

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Lighthouse Lab Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region III

**Subject:** POLREP #4  
Progress on the Emergency CERCLA Removal Action  
Lighthouse Lab Site

Wilmington, DE  
Latitude: 39.8230750 Longitude: -75.5086150

**To:** Response Center RRC, EPA

**From:** Rich Rupert, On-Scene Coordinator

**Date:** 4/8/2011

**Reporting Period:** 04 April 2011 - 08 April 2011

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	A3RQ	<b>Contract Number:</b>	
<b>D.O. Number:</b>	0702-03-033	<b>Action Memo Date:</b>	
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Emergency
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	3/26/2011	<b>Start Date:</b>	3/26/2011
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>		<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	DNREC - 3/26/2011
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

### 1.1 Site Description

See previous POLREPs and Special Bulletins for additional site description information. The Site is located in a residential area in Wilmington, New Castle County, Delaware. The site is a two-story house on Lighthouse Lane with an attached garage and basement in the Beacon Hill neighborhood in Wilmington, New Castle County, Delaware. Similar occupied houses surround the site on all sides. Numerous chemicals and hazardous substances are being stored throughout the basement, garage, and two rooms in the house. Three makeshift laboratory appears to be set up in a bedroom on the second floor, in the living room of the first floor and in the basement of the house.

For a list of the most significant threats posed by the Site see POLREP#1, Special Bulletin.

## 2. Current Activities

### 2.1 Operations Section

On March 27, 2011, OSC Rupert met with the property owner to discuss the current situation including continued access and possible EPA activities. The resident indicated she did not have the financial means to address these issues and granted EPA access to continue to enter the property, remove and dispose of the chemicals and hazardous substances.

On March 28, 2011, OSC Rupert assumed the lead for the site. EPA mobilized ERRS to the Site to begin further site inventory and characterization of chemicals as well as preparations for disposal. ERRS mobilized a Response Manager, Chemist, and two Technicians. ERRS arranged for site security during non-work hours and a connex box was brought to site to provide a secure storage location. New Castle County Bomb Squad agreed to respond and address the explosive chemicals stored in the basement. In order for the bomb squad to be able to access the cabinet containing picric acid and other explosive chemicals, several items had to be moved. ERRS began removing flammable liquids being stored in close proximity to the house's furnace as well as items impeding access to the explosive chemicals. The items removed were classified by the on-site chemist and then placed in 55-gallon

drums for disposal. START performed air monitoring and documentation activities during these activities. In addition, Delaware Department of Natural Resources and Environmental Control (DNREC) prepared a fact sheet with information about the Site and distributed it to residents in the area.

At approximately 1830, New Castle County Bomb Squad entered the Site and removed 6 containers of picric acid and 2 containers of dinitrophenol. These containers were transported to a remote location and detonated.

On March 29, 2011, ERRS continued to inventory, characterize chemicals and remove and stage items for disposal. Due to the time critical nature of the response and large volume of items for disposal, ERRS is procuring a subcontractor assist with on-site lab packing. Due to the exigent circumstances posed by Site conditions, the subcontract is expected to be in place by Friday, April 1st, 2011. As of March 30, 2011 all chemicals identified as flammable or potentially explosive have been removed from the residence.

On March 30<sup>th</sup> 2011, ERRS mostly removed the flammable liquids that were stored in the basement storage area. The items removed were classified by the on-site chemist and then placed in 55-gallon drums for disposal. START performed air monitoring and documentation activities during these activities. ERRS is procuring a subcontractor to assist with the on-site lab packing.

On March 31st, 2011, ERRS continued to inventory, characterize chemicals and remove and stage items for disposal. Keen Gas removed gas cylinders that were stored in the two laboratories.

On April 1st, ERRS subcontractor, Capital Environmental began to inventory and lab pack the chemicals for disposal. As the lab packing was being conducted, ERRS crew continued to remove and stage items for disposal. START continued to perform oversight and air monitoring during these site activities. As of April 7th, the majority of the chemicals were removed from the residence and transported offsite to be properly characterized and securely staged for disposal. Also, the second floor makeshift laboratory was cleared of chemicals and equipment and decontaminated. Subsequently, the walls were painted and the carpet was removed to expose the hardwood floor.

On April 2<sup>nd</sup>, Capital inventoried and drummed most of the chemicals that were stored in cabinets the garage. The packed drums were temporarily stored onsite in a conex box. The cabinets were then removed from the garage to the backyard and covered in plastic poly sheeting.

On April 3<sup>rd</sup>, ERRS removed most of the chemicals, shelves and equipment that were stored in the second floor laboratory area. The next step in this area will be to remove the contaminated glassware, furniture and carpet. All used glassware will be crushed onsite, drummed for disposal.

On April 4<sup>th</sup>, while ERRS continued to remove chemicals from the basement area, more containers of picric acid were found stored in cabinets. The New Castle County Bomb Squad agreed to respond and address the explosive chemicals stored in the basement.

On April 5<sup>th</sup>, ERRS removed all the furniture and contaminate carpet from the second floor laboratory area. Personnel from Lightwave Logic (41 Germany Drive, Wilmington DE) obtain some chemicals that were still in original packaging. ERRS continued to inventory, characterize and remove chemicals in the basement and stage items for disposal.

On April 6<sup>th</sup>, ERRS completed the painting of the second floor lab area. ERRS mostly removed all the chemicals in the basement area. The chemicals were segregated by Capital Environmental and stored in drums. START continued to perform oversight and air monitoring during these site activities.

On April 7<sup>th</sup>, ERRS and Capital Environmental removed and transferred most of the chemicals offsite to be temporary staged, and further categorized for disposal. At approximately 1000 on April 7, DNREC-Response Specialist, Jamie Bethard, coordinate with the New Castle County Bomb Squad to entered the Site and removed seven containers of picric acid, and numerous gas cylinders. These containers were transported to a remote location and detonated.

As of April 8th, the majority of the solid waste was removed offsite and disposed of accordingly. Most of metal cabinets were crushed onsite in a 20 yd<sup>3</sup> roll off bin and transported to a scrap facility.

## **2.2 Planning Section**

### **2.2 Next Steps**

ERRS will continue to decontaminate equipment and clean and remove carpets from the laboratory and basement chemical storage area. Upon the removal of chemicals from the residence and subsequent

decontamination of equipment and carpets, the EPA plans to collect indoor air samples from within the residential property. Indoor air samples will be collected to assess the risk to occupants potentially impacted by a release of chemical vapors stored at the site. Indoor air samples will be collected using Summa canisters and sent to a laboratory for analysis. Expedited turnaround time (TAT) for analytics is necessary to allow clearance so the owner can reoccupy the house. She is currently residing in a local hotel. A 48 hour TAT will also allow us to demobilize the contractors and close out the site and allow re-occupation, if the samples are found to be within acceptable levels. Additionally, county health officials will be reviewing the results to make their own determination regarding re-occupation.

### **2.3 Logistics Section**

No information available at this time.

### **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.