEM and EPA, over ongoing illegal dumping at the landfill. Concerns over site security measures and access control were also voiced because of their relation to the illegal dumping.

On March 19, 1991, Jim Ashton, RI DEM, Division of Solid Waste, contacted RPM David Newton, to discuss the availability of funding to restrict site access. RI DEM had previously required the owner to provide further security measures and adequate landfill cover. The owner was slow to respond, but did complete a sufficient landfill cover. He was however, unwilling to address access restrictions at the property.

As a result of inquiries from the RPM for emergency removal assistance concerning ongoing underground fires at the site, and per OSWER Directive No. 9200.2-03, the Removal Program SI conducted a removal preliminary assessment/site investigation (PA/SI) at the J.M. Mills landfill section of the NPL site on May 23, 1991.

As part of the Removal PA/SI, pertinent sections of a 1988 draft Remedial Investigation were reviewed. The Remedial Investigation indicated the presence of heavy metals, volatile (VOCs) and semi-volatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs), in areas of the J.M. Mills Landfill.

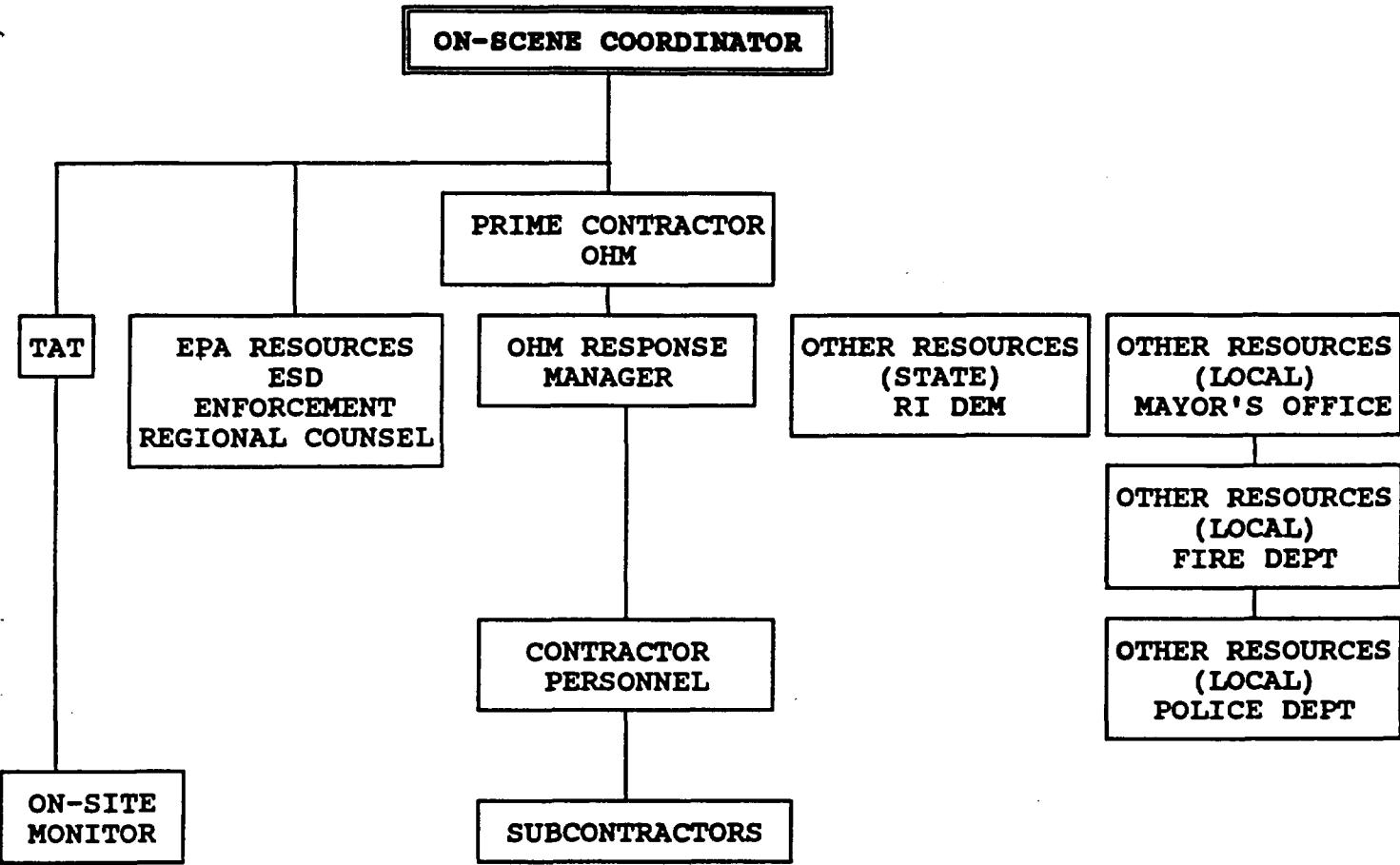
The Removal PA/SI sampling identified and confirmed contaminant emissions from vent pipes and from the base of the landfill. The water samples indicated contaminants including lead, zinc, copper, barium, chromium, and VOCs. Soils collected from areas along the base of the landfill indicated the presence of similar heavy metals, VOCs, and SVOCs. Also noted on the site were 2 drums and cement transite asbestos piping. Analyses of the drum's contents indicated the presence of SVOCs.

In the Removal Assessment form for National Priority Listed (NPL) sites, the Removal SI recommended construction of a fence surrounding the landfill area to limit access, and removal of the drums noted on the landfill property. See Appendix A - List of Reference Documents. Warren Angell II, of the RI Division of Air and Hazardous Materials, wrote to the Chief of the EPA RI Superfund Section September 26, 1991, and concurred with the SI's recommendations.

2.5 Efforts to Obtain Response by Responsible Parties

EPA has reason to believe that Mr. Marszalkowski was the owner and operator of the Site at the time of disposal of hazardous substances. A Notice of Potential Liability and Invitation to Perform or Finance Proposed Removal Activities Letter (Notice Letter) was sent to him on October 7, 1991 (Appendix C). A reply to the Notice Letter from Mr. Marszalkowski's Counselors was received by the EPA on October 30, 1991 (Appendix A - List of Reference Documents). The reply stated that Mr. Marszalkowski was not willing to perform the required activities.

2.6 Response Organization



2.7 Resources Committed

EPA resources committed under the removal action began accruing on September 25, 1991 and are estimated as of April 14, 1992.

ERCS:	\$ 44,001
TAT:	15,069
<u>EPA:</u>	<u>\$ 30,000</u>
TOTAL:	\$ 89,968

Accounting Information

EPA Site ID #: 40
CERCLIS ID #: RID055176283

Final estimated TAT costs are summarized by the following Technical Direction Documents (TDDs):

TDD #01-9109-05:	\$ 9,640
TDD #01-9109-05A:	2,676
TDD #01-9109-05B:	2,753
TOTAL	\$ 15,069

In addition, the following estimated TAT costs were incurred during the Removal Site Evaluation:

TDD# 01-9105-08:	\$ 2,540
TDD# 01-9105-08A:	\$ 827
TDD# 01-9105-08B:	\$ 125
TOTAL	\$ 3,492

The EPA costs were based on a \$30/hr estimate for direct labor costs plus \$60/hr for indirect labor costs.

In accordance with EPA guidance, the TAT costs for the Removal PA/SI are not included in the estimated cost incurred for the removal action.

2.8 Chronological Summary of Activities

Tuesday, September 17, 1991

TAT member David Strzempko, OSC Paul Groulx, EPA Enforcement Coordinator (EC) Lee MacMichael and RPM David Newton visited the J.M. Mills Landfill Site to discuss Remedial Section concerns, enforcement issues and view the site for tentative security fencing placement. It was suggested that a fence be constructed around the landfill site as part of a Removal Action, as well as the removal of drums noted on the site.

The landfill area was viewed from the north to the south. Primary concerns of RPM Newton included current site use by off-road vehicles and the general public. Such access was evident by the paths and roadways noted at the site.

RPM Newton provided a map depicting the landfill area and this was used to tentatively show where a fence should be placed around the landfill. These areas were viewed on the site and were contained by the following approximate boundaries: from a canal extending from the Blackstone River just north of a power line easement; along the Providence and Worcester Railroad for 0.7 miles; and back to the Blackstone River beyond the southern end of the landfill.

Additionally, a drum area was viewed in the northern side of the landfill approximately halfway along the 0.7 mile railroad easement. Two full drums and two empty drums were noted here. Samples had been collected from the drums in June and August of 1990, and the results of analyses can be found in the Removal Program PA/SI Analytical Data Summary for the J.M. Mills Landfill (Peterson/Puritan) Site, Cumberland, Rhode Island, dated October, 1991, prepared by TAT members, and referenced in Appendix A - List of Reference Documents.

After viewing the drum area, OSC Groulx, EC MacMichael and RPM Newton walked to the peak of the landfill to obtain a better understanding of surrounding local geography.

After the site visit, all involved parties travelled to the Cumberland Town Hall to confirm ownership of the site.

Friday, September 25, 1991

An Action Memorandum requesting \$108,000 for the initiation of a Superfund removal action at the J.M. Mills Landfill Site was approved by U.S. EPA Region I Regional Administrator Julie Belaga.

A delivery order for \$ 60,000 was issued to EPA's Zone I Emergency Response Services Cleanup (ERCS) Contractor, OHM Corporation.

Friday, October 11, 1991

TAT member David Strzempko and OSC Paul Groulx visited the J.M. Mills Landfill Site. The visit was made to meet with surveying companies participating in a pre-bid meeting for research and survey work to delineate the J.M. Mills Landfill Site property boundaries for future security fence placement.

Mike Evanko, a project control technician (PCT) with OHM Remediation Services, Inc. (OHM), EPA's Emergency Response Cleanup Services (ERCS) contractor, was also on site. Mr. Evanko had previously contacted seventeen local (Rhode Island) surveyors by phone and mailed bid specifications approximately one week earlier asking them for bids on the above stated work.

The following surveyors were present at the pre-bid meeting:

Barry Lama	Allinson-Lama Corporation
Robert H. Bodesa	Angle-Arc Corporation
Anthony Winiarski	Waterman Engineering Company
Frank Waterman	Waterman Associates
Paul Coutu	Lunar Mapping Incorporated
John F. Delucia	Delucia Associates Incorporated
Steven Murgo	Surveyor
Louis Federici	Louis Federici and Associates
Alan Woodmansee	John P. Caito Corporation
Norbert A. Therien	National Engineering and Survey Incorporated
Marc N. Nyberg	Marc N. Nyberg Associates, Incorporated

Also at the site were RI DEM representative Linda Wofford and RPM David Newton. RPM Newton was dropped off at the site by Robert Zonfrillo and Shelley Regan of the Blackstone Valley Sewer Commission (BVSC). RPM Newton had just completed a meeting with the BVSC to help locate their lines on the site, and to discuss potential dumping into one of their sewer lines.

Several of the surveyors at the site indicated that the completion dates required by OSC Groulx for the various tasks would be difficult to meet. OSC Groulx responded that these dates were critical given the eventual fence installation schedule and upcoming winter season. OSC Groulx asked that the companies reflect this in their proposed bids.

OSC Groulx also asked that the surveyors locate monitoring wells within their survey which were within 20 feet of the eastern landfill property line, as an addendum to the original proposal. The surveyors also requested a waiver from the required completion dates if work was stopped by the Worcester and Providence Railroad because of access problems. OSC Groulx granted this waiver under the stipulation that delays in completion dates reflect the amount of time access may be withheld from the rail line.

Proposed fence line/survey area maps and addendums to the original proposal were handed out to all parties attending the pre-bid meeting. The intended fence line was walked by all parties to fully understand the scope of the project.

Thursday, October 17, 1991

Rhode Island Dig-Safe was contacted and notified of the fence installation plans.

Tuesday, October 22, 1991

Norbert Therien, from National Engineering and Survey, Inc., met with Mr. Bousquet and Mr. Jarvis from AT&T and U.S. Sprint (Sprint), respectively. The meeting was held to locate the company's phone utility lines which paralleled the proposed fence line. The lines were located and marked on the ground in the field, and later were placed on the survey map.

OSC Groulx and RPM Newton attended a public informational meeting at the Mayor's office in Cumberland, RI. The meeting was held to brief state and local officials of the upcoming removal activities at the J.M. Mills Landfill.

The following persons were in attendance:

- Cumberland Mayor Edward R. Alger
- Cumberland Administrative Assistant John Macqueen
- RI DEM Sr. Engineer Linda Wofford
- Berkely Fire District Chief Harold Audet

In addition to discussing the schedule of activities, the following items were covered:

- The Mayor agreed to contact the site owner and encourage him to allow EPA access to the property.
- Town by-laws were discussed and it was agreed that a 7-foot high fence would be installed without barbed wire and 20-foot gates would be installed at northern and southern ends of the fence. The town also agreed to waive local permit fees.
- The administrative record would be placed at the Cumberland and Lincoln Town libraries.
- Applicable, relevant and appropriate requirements (ARARs) were brought up by the Ms. Wofford. It was agreed that any soils excavated during fence post drilling, which exhibited greater than 10 parts per million (ppm) total volatile organic compounds, would be documented and disposed of properly.

Monday, October 26, 1991

TAT member David Strzempko and OSC Paul Groulx visited the J.M. Mills Landfill Site. The visit was made to view property line delineation and to determine locations for future security fence placement. Norbert Therien was at the site to brief the OSC.

Mr. Therien's company had been chosen as the site surveying contractor subsequent to an October 11, 1991 open pre-bid meeting, and an October 18, 1991 subcontract awarding through OHM Remediation Services, Inc., EPA's Emergency Response Cleanup Services contractor.

Mr. Therien provided the OSC with a copy of a map locating the property line along the Providence and Worcester Railroad Co. property. The map also located the existing rail line, AT&T and Sprint fiber optic cables (parallel to the rail line), the Blackstone Valley Sewer Commission Sewer line, the edge of the Blackstone River, and monitoring wells along the northeastern length of the landfill.

The site property line had been staked every 75 feet along the rail line, and corners where fencing was proposed to be placed up to the riverbanks were also marked. Mr. Therien explained that while he delineated the property line, AT&T and Sprint representatives were at the site and located buried fiber optic cables with maps and field instruments. These cables lines were marked approximately every 50 feet with orange spray paint.

Based on the location of the site property line, landfill debris, and fiber optic cables, the OSC decided that the only location for the proposed fence line was 25 feet onto railroad property approximately 5 feet southwest of and paralleling the Sprint fiber optic cable. Mr. Therien provided the OSC with railroad Rights of Way Office contact Arthur Fallon, telephone # (508)799-4475, extension 250. The OSC spoke with Mr. Fallon later in the day to obtain access and fence installation permission.

The OSC asked Mr. Therien to provide (based on the railroad negotiations), an actual marking of the fence line similar to the property line by staking it every 75 feet, and a revised plan indicating this new proposed fence location. The OSC also stated that he would provide Mr. Therien with proposed gate locations and fence turns to calculate actual linear footage of the fence line. The linear footage and revised plan would be submitted to fence companies bidding on the construction of the fence.

Linda Wofford of the RI DEM, had requested as part of the state ARARs that the OSC provide monitoring for organic vapors during excavation at the site (post hole drilling). Total headspace organic vapor concentrations of soils should not exceed 10 units. If this value was exceeded, the RI DEM asked that they be contacted to review the situation. The OSC indicated that the TAT members would provide such monitoring during fence post excavation.

Wednesday, November 6, 1991

OSC Groulx received a letter from the Providence and Worcester Railroad (P & W) granting the EPA permission to erect a fence on their property. Permission was granted with the following conditions: that the fence be erected as was depicted on a plan submitted to P & W; that advance notice be given to ensure a flagman or other protective measure could be provided; and that contractors stay at least 20 feet from the railroad tracks. See Appendix A - List of Reference Documents.

Friday, November 8, 1991

TAT member David Strzempko and OSC Paul Groulx visited the J.M. Mills Landfill Site. The visit was made to meet with fencing companies participating in a pre-bid meeting for future security fence placement around the J.M. Mills Landfill Site. Joseph Overend and Mike Evanko, a Response Manager and PCT respectively, with OHM, and Norbert Therien, from National Surveyors-Developers, Inc., were also on site. Mr. Evanko had previously contacted eleven local (Rhode Island) fencing contractors by phone and mailed requests for proposals and attendance at the pre-bid meeting approximately one week earlier.

At the pre-bid meeting, specifications for the fence construction as well as contract details were handed out to each attending contractor. The following fencing contractors were present at the pre-bid meeting:

Ernest Jocicorur	North Smithfield Fence
Walter Lenartowicz	Pawtucket Fence, Inc.
Frank C. Pinocci	C.P. Fence Company, Inc.
Rick Croke	Wood and Wire Fence Company, Inc.
Mark Loffredo	Fence World, Inc.
Don Costantino	Atlantic Fence
Aldo J. Costantino	Costantino Bros., Inc.
Jeffrey Johnson	Walter Johnson Company Fencing
Michael J. Interlini	United Fence Company, Inc.

The OSC detailed the EPA/ERCS working relationship to the contractors to allow a better understanding of the contract. The OSC stated the work areas (clearly keeping off of landfilled areas), and the requirement for mandatory Providence and Worcester flag men during any site work along the rail line. Additionally, the OSC stated that an EPA safety plan would be read and signed by all personnel, and would govern all activities at the site.

The complete proposed fence line was walked with all of the attending contractors. At the northern corner of the proposed fence, it was decided by the OSC to angle the fence southerly toward the Blackstone River. The new fence configuration was proposed to reduce abrupt topographic changes and to avoid an area of standing water adjacent to the river.

The change in configuration added 43 linear feet to the total fence line indicated on the distributed plan. Also, it was decided by the OSC to place 5-foot wide wing sections of fence which would extend out over the river at each fencing terminus. This added an additional 10 linear feet to the total fence line. The total planned fence footage now equaled approximately 3,224 linear feet.

While walking the fence line along the P & W Railroad, dirt piles and railroad ties were observed to extend into proposed fence line areas. The OSC indicated that movement of such materials should be reflected in the bid, and materials should be moved away from the rail line.

Also, the OSC and surveyor agreed that the person receiving the award for the fence construction should contact the surveyor two days in advance to inform him when he should mark the fence line if the date were to vary from November 18, 1991.

Tuesday, November 12, 1991

A press statement was coordinated and released by RPM Newton.

Monday, November 18, 1991

TAT member David Strzempko visited the J.M. Mills Landfill Site. The visit was made to monitor ERCS subcontractors participating in the security fence placement around the J.M. Mills Landfill Site. Prior to leaving for the site, Linda Wofford, of the RI DEM, was contacted to inform her of the site visit.

Upon arrival at the site, TAT member Strzempko met with Norbert Therien, the surveyor, and Mark Loffredo, of Fence World, Inc.. TAT member Strzempko discussed the placement of fence line markers every 75 feet with Mr. Therien. He indicated that all of the markers were in place except for the southern end of the fence line next to the Blackstone River. Mr. Therien indicated that he would complete these markers in the morning and take final measurements for the as-built fence layout diagram in approximately two weeks.

Mr. Loffredo indicated that he would have workers grubbing the fence line area on November 19, 1991, and expected to begin drilling the post holes on the following day. Mr. Loffredo further stated that he planned to be working along the P & W rail line for four days, and had contacted the railroad for arrangements.

TAT member Strzempko gave Mr. Loffredo a copy of the site health and safety plan and explained that all workers at the site must read and sign the plan. Additionally, TAT member Strzempko requested that Mr. Loffredo provide a daily log of workers involved with site activities. TAT member Strzempko also provided Mr. Loffredo with another copy of the fence specifications (see Appendix A - List of Reference Documents).

Mr. Loffredo stated that his company would meet all of the specifications with one exception. The exception involved SS40 piping for the line, corner, and gate posts, instead of Schedule 40 piping. Mr. Loffredo stated that the piping met or exceeded the required specifications.

After speaking with the surveying and fence contractors, TAT member Strzempko proceeded north along the rail line and checked to see if fence line markers were emplaced every 75 feet as was required of the surveyor. The markers were placed as required.

Upon arriving at the north end of the rail line, TAT member Strzempko met Mr. Kenneth Jackson, a technician with US Sprint. Mr. Jackson was on site to relocate the Sprint optical cable. This was being performed as a precautionary measure since the Sprint cable lay buried only 5 feet from the proposed fence line. Spray paint was used to mark the cable location every 5 feet. Mr. Jackson further stated that he would be on site on November 19, 1991, to ensure that the markings were still clearly visible.

Tuesday, November 19, 1991

TAT member David Strzempko and OSC Paul Groulx visited the J.M. Mills Landfill Site. The visit was made to monitor the removal by Clean Harbors, Inc., of two drums previously noted at the site, inspect the fence construction materials and progress, and view cement transite asbestos piping noted at the site by RPM David Newton.

OSC Groulx and TAT member Strzempko met with Scott Sullivan and Todd Legg, a chemist and foreman with Clean Harbors, Inc., respectively. EPA, TAT and Clean Harbors personnel traveled to the area where the drums had been previously noted; adjacent to the Providence and Worcester rail line within the eastern toe of the landfill slope approximately half way along the length of the landfill.

Clean Harbors personnel proceeded to dress out in level C personal protective equipment (PPE), and placed the two drums into 85-gallon polyethylene overpack drums for transport to their South Boston facility. The drums would be stored there prior to finalizing disposal arrangements.

To prevent duplication in sampling and analyses (required by disposal facilities to determine applicable disposal methods), OSC Groulx provided the Clean Harbors chemist with a list of analytical results from sampling previously performed on the drums. Manifest #MAF 373278 was assigned to the two overpacked drums by Clean Harbors personnel. Refer to Appendix D - OHM Remediation, Inc. CERCLA Off-Site Waste Management Report dated January 20, 1992. Clean Harbors personnel also took three empty drums for disposal, two of which were collected from the area where the drums were overpacked, while a third was collected from areas north of the landfill. This was performed at the request of RPM Newton.

OSC Groulx and TAT member Strzempko later met with RPM Newton, William Hanscom, an Investigator for EPA, and Brad Blissett, a representative of Alliance Technologies, a company which performs potentially responsible party (PRP) searches.

RPM Newton and OSC Groulx traveled to a northwestern section of the landfill adjacent to the Blackstone River, where they viewed 10 pieces of asbestos cement transite piping ranging from 10 to 16 feet in length, and 8 inches to 12 inches in diameter.

It was also noted that work on the fence by Fence World, Inc. personnel was progressing. Post holes had been augered approximately half way along the rail line proceeding south. An auger connected to a bobcat was being used to drill post holes, and the foreman for Fence World, Inc. indicated that he planned to finish augering the remaining holes within two days.

The foreman noted that the fence posts were brought on site, and he anticipated setting them into concrete within the post holes in approximately 3 days. A flagman for the P & W railroad was present during fencing operations along the rail line.

OSC Groulx and TAT member Strzempko completed air monitoring utilizing an HNU Model P1 photoionization detector and an MSA Model 260 combustible gas indicator within completed auger holes. This was done to help ensure that explosive conditions or volatile organic compounds were not present during borings. No organic vapors above background levels were detected within the auger holes. Immediately after augering, the lower explosivity limit (LEL) readings within the auger holes were 0 percent.

Wednesday, November 20, 1991

TAT member David Strzempko visited the J.M. Mills Landfill Site. The visit was made to monitor the progress of ERCS subcontractors participating in the security fence placement around the J.M. Mills Landfill Site.

Upon arrival at the site, TAT member Strzempko noted that line posts had been encased in concrete along the northern half of the fence line adjacent to the P & W rail line. It was noted that the concrete had been poured approximately four inches below ground level. The subcontractor foreman from Fence World, Inc., explained that a finish coat of concrete would be placed around each post and tapered to ground level per the bid specification to allow water to flow away from the posts.

TAT member Strzempko measured the line post total height and noted that the posts consisted of an 8 foot post with a 1-foot section brazed onto the end to make the posts 9 feet. The diameter of the line posts conformed to the required bid specifications.

Drilling for post holes continued along southern portions of the fence line adjacent to the rail line. No flag man for the railroad was present at the site. The foreman stated that the P & W Railroad Company had been contacted but were unable to provide a flag man due to staffing problems.

TAT member Strzempko stressed the importance of keeping drilling operations as far from the Sprint underground cable location as possible. This was done after noting that several of the boreholes deviated from the fence line toward the cable location.

Additionally, TAT member Strzempko stressed that all additional workers on the site had to sign the health and safety plan. The Fence World foreman agreed to provide the list of all worker signatures upon completion of the job.

Thursday, November 21, 1991

TAT member David Strzempko visited the J.M. Mills Landfill Site. The visit was made to monitor the progress of ERCS subcontractors participating in the security fence placement around the J.M. Mills Landfill Site.

Upon arrival at the site, TAT member Strzempko noted that line posts had been encased in concrete along the northern three quarters of the fence line adjacent to the P & W rail line. It was noted that a finish coat of concrete had been placed around each post and tapered to ground level per the bid specification to allow water to flow away from the posts.

Post holes had been drilled for the northern flank of the fence which was to abut the river, as well as for the northern gate posts. The posts for these areas were placed within the holes, but no concrete had been poured yet. The gate posts appeared to be consistent with bid specification diameters.

Again, as on the previous days, TAT member Strzempko stressed to the drilling crew the importance of keeping away from the Sprint underground cable. Approximately 20 more post holes needed to be drilled along the rail line.

No P & W Railroad Company flag man was present on the site. After ascertaining that the foremen had tried contacting the railroad, TAT member Strzempko departed the site for the day. OSC Groulx later contacted the P & W Railroad office and confirmed that there was a shortage of railroad flagman.

Friday, November 22, 1991

Clean Harbors, Inc. disposed of the two drums taken from the site at Petrochem, Inc. in Ft. Wayne, Indiana through a fuel blending process (See Appendix D).

Monday, November 25, 1991

TAT member David Strzempko and OSC Paul Groulx visited the J.M. Mills Landfill Site. The visit was made to monitor the progress of ERCS subcontractors participating in the security fence placement around the J.M. Mills Landfill Site.

Upon arrival at the site, OSC Groulx and TAT member Strzempko noted that all line posts, corner posts and gate posts had been encased in concrete, though corner posts at the edge of the Blackstone River were not set in concrete. This was because the river had risen approximately 4 feet higher along it's banks than during previous visits.

The foreman for Fence World, Inc. indicated that he expected to complete the job by Wednesday, November 27, 1991. The remaining concrete was being troweled around the posts by the foreman.

OSC Groulx requested that TAT member Strzempko return to the site on November 27, 1991, for a progress report. TAT member Strzempko and OSC Groulx departed the site for the day.

Wednesday, November 27, 1991

TAT member David Strzempko visited the J.M. Mills Landfill Site. The visit was made to monitor the progress of ERCS subcontractors participating in the security fence placement around the J.M. Mills Landfill Site.

Upon arrival at the site, TAT member Strzempko noted that spring tension wire had been placed along line posts approximately three quarters of the way north along the P & W rail line, while fencing fabric had been placed on line posts approximately half way along the same rail line.

Posts at the edge of the Blackstone River were set into concrete with fan extensions out over the water in place. The river height had fallen approximately 4 feet from the November 25, 1991 visit to a level consistent with all visits prior to November 25, 1991.

At the northern end of the fence line, it was observed that two line posts and both gate posts had been knocked over. Tire tracks indicated that the posts were probably knocked over or pulled out by a four wheel drive vehicle.

The foreman for Fence World, Inc. acknowledged that some posts had been vandalized. He planned to reset the posts later in the day. Due to weather conditions, he changed the completion date of the fence to Monday, December 2, 1991.

Tuesday, December 3, 1991

TAT member David Strzempko and OSC Paul Groulx visited the J.M. Mills Landfill Site. The visit was made to view the security fence placement around the J.M. Mills Landfill Site.

Features noted while walking the fence border with the P & W rail line included gaps which were prevalent between the bottom selvages of the fence and the ground, a section of tension wire had not been tightened down, bolts were not peened on the fence hardware, and sections where new rolls of fencing had been tied in were not fully twisted in to prevent the fence from splitting.

After viewing the fence, the OSC and TAT member Strzempko proceeded to the Berkeley Fire District building and met with Fire Chief Harold Audet. The OSC stated that the EPA would be on site next week to install signs along the fence line, warning of the restricted access as well as potential health threats.

Wednesday, December 11, 1991

TAT member David Strzempko and OSC Paul Groulx visited the J.M. Mills Landfill Site. The visit was made to finalize the fencing contract, distribute keys and lock the security fence around the J.M. Mills Landfill Site.

Prior to travelling to the landfill, OSC Groulx and TAT member Strzempko proceeded to the Berkeley Fire District station and met with Chief Audet. Extra keys for the locks to be placed on the fence, as well as additional chains and signs, were distributed to the Chief.

Also prior to going to the landfill, OSC Groulx stopped at the solid waste transfer station located adjacent to southern portions of the landfill. OSC Groulx spoke with Mrs. Nunes, and found out that her company is currently leasing the property, although not from Mr. Marszalkowski, the landfill owner. OSC Groulx stated that he would be locking the gates adjacent to their transfer station in an attempt to limit access to fenced portions of the landfill.

The following persons were met at the landfill: Mike Evanko, from OHM; and Mark Loffredo from Fence World, Inc., the fencing subcontractor. Warning signs previously obtained by Mike Evanko and mailed to OSC Groulx were secured at 100- foot intervals along the fence with wire hog rings.

OSC Groulx stated to Mr. Loffredo that the following concerns about the fence construction would have to be addressed prior to payment. These included peening the bolts on the fence hardware, backfilling areas along the base of the fence with off-site fill materials, and placement of locking 20-foot long by 5-inch diameter pipes across the front of the northern and southern gates.

Mr. Loffredo agreed to honor these request. OSC Groulx stated that TAT member Strzempko would check to see that these requirements were completed and would telephone the ERCS prime contractor to release full payment upon viewing the changes.

OSC Groulx and TAT member Strzempko then met with RPM Newton and RI DEM personnel Linda Wofford and Jim Ashton. OSC Groulx explained the timetable for remaining funding for fence repair. The OSC also distributed keys for the gate locks to the RPM, State officials, and the Fire Department. The key set for the locks was Master Co. number 2840.

After the meeting, TAT member Strzempko calibrated air monitoring instruments including an HNU photoionization detector, an MSA combustible gas indicator, and a Victoreen Thyac III radiation detector. OSC Groulx and TAT member Strzempko proceeded to assess the landfill for any remaining potential hazardous materials which may have been missed during previous assessments. Newly identified suspected hazardous materials are shown on Figure 4 - Site Diagram, which follows on page 24. Figure 4 also delineates the completed fence line.

Materials were inventoried and are represented on the figure by their abbreviated identification, (such as A001). A complete list of all materials found at the site follows in Table 1 - Tank, Drum and Potential Asbestos Identified at The J.M. Mills Landfill Site located on page 29.

TAT and OSC completed their walk through of the site. During the walk through, no readings above background were encountered on the air monitoring instruments.

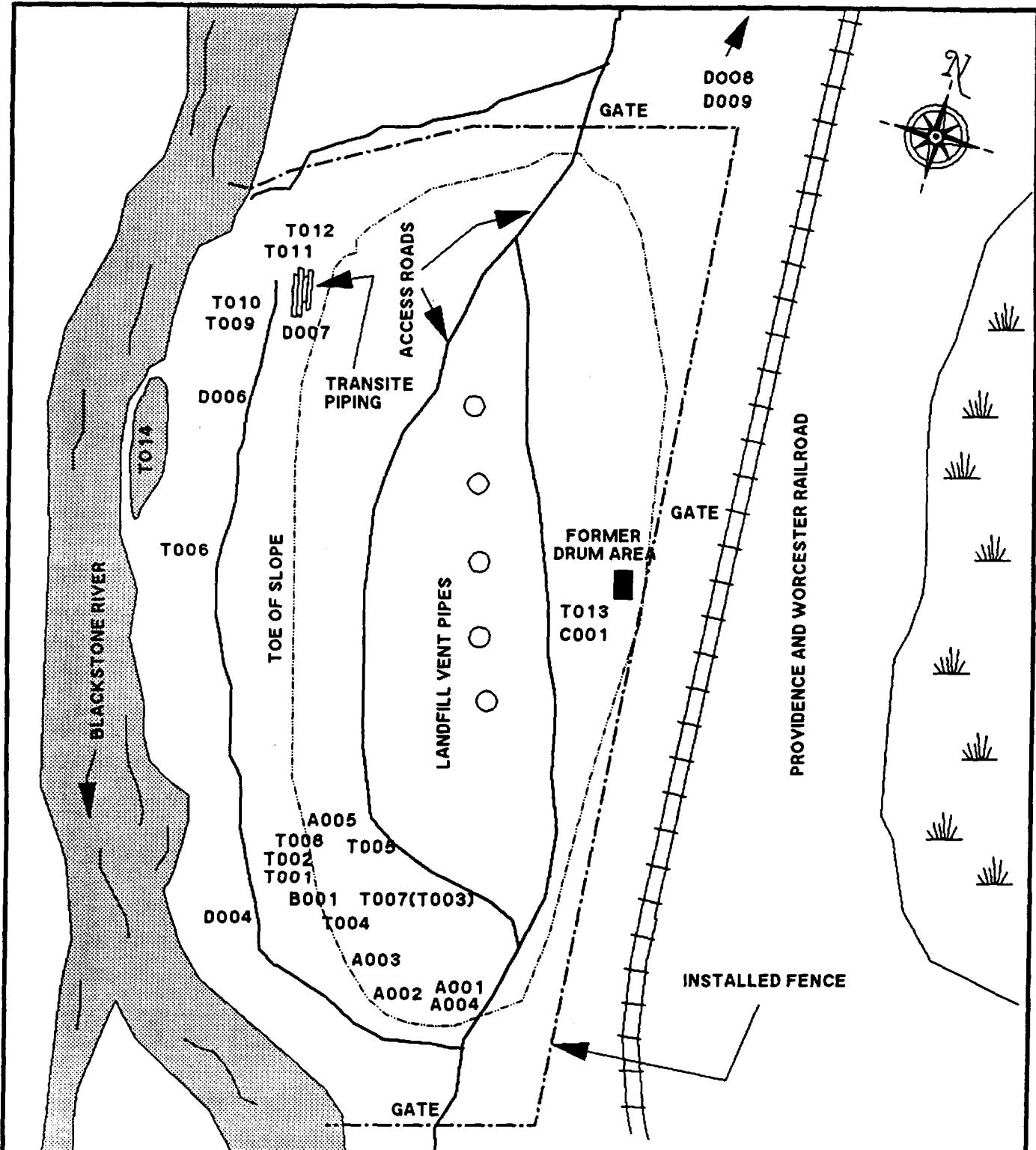


FIGURE 4
SITE DIAGRAM
J.M. MILLS LANDFILL
CUMBERLAND, RHODE ISLAND

NO SCALE

WESTON

REGION I TECHNICAL ASSISTANCE TEAM

DRAWN D. STRZEMPKO	DATE 4/92	PCS/Filename 1737F4A
APPROVED MMV	DATE 4/92	TDD # 01-9109-05C

Sampling of the materials noted at the site was scheduled to occur during February 1992.

Monday, December 16, 1991

TAT member David Strzempko travelled to the J.M. Mills Landfill Site to ascertain that tasks requested of the fencing subcontractor by the OSC were completed.

Upon arrival at the site, it was observed the posts were not yet welded across the front of the fence, bolts were not peened on the fencing hardware, and although dirt piles were placed along portions of the fence where low spots were noticed, it was not yet spread.

TAT member Strzempko departed the site and reported the findings to Mike Evanko and the OSC. Mr. Evanko called the fencing contractor and was informed that the changes would be completed tomorrow.

Tuesday, December 17, 1991

TAT member Strzempko travelled to the site the following day and noted that all the requested fence changes were completed.

Thursday, January 30, 1992

OSC Groulx was notified by Mr. McCarthy of the Cumberland Police Department that the fence around the J.M. Mills landfill had been vandalized at several locations. OSC Groulx notified RPM Newton, and he agreed to perform an inspection to document the fence damages.

Friday, January 31, 1992

RPM Newton visited the site and performed an inspection of the fence damages. Damages were documented by RPM Newton with both notes and photographs. The following damages were observed: the concrete around the northwestern fan extension post was cracked and the post was swung inward; a line pole adjacent to the northern gate was bent inward; 3 line poles along the eastern side of the fence were bent inward; and the east gate and it's associated poles were bent inward.

RPM Newton judged that the fence condition was compromised but still provided an adequate deterrent to public access at this time. He recommended to OSC Groulx that continued monitoring occur, and repair take place prior to school vacation.

Wednesday, February 26, 1992

OSC Groulx issued POLREP #1. It was distributed to applicable federal, state, and local officials.

TAT members David Strzempko and Thomas Saccoccio, and OSC Paul Groulx visited the J.M. Mills Landfill Site to sample tanks, drums, and suspected asbestos which was previously observed during the December 11, 1991 site visit. Sampling data would be used by the OSC to determine if further removal actions were warranted at the site. During the sample visit the locations of all potentially hazardous materials would be noted at the site.

Entry to the landfill area was made from the southern end. The TAT members and OSC Groulx noted two 55-gallon steel drums approximately 400 feet south of Martin Street next to the P & W rail line. The drums, which had not been previously observed, appeared to have leaked a portion of their contents. Also, a sewer cover from a Blackstone Valley Sewer Commission manhole was observed to be removed, and some of the fencing around the landfill had been vandalized.

OSC Groulx and the TAT members proceeded to the southern gate of the landfill and met with EPA RPM David Newton. After the meeting, the TAT members calibrated air monitoring instruments which included a Foboro OVA 128 organic vapor analyzer (OVA), an MSA Model 260 combustible gas indicator (CGI), and a Victoreen Thyac III radiation detector (radiation meter).

TAT members Strzempko and Saccoccio began by sampling five locations for asbestos analyses. These areas included: A001, suspected asbestos block on a safe; A002, suspected aircell on a tractor trailer door; A003, asbestos transite sheeting; A004, suspected asbestos cement on piping; and A005, suspected asbestos block on a safe. Sampling areas are shown on the previously referenced Figure 4 - Site Diagram.

The TAT members proceeded to tank T008 to collect samples for the following analyses: oil identification, polychlorinated biphenyls (PCBs), base/neutral acid-extractables (BNAs), metals, and volatile organic compounds (VOCs). Screening was performed within the tank with the OVA, CGI, and radiation meter. OVA readings were 25 units above the 0.8 unit background; CGI readings were 0 percent lower explosivity limit (LEL) and 20.8 percent oxygen (background); and the radiation meter indicated 0.02 millirems/ hour (background).

OSC Groulx also asked that the TAT members redocument tanks previously numbered on the site by OSC Haworth in 1989. All tanks are depicted on Figure 4 - Site Diagram.

OSC Groulx and RPM Newton reported that the two tanks previously noted in the lagoon on western central portions of the site, were actually only one tank and a roll of textile fabric. With the lagoon being empty, OSC Groulx was also able to determine that the tank in the lagoon had holes in the bottom and was empty.

The OSC, RPM, and TAT members exited the southern gate of the landfill and were proceeding to the northern gate when a 275-gallon home heating oil tank was noted on eastern portions of the landfill (where two drums had previously been removed). Closer inspection indicated that the tank was empty (labelled T013). A compressed gas cylinder, with an oxygen label, was noted next to tank T013 and OSC Groulx labelled it C001.

Northwest portions of the site were accessed through the northern gate. OSC Groulx and RPM Newton noted two additional drums labelled D006 and D007. It was later observed that drum D006 probably contained rainwater based on a pH reading of 7 (measured with pH sensitive paper), and the physical characteristics of the liquid. Drum D007 was sampled for the same parameters as tank T008. Air monitoring was performed in the breathing zone since the drum was crushed and instrument probes could not be inserted. Air monitoring yielded no readings above background. Tank T010, previously thought to contain liquid, was found to be empty.

Tanks T011 and T012 were rechecked for contents. Tank T012 was found to be empty, but Tank T011 had 1 inch of liquid which appeared to be rainwater. The pH was measured with pH sensitive paper and was found to be 7, and several holes in the tank led OSC Groulx to determine that it contained collected rainwater.

The two drums noted north of the site were sampled for the same parameters as tank T008. These drums were labelled D008 and D009. Drum D008 registered 25 units on the OVA while drum D009 registered 10 units. Both drums yielded background levels when screened with the CGI and radiation meter.

Samples were packaged for transport and delivery to the EPA New England Regional Laboratory (NERL), in Lexington, Massachusetts. The OSC, RPM, and TAT members departed from the site. Refer to Appendix E for a copy of the chain of custody log for the samples which were collected.

Thursday, February 27, 1992

OSC Groulx contacted John Leo of the RI DEM, and informed him of the two drums observed beyond northern portions of the J.M. Mills landfill. The OSC explained that the contents of the drums appeared to be diesel fuel, and Mr. Leo agreed to take the lead on removal and disposal of the drums.

Tuesday, March 10, 1992

TAT member David Strzempko and OSC Paul Groulx visited the site to assess vandalism of the security fencing and to complete a final inventory of all suspected hazardous materials found at the landfill during previous visits.

Areas of damage along the fence line were identified with blue taping and a number. The following locations and damages were numbered and recorded:

1. Approximately one third of the way along the P & W rail line from the southern end of the existing fence, a 3-inch gate post from which a 4-foot swinging gate was hung had been bent inward.
2. On the other end of the gate mentioned in item 1, the 3-inch diameter gate post which the 4-foot swinging gate closes on, had been bent over.
3. Thirty feet north of the gate mentioned in item 1, a 2-inch diameter line post had been bent inward.
4. Two hundred and twenty feet south of P & W marker P8, a 2-inch diameter line post had been bent inward.
5. One hundred and twenty feet south of P & W marker P8, a 2-inch diameter line post had been bent inward.
6. One hundred and sixty feet south of P & W marker P8, a 2-inch diameter line post had been bent inward.
7. Twenty feet south of the northern end of the fence, a 2-inch diameter line post had been bent inward.
8. Ten feet south of the northern end of the fence, a 2-inch diameter line post had been knocked over.
9. On the northeast corner of the fence, a 3-inch corner post had been knocked over.
10. Between the northeast corner post and northern gate post, a 2-inch diameter line post had been bent inward. Also, fence fabric next to the gate post had been cut.
11. The end post and fan extending out over the Blackstone River on the north end of the fence was found to spin within the concrete setting.

The recorded damages and expected repairs were detailed by TAT member Strzempko, who prepared a specification package for the fence repair contractor.

Table 1 - Tanks, Drums, and Potential Asbestos at the J.M. Mills Landfill Site documents the size, shape, and contents of the objects documented on the site (and located on Figure 4).

TABLE 1
TANKS, DRUMS, AND POTENTIAL ASBESTOS
IDENTIFIED AT THE
J.M. MILLS LANDFILL (PETERSON/PURITAN NPL) SITE

A = Potential asbestos
B = Battery
C = Cylinder
D = 55-gallon steel drum
T = Steel tank
***** = Not labeled in the field

Number	Type	Size	Contents
A001	Insulation on a safe	4-feet by 4-feet by 5-feet	
A002	Insulation in doors	Six 4-feet by 10-feet panels	
A003	Transite sheeting	Two 4-feet by 8-feet sheets	
A004	Insulation noted on piping	8-foot pipe	
A005	Insulation on a safe	4-feet by 4-feet by 5-feet	
B001	Truck battery	2-feet by 2-feet by 3-feet	One cell with plates
C001	Top valve broken	300 T (6000 pounds)	Oxygen
D004	Open top drum		Construction debris
D005	Sealed drum		Empty
D006	Crushed drum		Rain water
D007	Crushed drum		Water with a sheen
T001	Cylindrical	8-feet dia. by 24-feet length	Empty
T002	Cylindrical	5-feet dia. by 18-feet length	Empty
T003	Cylindrical (also T007)	5-feet dia. by 12-feet length	Empty
T004	Cylindrical	7-feet dia. by 15-feet length	Empty
T005	Oil truck tank	4-feet height by 14-feet length	Empty
T006	Crushed cylinder	5-feet dia. by 18-feet length	Empty
T008	Cylindrical	5-feet dia. by 5-feet length	3-inches of sludge
T009	Crushed cylinder	5-feet dia. by 20-feet length	Empty
T010	Home heating oil tank	275-gallon	Empty
T011	Cylindrical	5-feet dia. by 15-feet length	1-inch of rain water
T012	Crushed cylinder	5-feet dia. by 15-feet length	Empty
T013	Home heating oil tank	275-gallon	Empty
T014	Cylinder	5-feet dia. by 15-feet length	Empty
*	Transite Piping	Ten 8-inch to 12-inch dia. pipes, 10-feet to 16-feet in length.	

Monday, March 16, 1992

OSC Groulx sent a work order to OHM directing the PCT to subcontract a fence company to perform the needed repairs. A copy of the fence repair specifications prepared by TAT member Strzempko was included with the work order.

Monday, April 6, 1992

TAT member David Strzempko visited the J.M. Mills Landfill Site. The visit was made to monitor fence repairs being performed at the site by Fence World, Inc., of Woonsocket, Rhode Island, who were subcontracted by OHM.

Upon arrival at the site, TAT member Strzempko met with P & W railroad Flagman E. Richard (employee # 5430), and Fence World, Inc. workers, including a Foreman and a Laborer. The workers had just replaced the northeastern corner fence post which included upgrading the diameter of the post to 4 inches. Also, the line post between the corner post and the gate post was replaced and associated cross bars, truss rods, fence fabric, stretcher bars and tension wires were also repaired.

Repairs were then completed on the end post and associated fan extending out over the Blackstone River at the northwestern end of the fence line. Here, the end post and attached fan were removed from the existing concrete encasement, and a new end post hole was excavated next to it. The fan post and associated fan were reset in new concrete once a piece of 1/2-inch reinforcement rod was placed through post approximately 6 inches from the bottom. Again, the associated cross bars, truss rods, fence fabric, stretcher bars and tension wires were also repaired.

Workers proceeded to the six damaged line posts along the eastern section of the fence line (abutting the P & W railroad). Repairs consisted of removing damaged sections of fencing, winching out old line posts and associated concrete encasements, and reinstalling new line posts. Fence fabric was then remeshed, and the fencing was tied off to the line posts utilizing galvanized 9 gauge steel wiring.

The final area of fencing that was repaired consisted of the 4-foot gate located centrally along eastern portions of the fence line. Bent gate posts and their concrete encasements were winched out of the ground, and new 4-inch posts were installed. All of the associated cross bars, truss rods, fence fabric, stretcher bars and tension wires were repaired, and the gate was reinstalled.

The following deviations from specification were noted by TAT member Strzempko: the bolts on the fencing were not peened or tack welded and the posts used on the 4-foot gate were 1 inch larger in diameter than was specified. These deviations were reported to the OHM PCT who contacted Fence World, Inc. about correcting them. Fence World, Inc. replied that they would remove the debris and tack weld the associated fence hardware.

Monday, April 13, 1992

TAT member Strzempko travelled to the site and noted that all of the fence specifications were met.

Tuesday, April 14, 1992

OSC Groulx received the final results of analytical testing performed on samples collected from the J.M. Mills Landfill site. Asbestos was detected in 2 of the 5 samples collected: at 25 percent at A003 (transite sheeting); and at 70 percent at A004 (cement on the section of piping).

The following semi-volatile organic compounds (SVOCs) were detected in sludge from T008: phenanthrene at 20 ppm; pyrene at 10 ppm; and 2-methylnaphthalene at 30 ppm. No pesticides were detected in the sample, but the polychlorinated biphenyl aroclor-1242 was detected at 15 ppm. No volatile organic compounds were detected in the sample, and the material was identified through a chromatogram matching analyses as 10W30 motor oil.

No SVOCs, pesticides or PCBs were detected in the aqueous drum sample D007. Two tentatively identified VOCs were detected at the following concentrations: 3 ppm unknown hydrocarbon; and 7 ppm C-6 hydrocarbon. The liquid was identified through a chromatogram matching analyses as #2 fuel oil.

No metals analyses was performed due to scheduling conflicts at NERL.

The OSC determined that no further removal activities were warranted at the site at this time for the following reason: transite piping in northern portions of the landfill was not friable and thus did not pose an airborne risk; the transite sheeting (A003) was not friable and thus did not pose an airborne risk; the cement on the piping (A004) was not of a significant quantity; the tank sludge (T008) volume was far less than 10 percent of the tank volume, therefore the tank is considered empty under Resource Conservation and Recovery Act (RCRA) guidelines; drum D007 contained mainly rainwater and analytical results reflected probable residue contained within the drum; the site is secured thus limits access to unauthorized personnel; and based on conversations between the OSC and RPM Newton, the site will be undergoing remedial action upon completion of an EPA remedial investigation/feasibility study (RI/FS).

2.9 Treatment, Disposal and Alternative Technology Options and Selections

Disposal of the drums from the site was performed by Clean Harbors, Inc. by fuel blending. This was deemed the most cost-effective option for such a small amount of material. All material was disposed of at facilities in compliance with the CERCLA Off-Site Policy. Please refer to Appendix D - OHM's CERCLA Off-Site Waste Management Report.

2.10 Community Relations

Following the initial site investigations and the request for assistance from the RPM, the local community welcomed the initiation of the removal activities by the EPA. The surrounding residential community was confronted with a health threat posed by access to the hazardous substances within the landfill. The most effective interim way to mitigate the health threat was by limiting access, and the EPA removal action involving security fence construction met this need.

On October 22, 1991, the OSC met with Cumberland Mayor & Councillors, and the Berkeley Fire District for an informational community meeting prior to the initiation of removal activities. The OSC included state officials in the meeting to create an open forum and arrive at ARARs which were mutually acceptable to both local and state entities. Periodic updates were given to state and local officials during site activities. Keys for the locks on the fence gates were distributed to the Fire District.

The OSC was also available for interviews with the local media.

Copies of the Administrative Record File are located at the Cumberland and Lincoln Libraries, as well as at the EPA New England Regional Laboratory, 60 Westview Street, Lexington, Massachusetts.

3.0 EFFECTIVENESS OF REMOVAL

The removal action was deemed successful and effective by the OSC and all parties involved. The actions provided the quickest and best alternative available until the ongoing EPA remedial investigation/feasibility study (RI/FS) can be completed.

3.1 RESPONSIBLE PARTIES

The only responsible party identified prior to the initiation of removal activities was the property owner, Mr. Joseph Marszalkowski who did not indicate a willingness to perform the required activities (see Section 2.5).

3.2 STATE AND LOCAL AGENCIES

The RI DEM as well as the RPM requested EPA removal assistance at the site because the their agencies and respective branches lacked either the resources or jurisdiction to accomplish the security fencing task.

Ms. Wofford of the RI DEM played a vital role in assisting the OSC during review of ARARs, and made several site visits and remained in close contact with the OSC. The result was a coordinated effort which expedited the removal action. The RI DEM also waived the taxes for transport of the drums off of the site.

The City of Cumberland assisted in the removal action by providing assessor's maps and tax information. The Berkeley Fire District helped with historical land use and agreed to provide support in the event of a fire. Other local officials were also helpful in waiving process permit fees and providing requested information, and the city helped accelerate the process of obtaining written EPA site access.

The Police and Fire Departments have been helpful in continued monitoring of the fence condition.

3.3 FEDERAL AGENCIES

The EPA promptly responded to the request for assistance from the RPM and RI DEM and conducted a Removal Site Evaluation in June of 1991. An Action Memorandum was signed in September of 1991, and bids for a surveyor were solicited shortly thereafter.

A close working relationship was established between the EPA Removal and Remedial programs. Such a relationship helped facilitate an effective removal action.

The OSC employed the most cost-effective methods by utilizing the EPA ERCS contractor in an off-site capacity. OHM solicited and chose bidders based on local resources, lowest bid, and references of previous work provided by bidders.

3.4 CONTRACTORS AND PRIVATE GROUPS

The ERCS contractor for the J.M. Mills Site was OHM Remediation Services, Inc.. OHM personnel completed all tasks in a professional manner. On-site activities were completed in the most cost-effective manner and on schedule even though OHM personnel were not in the area for the majority of the tasks which were completed. This was primarily facilitated by detailed bid specifications for the surveying and fencing subcontractors, and subsequent bids which were submitted reflecting lump sum fixed costs.

Additionally, it should be noted that all subcontracts granted by OHM were conducted under the rules of the Davis-Bacon Act (general wage decision).

The Roy F. Weston, Inc. Technical Assistance Team (TAT) monitored the ERCS subcontractors to ensure efficient and proper completion of the tasks, as well as assisting the OSC with site documentation. TAT maintained close contact with the OSC through all phases of the project and provided the Site Safety Plan and detailed outline for fence bid specifications.

The fence company, Fence World, Inc. was attentive to needs of the OSC and responded to OHM requirements.

Since a large portion of the fence was erected on P & W railroad property, negotiations with that company were essential. The railroad was very cooperative and allowed the fence to be erected with limited conditions: that they be notified prior to the commencement of site activities for arranging the presence of a flagman; and fence work be conducted at least 20 feet from the rail line. Placement of the fence on railroad property was necessary because portions of the landfill had encroached onto their property.

Clean Harbors was extremely efficient in the disposal of the two drums from the site.

AT&T and Sprint Telecommunications personnel were attentive to EPA requests and acted quickly on two occasions to delineate phone lines at the site.

4.0 DIFFICULTIES ENCOUNTERED

The only significant problem encountered in this removal action was obtaining permission from the railroad company to place a portion of the fence on their property. This was needed due to the location of landfilled materials. After meeting with the OSC and getting a scope of the situation at the site, railroad officials allowed access.

5.0 RECOMMENDATIONS

To maintain cost effectiveness during similar time critical removal actions in the future, the following recommendations and comments are presented:

- Use of ERCS as a subcontracting mechanism was extremely efficient because a group of subcontractors was asked to bid, and the PCT was able to review each subcontractors credentials and recommendations as well as choose the most cost effective subcontractor based on their bids.

- Use of a fixed-cost projection for subcontractors bidding on tasks is highly recommended. In this case, surveying and fencing tasks were needed. To achieve standardization of bids, and as a necessary requirement for fixed-cost projections, it was essential to provide subcontractors with detailed bid specifications.
- It was necessary and recommended that scheduling requirements be detailed at the bid stage, and enforced throughout the project's duration. Contingencies for subcontractors missing deadlines was clearly delineated and helped facilitate completion of the project on time.
- To ensure that the quality of work being performed is acceptable, it is recommended that period checks of completed workmanship be employed. TAT provided such a check and reported to the OSC. The ERCS prime contractor should provide contingencies within the subcontract for workmanship which falls below quality standards.
- Since past local use of the landfill has been as a recreational area and vandalism of the fence has occurred for continued entry, it is probable that future vandalism will necessitate further fence repairs.

5.1 PREVENTION OF SIMILAR RELEASE

The release of hazardous substances may have resulted from the improper operation of the landfill. Proper enforcement of current environmental regulations should minimize similar releases.

5.2 IMPROVEMENT OF RESPONSE ACTIONS

The only recommendation is for OSC's to ensure that there is a contingency for a backup subcontractor in the event that subcontract penalties for substandard work are ineffective, and a new subcontractor has to be chosen.

5.3 CONTINGENCY PLANS

No changes are recommended to the National or Regional Contingency Plans.

6.0 PROJECT SUPPORT FILE

See Appendix A for the List of Reference Documents. The complete site files can be found at the U.S. Environmental Protection Agency, 60 Westview Street in Lexington, Massachusetts.

APPENDIX A

LIST OF REFERENCE DOCUMENTS

List of Reference Documents
J.M. Mills Landfill Removal Action
Cumberland, Rhode Island

All of the documents listed below are available at:

U.S. Environmental Protection Agency
60 Westview Street
Lexington, Massachusetts

Superfund Record of Communication from Louise House Boston Region Agency for Toxic Substances and Disease Registry to Richard Haworth, OSC, EPA Emergency Services Division, Lexington, MA, date February 12, 1991. Record relative to analysis of drum contents found at the J.M. Mills Landfill.

Closure memorandum from Dorothy Girten, EPA Removal Program Site Investigator, to David Newton, EPA Remedial Project Manager, dated August 5, 1991. Record relative to SI recommending fencing and drum and asbestos removal at J.M. Mills Landfill Site.

Removal Program Preliminary Assessment/Site Investigation for Peterson/Puritan (J.M. Mills Landfill) Site, Cumberland, Rhode Island, dated June, 1991, and prepared by the Roy F. Weston, Inc., Technical Assistance Team.

Removal Program PA/SI Analytical Data Summary, J.M. Mills Landfill (Peterson/Puritan) Site, Cumberland, Rhode Island, dated October, 1991, and prepared by the Roy F. Weston, Inc., Technical Assistance Team.

Site Safety Plan For The J.M. Mills Landfill Site, Cumberland, Rhode Island, dated October 29, 1991, and prepared by the Roy F. Weston, Inc., Technical Assistance Team.

Letter from J.M. Mills, Inc., to EPA OSC Paul Groulx, dated October 25, 1991. Relative to J.M. Mills, Inc. granting access to EPA and it's contractors for completion of landfill fencing.

Letter from Providence and Worcester Railroad to EPA OSC Paul Groulx, dated November 4, 1991. Relative to Providence and Worcester Railroad granting access to EPA and it's contractors for completion of landfill fencing.

OHM Remediation Services, Inc. (ERCS) Proposal Summary and Bid Report for surveying services, J.M. Mills Landfill, dated October 17, 1991.

OHM Remediation Services, Inc. (ERCS) Proposal Summary and Bid Report for fencing services, J.M. Mills Landfill, dated January, 1991.

National Surveyors-Developers, Inc. Blueprint, Proposed Fence Location for O.H.M. Corporation, J.M. Mills, Inc. Site, Cumberland, Rhode Island, dated October, 1991.

National Surveyors-Developers, Inc. Blueprint, Existing Fence Location for O.H.M. Corporation, J.M. Mills, Inc. Site, Cumberland, Rhode Island, dated December, 1991.

APPENDIX B

J.M. MILLS LANDFILL ACTION MEMORANDUM
DATED SEPTEMBER 25, 1991



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

ENVIRONMENTAL SERVICES DIVISION

60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173-3185

*Paul R. Groulx
September 25, 1991*

~~CONTAINS ENFORCEMENT SENSITIVE INFORMATION~~

MEMORANDUM

DATE: September 25, 1991

SUBJ: Request for a Removal Action at the Peterson/Puritan Inc.
(J.M. Mills Landfill Property) NPL Superfund Site
Cumberland, Rhode Island

FROM: Paul R. Groulx, On-Scene Coordinator
Emergency Planning and Response Branch

TO: Julie Belaga
Regional Administrator

THRU: Merrill Hohman, Director
Waste Management Division

THRU: Edward J. Conley, Director
Environmental Services Division

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed removal action described herein for the J.M. Mills Landfill Property (a portion of the Peterson/Puritan, Inc. NPL Site) in Cumberland, Rhode Island.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID #: RID055176283
Site ID #: 40
Category : Time-critical

A. Site Description

1. Removal Site Evaluation

The area of concern occupies the portion of the Peterson/Puritan, Inc. Superfund National Priority Listed (NPL) Site ("Site") identified as the J.M. Mills Landfill Property ("Landfill"), which was utilized as a solid waste landfill from 1954 through the early 1980's. The State of Rhode Island ordered the facility on June 30, 1982 to cease accepting any wastes (Mott 1988/C-E Environmental, Inc. Report). The front portion of the Landfill has several buildings which the owner has leased to a trucking company.

As a result of inquiries from the EPA Remedial Project Manager ("RPM") for emergency removal assistance concerning ongoing underground fires at the Landfill, and per OSWER Directive No. 9200.2-03, the EPA Removal Program Site Investigator ("SI") conducted a removal preliminary assessment/site investigation (PA/SI) at the Landfill on May 23, 1991.

As part of the Removal PA/SI, pertinent sections of a 1988 draft Remedial Investigation ("RI") were reviewed. They indicated the presence of heavy metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs), in the Landfill.

The Removal PA/SI sampling identified contaminant emissions (acetone, methylene chloride, ethyl acetate, toluene, and n-propylbenzene) from vent pipes and from the base of the Landfill. Water samples indicated contaminants including lead, zinc, copper, barium, chromium, and VOCs. Soils collected from areas along the base of the Landfill indicated the presence of similar heavy metals, VOCs, and SVOCs. Also found on the Site were a drum and asbestos piping. Analyses of the drum's contents indicated the presence of SVOCs, including naphthalene, dimethyl phthalate, and acetophenone; and heavy metals, including arsenic, barium, cadmium, lead, and mercury. The above factors resulted in the Removal SI recommending construction of a fence to limit access, and removal of the drum and asbestos piping.

Additionally, the RPM indicated that in May of 1991, several smoldering fires occurred within interior portions of the Landfill. The State of RI Department of Environmental Management (DEM) and local officials have asked the EPA Remedial Project Manager (RPM) to address the concerns of public access and site security.

2. Physical Location

The Landfill, commonly referred to as Marszalkowski's dump, or as J.M. Mills Landfill, is located off 4 Mendon Road (Route 122) in Providence County, Cumberland, Rhode Island. The area of concern is located southeast of several manufacturing buildings (including Peterson/Puritan, Inc.), and is identified by the large burial mound (landfill area). This area is bounded to the northeast by the Providence Worcester Railroad tracks, to the northwest by the Blackstone Valley Electric high tension transmission lines, to the southwest by the Blackstone River, and to the southeast by a line perpendicular to the Providence Worcester Railroad tracks and the Blackstone River approximately seven tenths of a mile to the southeast of the Blackstone Valley Electric high tension transmission lines.

The three wells of the closed Quinnville Wellfield are located across the Blackstone River approximately 1000 feet from the northern flank of the Landfill. The closed Lennox Street Well is located approximately 1000 feet from the southern flank of the Landfill.

3. Site Characteristics

The width of the Landfill is approximately 200 feet at each end, and approximately 500 feet at the center. The height of the Landfill is over 100 feet above local ground level. Access is presently not restricted.

4. Release or Threatened Release into the Environment of a Hazardous Substance, Pollutant or Contaminant.

As noted above, metals, PCBs, VOCs, and SVOCs have been identified at the Landfill. Many of these contaminants are toxic for all routes of exposure, e.g., inhalation, ingestion and direct contact, and are defined as "hazardous materials" by section 101 (14) of CERCLA, or as "pollutants or contaminants" by section 101 (33) of CERCLA. A memo by the RI DEM indicated that 3 area youths became sick from exposure to airborne contaminants in the Landfill area.

Additionally, methane is being generated at the Landfill. Vent pipes had been installed prior to the Removal SI. There is evidence, i.e., burn marks on the pipes, that vandals have ignited the methane venting from the pipes.

5. NPL Status

The Peterson/Puritan, Inc. Site has been listed on the NPL since September, 1983. It received a score of 40.1 from the Hazard Ranking System.

B. OTHER ACTIONS TO DATE**1. Previous Actions**

The following actions have been performed to date:

- Quinnville Municipal Well closed 1979
- Lennox Street Municipal Well closed 1979
- EPA/Goldberg Zoino & Associates study 1980-81
- Peterson/Puritan - Malcolm Pernie Study-1982
- Site Listed on NPL September 1983
- Peterson/Puritan Reimbursement of Lincoln for water supply - 1984
- Peterson/Puritan Remedial Investigation/Feasibility Study (RI/FS) Phase 1 1987-89
- EPA Removal Preliminary Assessment & Site Investigation - June 1990
- EPA emergency response inspection to landfill fire 3/6/91
- EPA removal program site investigator review NPL site on May 1991
- Peterson/Puritan, Inc., RI/FS ongoing.

C. STATE AND LOCAL AUTHORITIES' ROLES

The State of Rhode Island ordered the J.M. Mills Landfill to cease accepting any waste after June 30, 1982 (Mott 1988/C.E. Environmental Inc. Report). The RI DEM issued a Notice of Violation (NOV) and Order on December 27, 1985. In August of 1986, the RI DEM requested a Closure Certificate for the Landfill. On September 30, 1986, the State determined through an inspection that neither the closure requirement nor the access restriction requirement had been complied with. In 1986, the State received complaints that children became sick after playing at the Landfill. Sampling surveys during 1987 and 1988 involving ponded surface water/leachate at the base of the Landfill have indicated releases of both VOCs and heavy metals. Metals released from the Landfill include arsenic, copper, lead, and zinc (Versar/C.E. Environmental Inc. report).

In April 1991, a concern was raised to the RI DEM and EPA by the Cumberland Town Councilors who publicly voiced their concerns over the ongoing illegal dumping, lack of security measures and lack of access control.

On March 19, 1991, Jim Ashton, RI DEM Division of Solid Waste, contacted the EPA RPM, David Newton, to discuss the availability of funding to restrict access at the Landfill. RI DEM had previously required the owner provide further security measures and adequate cover. The owner was reluctant to respond and has been unwilling to comply with all DEM conditions.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to Public Health or Welfare

The Landfill is accessible to nearby residential areas, thereby presenting a potential threat for exposure to humans from hazardous substances and pollutants through dermal absorption and inhalation. Signs of heavy public usage are evident. The potential for fire and explosion remains a risk to human health due to continued production and venting of methane and detectable VOC's. Also, air releases are occurring as a result of the Landfill's internal high temperature pyrolysis of organic materials, as evidenced by intermittent releases of smoke from various parts of the mound.

These threats are have been documented by local doctors, Cumberland Police Department, and the RI DEM.

IV. ENDANGERMENT

The Agency for Toxic Substances Disease Registry (ATSDR) has recommended removal of the drum in a health consultation for the Site.

Regarding the fence, although the analytical data has not revealed surface contaminant concentrations to be typically greater than 100 ppm, an endangerment finding is justified due to long term potential and actual exposure through dermal absorption and inhalation of hazardous substances to the public from this property. If not addressed by implementing the response actions selected in this Action Memorandum, this situation may present an imminent and substantial endangerment to public health, public welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The proposed removal actions include the following:

- a. Coordinate the removal of the exposed abandoned drum, as recommended by the ATSDR.
- b. Secure the Landfill with an eight-foot high, 0.7 mile long chain link fence adjacent to the Providence Worcester Railroad track to prevent public access.

2. Contribution to Remedial Performance

This proposed removal action is in accordance with the requests of the RPM and is consistent with the remedial action planned for this NPL Site.

3. Description of alternative technologies

Incineration or treatment of the contents of the drum is the anticipated disposal method.

4. Applicable or relevant and appropriate requirements (ARARs)

All federal regulations pertaining to the cleanup of the property will be followed. The RI DEM is being requested to identify State ARARs. The OSC will, to the extent practicable, incorporate them into the removal action when they are made available.

5. Project Schedule

The removal action will take approximately four months to complete, pending weather conditions. The response activities will commence within one week of approval of this Action Memorandum.

B. Estimated Costs

- EXTRAMURAL COSTS:

o Regional Allowance Costs:

Extramural Contractor Cost \$ 60,000

o Other Extramural Costs:

Technical Assistance Team \$ 20,000

o Subtotal, Extramural Costs:

\$ 80,000

o Extramural Project Contingency:

\$ 16,000

* TOTAL EXTRAMURAL COSTS AND CONTINGENCY:

\$ 96,000

- INTRAMURAL COSTS:

o Direct and Indirect Costs:

\$ 10,000

o Intramural Contingency :

\$ 2,000

* TOTAL INTRAMURAL COSTS AND CONTINGENCY:

\$ 12,000

TOTAL REMOVAL PROJECT CEILING:

\$108,000

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed action will increase public health risks and endangerment posed by possible direct exposure to contaminants on-site.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

See attached.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Peterson/Puritan Inc. (J.M. Mills Landfill Property) NPL Site, in Cumberland, Rhode Island, developed in accordance with CERCLA, as amended, and which is consistent with the NCP.

Conditions at the Landfill meet the National Contingency Plan Section 300.415 (b)(2) criteria for a removal action in that there is:

"Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants"..... [300.415(b)(2)(i)];

"Hazardous substances or pollutants or contaminants in drums, barrels, tanks or other bulk storage containers, that may pose a threat of release".....[300.415(b)(2)(iii)];

"Threat of fire or explosion".....[300.415(b)(2)(vi)].

Therefore, I recommend approval of this removal action. The total estimated project ceiling is \$108,000 of which \$96,000 is for extramural contractor costs.

APPROVAL:



DATE

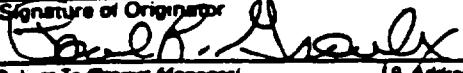
9/26/91

DISAPPROVAL:

DATE

(Shaded areas are for use of procurement office only)

Page of

US Environmental Protection Agency Washington, DC 20460		1. Name of Originator PAUL R. GROULX		2. Date of Requisition 09/25/91	
Procurement Request/Order		3. Mail Code EER-ESD/LEX		4. Telephone Number (617) 860-4308	
6. Signature of Originator 		7. Recommended Procurement Method <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Other than full and open competition <input type="checkbox"/> Sole source small purchase			
8. Deliver To (Project Manager) PAUL GROULX		9. Address U.S. EPA, ESD, REGION I 60 WESTVIEW ST., LEX, MA 02173		10. Mail Code EER/LEX	
12. Financial Data 68-20X8145		13. Appropriation a. Appropriation b. Servicing Finance Office Number		11. Telephone Number (617) 860-4308/367	
				NOTE: Item 12(d) Document Type = Contract = "C" Purchase Order = "P"	
..... FMO Use (e) (73 digits)		D T (d)	Document Control Number (e) (6 digits)	Account Number (e) (10 digits)	Object Class (e) (4 digits)
		C	ER0034	1TFALANE40	25.35
					\$60,000 00
13. Suggested Source (Name, Address, ZIP Code, Phone/Contact)		14. Amount of money committed is: <input checked="" type="checkbox"/> Original <input type="checkbox"/> Increase <input type="checkbox"/> Decrease		15. For Small Purchases Only: Contracting Office is authorized to exceed the amount shown in Block 12(h) by 10% or \$100, whichever is less. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
a. Branch/Office DONALD F. BERGER, CHIEF, ESD-AB		Date 9/25/91		d. Property Management Officer/Designee JULIE BELAGA, REGIONAL ADMINISTRATOR	
b. Division/Office EDWARD J. CONLEY, DIRECTOR, ESD		Date 9/25/91		e. Other (Specify) JULIE BELAGA, REGIONAL ADMINISTRATOR	
c. Funds listed in Block 12 and Block 15 (if any) are available and reserved. (Signature of Certifying Officer)		Date 26 Aug 91		f. Other (Specify) Mary-Ellen Storie	
16. Approvals Donald F. Berger, Chief, ESD-AB					
17. Contracting Officer EDWARD J. CONLEY, DIRECTOR, ESD					
18. Contracting Officer EDWARD J. CONLEY, DIRECTOR, ESD					
19. Contracting Officer EDWARD J. CONLEY, DIRECTOR, ESD					
20. Contracting Officer EDWARD J. CONLEY, DIRECTOR, ESD					
21. Contracting Officer EDWARD J. CONLEY, DIRECTOR, ESD					
22. Delivery to POB Point of Contact/Address and Phone				23. Person Taking Order/Name and Phone	
24. Contracting Officer EDWARD J. CONLEY, DIRECTOR, ESD					
25. Contracting Officer EDWARD J. CONLEY, DIRECTOR, ESD					
26. Schedule					
Item Number (a)	Supplies or Services (b)		Quantity Ordered (c)	Unit (d)	Estimated Unit Price (e)
	FUNDING FOR EMERGENCY REMOVAL AT J.M. MILLS LANDFILL PROPERTY CUMBERLAND, R.I. (PETERSON/PURITAN INC. - SUPERFUND NPL SITE) ACTION MEMORANDUM - SEPTEMBER 25, 1991				\$60,000

APPENDIX C

**NOTICE OF POTENTIAL LIABILITY AND INVITATION TO PERFORM
OR FINANCE PROPOSED CLEANUP ACTIVITIES LETTER**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
ENVIRONMENTAL SERVICES DIVISION
60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173-3185

URGENT LEGAL MATTER -- PROMPT REPLY NECESSARY
CERTIFIED MAIL: RETURN RECEIPT REQUESTED

OCT 07 1991

J. M. Mills, Inc.
Joseph Marszalkowski, President
c/o Joseph Wurzel
305 Park Shore Drive
Unit 241
Naples, Florida 33940

Re: **NOTICE OF POTENTIAL LIABILITY AND INVITATION TO PERFORM OR FINANCE PROPOSED CLEANUP ACTIVITIES:**
Peterson/Puritan, Inc., Cumberland, Rhode Island

Dear Mr. Marszalkowski:

This letter serves to notify you of potential liability regarding removal actions at the J. M. Mills Landfill ("Landfill") portion of the Peterson/Puritan, Inc. Superfund Site ("Site") in Cumberland, Rhode Island as defined by Section 107(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA"), as amended, 42 U.S.C. § 9607(a). In particular, this letter notifies you of forthcoming removal activities at the Landfill portion of the Site which you are invited to perform or finance and which you may be ordered to perform at a later date.

NOTICE OF POTENTIAL LIABILITY

The United States Environmental Protection Agency ("EPA") has documented the release or threatened release of hazardous substances or pollutants or contaminants at the Landfill, which is located at 4 Mendon Road in Cumberland, Rhode Island. The Landfill is bounded to the northeast by Providence Worcester Railroad tracks, to the northwest by Blackstone Valley Electric high tension wires, to the southwest by the Blackstone River, and to the southeast by a line perpendicular to the Providence Worcester Railroad tracks and the Blackstone River seven tenths of a mile to the southeast of the Blackstone Valley Electric high tension wires.

Hazardous substances involved in the release or threat of release at the Landfill include, but are not limited to, polychlorinated biphenyls, phthalates, naphthalene, and

J.M. Mills, Inc. Notice Letter
Peterson/Puritan, Inc. Site
J.M. Mills Landfill Property
Page 2

acetophenone along with the threat of breakouts from underground fire and the threat of explosion or fire posed by methane venting. EPA has spent and is considering spending public funds on actions to investigate and control such releases or threatened releases at the Landfill. Unless a potentially responsible party ("PRP") or parties commit to properly perform or finance such actions, EPA may continue to perform these actions pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604.

Under Sections 106(a) and 107(a) of CERCLA, 42 U.S.C. §§ 9606(a) and 9607(a), Section 7003 of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6973, and other laws, liable parties may be obligated to implement response actions deemed necessary by EPA to protect public health, welfare, or the environment and may be liable for all costs incurred by the Government in responding to any release or threatened release at a Site. Such actions and costs may include, but are not limited to, expenditures for investigations, planning, response, oversight, and enforcement activities.

Responsible parties under CERCLA include current and former owners and operators of a Site, persons who arranged for disposal or treatment of hazardous substances found at a Site (often called "generators"), and persons who accepted hazardous substances for transport to a Site (often called "transporters"). EPA has evaluated evidence gathered during investigations of the Landfill. Based on this evidence, EPA has information indicating that you are a potentially responsible party under Section 107(a) of CERCLA with respect to the Site. Specifically, EPA has reason to believe that J.M. Mills, Inc. is the current owner of the Landfill and was the owner and operator of the Landfill at the time of disposal of hazardous substance found on the Landfill. By this letter, EPA notifies you of your potential liability and urges you to voluntarily perform or finance those response activities that EPA determines are necessary at the Landfill and/or the Site.

OUTLINE OF SITE RESPONSE ACTIVITIES

In accordance with CERCLA and other authorities, EPA has undertaken certain actions and incurred certain costs in response to conditions at the Landfill. These response actions have included conducting a site assessment as well as other investigations which have revealed the presence of hazardous substances at the Landfill.

J.M. Mills, Inc. Notice Letter
Peterson/Puritan, Inc. Site
J.M. Mills Landfill Property
Page 3

Due to the presence of hazardous substances at the Landfill, and in light of other conditions, EPA has determined that there may be an imminent and substantial endangerment to public health, welfare, or the environment. In response, EPA is planning to conduct the following immediate removal activities at the Landfill portion of the Site: construction of a fence to secure the property; sampling and analysis of the contents of deteriorating drums present within the Landfill boundaries; and, if appropriate, overpacking, staging, and disposal of those drums at an EPA-approved disposal facility. The duration of removal activity at the Landfill is expected to be approximately four (4) months.

INVITATION TO PERFORM SITE RESPONSE ACTIVITIES

Before EPA spends additional public funds to undertake a removal action at the Site, EPA urges you to voluntarily perform or finance the removal activities outlined above. Any such work performed by you in your capacity as a PRP must be conducted pursuant to a unilateral administrative order and an EPA-approved workplan as authorized by Section 106(a) of CERCLA, 42 U.S.C. § 9606(a). Prior to final issuance of such a unilateral order, a draft order will be sent to you or your representative for review and comment.

Be advised that even if you do not indicate a willingness to perform or finance necessary response actions, EPA may order you to undertake such actions under Section 106 of CERCLA, 42 U.S.C. § 9606. Failure to comply with a Section 106(a) administrative order may result in a fine of up to \$25,000 per day under Section 106(b) or imposition of treble damages under Section 107(c)(3) of CERCLA. Further, you may be held liable under Section 107(a) for the cost of any response activities EPA performs at the Landfill and for any damages to natural resources.

PRP RESPONSE AND EPA CONTACT

You should contact EPA within ten (10) business days after receipt of this letter to indicate your willingness to perform or finance the response activities outlined above. If EPA does not receive a response within that time, EPA will assume that you do not wish to negotiate a resolution of your liabilities in connection with the response and that you have declined any involvement in performing response activities. Be advised,

J.M. Mills, Inc. Notice Letter
Peterson/Puritan, Inc. Site
J.M. Mills Landfill Property
Page 4

however, that liability under CERCLA is joint and several; therefore, each PRP is potentially liable for undertaking all response actions or reimbursing the Government for the entire amount of its response costs.

Please provide the name, address, and telephone number of a designated contact for future communications. Your written response, including any technical comments or questions concerning the proposed response activities, should be directed to:

Paul R. Groulx
U.S. Environmental Protection Agency
60 Westview Street
Lexington, Massachusetts 02173
(617) 860-4308

Legal questions and all communications from counsel should be directed to:

Brian Rohan
U.S. Environmental Protection Agency
Office of Regional Counsel
JFK Federal Building -- RCU-23
Boston, Massachusetts 02203
(617) 565-3376

DECISION NOT TO USE SPECIAL NOTICE

Under Section 122(e) of CERCLA, 42 U.S.C. § 9622(e), EPA has the discretionary authority to invoke special notice procedures to formally negotiate the terms of an agreement between EPA and PRPs to conduct or finance response activities. The use of special notice procedures triggers a moratorium on certain EPA activities at the Site while formal negotiations between EPA and the PRPs are conducted.

Due to the exigencies posed by conditions present at the Landfill, removal activities must be conducted as expeditiously as possible. EPA has therefore decided not to invoke the Section 122(e) special notice procedures with respect to CERCLA removal actions at this Site. Nonetheless, EPA is willing to discuss settlement opportunities without invoking a moratorium, but will initiate the response action as planned if such discussions do not lead to settlement expeditiously.

J.M. Mills, Inc. Notice Letter
Peterson/Puritan, Inc. Site
J.M. Mills Landfill Property
Page 5

ADMINISTRATIVE RECORD

Pursuant to Section 113(k) of CERCLA, 42 U.S.C. § 9613(k), EPA will establish an administrative record containing documents that form the basis of EPA's decision on the selection of response actions for the Landfill. The administrative record files may be inspected and comments may be submitted by contacting:

Pam Bruno
Administrative Records Coordinator
U.S. Environmental Protection Agency
60 Westview Street
Lexington, Massachusetts 02173
(617) 860-4309

The Administrative Record Files with corresponding index should be available for inspection at a repository near the Site within sixty (60) days of initiation of on-site removal activities.

SITE ACTIVITY OUTSIDE EPA ACTIONS

If you are already involved in discussions with state or other local authorities or involved in a lawsuit regarding this Site, you should continue such activities as you see fit. This letter is not intended to advise or direct you to restrict or discontinue any such activities. However, you are advised to report the status of any such discussions or actions in your response to this letter and to provide a copy of your response to any other parties involved in those discussions or actions.

CONSENT TO ACCESS

Under cover of a separate document attached to this letter, EPA requests access to your property, the Landfill, to perform or oversee the response actions discussed above.

PURPOSE AND USE OF THIS NOTICE LETTER

The factual and legal discussions contained in this letter are intended solely to provide notice and information. Such discussions are not intended to be, and cannot be, relied upon as EPA's final position on any matter set forth herein.

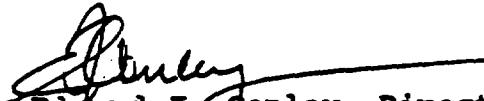
J.M. Mills, Inc. Notice Letter
Peterson/Puritan, Inc. Site
J.M. Mills Landfill Property
Page 6

Due to the seriousness of the environmental and legal problems posed by conditions at the Site, EPA urges that you give immediate attention and provide a prompt response to this letter.

By copy of this letter EPA is notifying the State of Rhode Island and the Natural Resources Trustees of EPA's intent to perform, or to enter into negotiations for the performance or financing of, response actions at the Landfill.

Thank you for your attention to this matter.

Sincerely,



Edward J. Conley, Director
Environmental Services Division

Attachment

cc: ✓Paul Groulx, EPA On-Scene Coordinator
Lee Mac Michael, EPA Enforcement Coordinator
Brian Rohan, EPA Case Attorney
Pam Bruno, EPA Administrative Records Coordinator
David J. Newton, Remedial Project Manager
Bruce Diamond, EPA Office of Waste Programs Enforcement
Henry Longest, EPA Office of Emergency and Remedial Response
Tom Getz, RI Department of Environmental Management
Linda Wofford, RI Department of Environmental Management
William Patterson, Natural Resources Trustee -
U.S. Department of the Interior
John Lindsay, Natural Resources Trustee -
National Oceanographic and Atmospheric Administration

APPENDIX D

OHM REMEDIATION SERVICES, INC., CERCLA OFF-SITE
WASTE MANAGEMENT REPORT, DATED JANUARY 20, 1992



OHM Corporation

January 20, 1992

Mr. Paul Groulx
USEPA Region I
60 Westview Street
Lexington, MA 02173

RE: CONTRACT 68-01-7445 - CERCLA OFF-SITE WASTE MANAGEMENT REPORT

Dear Mr. Groulx:

Please find enclosed OHM's off-site CERCLA report for the following delivery order(s):

7445-01-064, JM Mills Landfill, Cumberland, Rhode Island

If you have any questions, or require addition information, please contact me toll-free at (800) 327-2853. Thank you.

Sincerely,


Gary N. James
Deputy Program Manager
ERCS Zone I

GNJ:ddc

Attachments

pc: Patricia Tidwell
Project File 11558E

The CERCLA Off-Site Disposal Report (J11558)

1. Superfund site name, state, ERRIS number: JM MILLS LANDFILL
CUMBERLAND, RI
7445-01-064

2. Type of action (check two):

Removal Remedial

Fund-financed Fund-financed
 PRP-financed PRP-financed

3. Type (check one) and form (check one) of waste; if more than one type, attach separate sheet for this and remaining questions for each type:

<u>TYPE</u>	<u>FORM</u>
<input type="checkbox"/> Solvents	<input type="checkbox"/> Wastewater
<input type="checkbox"/> Dioxins/Furans	<input type="checkbox"/> Liquid waste
<input type="checkbox"/> Cyanides	<input type="checkbox"/> Organic sludge
<input type="checkbox"/> Heavy Metals (specify metals)	<input type="checkbox"/> (greater than 1% total solids)
<input type="checkbox"/> Acids	<input type="checkbox"/> Inorganic sludge
<input type="checkbox"/> PCB's	<input type="checkbox"/> (less than 1% total organic carbon)
<input type="checkbox"/> Halogenated organics	<input type="checkbox"/> Solid or solidified waste
<input type="checkbox"/> Other RCRA-listed hazardous wastes (specify)	<input type="checkbox"/> Contaminated soil and debris
<input checked="" type="checkbox"/> Non-hazardous or de-listed waste	

4. Quantity of waste: 3

Cubic yard (CY)
 Gallons (Gal)
 Drums
 Lab packs
 Tons/pounds

5. Range, average, and/or representative concentrations of the contaminants of concern: N/A

6. Pre-treatment of waste before transportation: N/A

Precipitation Fixation
 Neutralization Stabilization
 Solidification Other

The CERCLA Off-Site Disposal Report (J11558E)

1. Superfund site name, state, ERRIS number: JM MILLS LANDFILL
CUMBERLAND, RI
7445-01-064

2. Type of action (check two):

Removal Remedial

Fund-financed Fund-financed
 PRP-financed PRP-financed

3. Type (check one) and form (check one) of waste; if more than one type, attach separate sheet for this and remaining questions for each type:

<u>TYPE</u>	<u>FORM</u>
<input type="checkbox"/> Solvents	<input type="checkbox"/> Wastewater
<input type="checkbox"/> Dioxins/Furans	<input checked="" type="checkbox"/> Liquid waste
<input type="checkbox"/> Cyanides	<input type="checkbox"/> Organic sludge
<input type="checkbox"/> Heavy Metals (specify metals)	<input type="checkbox"/> (greater than 1% total solids)
<input type="checkbox"/> Acids	<input type="checkbox"/> Inorganic sludge
<input type="checkbox"/> PCB's	<input type="checkbox"/> (less than 1% total organic carbon)
<input type="checkbox"/> Halogenated organics	<input type="checkbox"/> Solid or solidified waste
<input checked="" type="checkbox"/> Other RCRA-listed hazardous wastes (specify) <u>D002</u>	<input type="checkbox"/> Contaminated soil and debris
<input type="checkbox"/> Non-hazardous or de-listed waste	

4. Quantity of waste: 2

Cubic yard (CY)
 Gallons (Gal)
 Drums
 Lab packs
 Tons/pounds

5. Range, average, and/or representative concentrations of the contaminants of concern: PAINT, 100%

6. Pre-treatment of waste before transportation: N/A

Precipitation Fixation
 Neutralization Stabilization
 Solidification Other

01/15/92 14:25 219 447 0474

CITY OF INDIANA

4002



CHEMICAL WASTE MANAGEMENT OF INDIANA, INC.

 4636 ADAMS CENTER ROAD
 FORT WAYNE, INDIANA 46806
 TELEPHONE (219) 447-5585
 IND 078911146
DISPOSAL
MEMO

CONTROL NUMBER

WORK ORDER NO.

GENERATOR

WASTE

PROFILE NO.

HOUR/DATE

SAMPLER

TB

LAB

QUANTITY

PURCHASE ORDER NO.

TRANSPORTER

SHIP DATE

11/25/91

SAMPLE #

9NA

MANIFEST NO.

11/12 252391

WEIGHT

TIME

DATE

TRUCK
ID#

1ST WT.

RECALL

66680 LB

08:21 AM 11/25/91

912

2ND WT.

GROSS

42240 LB

66680 LB

MEMORY

KEYBOARD REENTRY

912

10:13 AM 11/25/91

NET

TONS

42240 LB

66680 LB

HAUL #

24440 LB

TOTAL

8

8

8

8

8

8

12.22

ADD'L NOTIF. FORM(S) ATTACHED:

 YES NO

FORM #

FINGERPRINT ANALYSIS REPORT

SAMPLE NO. NA

PHYSICAL CHARACTERISTICS:

 STATE: SOLID SEMI-SOLID
 LIQUID SOLID/LIQUID

LAYERS: COLOR

 NOT APPLICABLEODOR: STRONG MILD NONE

WATER MIX:

GENERATION OF GASES

YES NO

TEMPERATURE CHANGE

YES NO

RELATIVE DENSITY

YES NO

REACTIVE SULFIDE SCREEN:

 PASSES TEST (NON-DETECTABLE)
 FAILS TEST (DETECTABLE)
 NOT APPLICABLE

RADIOACTIVITY SCREEN:

 - BACKGROUND
 > BACKGROUND

PAINT FILTER TEST:

 PASSES TEST (NO LIQUIDS DETECTED)
 FAILS TEST (% FREE LIQUIDS)
 NOT APPLICABLE

REACTIVE CYANIDE SCREEN:

 PASSES TEST (NON-DETECTABLE)
 FAILS TEST (DETECTABLE)
 NOT APPLICABLE

FLAMMABILITY POTENTIAL

 POSITIVE
 NEGATIVE

BULK DENSITY

PENETROMETER

pH:

g/cm³

ACCEPTANCE STATUS:

 CONFORMING
 NON-CONFORMING
 ACCEPTED FOR DISPOSAL
 REJECTED

REASON(S) FOR REJECTION:

 OFF SPEC
 SEE SCREENS ABOVE
 OTHER

COMMENTS: 90

Inspec. only
-crushed drums

TB

LABORATORY SIGN OFF

MANAGEMENT METHOD

SPECIAL HANDLING INSTRUCTIONS:

DESTINATION:

 SECURE LANDFILL (D80)
 DRUM BUILDING (S01)

COORDINATES

3-10-0-18

OPERATOR:

CX

COMMENTS:



Chemical Waste Management of Indiana, Inc.

Adams Center Facility

DOUBLE LINER SYSTEMS

DESIGN AND CONSTRUCTION:

Chemical Waste Management's Adams Center Facility is geologically ideal for the safe and effective management of solid hazardous waste. The geological structure underlying the facility consists of highly impermeable layers of glacial clay till. A 3 foot thick slurry cutoff wall has been installed around the facility at depths as deep as 40 feet to isolate the groundwater present in the uppermost water bearing zone. This design has restricted the lateral movement of water within that zone so it neither moves off-site or onto the site.

The hazardous waste management industry also depends on technology to add to natural safeguards; engineering and research help provide safer, more environmentally sound containment techniques. Double synthetic liners and leachate collection systems are two of the methods employed at the Adams Center Facility to ensure that the wastes are securely managed.

The residuals management unit (RMU) liner system consists of four separate liners and two leachate collection layers which provide secure containment of all wastes. Leachate consists of precipitation (rainwater and snowfall) which by regulatory definition has become a hazardous waste by passing through the waste.

Chemical Waste Management of Indiana, Inc. uses a geomembrane liner made of high-density polyethylene (HDPE) 60 mil thick. The selection of this material was made on the basis of extensive review of manufacturer's test data, prior rating experience, and Chemical Waste Management's own testing program for compatibility of liner materials with the types of waste received at the Adams Center Facility.

The RMU is carefully engineered and constructed for secure containment of the incoming wastes. The units are excavated to an elevation that provides a solid, highly impermeable subgrade or base. During the excavation, the base is shaped and graded to facilitate liquid movement to central collection areas for removal. This base is required by permit to be a minimum of five feet above the monitored aquifer. However, at the Adams Center Facility the disposal units have been designed so that the thickness of the in situ glacial till ranges from nine to fourteen feet thick adding additional environmental safeguards.

On top of this base, three feet of clay is recompacted in six-inch layers, and each layer has been tested to ensure a permeability of at least 1×10^{-7} cm/s or less. Permeability is the speed at which water will move through a material and is measured in centimeters per second (cm/s). The minimum permeability allowable by regula-

tion is 1×10^{-7} cm/s which is equivalent to 1.24 in/yr. After appropriate documentation of the results by the engineering firm which performed the Quality Assurance/Quality Control (QA/QC) of the project, the first HDPE liner is installed. A combination of HDPE drainage net and geotextile fabric is placed directly above the liner as part of the leachate detection system. Another layer of recompacted clay (one and one-half feet thick) is placed prior to the installation of the second HDPE liner. This clay layer is not required by regulation, but is incorporated into the design as an additional safeguard.

The primary leachate collection system, comprised of geotextile and HDPE drainage net is placed on top of the uppermost HDPE liner. A one foot thick layer of granular material is placed on top of this system to serve as a working surface and also to provide a redundant primary leachate collection system. The system is constructed to direct the flow of contaminated rain/snowfall that percolates through the RMU to a collection sump for removal and treatment/disposal off-site.

In total, more than five feet of materials are constructed under controlled conditions to provide an end product that exceeds the U.S. Environmental Protection Agency minimum technology guidelines and Indiana Department of Environmental Management regula-

tions. The materials comprise the double geosynthetic liner system that has been designed to safeguard our environment for generations of the future.

RESIDUALS MANAGEMENT UNIT CLOSURE:

Chemical Waste Management of Indiana, Inc. RMU closure procedures include many built-in safeguards which are designed to minimize the need for post-closure maintenance. More importantly, they control and minimize, or eliminate, the potential escape of hazardous waste, hazardous constituents, leachate, and contaminated run-off in order to protect health and the environment.

When a unit has reached final grades, a protective cap is laid down. This cap, constructed in accordance with USEPA guidelines, includes 2 feet of recompacted clay, a 40 mil high density polyethylene (HPDE) liner, a geonet drainage layer, a geotextile filter fabric and 2 feet of topsoil.

The surface is sloped to promote drainage of rainwater away from the RMU and the soil on top of the closed unit is sown with natural vegetation to minimize erosion. The closure activities are performed under the same degree of Quality Assurance/Quality Control (QA/QC) inspection and documentation by a qualified engineering firm that the construction process received.

An independent engineer, registered in the state of Indiana, must inspect the site to insure that all requirements of the closure plan have been completed. If the requirements have been met, the registered engineer will issue a certificate of closure. This certificate is submitted to the Commissioner of the Indiana Department of Environmental Management for review and final approval.

ENVIRONMENTAL PROTECTION:

After an approved closure, Chemical Waste Management of Indiana, Inc.'s responsibility continues. We ensure that the vegetation planted on top of the unit reaches maturity, that precipitation flows off the area in an expedient manner, and that leachate continues to be removed. A security system is maintained around the unit, as well as an extensive groundwater monitoring program.

Installation of double geosynthetic liner systems in residual management units, together with the Adams Center Facility's ongoing groundwater monitoring program provides a triple measure of environmental protection. In fact, CWM's RMU construction not only meets both federal and state standards for RMU design, but exceeds them.

It's precisely these kinds of additional precautions and the investment in more technologically

sophisticated techniques that demonstrate Chemical Waste Management of Indiana, Inc.'s commitment to protecting the environment as well as the public health of neighboring communities.

For additional information contact:

Candace C. Chudzik
Community Relations Manager
Chemical Waste Management of Indiana, Inc.
4636 Adams Center Road
Fort Wayne, Indiana 46806
(219) 447-5585

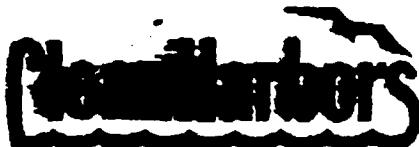
CLEAN HARBOR, INC
WASTE INFORMATION TRACKING SYSTEM
GENERATOR NAME U S EPA
GENERATOR EPA ID # RIP000010158
FOR MANIFEST DATES 11/20/91 TO 11/20/91
P
Drum Activity Disposal Report by Generator Epa Id Number

REPORT DATE 01/14/92
WTARCRM

Date Received: 11/20/91 Manifest #: MAF373278

Line Item	Profile No	CHI Code	Drum #	Pump/Ship Activity	Empty Container Activity
11A	S54965	CCF3	247372	11/22/91 PETROCHEM	MI2541608
				FUEL BLENDING	
11A	S54965	CCF3	247373	11/22/91 PETROCHEM	<u>MI2541608</u>
				FUEL BLENDING	
11B	S54966	D23	247374		11/25/91 FORT WAYNE <u>BOL72127</u>
11B	S54966	D23	247375		11/25/91 FORT WAYNE BOL72127
11B	S54966	D23	247376		11/25/91 FORT WAYNE BOL72127

Total of Records Printed : 5



CERTIFICATE OF DISPOSAL

MANIFEST NOS: MAF 373278GENERATOR: U.S. EPA / J.M. Mills LandfillFACILITY ADDRESS: Peterson Turitan NPL Site, Cumberland, RI 02864PICK UP DATE: 11-20-91

The material shipped on this order has been consolidated, treated and/or disposed of in accordance with all applicable Federal, State and local statutes, laws, regulations and ordinances at either Clean Harbors of Braintree or at another licensed facility which has been approved by Clean Harbors.

All material consolidated at Clean Harbors of Braintree, Inc. and subsequently shipped to another licensed facility for treatment and/or disposal shall be identified as being generated by Clean Harbors of Braintree, Inc. in accordance with 40 CFR Section 263.10(c).

Clean Harbors of Braintree, Inc. warrants that it shall indemnify, hold harmless, and defend the generator from any liability, claims and penalties as a result of destruction or damage to any property, contamination of or adverse effects on the environment, any violation of governmental laws, regulations or orders, or death or bodily injury to any person caused by or in any manner connected with the treatment or disposal of material specified on this order.

Treatment/Disposal Method

1. Recovery
2. Liquids Incineration
3. Solids Incineration
4. Wastewater Treatment
5. Secure Chemical Landfill* D23
6. Consolidation
7. Stabilization
8. Fuels Blending CCF3,
9. Supplemental Fuels
10. Other

*An alternate means of disposal or recycling may be selected at Clean Harbors' discretion.

Clean Harbors of Braintree, Inc.

Signed: Paul J. ConnerDate: 1-14-92

In case of emergency or spill, immediately call the National Response Center (800) 424-9802.

01/14/92 09:05

002



COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE
One Winter Street
Boston, Massachusetts 02108

W6 L8595
577

Please print or type. If form designed for use on site (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator US EPA ID No. RI PA010201011011518446123	Manifest Document No. 1011518446123	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address Albert R. Groves		U.S. Environmental Protection Agency Environmental Services Division Emergency Response Branch 1300 Westview Street, Lexington, MA 02421 (Peterson Refinery NY site)			
4. Generator's Phone (617) 1560-4328		5. Transporter 1 Company Name Clean Harbors of Kingston, Inc. MA D101534526137			
6. Transporter 2 Company Name		US EPA ID Number MAPD0534526137			
7. Designated Facility Name and Site Address Clean Harbors of Braintree, Inc. 385 Quincy Ave Braintree, MA 02184		10. US EPA ID Number MAPD0534526137			
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
a. Wash Paint Related Material Flammable Liquid, UN1263, D001		202	DF0014000	P	D0101
b. Non Hazardous Non Regulated Empty/last contained Solvents		003	DM0000000	P	MA99
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APPENDIX E

CHAIN OF CUSTODY LOG 2/26/92 SAMPLING

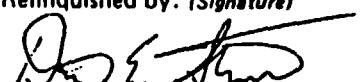
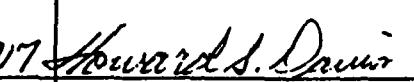
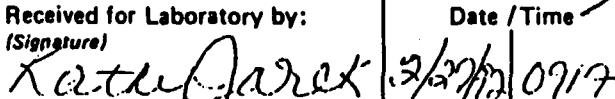
ENVIRONMENTAL PROTECTION AGENCY

Office of Enforcement

REGION 1

JFK Federal Building, Rm. 2203
Boston, Massachusetts 02203

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME					NO. OF CON- TAINERS	REMARKS					
92083	J.M. Mills L.F.						1	1	1	1	1	1
SAMPLERS: (Signature)	(Signature)					1	1	1	1	1	1	
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION		100's (1/10)	1000's (1/100)	Metals (1/10)	PCB (1/10)	Oil (1/10)	Asbestos
W001	2/26/92	0840		X	Water Sample (1000's BLANK)	3X100	X					Card # 00580
T008		1200		X	Tank Sludge Sample	1x10ml, 1x10ml	X	X	X	X	X	Card # 00589
A001		1215		X	Bank safe vault				X			Card # 00590 022601-92SF
A002		1215		X	Air cell in trailer door				X			Card # 00591 022602-92SF
A003		1215		X	Transite sheeting				X			Card # 00592 022603-92SF
A004		1215		X	Cement on Pipe				X			Card # 00593 022604-92SF
A005		1215		X	Bank safe vault				X			Card # 01703 022605-92SF
D008		1715		X	Drum sample	1x10ml, 1x10ml	X	X	X	X	X	Card # 01704
D009		1700		X	Drum Sample	1x10ml, 1x10ml	X	X	X	X	X	Card # 01705
D007		1545		X	Drum sample	1x10ml, 1x10ml	X	X	X	X	X	Card # 01706
Relinquished by: (Signature)		Date / Time	Received by: (Signature)			Relinquished by: (Signature)		Date / Time	Received by: (Signature)			
		2/27/92 0917						2/27/92 0917				
Relinquished by: (Signature)		Date / Time	Received by: (Signature)			Relinquished by: (Signature)		Date / Time	Received by: (Signature)			
Relinquished by: (Signature)		Date / Time	Received for Laboratory by: (Signature)			Date / Time	Remarks			PROJ. # 92007		
						2/27/92 0917						
Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files												

APPENDIX F

PERSONNEL LIST

Peterson & Puritan NPL Superfund Site
(J.M. Mills Landfill)
also referred to as The Marszalkowski Dump
Mendon Road (RT 122)
Cumberland, Rhode Island

rev.02/11/92

PERSONNEL DIRECTORY:

Owner and Representatives

Joseph Marszalkowski, President
J.M. Mills, Inc
Address all correspondence to:

J.M. Mills, Inc.
Attention: Mrs. Linda Marszalkowski
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Robert M. Steele, Esq. (401) 456-1200
Tillinghast Collin & Graham
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Brian Rohan, esq. 1(617) 565-3365
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JFK Federal Building
Boston, MA 02203

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Remedial Project Manager 1(617) 573-9662 fax
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R.I. Superfund Section
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Lisa West 565-1145
Community Relations
U.S. Environmental Protection Agency
Region I

Richard Boyton, Chief
US EPA
Rhode Island Superfund Section
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STATE OF RHODE ISLAND

James Ashton
State of Rhode Island
Department of Environmental Management
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Warren S. Angell II, Principal Engineer
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John Macqueen, Jr. Administrative Assistant Town of Cumberland Town Hall 45 Broad Street Cumberland, R.I. 02864	1(401) 728-2400 1(401) 728-3311 fax
Harold Audet, Fire Chief Berkley fire Department 1025 Mendon Road Cumberland, R.I. 02864 Cumberland City Councilor - Lucille Walsh - John Jackson - David Chenevert	1(401) 333-4311(b)

Newspapers

Pawtucket Times - Evening Times
Henry Metz

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PROVIDENCE/WORCESTER RAILROAD COMPANY:

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Rick Protoctor, Flagman

Joyce Brown, Secretary 1-508-755-4000x352
% Heidi Eddins 1-508-795-0748

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Mark Jarvis
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(Sprint reference ticket #8001643)
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Atlanta, Ga 30339

Phillip Albert 1-401-434-6350
Blackstone Valley District Sewer Line

Cecilia Numes RI 1-401-724-6430
Numes Disposal MA 1-508-336-4493
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Cumberland, RI

Rhode Island Dig Safe 1-800-225-4977

Clean Harbors
Environmental Services Companies 1-401-461-1300
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William R. Howard, Operation Supervisor
Scott Sullivan, Chemist
Todd Legg, Foreman