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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: **POLREP #6**
Final Pollution Report
Knoxville College
B43S
Knoxville, TN
Latitude: 35.9709164 Longitude: -83.9434094

To:
From: Kevin Eichinger, OSC
Date: 8/21/2014
Reporting Period: June 27, 2014 through August 20, 2014

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

There are numerous containers of hazardous materials, including some extremely hazardous substances, unsecured. Many are broken, and 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.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Knoxville College reportedly discontinued their science program in 2007. Since then, time, vandalism, and theft have led to the destruction and degradation of much of the containers stored in the A. K. Stewart Science Hall. Tennessee Department of Environmental Conservation (TDEC) performed a site reconnaissance on June 5, 2014, and immediately contacted the Region 4 Emergency Response and Removal Branch (ERRB) to report the conditions. Thousands of bottles of hazardous chemicals, including acids, bases, oxidizers, organic peroxides, cyanides, radioactive sources, and asbestos are all present in

the building. Container size ranges from 5-gallon buckets to milliliter-sized small containers. Many containers have no, or illegible, labels. Many containers are spilled, broken, or otherwise destroyed. Flammable and corrosive liquids are spilled onto the floor. Vandals have thrown containers from upper windows onto the ground below, causing the bottles to break and spill. Elevated mercury levels were detected throughout the facility. Three radioactive sources were found unsecured in the building.

The building is dilapidated, with leaks in the roof and a flooded ground floor. There is no security for the building; the windows are broken and the doors not functional. Entry into the building is 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.

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

2.2 Planning Section

2.2.1 Anticipated Activities

Emergency response activities are complete, no further response actions are planned.

2.2.1.1 Planned Response Activities

Emergency response activities are complete, no further response actions are planned.

2.2.1.2 Next Steps

Emergency response activities are complete, 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

2.5.1 Safety Officer

OSC Eichinger is serving as the Safety Officer with ERRS providing an Assistant Safety Officer.

2.5.2 Liaison Officer

OSC Eichinger is currently coordinating will Local and State Response Partners.

2.5.3 Community Involvement Coordinator (CIC)

CIC Atashi is developed a second fact sheet that details the work completed and future activities. This fact sheet was mailed out to residents within 1/4 mile radius of the site. This fact sheet was mailed out on July 17, 2014.

3. Participating Entities

3.1 Unified Command

An incident command structure has been established for this incident. At this time, OSC Eichinger is filling the role of Incident Commander with personnel from START and ERRS filling the Operation Section Chief, Assistance Safety Officer, HAZMAT Team Leader, Decontamination Team Leader, Air Monitoring Group Supervisor, Resource Unit Leader and Documentation Unit Leader positions. At this time, a Unified Command structure is not needed due to the size of the incident. Local and State Agencies will participate in the incident command structure as Assisting Agencies

3.2 Assisting Agencies

The following local and state agencies are providing support:

- Tennessee Department of Environmental Conservation (TDEC)
- Tennessee Department of Emergency Management (TEMA)
- City of Knoxville/Knox County Emergency Management
- City of Knoxville Mayor's Office
- City of Knoxville Fire Department

4. Personnel On Site

The following personnel were on-site at various times throughout this reporting period:

- EPA - 1
- ERRS - 5
- Tradebe Treatment and Recycling, LLC - 3
- Air Gas - 1
- Holston Gas - 1
- Medical Waste of America - 2
- Philotechnics, Ltd -
- TEMA - 1
- PRP - 2

5. Definition of Terms

Abbreviations and acronyms are spelled out within the text of the Pollution Report. Definitions will be added to this section as necessary.

6. Additional sources of information

6.1 Internet location of additional information/report

Documents, photographs, maps and other important/pertinent information can be found at http://epaosc.org/knoxvillecollege. Log-in credentials may be required to view certain documents.

6.2 Reporting Schedule

Pollution Reports (POLREP) will initially be drafted as significant events occur. This schedule will change and be less frequent as the emergency response progresses. Please note that POLREP must be review and approved prior to publication, so there may be a delay.

7. Situational Reference Materials

All situational reference materials will be uploaded to http://epaosc.org/knoxvillecollege. Log-in credentials may be required to access certain documents.