



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

1 CONGRESS STREET, SUITE 1100  
BOSTON, MASSACHUSETTS 02114-2023

**CONTAINS ENFORCEMENT-SENSITIVE INFORMATION**

**MEMORANDUM**

**DATE:** June 04, 2008

**SUBJ:** Request for a Removal Action at the Providence Barrel Site,  
Smithfield, Providence County, Rhode Island  
**Action Memorandum Addendum – Change of Scope**

**FROM:** Edward J. Bzenas, On-Scene Coordinator  
Emergency Response and Removal Section II

**THRU:** Steven R. Novick, Chief  
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**TO:** James T. Owens III, Director  
Office of Site Remediation and Restoration

**I. PURPOSE**

The purpose of this Action Memorandum Addendum is to request and document a Change in Scope to the ongoing removal action at the Providence Barrel Site (the Site). The Site is located at 7 Oak Street in Smithfield, Providence County, Rhode Island. Additional characterization performed under the Action Memorandum signed on March 10, 2008, has identified site-related hazardous substances that have migrated to adjacent properties. This addendum requests that the Site boundaries be expanded to include the remediation of adjacent properties that have been impacted. No additional funds are requested at this time.

Hazardous substances present in soils and groundwater at the Site, if not addressed by implementing the response actions selected in this Action Memorandum, will continue to pose a threat to human health and the environment. There are no nationally significant or precedent-setting issues associated with this Site, and there has been no use of the OSC's \$200,000 warrant authority.

**II. SITE CONDITIONS AND BACKGROUND**

**CERCLIS ID# :** RID075699546  
**SITE ID# :** 01EO  
**CATEGORY :** Time Critical



## **A. Site Description**

### **1. Removal site evaluation**

(See Action Memo signed March 10, 2008 for additional information.)

On April 21 -24, 2008, EPA and START personnel conducted additional characterization of the extent of contamination by collecting soil samples for field analysis. Field screening results indicate that surface soil at 18-20 Esmond Street, and other abutting properties, is contaminated with metallic lead at levels above the criteria established by the State of Rhode Island for protection of public health on residential properties (150ppm lead in surface soils).

### **2. Physical location**

The Providence Barrel Site is located 7 Oak Street in Smithfield, Providence County, Rhode Island in the Town of Smithfield, Tax Assessor's records as Plat 25, Lot 66B. The geographical coordinates, as measured from the center of the property are 41° 52' 32.7" north latitude, 71° 30' 8.2" west longitude.

The Site encompasses approximately 2 acres. Located in southern Smithfield within a mixed residential and commercial / industrial area, the former Providence Barrel facility is bordered on the north, east, and west by residential properties and on the south by a building, which was formerly the Parkinson Machinery and Manufacturing Corporation (Parkinson) and is now known as United States Granulator. The Woonasquacket River is located approximately 700 feet east of the facility. Currently, access is unrestricted to the Site and the entrance to the Site is frequently used as a parking area for the neighborhood.

Abutting properties that may be impacted by the contamination from the Site include 14 - 16 Esmond Street, 18-20 Esmond Street, 22 Esmond Street, 11 Maple Ave, 13 Maple Ave and potentially others. Investigation and soil sample collection on residential properties is ongoing; additional locations will be identified as the investigation proceeds.

### **3. Site characteristics**

The former Providence Barrel facility encompasses approximately 2 acres in the mixed residential / commercial neighborhood. The facility historically operated as a barrel reclamation facility from 1972 to 1980. The chemical composition and volume of material spilled or dumped on the property is unknown. Any buildings that existed on the property have been removed. The area consists of a sparsely vegetated open area and a cluster of trees on the west-southwest side of the property. The Site is currently inactive,



with soil and potential groundwater contamination. The Woonasquatucket River is located approximately 700 ft east of the facility.

According to the EPA Region 1 Environmental Justice Mapping Tool, the Site is not in an environmental justice area.

**4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant**

Hazardous substances that pose a threat of release include, but are not limited to, the following:

Hazardous Substances or Pollutants or Contaminants	Media	Range of Contaminant Levels in Soil Samples
Lead	Surface Soil	300ppm to 4790ppm
Arsenic	Surface Soil	Up to 72ppm
Semi-Volatile Organic Compounds (SVOC's)	Surface Soil	1,100ppb to 530,000ppb
Tetrachloroethylene (PCE)	Surface Soil/Groundwater	44ppb to 15,000ppb

**5. NPL status**

The Site is not currently on the National Priorities List, and has not received a Hazardous Ranking System rating.

**B. Other Actions to Date**

**1. Previous actions**

On April 01, 2008, a removal action was initiated by EPA. Equipment and personnel were mobilized to the site. The site was cleared of trees and underbrush. Security fencing was installed aa the site perimeters. On April 21, 2008 EPA contractors began additional sample collection to define the extent of contamination. Prior to these dates, there had been no removal actions conducted at this site.

**2. Current actions**

EPA will continue to work with RIDEM on an extent of contamination survey, including investigation of whether contaminants from the Site may pose a public health threat via surface soils, ground water migration or vapor intrusion pathways.



Excavation of contaminated soils on the Site began on May 02, 2008.

**C. State and Local Authorities' Roles**

**1. State and local actions to date**

RIDEM conducted several investigations at the Site. Their findings are summarized in the document titled *Final Expanded Site Inspection Report for the Providence Barrel Property, Smithfield, Rhode Island, CERCLIS NO RID075699546, prepared by RIDEM Office of Waste Management, dated July 28, 2005.*

**2. Potential for continued State/local response**

RIDEM will be working closely with EPA on addressing potential vapor intrusion of Site contaminants to the indoor air of the abutting properties. It has been determined that vapor intrusion mitigation systems are deemed necessary: RIDEM will be the lead agency responsible for the operation and maintenance (O&M) of these systems. RIDEM will also provide ARARs and continue to provide technical support. Neither state nor local authorities have the resources to address the hazardous substances at the Site.

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

**A. Threats to Public Health or Welfare**

(No changes have occurred in this section. Please refer to the Action Memorandum signed March 10, 2008 for additional information.)

**B. Threats to the Environment**

(No changes have occurred in this section. Please refer to the Action Memorandum signed March 10, 2008 for additional information.)



#### **IV. ENDANGERMENT DETERMINATION**

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.<sup>1</sup>

#### **V. PROPOSED ACTIONS AND ESTIMATED COSTS**

##### **A. Proposed Actions**

##### **1. Proposed action description**

At this time, the owner on record continues to deny ownership of the property; therefore EPA will conduct this removal action as a fund lead action. The actions below were proposed in the Action Memorandum dated March 10, 2008 and will be implemented on abutting properties as well to protect public health, welfare, and the environment by removing the hazardous substances and the contaminated soils from the Site.

Removal actions will include:

1. Conduct a site walk with the Emergency Rapid Response Services (ERRS) contractor
2. Mobilize equipment, personnel, and supplies
3. Provide site security
4. Conduct additional sampling to further characterize the extent of contamination
5. Excavate and dispose of contaminated soils at EPA-approved disposal facilities
6. Construct an engineered cap over contaminated soils that cannot otherwise be excavated
7. Backfill excavated areas with clean fill material
8. Conduct additional investigation of potential indoor air/vapor intrusion problems due to contamination from the Site
9. If necessary, install systems to control site related vapor intrusion into residential buildings
10. Repair response-related damage

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<sup>1</sup> "In accordance with OSWER Directive 9360.0-34, an endangerment determination is made based on relevant action levels, cleanup standards, risk management guidance, or other relevant information published and relied upon by the State of Rhode Island."



## **2. Community relations**

Since the Site is located within a residential neighborhood, EPA will remain involved with the community throughout the cleanup. EPA will coordinate closely with state and local authorities on community relation activities such as press releases, fact sheets, and public meetings. The OSC will be available at the Site during removal activities to address questions and concerns from the public.

## **3. Contribution to remedial performance**

The cleanup proposed in this Action Memorandum is designed to mitigate the threats to human health and the environment posed by the Site. The actions taken at the Site would be consistent with and will not impede any future responses.

## **4. Description of alternative technologies**

The use of alternative technologies with regard to off-site disposal options will be examined as the Site progresses. On-site field screening and analytical techniques may also be utilized for on-site waste characterization.

## **5. Applicable or relevant and appropriate requirements (ARARs)**

Federal ARARs:

40 CFR Part 264 Hazardous Waste Regulations - RCRA Subtitle C

40 CFR Part 403: General Pretreatment for Existing and New Sources of Pollution

Federal ARARs will be met to the extent practicable considering the exigencies of the situation. The OSC will coordinate with State officials to identify additional State ARARs, if any, and will meet, to the extent practicable, each ARAR identified in a timely manner.



The following, while not ARARs, will be complied with during the removal action:

29 CFR Parts 1910, 1926, and 1904: OSHA Health and Safety Regulations

40 CFR Part 262 Standards Applicable to Generators of Hazardous Waste:

Subpart B - The Manifest

262.20 : General requirements for manifesting

262.21 : Acquisition of manifests

262.22 : Number of copies of manifests

262.23 : Use of the manifest

Subpart C - Pre-Transport Requirements

262.30 : Packaging

262.31 : Labeling

262.32 : Marking

Subpart D - Recordkeeping and Reporting

262.40 : Recordkeeping

40 CFR Part 300.440 Procedures for Planning and Implementing Off-Site Response Actions (Off-Site Rule)

49 CFR Parts 171-179 : Department of Transportation Regulations for Transport of Hazardous Materials

## 6. Project schedule

The removal action was initiated on April 01, 2008. The majority of the removal action will take place in the spring and summer of 2008. The overall removal action is anticipated to be completed within ten months.

## B. Estimated Costs

COST CATEGORY		CEILING
<i>REGIONAL REMOVAL ALLOWANCE COSTS:</i>		
ERRS Contractor		\$985,000.00
Interagency Agreement		\$20,000.00
<i>OTHER EXTRAMURAL COSTS NOT FUNDED FROM THE REGIONAL ALLOWANCE:</i>		
START Contractor		\$235,000.00
Extramural Subtotal		\$1,240,000.00
Extramural Contingency	10%	\$124,000.00
<b>TOTAL, REMOVAL ACTION CEILING</b>		<b>\$1,364,000.00</b>



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

In the absence of the removal action described herein, conditions at the Site can be expected to remain unaddressed, and threats associated with the presence hazardous substances will persist.

## **VII. OUTSTANDING POLICY ISSUES**

There are no precedent-setting policy issues associated with this site.

## **VIII. ENFORCEMENT ... For Internal Distribution Only**

The Enforcement Strategy remains unchanged. Please refer to the Action Memorandum signed on March 10, 2008 for additional information.

The total EPA costs for this removal action based on full-time accounting practices that will be eligible for cost recovery are estimated to be \$1,240,000 (extramural costs) + \$200,000 (EPA intramural costs) = \$1,440,000 X 1.33 (regional indirect rate) = **\$1,915,200**<sup>2</sup>.

## **IX. RECOMMENDATION**

This decision document represents an addendum to the Action Memorandum for the Providence Barrel Site in Smithfield, Rhode Island (signed on March 10, 2008), and is developed in accordance with CERCLA, as amended, and is not inconsistent with the National Contingency Plan. The basis for this decision will be documented in the administrative record to be established for the Site.

Conditions at the Site meet the NCP Section 300.415 (b) (2) criteria for a removal action due to the following:

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<sup>2</sup>Direct Costs include direct extramural costs \$1,240,000 and direct intramural costs \$200,000. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site specific costs [33% x \$1,915,200], consistent with the full accounting methodology effective October 2, 2000. These estimates do not include pre-judgement interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.



*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)];*

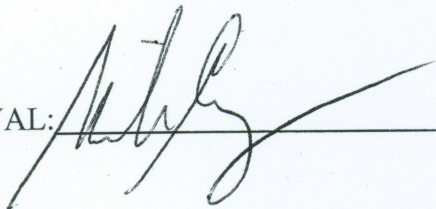
*Actual or potential contamination of drinking water supplies or sensitive ecosystems [§300.415(b)(2)(ii)];*

*High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate; [§300.415(b)(2)(iv)];*

*The availability of other appropriate Federal or State response mechanisms to respond to the release; [§300.415(b)(2)(vii)].*

I recommend that you approve this proposed addendum to the Action Memorandum. No additional funds are requested at this time. The total removal action project ceiling remains \$1,364,000.

APPROVAL: \_\_\_\_\_



DATE: \_\_\_\_\_

6-4-08

DISAPPROVAL: \_\_\_\_\_

DATE: \_\_\_\_\_