

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Biotech Industries - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region IV

**Subject:** POLREP #5  
Biotech Industries  
  
Newton, NC  
Latitude: 35.6140810 Longitude: -81.3654540

**To:**  
**From:** Kenneth Rhame, OSC  
**Date:** 2/25/2011  
**Reporting Period:** 2/18/2011 through 2/25/2011

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	B4E3	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Emergency
<b>Response Lead:</b>	PRP	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	1/24/2011	<b>Start Date:</b>	1/24/2011
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>		<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

#### 1.1.1 Incident Category

CERCLA-Emergency Assessment

#### 1.1.2 Site Description

Biotech Industries is an active chemical distribution facility that provides and blends chemicals for pools, wood bleaching, textiles and other applications. The operation is housed in a 100,000 square foot building approximately 600 feet from Jacobs Fork Middle School and 1,000 feet from Fred T. Foard High School.

##### 1.1.2.1 Location

Biotech Industries is located at 3561 Plateau Road, Newton, Catawba County, NC28658.

##### 1.1.2.2 Description of Threat

NC DENR requested EPA assistance after performing a routine inspection of Biotech Industries. EPA, DENR and START performed a walkthrough and assessment on 1/24/2011. EPA observed hundreds of drums in the warehouse section of the facility. Many drums were labeled corrosive, flammable, oxidizer, toxic, etc, some drums were unlabeled. A large number of drums were rusted, dented, punctured or otherwise compromised. EPA observed drums with material leaking onto the floor. Drums contained compounds such as sodium hydroxide, sodium hypochlorite, acetone and various alcohols. EPA observed a drum containing several buckets which contained mercury switches. Drums containing various chemicals were not segregated by hazard class with flammables being located directly next to oxidizers and corrosives. Due to the instability of the site (leaking drums, incompatible materials) and proximity to school, EPA initiated a Emergency Response Action.

#### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

EPA observed hundreds containing hazardous substances including flammables, oxidizers, toxics, etc. START performed air monitoring with at TVA-1000 and obtained PID reading of over 800 ppm when uncapping an unlabeled drum. EPA observed drums with a white crystallized substance covering the top and part of the side. Many drums are compromised in various ways and some are leaking onto the floor. One drum contains several buckets containing mercury switches.

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

NC DENR requested EPA assistance after performing a routine inspection of Biotech Industries. EPA, DENR and START performed a walkthrough and assessment on 1/24/2011. EPA observed hundreds of drums in the warehouse section of the facility. Many drums were labeled corrosive, flammable, oxidizer, toxic, etc, some drums were unlabeled. A large number of drums were rusted, dented, punctured or otherwise compromised. EPA observed drums with material leaking onto the floor. Drums contained compounds such as sodium hydroxide, sodium hypochlorite, acetone and various alcohols. EPA observed a

drum containing several buckets which contained mercury switches. Drums containing various chemicals were not segregated by hazard class with flammables being located directly next to corrosives. The property is located within 1000 feet of a middle school and a high school. The property owner maintained that he received the material from various business and was paid for disposal. He claims that he intends to either sell or recycle the majority of the material and consolidate and dispose of the rest. Biotech Industries is the consolidation of S&W Chemicals and Catawba Chemicals, both of which were owned by the owner of Biotech.

EPA has activated US Coast Guard as OSC representatives. Two Coast Guardsmen are now on site and are actively coordinating site activities.

#### **2.1.2 Response Actions to Date**

EPA performed an assessment of the site and spoke with the owner regarding site stabilization. Due to the instability of the site (leaking drums, incompatible materials) and proximity to school, EPA initiated a Emergency Response Action.

Southern Logistics has segregated most of the incompatible materials and contained all leaking and unstable drums. Drums have been moved to the following segregated staging areas. Caustics, acids, flammables, oxidizers and acids Southern Logistics has also removed several drums of various flammable compounds from a trailer adjoining the main Biotech warehouse. Several rusted and unstable drums of flammables were pumped into new drums and moved to the flammable staging area. Air monitoring indicated levels averaging 300 ppm during the transfer of the flammable material. All workers were in respiratory protection.

Due to high particulate levels in work areas the site warehouse has been upgraded to level C PPE. Engineering controls including sweeping and vacuuming dirt and opening doors to increase ventilation have been implemented. The engineering controls have successfully reduced the amount of visible particulates in work areas.

OTIE START has performed air monitoring daily throughout site stabilization activities. Air monitoring has included PID/FID, CO, LEL, H<sub>2</sub>S, O<sub>2</sub>, Cl<sub>2</sub> and various Drager tubes. No readings were obtained above TWA with the exception of brief elevated levels of CO while using a fork lift in a poorly ventilated area. An intrinsically safe fan was brought in from the local fire department to ventilate the area.

Due to high amounts of visible particulates OTIE-START collected air samples using SKC pumps and RCRA metals cartridges. The results were negative with the exception of very low levels of total chromium. The levels were below the RSL for trivalent chromium but slightly above the RSL for hexavalent chromium (chrome-6). START will run samples for chrome-6 next week in order to confirm that levels are below RSL. A minimum of level C PPE will be maintained until the analytical results are obtained. Southern Logistics finished segregating incompatible materials based upon labels and is currently securing remaining drums with loose bungs or missing lids.

On February 9, 2011 at approximately 1429 hours START detected spikes of Cl<sub>2</sub> while air monitoring using a Multi-Rae with Cl<sub>2</sub> sensor installed. Cl<sub>2</sub> spiked at around 7 ppm and averaged 2 ppm in the area of some recently sorted and exposed pool chemicals. All personnel in the area were in level C respiratory protection with organic vapor/chlorine gas cartridges. The source of the chlorine gas was discovered to be an open poly drum containing a small amount of solid partially submerged in liquid. The drum was emitting visible yellow-green chlorine gas. START observed Cl<sub>2</sub> concentration peaking at 20 ppm briefly while Southern Logistics placed a lid on the drum. After capping the drum START and Southern Logistics evacuated the area and ventilated with a fan. Levels fell to 0 ppm after the drum was closed and the area ventilated. Southern Logistics taped the lid closed and placed the drum outside at the rear of the building inside a locked chain link fence. START performed air monitoring outside in the vicinity of the drum and downwind along the property line. No readings were obtained over 0 ppm Cl<sub>2</sub>. START will monitor the drum daily and Southern Logistics will formulate a plan to deal with the drum containing Cl<sub>2</sub> gas. All personnel entering the exclusion zone will be in level B until it can be confirmed that Cl<sub>2</sub> gas is no longer a threat.

On February 11, START received sampling results for chrome-6. Levels were well below the residential RSL with the highest hit being 0.0000258 mg/m<sup>3</sup> and the RSL being .0001 mg/m<sup>3</sup>. No additional air sampling will be performed for metals.

On February 12, 2011 Southern Logistics set up a scrubber system to neutralize the Cl<sub>2</sub> gas in the drum by forcing it through a drum of 10% caustic solution. After the gas was neutralized the drum was pumped full of caustic solution. One more drum was found to contain low levels of Cl<sub>2</sub> gas, it was also neutralized by filling it with caustic solution. Cl<sub>2</sub> levels were below 1 ppm in the drums after neutralizing the Cl<sub>2</sub>.

On February 14, 2011 START observed PID levels of over 100 ppm near the flammable storage pad, Southern Logistics identified a drum of tetrachloroethylene weeping from the base, Southern Logistics overpacked the drum without incident. Due to the release of Cl<sub>2</sub> gas and the poor condition of many of flammable drums and the amount of unknown substances the Coast Guard has decided that any further entries will be made in level B.

On February 17, 2011 Southern logistics identified and segregated by label the last of the drums in room 2. This should conclude the segregation and inventory phase, barring the event of finding more material or drums.

On February 18, 2011 Southern Logistics sampled drums containing flammable materials in room 3. Southern Logistics will hazcat and test bulk the samples on Feb. 19 in preparation for pumping and bulking the flammable materials in poly totes on Monday Feb. 21.

During the week of February 21 through February 25, 2011 Southern Logistics consolidated drums of flammable material in room three into totes based on hazard classes obtained by hazcat testing. The

consolidation involved pumping several thousand gallons from individual drums using an intrinsically safe pump. START monitored the explosive atmosphere in the room while Southern Logistics pumped. LEL levels stayed at 0% for the duration of the pumping with the exception of a reading of 15%. Southern Logistics stopped pumping when the LEL was obtained and allowed the room to clear before continuing to pump. All pumping of flammable material was performed in level B PPE. Southern Logistics also opened, sampled and hazcated drums in the flammable storage area that they were previously unable to open due to rusted bungs. Other activities performed during this reporting period include sampling and hazcating of used oil drums and the transfer of solid oxidizers into cubic yard boxes.

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

Biotech Industries is the PRP. The president of Biotech signed an Access Agreement and Notice of Federal Interest. Biotech has agreed to fund the site stabilization activities and has contracted Southern Logistics to perform the work. The work will include properly containerizing all hazardous and non-hazardous materials which are in compromised containers based on visual inspection, segregating all materials based on compatibility and providing an inventory of all hazardous and non-hazardous materials on site.

#### **2.1.4 Progress Metrics**

### **2.2 Planning Section**

#### **2.2.1 Anticipated Activities**

EPA will conduct oversight of the PRP contractor until the work is completed to satisfaction. START contractor Oneida Total Integrated Enterprises (OTIE) will conduct oversight.

##### **2.2.1.1 Planned Response Activities**

##### **2.2.1.2 Next Steps**

##### **2.2.2 Issues**

### **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**

US EPA  
NC DENR-RCRA  
Catawba County Fire Marshal  
Catawba County Emergency Management  
START

## **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.