



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

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

**CONTAINS ENFORCEMENT-SENSITIVE INFORMATION**

**MEMORANDUM**

**DATE:** 27 September 2006

**SUBJ:** Request for a Removal Action at the Applebee Road Tannery Waste Landfill Site, Milton Mills, Strafford County, New Hampshire – **Action Memorandum**

**FROM:** *RAH*  
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Emergency Response and Removal Section II

**THRU:** Steven R. Novick, Chief *WJ*  
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**TO:** *SS*  
Susan Studien, Director  
Office of Site Remediation and Restoration

**I. PURPOSE**

The purpose of this Action Memorandum is to request and document approval of the proposed removal action at the Applebee Road Tannery Waste Landfill Site, (the Site), which is located on Applebee Road in Milton Mills, Strafford County, New Hampshire. Hazardous substances present in waste, soil, and sediment 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 the OSC has not used delegated warrant authority.

**II. SITE CONDITIONS AND BACKGROUND**

**CERCLIS ID#:** NHN000103222

**SITE ID#:** 01P5

**CATEGORY:** Time-Critical

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## **A. Site Description**

### **1. Removal Site Evaluation**

A Removal Program Preliminary Assessment/Site Investigation (PA/SI) was performed in 1992.<sup>1</sup> It was determined that conditions at the site met the National Contingency Plan's criteria to perform a removal action, and documented in a Closure Memorandum dated 6 April 1993. At that time, removal program management agreed to a request from representatives of the New Hampshire Department of Environmental Management (NH DES) that NH DES be the lead agency to address the site.

EPA's Pre-Remedial Program began an investigation in 2004. Preliminary findings were circulated to the Removal Program in December in accordance with routine procedure. After reviewing this information package, the OSC contacted NH DES and it was agreed EPA should reassume the role of lead agency.

The OSC performed a site inspection on 13 May 2005. It was observed that site conditions had not changed since the time of the PA/SI in 1992. Because the data generated at that time is still adequate to determine if a removal action is appropriate, duplicative sampling was not performed.

A Closure Memorandum dated 13 May 2005 formally documents the conclusion of the removal evaluation of this Site. It recommends that a removal action is appropriate because conditions at this Site meet the criteria in the National Contingency Plan (NCP) for initiating a removal action. The Pre-Remedial investigation has been put on hold pending the outcome of Removal Program activity.

In July, 2005, a Notice of Potential Liability and Invitation to Perform a Cleanup Letter was sent to the Town of Milton because of its status as operator at the time of disposal. Specifically, the town operated a landfill at the site from the 1940s through the 1960s. The Town replied that it could not offer to perform or finance a removal action, but did offer to assist EPA by disposing of metal debris and providing clean soil for use as backfill. EPA did not initiate a removal action based on limited funding and personnel

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<sup>1</sup> Based on its street address, the name of the site in 1992 was the Branch Road Landfill. Years later, the street name was changed to Applebee Road to accommodate installation a 911 emergency system.

limitations associated with EPA Region 1's contribution to the Hurricane Katrina and Rita relief effort in EPA Regions 4 and 6. By 2006, two new Selectmen had been elected, and the Town offered to perform a removal action.

## **2. Physical Location**

The Site is located principally on property owned by the Milton Mills Cemetery Association on Applebee Road, and to a lesser degree on adjacent residential property at 524 Applebee Road. The coordinates are approximately 43° 29' 46.9" north latitude, and 70° 57' 56.2" west longitude. Page 44, Deed Book 736, and page 145, Deed Book 555 in the Stafford County Registry of Deeds provides a legal description of the two parcels on which the Site is located. Lot numbers 111 and 112 on Map 9 in the Milton Tax Assessor's Office represent their location together with surrounding parcels. The boundaries of the Site are residential property to the north, the Salmon Falls River (NH/ME state boundary) to the east, residential property to the south, and Applebee Road to the west.

## **3. Site Characteristics**

The Site is in a rural-residential area. There are approximately 186 people in a one-half mile radius. Cemetery Association property is generally flat and at-grade with Applebee Road, then drops steeply to the Salmon Falls River and flood plain/wetland below. At this time, graves are limited to a small portion of available land. There is a baseball field between existing graves and the slope leading down to the River. There is one single-family home on the residential parcel at 524 Applebee Road. The eastern portion of this parcel is wooded, and slopes less steeply toward the River. The Salmon Falls River is a Class B water body, suitable for fishing and swimming.

According to the EPA Region One Environmental Justice Mapping Tool, the Site is not in an environmental justice area. The "owner-operator type" for this site is "other" (a non-profit association). The operational status of the site is active. The incident type is non-oil spill. The incident category is landfill. Please refer to the Threats section of this document for a description of the potential pathways for receptor exposure.

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

Based on the information available at this time, the hazardous substances or pollutants or contaminants that are being released or for which there is a threat of release include but are not limited to the list below.

Hazardous Substances or  
Pollutants or Contaminants

Media

Metals [chromium-III, lead]

Waste, soil, sediment

**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**

No prior response actions have occurred at this site. EPA's removal program concluded a preliminary assessment/site investigation in 1993. EPA's pre-remedial program began an investigation in 2004. It has been put on hold pending the outcome of the removal action.

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

DES lacks sufficient resources to address the hazardous substances at this Site. The OSC anticipates that DES will continue to work with EPA and local authorities in a cooperative manner to facilitate the completion of a removal action.

Preliminary discussion with the Town of Milton's Selectmen and Town Administrator indicate their willingness to undertake a cleanup at the site based on their liability pursuant to CERCLA. The case team has drafted an Administrative Order on Consent and Statement of Work. After review by management, they will be presented to the Town for review.

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

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

Based on Site conditions and information available on the hazardous substances present, the Site poses the threats to the environment outlined below.

*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)];*

The hazardous substances chromium and lead are present in tannery waste and soil at the surface of the ground at this Site. The Site is in a residential setting, and there is a baseball field on site property. Several homes are located nearby, and there are an estimated 186 people in a one-half mile radius. Exposure to children may result from walking, playing, or digging in contaminated soil and/or waste, for example, while retrieving a stray baseball, searching among the many old, glass bottles also found along the embankment, or going to the Salmon Falls River to fish. Access to the Site is unrestricted.

*High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate; [§300.425(b)(2)(iv)];*

New Hampshire's Contaminated Sites Risk Characterization and Management Policy (RCMP) provides that a site may be characterized as protective of human health and the environment if the concentration of the hazardous substances chromium and lead in accessible soil does not exceed 1000 parts per million (ppm) and 400 ppm, respectively. The results of tests performed on samples collected from the site reveal that chromium and lead are present in exposed tannery waste at concentrations as high as 37,500 ppm and 9,850 ppm, respectively, which are significantly higher than the RCMP benchmarks.

In addition to the effects of weather, migration of small amounts of waste might occur by adhering to the feet or shoes of children or others entering the area.

*The availability of other appropriate Federal or State response mechanisms to respond to the release; [§300.425(b)(2)(vii)];*

The State of New Hampshire Department of Environmental Services does not have the resources to perform the response outlined in this action memorandum.

**B. Threats to the Environment**

Based on Site conditions and information available on the hazardous substances present, the Site poses the threats to the environment outlined below.

*High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate; [§300.425(b)(2)(iv)];*

EPA sampling indicates hazardous substances at this site may be migrating to the adjacent Salmon Falls River floodplain.

	Maximum Concentration (parts per million)	
	Chromium (total)	Lead
Waste	37,500	9,850j
Soil (surface soil near waste)	706	544
Sediment (wetland adjacent to Salmon Falls River)	1840j	155
j = estimated		

The maximum concentration of chromium found present at the site, shown in the table above, greatly exceeds the 1000 ppm threshold published in the RMCP. Although found at only one area of the site during the PA/SI, the maximum concentration of lead in surface soil was found to be 9,850 ppm, also significantly higher than the RCMP threshold of 400 ppm.

*“Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released” [§300.425(b)(2)(v)].*

If a solid waste leaches chromium at a concentration greater than 5.0 ppm, it is regulated as hazardous waste by both EPA and DES. One exception to this is tannery waste, which was granted an exemption from this rule. Regardless, the federal leachate test performed on the tannery waste at this Site yielded a result

as high as 9.8 ppm. A reasonable interpretation of the leachate test result is that exposed tannery waste is releasing the hazardous substance chromium into the environment.

*The availability of other appropriate Federal or State response mechanisms to respond to the release; [§300.425(b)(2)(vii)];*

The State of New Hampshire Department of Environmental Services has indicated that it does not have the resources to perform the response action outlined in this action memorandum.

#### **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>2</sup>

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

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

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

In the event the town of Milton does not perform the removal pursuant to its agreement with the EPA, EPA will use temporary fence to secure the work area, and then use heavy equipment to excavate tannery waste, soil, and sediment consistent with the relevant RCMP threshold, and transport these to a secure landfill, and restore the impacted area to the extent practical. Capping and administrative controls may also be employed if, for example, contamination is deeper than three feet, or for other reasons. Restoration includes, but is not necessarily limited to, backfilling excavated areas, and establishing a vegetative cover.

Personnel will collect samples of waste, soil, and air to comply with the requirements of the Site's health and safety plan, characterize waste,

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<sup>2</sup> In accordance with OSWER Directive 9360.0-34, an endangerment determination is made based on relevant action levels or cleanup standards published and relied upon by the State of New Hampshire.

document the effectiveness of the cleanup, and assure the quality of backfill obtained from off-site vendors.

## **2. Community relations**

The OSC will coordinate with Superfund Community Relations personnel on this matter. However, because of the rural setting, work at the Site is unlikely to have a significant or adverse impact on homes nearest to the site. The cleanup area is not near any grave sites, so it is not expected to impact any cemetery operations. Operations may temporarily limit the size or use of the baseball field. At a minimum, EPA will provide a written Community Update at the start of the action, and periodically as the cleanup progresses. The OSC will deliver these to the residents close to the Site.

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

The purpose of the cleanup proposed in this Action Memorandum is to mitigate the threats to human health and the environment present at 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 nature of this Site is not conducive to using alternative technologies.

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

The federal cleanup standards, standards of control, and other substantive requirements that have been identified to-date, are listed below, and are relevant and appropriate<sup>3</sup> within the confines of EPA Publication 540/P-91/011, "Superfund Removal Procedures: Guidance on the Consideration of ARARs During Removal Actions."

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<sup>3</sup> The hazardous waste rules identified herein will be applicable if hazardous waste is determined to be present during the removal action.



## FEDERAL

### 40 CFR Part 6 – Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act

#### Appendix A – Statement of Procedures on Floodplain Management and Wetlands Protection

#### Subpart C – Coordination with Other Environmental Review and Consultation Requirements

##### 6.302 (a) – Wetlands Protection

##### 6.302 (b) – Floodplain Management

### 40 CFR Part 257 – Criteria for Classification of Solid Waste Disposal Facilities and Practices

#### Subpart A – Classification of Solid Waste Disposal Facilities and Practices

##### 257.3 – Criteria for classification of solid waste disposal facilities and practices

### 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 264 – Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities

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

STATE

Contaminated Sites Risk Characterization Management Plan (RCMP)

Env-A 1002 Fugitive Dust Control

Env-Sw 100 et seq – Solid Waste Program Rules

Env-Wm 100 -1100 Hazardous Waste Program Rules

Env-Ws 1700 Surface Water Regulations

Env-Wt Parts 100- 800 Wetlands Rules

**6. Project Schedule**

The case team will endeavor to finalize an AOC by the spring of 2007. In addition to the time to agree on the terms of the AOC, the Town will need to arrange for funding. If negotiations fail or funds do not become available to the Town, the OSC anticipates a fund-lead start no later than the summer of 2007. The estimated duration of cleanup actions once initiated by either party should not exceed six months.

**B. Estimated Costs**

If a fund-lead removal becomes necessary, below is an estimate of the extramural funds required.

COST CATEGORY		CEILING
<b>REGIONAL REMOVAL ALLOWANCE COSTS</b>		
ERRS Contractor		\$1,500,000.00
Interagency Agreement		\$0.00
<b>OTHER EXTRAMURAL COSTS NOT FUNDED FROM THE REGIONAL ALLOWANCE</b>		
START Contractor		\$200,000.00
Extramural Subtotal		\$1,700,000.00
Extramural Contingency	10%	\$170,000.00
<b>TOTAL REMOVAL ACTION CEILING</b>		<b>\$1,870,000.00</b>

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

In the absence of the response action described herein, conditions at the Site will persist. Hazardous substances will remain on-site, and continue to pose the threats to public health, welfare, or the environment outlined above.

## **VII. OUTSTANDING POLICY ISSUES**

There are no precedent-setting issues at this Site at this time.

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

See the attached Enforcement Strategy.

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 \$1,870,000.00 (extramural costs) + \$100,000.00 (EPA intramural costs) = \$1,970,000.00 x 1.3151 (regional indirect rate) = \$2,590,747.<sup>4</sup>

## **IX. RECOMMENDATION**

This decision document represents the selected removal action for the Applebee Road Tannery West Landfill Site in Milton Mills, New Hampshire, developed in accordance with CERCLA, as amended, and is not inconsistent with the National Contingency Plan. The Agency will document the basis for this decision in the administrative record within sixty days from the date on-site activities begin.

Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a removal action as outlined below.

*Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants*

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<sup>4</sup> Direct Costs include direct extramural costs of \$1,870,000.00 and direct intramural costs of \$100,000.00. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific costs [31.51% x \$1,970,000.00] consistent with the full accounting methodology effective October 2, 2000. These estimates do not include prejudgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of 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.

*[\$300.415(b)(2)(i)];*

*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)];*

*Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; [\$300.415(b)(2)(v)];*

*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 the proposed removal action. The total removal action project ceiling if approved will be \$1,870,000.00. Of this total, no more than \$1,670,000.00 comes from the Regional removal allowance.

APPROVAL: 

DATE: 9-28-06

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

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