



**CONTAINS ENFORCEMENT-SENSITIVE INFORMATION**

**MEMORANDUM**

**DATE:** July 17, 2013

**SUBJECT:** Request for a Removal Action at the Creative Packaging and Paper Site, Worcester, Worcester County, Massachusetts - **Action Memorandum**

**FROM:** Allen K. Jarrell, On-Scene Coordinator *Allen K. Jarrell*  
Emergency Response and Removal Section I

**THRU:** David McIntyre, Chief *D. McIntyre*  
Emergency Response and Removal Section I

Stanley Chin, Acting Chief *SC*  
Emergency Planning & Response Branch

**TO:** James T. Owens III, Director  
Office of Site Remediation and Restoration

**I. PURPOSE**

The purpose of this Action Memorandum (AM) is to request and document approval of the time-critical removal action (RA) at the Creative Packaging and Paper Site (the Site), located at 261 Clover Street in Worcester, Worcester County, Massachusetts. Vats, drums, and containers with ferric sulfate, diesel fuel, sodium sulfide, sodium hydroxide, chlorine dioxide and unlabeled/unknown materials along with asbestos-containing material (ACM) present in piping insulation, if not addressed by implementing the response actions selected in this AM, will continue to pose a threat to human health and the environment. There is no use of the OSC's \$200,000 warrant authority.

**II. SITE CONDITIONS AND BACKGROUND**

**CERCLIS ID#:** MAD060100500  
**SITE ID#:** 01LB  
**CATEGORY:** Time-Critical

**A. Site Description**

**1. Removal site evaluation**

On January 15, 2013, the City of Worcester, Massachusetts' Fire Department (WFD) requested assistance from the EPA Region I Emergency Planning and Response Branch (EPRB)

to investigate the Site and determine whether the containments in the vats, drums, and containers left in the abandoned, unsecured building were an imminent hazard and met the criteria for a removal action.

On February 27, 2013, the On-Scene Coordinator (OSC) and Weston START personnel conducted a site reconnaissance with a representative of the secured lender. During the reconnaissance it was observed that the roof had collapsed in the eastern portion of the building. Personnel documented the presence of nine drums of ferric sulfate, totes of kerosene, de-foamer, sodium hydroxide solution, and other processing chemicals. Two large vats labeled 'caustic,' one of which seemed to be empty, were also observed. Access was restricted in the 2 sections of the building where the roof had collapsed. The 'empty' vat was located in one of these sections. Other than the two collapsed areas, personnel did not observe any other major structural concerns. The remaining roof, second floor/mezzanine, and stairwells appeared to be in good condition. The site conditions and vats, drums, and containers were photo-documented.

On March 18, 2013, the OSC conducted a Site Investigation (SI) with Weston START, WFD, and Massachusetts Department of Environmental Protection (MassDEP) personnel. A representative of the secured lender also participated. The main purpose of the SI was to conduct a container inventory and sampling activity. MassDEP and site personnel entered the building through the entrance at the northwest corner. According to the representative of the secured lender, some portions of the processing machinery had been moved by the company that purchased the equipment from Creative Paper when it closed in 2011.

Personnel conducted photo-documentation of the building and containers during the walkthrough. Additional drums and containers not previously noted such as antifreeze, oil, and lubricants were identified. The two large treatment pools were discussed and the lender's rep stated that the water in the treatment pools had been sampled and approved for discharge into the municipal sewer system. He also noted that the large tank labeled 'caustic' contained a 50% solution of sodium hydroxide. However, he could not identify the contents of the drums or totes staged next to the tank. There were also unknown contents in 4 black polyethylene (poly) drums and several other containers/drums located near the caustic tank.

Throughout the walkthrough, numerous totes were observed and the lender's rep stated that they most likely contained water rather than what their labels specified. The walkthrough concluded with documenting the contents of the boiler room. Following this walkthrough, an inventory was made of the containers of any possible known or unknown contaminants. WFD provided temporary lighting and a generator to assist in the inventory collection.

On March 20, 2013, the SI's sampling activities were conducted. First, drums, totes, and containers that needed to be sampled were identified. MultiRAE Plus readings were initially taken and sampling of unknown containers was conducted in modified Level B personal

protective equipment (PPE). Personnel then obtained physical characteristics of the contents, including pH and state (liquid or solid/frozen) and took samples of the liquids. Level B PPE was donned to conduct closed container investigation and sampling. Unlabeled containers, and containers with unknown contents, were opened and monitored with the MultiRAE Plus. Physical characteristics such as color, viscosity, and state (liquid or solid/frozen) were observed. Personnel then obtained pH readings, and collected samples based on MultiRAE Plus readings, pH results, and physical characteristics. Samples were then collected for full-suite laboratory analyses. Finally, two samples of suspected ACM were taken of pipe wrap from the northwest portion of the building.

The following volatile organic compounds (VOCs) were detected in one or more of the product/waste samples collected from the drums and containers:

- 1,2,4-trimethylbenzene;
- 1,3,5-trimethylbenzene;
- Naphthalene;
- n-butylbenzene;
- propylbenzene;
- para-isopropyltoluene; and
- sec-butylbenzene.

The following semi-volatile organic compounds (SVOCs) were detected in one or more of the product/waste samples collected from the drums and containers:

- 1-methylnaphthalene;
- 2-methylnaphthalene;
- bis(2-ethylhexyl)phthalate;
- di-n-butylphthalate; and
- naphthalene..

No metals were detected in any of the product/waste samples submitted for analysis. Cyanide was detected in two samples. However, cyanide analysis was not performed on all samples due to physical characteristics. No PCBs were detected in any of the product/waste samples submitted for analysis. Both ACM samples contained 4% amosite asbestos, and 2% chrysotile asbestos.

## 2. Physical location

Latitude: 42° 13' 45" N  
Longitude: 71° 51' 01" W

The Site is located at 261 Clover Street, Worcester, Worcester County, Massachusetts (MA). It borders the intersections of James Street, Clover Street, and South Ludlow Street. Creative Packaging and Paper is a 5.03-acre parcel, with a 2.85-acre (124,100-square-foot) building. The remainder of the property is paved, and several loading docks, sheds, outbuildings, and semi-trailers were observed on the property.

### **3. Site characteristics**

The current owner is R & J Realty, Limited Liability Partnership (LLP), according to Worcester Assessor Department records. The building, built in 1955, was formerly used for cardboard recycling from the 1980s through 2011. Presently, the Site is non-operational.

According to the EPA Environmental Justice Screening Tool, the Site is not in a designated environmental justice area.

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

The information from the Fire Department indicated the presence of multiple 55-gallon containers of ferric sulfate, diesel fuel, and unlabeled/unknown materials. Materials used in paper processing may include sodium sulfide, sodium hydroxide, and chlorine dioxide. Additionally, a review of EPA's database systems, Enforcement and Compliance Online (ECHO), and Online Tracking information System (OTIS), indicated that VOCs and SVOCs were stored or emitted at the Site and therefore may currently remain. Asbestos is a general name applied to a group of silicate minerals consisting of thin, separable fibers arranged in parallel. Asbestos minerals fall into two classes, serpentine and amphibole. EPA and OTO sampling results indicate the presence of amosite and chrysotile (serpentine class) asbestos in 2 samples of pipe insulation.

### **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 - none**
- 2. Current actions - none**

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

### 1. State and local actions to date

MassDEP has been working on this project for several years, but had been unsuccessful in compelling the former business to properly remove all the chemical hazards. MassDEP did not have the funds available to remove these contaminants and that was the basis for asking for EPA assistance in this matter.

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

The OSC anticipates that MassDEP and the City of Worcester will continue to work together to ensure the appropriate institutional Site controls are implemented.

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

*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)];*

Vats, drums, and containers at the Site contain hazardous, ignitable, corrosive and reactive chemicals. Cyanide was found in two of the containers. The potential for exposure is high due to the signs of trespass. In addition, pipe insulation contains asbestos fibers. Exposure to asbestos containing debris and soils may pose a significant health risk to persons trespassing or conducting any other activity on-site.

*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)];*

The containers are in various states of decay and some are already leaking and releasing hazardous substances. The Site has poor containment and the threat of these substances leaving the building is high.

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

The elements have caused the dilapidated building to deteriorate significantly. This intensifies the possibility of a release.

*Threat of fire or explosion; [§300.415(b)(2)(vi)];*

Flammable materials in drums and containers throughout the building present the threat of fire or explosion.

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

MassDEP requested EPA assistance to address the removal of these contaminants at the Site. EPA is the only response mechanism with the resources and authority to address the contamination or to oversee the performance of the work at the Site.

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

Actual or threatened releases of hazardous substances or pollutants or contaminants from this Site, if not addressed by implementing the response action selected in this AM, present an imminent and substantial endangerment to human health and the environment.

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

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

At this time, it does not appear that there is a viable potentially responsible party (PRP) to conduct the RA. Therefore, the removal will proceed as a fund-lead action. The RA will protect public health, welfare, and the environment from the threats identified in Section III by removing the hazardous substances from the Site.

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

EPA will perform or oversee the performance of the following proposed activities at the Site:

- Conduct a site walk with environmental remediation contractor and structural engineer to assess structural safety layout of the Site and determine required equipment, personnel and utilities;
- Develop and implement a site-specific Health and Safety Plan (HASP);
- Develop a site-specific work plan providing estimates of materials, time and costs;
- Provide site security as necessary;
- Mobilize personnel and equipment;
- Delineate work zones and decontamination area;
- Perform air monitoring at the perimeter of the Site throughout invasive site activities;
- Containers and material already identified through inventory will be sampled, bulked or overpacked, and staged;
- Pump out the contaminants from any vats or tanks and then neutralize, clean and disable those containers so they are no longer usable;
- Remove and dispose of the identified drums, containers, and ACM;

- Perform any additional sampling, analysis, characterization, neutralization, bulking or overpacking, and removal of hazardous substances as deemed necessary by the OSC;
- Identifying and characterizing waste streams and developing waste disposal profiles;
- Providing transportation and disposal of hazardous substances at CERCLA-approved off-site disposal and recycling facilities in a safe and as cost-effective a manner as possible;
- Repair response-related damages; and
- Demobilize resources.

## **2. Community relations**

The OSC will continue to coordinate with MassDEP and the City of Worcester. If necessary, the OSC will coordinate a public information session with the surrounding community, and will issue press releases and a fact sheet as required.

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

The cleanup proposed in this AM is designed to mitigate the threats to human health and the environment posed by the potential release of contaminants in the vats, drums, and containers and friable ACM at the Site. The actions taken would be consistent with and will not impede any future responses.

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

No alternative technologies will be used.

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

Federal ARARs:

40 CFR Part 61: Clean Air Act – National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart M – worker safety requirements.

40 CFR Part 122-125 and 131: National Pollutant Discharge Elimination System (NPDES)

40 CFR Part 264 Standards for Owners and Operators of Hazardous waste Treatment, Storage, and Disposal Facilities:

Subpart I - Use and Management of Containers

264.171 : Condition of containers

264.172 : Compatibility of waste with containers

264.173 : Management of containers

264.174 : Inspections

264.175 : Containment

264.176 : Special requirements for ignitable or reactive waste  
264.177 : Special requirements for incompatible wastes

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.

#### State ARARs:

Massachusetts Contingency Plan 310 CMR Section 7.15; U Asbestos Commonwealth of Massachusetts standards for handling, transporting and disposing asbestos.

The OSC will coordinate with State officials to identify additional State ARARs, if any. In accordance with the National Contingency Plan and EPA Guidance Documents, the OSC will determine the applicability and practicability of complying with each ARAR which is 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 OSC estimates that this RA will take approximately 6 months. Removal actions will commence immediately after receiving access to the Site from the property owner.

**B. Estimated Costs**

COST CATEGORY		CEILING
<i>REGIONAL REMOVAL ALLOWANCE COSTS:</i>		
ERRS Contractor		\$280,000.00
Interagency Agreement		\$ 0.00
<i>OTHER EXTRAMURAL COSTS NOT FUNDED FROM THE REGIONAL ALLOWANCE:</i>		
START Contractor		\$120,000.00
Extramural Subtotal		\$400,000.00
Extramural Contingency	25%	\$100,000.00
<b>TOTAL, REMOVAL ACTION CEILING</b>		<b>\$500,000.00</b>

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

In absence of the response action described herein, conditions at the Site will continue to remain constant or deteriorate, and the threats associated with the vats, drums, containers and ACM will persist. Delayed action will allow the public health risk and environmental risks posed by the release and exposure of these contaminants to continue unabated.

**VII. OUTSTANDING POLICY ISSUES**

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

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

See 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 \$500,000 (extramural costs) + \$65,000 (EPA intramural costs) = \$565,000 X 1.4485 (regional indirect rate) = **\$818,403<sup>1</sup>**.

---

<sup>1</sup>Direct Costs include direct extramural costs \$500,000 and direct intramural costs \$65,000. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site specific costs 44.85% x \$565,000, consistent with the full accounting methodology effective October 2, 2000. These estimates do not include pre-judgment 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.

**IX. RECOMMENDATION**

This decision document represents the selected RA for the Creative Packaging and Paper Site in Worcester, MA, 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) criteria for a RA due to the following:

*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)];*

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

*Threat of fire or explosion; [§300.415(b)(2)(vi)];*

*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 RA. The total extramural RA project ceiling if approved will be **\$500,000.00**.

APPROVAL: 

DATE: 7/18/13

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

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