

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Hormigueros Pyrotechnics - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: POLREP #1
Initial PolRep
Hormigueros Pyrotechnics
A25M
Hormigueros, PR
Latitude: 18.1295900 Longitude: -67.1091500

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Date: 7/21/2015

Reporting Period:

1. Introduction

1.1 Background

Site Number:	A25M	Contract Number:	
D.O. Number:		Action Memo Date:	6/23/2015
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	6/28/2015	Start Date:	6/24/2015
Demob Date:		Completion Date:	
CERCLIS ID:	PRN000201799	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

On May 26th 2015, a fire and explosion occurred at an illegal pyrotechnics storage warehouse. The Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) attributed the cause of the fire to be as a result of improper installation that may have influenced the overload, arcing and causing the molten material to be expelled.

The warehouse is divided into three bays and suffered significant damage, particularly the middle bay which housed the illegal pyrotechnics. The middle bay's roof is all but nonexistent as are the front and side walls.

Pyrotechnics contain salts of heavy metals such barium, strontium, lithium and copper to generate specific colors. In addition older pyrotechnics may also contain lead salts as a primer. The resultant ash – estimated at approximately 100 cubic yards – may contain these heavy metals.

1.1.2.1 Location

The warehouse is located in Hormigueros, Puerto Rico. Within 100 yards of the warehouse is a large residential development as well as a large supermarket. Directly across the street is an unnamed stream to which storm-drain water discharges into. This unnamed stream drains into a second unnamed stream –

at the confluence of which a school of large fish was observed.

1.1.2.2 Description of Threat

There is potential of heavy metals such as barium, copper, lead, strontium and lithium being present in the ash. Barium and lead also have the potential of exhibiting Toxicity Characteristic. Copper can, even in low concentrations be acutely toxic to all aquatic life.

Significant portion of the ash – approximately 100 cubic yards – is stockpiled in the middle bay which no longer has a roof or side and front falls, there is a potential for the ash to migrate through wind and tropical rainfalls.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

EPA obtained written access agreement from property title holder on June 16th, 2015. On June 17th, 2015, EPA, RST and EQB met on site to collect five (5) samples. The samples were analyzed for Toxicity Characteristics, Total Metals (TAL) and semi-volatile organics.

The results indicated elevated levels of copper between 80mg/kg and 23,000mg/kg. Elevated levels barium was also detected - between 1,630mg/L and 2,800mg/L. The Toxicity Characteristic results for barium, however, were well below RCRA levels

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

On June 23rd, 2015, verbal authorization - approving a project ceiling of \$250,000 - was granted by the Director of Emergency and Remedial Response Division.

On June 24th, 2015, the Emergency and Remedial Response Services (ERRS) contractor was issued a Task Order.

On June 28th, 2015, ERRS contractor personnel mobilized to Puerto Rico.

On June 29th, 2015, EPA and ERRS personnel met on site to determine equipment requirements to spread the spent and live pyrotechnics mix so as to enable the Puerto Rico Fire Department (PRFD) to quench the smoldering hotspots.

On July 1st, 2015, EPA, ERRS, EQB and PRFD met on site to quench the remaining smoldering hotspots. The task was successfully completed on this same day.

On Tuesday June 30th, 2015, EPA met with the EQB Director for Superfund and Emergency response. EQB concurred with EPA's approach of deactivating the live pyrotechnics on site and scrubbing the exhaust.

On July 7th, 2015, a scarp conex was brought to the site and the crew began the process of configuring the conex box with two propane lines inside, along the two long sides.

On July 15th, 2015, the propane deliver company brought two 500 pound propane cylinders along with the plumbing and pilot mechanism constructed for the conex box.

On July 16th, 2015, trial burns were initiated to refine the air/propane mix. The initial air compressor brought to the site was not capable of delivering sufficient volume of air to sustain a burn.

On July 17th, 2015, a high capacity air dryer - capable of providing 1,600 cfm of air - was brought to the site.

The system appears to be working, however, the pile of spent/live pyrotechnics is saturated with rain water. ERRS began spreading the spent/live pyrotechnics to enhance the air drying. The daily heavy rains is impeding the drying process.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

No information available at this time.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$150,000.00	\$50,000.00	\$100,000.00	66.67%
Intramural Costs				
USEPA - Direct	\$0.00	\$10,000.00	(\$10,000.00)	0.00%
USEPA - InDirect	\$0.00	\$25,000.00	(\$25,000.00)	0.00%
Total Site Costs	\$150,000.00	\$85,000.00	\$65,000.00	43.33%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

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.