

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Knoxville College - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #7
Final POLREP - Remobilization and Stabilization
Knoxville College
B43S
Knoxville, TN
Latitude: 35.9709164 Longitude: -83.9434094

To:
From: Terrence Byrd, OSC
Date: 12/9/2015
Reporting Period: 10/14/2015 - 10/17/2015

1. Introduction

1.1 Background

Site Number:	B43S	Contract Number:	EP-S4-07-02, TO: 0127
D.O. Number:		Action Memo Date:	6/7/2014
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	6/5/2014	Start Date:	6/5/2014
Demob Date:	8/20/2014	Completion Date:	8/20/2014
CERCLIS ID:	TNN000401009	RCRIS ID:	
ERNS No.:	1084952	State Notification:	06/05/2014
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Emergency Response, inactive facility.

1.1.2 Site Description

The incident occurred at an abandoned laboratory science teaching facility on the campus of the Knoxville College. The AK Stewart Science Hall is a three story brick structure located in the center of the campus. The facility is unsecured with many broken windows and doors at ground level. There are 39 rooms and laboratories containing various containers or hazardous substances. The college is in a residential neighborhood, with residences directly across the street. The facility is not fenced. There are numerous dilapidated structures on the campus that show evidence of trespassers and use by vagrants. Currently, the College is only utilizing one building for education and administrative purposes.

1.1.2.1 Location

The Site is located at 901 Knoxville College Drive, Knoxville, Knox County, Tennessee. The geographical coordinates are 35.970870, -83.943343.

1.1.2.2 Description of Threat

In June 2014, the U.S. Environmental Protection Agency (EPA) initiated emergency response (ER) and removal action (RA) activities at the Site after receiving a referral from the Tennessee Department of Environmental Conservation (TDEC) regarding large quantities of improperly stored hazardous chemicals that were located in the A.K. Stewart Science Building (see Figure 2 in Enclosure 1). ER and RA activities were conducted at the A.K. Stewart Science Building by EPA from June 5 through 27, 2014, and included: inventorying and lab packing identifiable chemicals; consolidating, stabilizing, and containerizing unknown chemicals; conducting air monitoring and sampling; and performing community outreach to inform nearby residents of cleanup activities. The ER and RA Letter Report submitted on October 10, 2014 provides further details regarding the RA activities conducted at the A.K. Stewart Science Building.

As part of the 2014 RA activities, suspected asbestos-containing building materials (ACBM) observed in the A.K. Stewart Science Building were bagged for eventual disposal in order to reduce the potential for worker exposure, and helped clear the area to enable cleanup personnel to safely move through the

building. In addition, windows and doorways on the bottom levels of the building were secured with plywood to minimize the potential for trespassing and vandalism. However, some of the bags of suspected ACBM were not removed from the building prior to demobilization.

After demobilizing from the Site, EPA continued to coordinate with TDEC and representatives from Knoxville College regarding the A.K. Stewart Science Building, as well as other structures at the Site. Based on their discussions, EPA returned to the Site in October 2015 to conduct additional RA activities.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The dormitories are no longer in use by the College, and there is evidence of homeless people using them for shelter.

The buildings are dilapidated, with leaks in the roof. There is no security for the buildings; the windows are broken some doors not functional. Entry into the buildings are unrestricted. The building does not have automatic sprinklers.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

There are numerous containers of hazardous materials, including some extremely hazardous substances, unsecured. Many are already broken, and the rain infiltration threatens to wash them from the building into the environment. Continued vandalism and theft in the building will only exacerbate the problem. The nature and type of the chemicals present pose toxicity, flammability, and reactivity threats to anyone mixing or playing with the chemicals. This poses the greatest threat to neighborhood children exploring the abandoned building. In consideration of these factors, the OSC elected to initiate an emergency response to address the potential risk of fire, explosion, and release of hazardous substances to the environment.

2.1.2 Response Actions to Date

See previous Pollution Reports for details of response actions taken and complete during past reporting periods.

Between June 27, 2014 and August 18, 2014, The ERRS contractor arranged for transportation and disposal of all waste generated during the initial emergency response operations.

EPA and ERRS crew re-mobilize on August 18, 2014 and made final preparations for waste transportation and disposal.

On August 19, 2014, used personal protective equipment and crushed empty drums were loaded in a 20 cubic yard dumpster. 118 containers of hazardous waste was loaded onto a tractor trailer. All hazardous waste and contaminated debris/personal protective equipment was shipped off for treatment and disposal by Tradebe Treatment and Recycling, LLC. Local compressed gas vendors removed 2 high pressure cylinders of nitrogen gas and 1 high pressure cylinder of oxygen at no cost.

On August 20, 2014, the radioactive waste was prepared and shipped off for treatment and disposal by Philotechnics, Ltd. and the biological waste was shipped off for disposal by Medical Waste of America. All equipment and storage containers were removed from the site and all crews de-mobilized.

On October 15, 2015, EPA, CMC Inc., and Tetra Tech START re-mobilized to the Site to conduct additional RA activities, which included:

- Removal of 15 bags of suspected ACBM from the A.K. Stewart Science Building, which remained in the building since the June 2014 RA activities.
 - Walk-through assessment of the following buildings to identify the potential presence of loose, suspected ACBM: Davis Hall, McCulloch Hall, Colston Hall, Beveridge Hall, Brandon Hall, and the 10-story high rise dormitory located to the northeast of the A.K. Stewart Science Building.
 - Wetting, bagging, and removal of loose, suspected ACBM (AeroCell™) from the bottom floor of Colston Hall; a total of 33 bags of suspected ACBM were removed from Colston Hall.
 - Transportation and disposal of a total of 48 bags (double-bagged and "burrito" wrapped inside a 20-cubic yard roll-off container) of suspected ACBM from the Site.
 - Securing bottom-floor openings (windows and doorways, where feasible) at McCulloch Hall and Colston Hall, where loose, suspected ACBM had been observed and removed. Openings were secured with plywood to minimize the potential for trespassing and vandalism.
 - Replacement of minor amounts of warped plywood at the A.K. Science Building.
- These removal activities were completed on October 17, 2015.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Knoxville College has stated they are the property owners and former operators of the Science Hall, but are financially unable to perform the removal. OSC Eichinger reviewed records and files found in the Science Hall. To date, no other PRPs has been identified from the information reviewed.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Hazardous Waste Debris	Solid	12600 pounds	012512017JJK		Incineration
Mercury Contaminated Debris	Solid	700 pounds	012512017JJK	Retort	Landfill
Lab Packs (Laboratory Chemicals)	Solid/Liquid	3600 pounds	012512017JJK		Landfill
Lab Packs (Laboratory Chemicals)	Solid/Liquids	9140 pounds	012512015JJK	Incineration	Landfill
Chlorine Gas	Gas	10 pounds	012512006JJK	Waste Water Treatment	
Compressed Nitrogen Gas	Gas	2 cylinder		Reuse	
Compressed Oxygen Gas	Gas	1 cylinder		Reuse	
Misc Debris/Empty Drums	Solid	20 cubic yards	3127-01	Recycling	Landfill
Medical/Biological Waste	Solid/Liquid	200 pounds	21477		Incineration
Low Level Radioactive Waste	Solid	10 pounds			Landfill
Asbestos Contaminated Material	Solid	48 bags			Landfill

2.2 Planning Section

2.2.1 Anticipated Activities

no further response actions are planned.

2.2.1.1 Planned Response Activities

no further response actions are planned.

2.2.1.2 Next Steps

no further response actions are planned.

2.2.2 Issues

No pertinent information to report.

2.3 Logistics Section

Logistical support is being provided by ERRS, START and Q-Solutions/EPA Warehouse contractors and EPA personnel.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

No information available at this time.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.