

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Roselle Mad Chemist - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IX

Subject: POLREP #2
Unstable Chemical Render Safe Operation
Roselle Mad Chemist
09WG
San Diego, CA
Latitude: 32.8948036 Longitude: -117.2195788

To:
From: Robert Wise, OSC
Date: 8/9/2010
Reporting Period: 07/31 - 08/07/2010

1. Introduction

1.1 Background

Site Number:	09WG	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	7/29/2010	Start Date:	8/7/2010
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Emergency/Time Critical Removal - Abandoned Biotechnology Laboratory

1.1.2 Site Description

The consists of two joined suites in a technology business park. The site consists of a series of analytical laboratories and offices. The laboratories contain cabinets, shelves and re Fridgerators storing large amounts of laboratory chemicals. Most of the chemical containers are less then 4 liters in volume. Chemicals are also stored haphazardly on the counters and in the fume hoods. The facility consists of 27 distinct rooms.

1.1.2.1 Location

The facility is located at 10441 Roselle Street, San Diego, San Diego Co., CA 92121. The facility is located in a light industrial, technology and commercial business park area in the Sorrento Valley district of San Diego.

1.1.2.2 Description of Threat

The facility was abandoned in January 2010 and contains a very large quantity of analytical reagents stored through out the facility. Chemical classes identified up to this point include: acids, bases, oxidizers, poisons, mutagens, carcinogens, heavy metals, flammables, water reactives, air reactive, peroxide forming chemicals and biological agents.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

OSC Wise and the START are currently conducting an inventory of all of the chemicals inside the building. A database of the chemicals will be built to determine the exact classes of chemicals, the hazards and the waste codes. The inventory was completed on 08/06/2010. Approximately 400 containers were identified as unknowns, hazcatted and placed into hazard classes. The unknowns included both solids and liquids and included the following hazard classes: acid, acid oxidizing, acid oxidizing chlorinated, acid oxidizing flammable, base, base oxidizing, combustible, chlorinated, cyanide, flammable, oxidizing, oxidizing chlorinated and oxidizing chlorinated flammable. During the hazcat operations, many containers were less then 25 ml in volume, these were consolidated into bigger containers by hazard class. A large number of

scintillation vials, centrifuge tubes and bacterial media growth test tubes were found and inventoried by batch. There were over 2,5000 individual chemical containers inventoried.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On July 29, 2010, San Diego Co. Environmental Health Hazmat Unit (SDCoEH) referred an abandoned biotechnology company, Aries Associates, LLC to EPA for a CERCLA Removal Action. OSC Wise and the START responded to the facility to assess the situation. Aries was a contract biotech company that went bankrupt in January 2010, abandoning a large quantity of laboratory reagents.

2.1.2 Response Actions to Date

August 2, 2010: 1 OSC, 4 START

The inventory of the chemicals continued. START began to conduct a field hazcat of the unknown chemicals. The hazcat procedures were conducted in the on-site fume hoods in Level D.

August 3, 2010: 1 OSC, 4 START

The inventory and field hazcat continued.

August 4, 2010: 1 OSC, 3 START

The inventory and field hazcat continued. OSC Wise emptied the fridges of petri-dishes in the storage room. Many of the petri-dishes had unknown organism grown in them. This operation was conducted in Level C and all of the material was containerized into biological waste bags.

August 5, 2010: 1 OSC, 3 START

The inventory and field hazcat continued. The inventory of the fridges began with the removal of all unknowns to the hood used for hazcatting. This operation was conducted by the START in Level C. John Misleh and Nick Vent of San Diego Co. Environmental Health (SDCoEH) visited the site. After going over the chemical inventory with Mr. Vent, the decision was made by OSC Wise and Mr. Vent to destroy some of the chemical containers using explosives due to the dangers associated with transporting them to a disposal facility. The chemicals to be destroyed included: shock sensitive materials, explosive materials, pyrophoric materials and water reactive materials. All of these materials required refrigeration during storage and were severely degraded. Capt. John Wood of the San Diego Fire Department Bomb Squad (SDFDBS) visited the site later in the day to work out the logistics of the detonation which was to occur on August 7, 2010. Due to a need for sand bags and heavy equipment to build a detonation bunker, OSC Wise notified the ERRS project officer and contracting officer that an emergency procurement of ERRS services was needed and an emergency TO was issued to ERRS.

August 6, 2010: 1 OSC, 4 START

The inventory and field hazcat was completed. Two additional lithium compounds were identified for destruction. Capt. Wood visited the site and final logistics of the detonation were worked out. A representative of L-3 Communications visited the site. OSC Wise provided him with a tour of the facility. He identified several chemicals that belonged to L-3 and confirmed that no virulent pathogens had been present at the facility.

August 7, 2010: 1 OSC, 3 START, 1 SDCoEH, 4 SDFDBS, 3 ERRS, 3 San Diego Police Department; 1 DTSC

The SDFDBS conducted a render safe procedure to explosively destroy the following chemicals:

- Trimethyl Orthoformate;
- Propylene Oxide;
- Benzoyl Peroxide;
- Diethyl Ether – inhibitor free;
- 1,1'-Azobis(cyclohexane – carbonitrile);
- 1-hydroxybenzotriazole hydrate;
- Phenyllithium ;
- Tert-Butyllithium; and
- 2,2"-Azobisisobutyronitrile.

In addition several round bottom flasks with unknown crystals were also destroyed on the recommendation of the L-3 Communications chemist that visited the site on August 6, 2010. He stated that those had existed prior to L-3 subleasing the building and that they had concerns about their stability.

At the request of SDFDBS, OSC Wise and the START contractor packed the chemicals for transport. The chemicals were packed with ice packs and vermiculite into plastic containers and coolers. The packaged materials were placed in the refrigerator until the detonation took place.

The ERRS contractor worked with the SDFDBS to prepare the detonation area, a vacant lot owned by the City of San Diego, approximately 500 meters south of the facility. A detonation bunker using soil available on-site and sand bags provided by ERRS was constructed. After the bunker was constructed, and at their request, OSC Wise and G. Baker, DTSC transported the chemicals to the bomb squad and then evacuated the detonation area. The SDFDBS placed the charges and detonated the chemicals.

SDCoEH assessed the area after the detonation and determined that post blast sampling was needed due to the evident heat generated by the blast. ERRS removed any sand bag material for disposal as solid waste and the area was smoothed over to grade.

After the detonation, the EPA team demobilized for the rest of the weekend.

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

OSC Wise issued CERCLA General Notice letters on July 31, 2010 with revised dates and requirements to the property owners, Dr. Michael Conrad (Aries Associates, President), the bankruptcy trustee for Aries Associates and L-3 Communications. All parties notified the OSC that they were either unable or unwilling to undertake the cleanup.

2.2 Planning Section

2.2.1 Anticipated Activities

OSC Wise deployed the ERRS contractor pursuant to the On-Scene Coordinator's delegated authority under CERCLA Section 104 to initially assist in the explosive detonation of the unstable chemicals. Based on the fact that they facility contains a large number of chemicals; improperly stored (incompatible storage); old and degraded, open contains and various hazard classes (flammable, oxidizer, corrosive, poison, reactive), and no viable and willing PRP, OSC Wise is going to continue the emergency removal until the chemicals are properly lab packed and disposed off or until the \$200,000 ceiling has been reached. If the \$200,000 delegated authority ceiling is reached, the removal will be ceased until an Action Memorandum has been approved. A draft Action Memorandum has been submitted to ORC for review.

2.2.2 Issues

As the lab packing progresses, unstable or DOT transport forbidden chemicals identified will be stored in a safe manner until another render safe operation can be arranged.

2.3 Logistics Section

The ERRS Response Manager will handle all logistical issues.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

The START will function as the SSO for this response.

2.6 Liaison Officer

OSC Wise will function as the Liaison Officer with local agencies.

2.7 Information Officer

OSC Wise will function as the PIO for this site. OSC Wise has granted one interview to the San Diego Reader. The press office has been notified.

3. Participating Entities

3.1 Unified Command

EPA is the lead agency for the removal action.

3.2 Cooperating Agencies

SDCoEH, DTSC, SBFDBS, San Diego Police Department

4. Personnel On Site

See Operations Section

5. Definition of Terms

OSC: On-Scene Coordinator
START: Superfund Technical Assessment and Response Team
ERRS: Emergency and Rapid Removal Service
SDCoEH: San Diego Co. Environmental Health
DTSC: California Department of Toxic Substance Control
SDFDBS: San Diego Fire Department Bomb Squad

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.