

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Central Roig - Removal Polrep  
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region II

**Subject:** POLREP #1  
Initial  
Central Roig  
A21R  
Yabucoa, PR  
Latitude: 18.0448796 Longitude: -65.8959878

**To:**  
**From:** Andrew Confortini, OSC  
**Date:** 12/11/2014  
**Reporting Period:** 11/17/2014 - 12/5/2014

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	A21R	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	
<b>Response Authority:</b>		<b>Response Type:</b>	PRP Oversight
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>		<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	11/17/2014	<b>Start Date:</b>	11/18/2014
<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

Abandoned sugar cane mill.

#### 1.1.2 Site Description

The Site consists of buildings and land associated with the former Central Roig sugar mill. The Site was operated as a sugar cane mill for more than 80 years and was abandoned in 2001. The Site currently includes approximately 16 structures of various sizes formerly used for the storage of sugar, equipment/machinery and parts, as well as sugar cane processing. Two structures, the laboratory and the maintenance building (Building 8), have been determined to contain hazardous substances. The facility is patrolled by local Police and secured 24 hours a day by a private security company. The property and structures at this location are owned by the Commonwealth of Puerto Rico and managed by the Puerto Rico Land Authority (PRLA).

Residential and agricultural areas are situated adjacent to an abandoned sugar cane mill containing hazardous substances, pollutants or contaminants that may present a threat of direct contact to the public

##### 1.1.2.1 Location

The Central Roig Site (the Site), located at 18° 3'40.94"N; 65°52'26.66"W, is located in a rural section of Yabucoa, Puerto Rico.

##### 1.1.2.2 Description of Threat

The presence of asbestos containing materials (ACM), laboratory/process chemicals and various petroleum-based liquids (in sumps and aboveground storage tanks-ASTs) have been identified at the Site. Conditions at the Site represent a potential threat to the public health, welfare and the environment.

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

On February 23, 2012, EPA On-Scene Coordinator (OSC) Rodriguez performed an inspection of the Site. During this inspection, OSC Rodriguez observed suspected asbestos containing material (SACM) on the facility floors, pipes and boiler room areas. In addition, several large petroleum spills were discovered near the ASTs, as well as unsecured chemicals inside a laboratory building adjacent to the Main building.

On March 6, 2012, OSC Rodriguez returned to the Site and directed EPA's Removal Support Team (RST-3) to collect insulation material observed on piping, boiler units and ground surface. Based upon the observations made at that time, OSC Rodriguez issued a Field Notice of Federal Interest (FNFI) relating to the performance of a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal action to clean up SACM and abandoned laboratory chemicals. On the same date, a separate FNFI was issued relating to the release of petroleum, from the ASTs, into the environment under the Clean Water Act of 1990. At the time of issuance, the facility was owned and operated by Compania Matriz de la Central Roig, Inc. (also known as Los Colonos). On April 20, 2012, the validated asbestos analytical results from the insulation material samples collected on March 6, 2012 were received. Based upon the results, asbestos fibers were not present in the various insulation materials sampled.

The abandoned chemicals in the laboratory were inventoried by RST-3 on March 7, 2012. There were approximately 60 containers (ranging up to 1 liter in size), both with and without labels. The hazardous substances identified include:

- Ammonium hydroxide;
- Chloroform;
- Formaldehyde;
- Silver nitrite; and
- Sodium hydroxide.

On January 9, 2013, OSC Rodriguez issued a FNFI and Responsible Party Notification to the Puerto Rico Land Authority (PRLA), to whom the land had reverted. In these documents, the environmental issues were outlined (SACM, laboratory chemicals, ASTs) and OSC Rodriguez requested that PRLA notify EPA of the current status of removal activities. In response, PRLA contacted OSC Rodriguez to coordinate the anticipated removal activities. On June 18, 2013, OSC Rodriguez visited the Site and discovered an additional petroleum spill. Further inspection revealed that the bottom of one tank had failed and the material had leaked into an earthen containment area. On July 11, 2013, PRLA implemented the cleanup of petroleum released in the AST containment area. OSC Rodriguez and RST-3 personnel were on-site during the completion of this work. PRLA excavated petroleum-contaminated soil and removed approximately 3000 gallons of oil and oily water from within and adjacent to the earthen containment area. However, no mitigation efforts were taken by PRLA to address the other environmental concerns noted in the FNFI.

On November 25, 2013, OSC Rodriguez returned to the Site to conduct a follow-up inspection of the mitigation work. Upon arrival, it was observed that some of the facility structures had been demolished. Based upon an inspection of the demolition debris, OSC Rodriguez directed RST-3 to collect samples of the mastic tar material observed on roofing panels as well as wipe samples from surfaces of steel within the debris piles adjacent to where buildings once stood. PRLA was also notified and directed to cease demolition activities.

On January 31, 2014, the validated asbestos analytical results from the insulation material samples collected on November 25, 2013 were received. The results confirmed that asbestos fibers were present within the mastic tar used to seal the roofing seams and on the steel surfaces.

On February 4, 2014, OSCs Andrew L. Confortini and Mark Gallo inspected the facility to assess and document current Site environmental conditions. The two day inspection identified 40 additional containers (ranging up to 1 liter in size) of chemicals containing hazardous substances within the former maintenance building (Building 8).

During the same inspection, the OSCs observed five 55-gallon plastic drums of Busan 1016 pesticide which, according to the manufacturers material safety data sheet, is considered to be a characteristic waste under the Resource Conservation and Recovery Act in Building 8. Evidence of leakage and/or spillage of petroleum were also observed on the floor of this building in the vicinity of several drums of oil-like material. In addition, large volumes of lubricating/machine oil in reservoirs beneath the sugar cane processing equipment were observed in Building 2.

On February 10, 2014, pursuant to EPA direction, RST-3 collected ten bulk samples from locations identified by OSC Confortini. Seven samples were taken of roofing tar/mastic used to seal joints on the corrugated roofing of recently demolished structures. Three samples were of various pipe insulation materials observed within Building 8. Each of the mastic/tar samples were found to contained chrysotile asbestos ranging from 2 to 10 percent. The three samples of pipe insulation materials collected within Building 8 did not contain asbestos fibers.

## **2. Current Activities**

### **2.1 Operations Section**

#### **2.1.1 Narrative**

On July 3, 2014, a CERCLA Unilateral Administrative Removal Order (UAO) was issued to PRLA to address the environmental threats identified at the Site by EPA. A UAO conference was held by phone with PRLA representatives on July 10, 2014 to discuss the terms of the UAO and address any issues of PRLA. On July 14, 2014, PRLA issued a Notice to Comply with the Order. From July 15, 2014 through October 2014, EPA, PRLA and its contractors consulted and developed the work plans for the prescribed work. On October 20, 2014, all work plans were approved by OSC Confortini.

Per the UAO, PRLA agreed to: provide continuous Site security; remove and dispose of all laboratory chemicals and drums, characterize the waste oil located in the main building sumps, and to abate, package and dispose of ACM on-site.

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

**Week of November 10, 2014 through November 15, 2014 (prior to EPA arrival):**

- On November 10, 2014, PRLAs prime contractor (Riclem Environmental Services Corporation- RICLEM) began preparation work at the Site. This included installation of fences, warning and permit signs and the mobilization of equipment. Work also included the mobilization and construction of a decontamination unit by the asbestos abatement subcontractor, Central Industrial, Inc.(Central Industrial).

**Week of November 17, 2014 through November 22, 2014:**

- On November 17, OSC Confortini arrived on-site and met with RICLEM representatives and was briefed on current Site operations. On November 18, EPA, RST-3 and RICLEM met to discuss the scope of work and logistical issues. Following the meeting, a detailed inspection of the facility was conducted.
- On November 19, the OSC, PRLA, RICLEM and RST-3, participated in a public meeting held adjacent to the Site. The meeting was broadcasted live on local radio and attended by two State Senators, Mayor of Yabucoa and approximately 40 local residents. The objective of the meeting was to explain to the public the nature of Site contaminants and mitigation actions being implemented, project schedule and long-term plans for the former Central Roig Sugar Mill.
- Mitigation activities completed by the end of the reporting period included: removal of vegetation and grading with heavy equipment to access laboratory area, preparing ACM work areas including water connection to the asbestos decontamination station, removing abandoned truck tires from work areas, waste segregation, and chemical inventorying and packaging.
- In addition, twelve (12) SACM samples were collected from debris piles, gasket and belt materials found in Building 8. Two (2) of the twelve (12 ) samples, both of gasket materials, contained 20 to 30 percent asbestos fibers. As a result, the two areas containing asbestos were immediately covered with polyethylene sheeting and secured with red caution tape. Both of the identified areas will be addressed by the Central Industrial.
- Background asbestos air samples were collected adjacent to planned asbestos remediation work areas.
- Asbestos removal permit was issued by the Puerto Rico Environmental Quality Board (EQB).

**Week of November 24, 2014 through November 29, 2014:**

- RICLEM continued mitigation efforts; including separation of chemicals and finalization of the chemical inventory.
- During the final inventory, three hundred and ninety two (392) bottles containing labeled (known) and unlabeled (unknown) chemicals were identified and accounted for. In addition, a total of eight (8) drums containing either pesticides or waste oil were identified and included into the final inventory.
- Central Industrial began removing ACM at Buildings 5 and 6.
- Asbestos third party monitor (AES) collected personal and perimeter air samples at Buildings 5 and 6 during ACM removal activities. Analytical results for perimeter air samples obtained during the reporting period were found to be below the EQB recommended limit of 0.005 f/cc.
- All chemicals found upon inventory completion were visually inspected and placed inside plastic drums or repackaged accordingly.
- ACM identified inside Building 8 remained covered with plastic and identified with red caution tape.
- The mobile analytical laboratory operated by Sanco Laboratories, Inc. (Sanco) was delivered to the Site;
- Sanco personal began collecting and analyzing samples from unlabeled (unknown) chemicals containers.
- RICLEM requested an amendment to the ACM removal permit to include additional ACM gasket and belt materials found inside Building 8.
- Asbestos third party laboratory (AES) continue collecting personal and perimeter air samples at Buildings 5 and 6 during ACM removal activities. AES also collected background air samples at Building 9.

**Week of December 1, 2014 through December 6, 2014:**

- RICLEM directed the collection of 18 waste samples for TCLP analysis. The analytical results are scheduled to be received by 12/15/2014;
- RICLEM completed the transfer of Busan 1016 into new drums;
- RICLEM began the transfer of petroleum located in Building 2 sumps into tank trucks. To date, 8,000-gallons of a petroleum and water mixture have been pumped;
- Central Industrial completed roofing panel mitigation work at Buildings 9 and 11;
- Central Industrial began the roofing panel mitigation work at Building 12; and
- RICLEM prepared and submitted the ACM waste profile to EQB for approval.

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

On-site remediation activities are currently being conducted under an Administrative Order on Consent with PRLA.

**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

### 2.2.1 Anticipated Activities

- RICLEM will receive the TCLP results. The results will be provided to EPA, RST-3 and disposal contractors for evaluation.
- RICLEM will continue removal of debris, material segregation and final cleaning efforts at Building 7.
- RICLEM will continue pumping petroleum and water mixture from the sumps in Building 2;
- RICLEM will begin transporting ACM waste off-site for disposal (pending final permitting approval);
- Central Industrial personnel will continue mitigation of mastic tar containing roofing panels located on and adjacent to the concrete pads of Buildings 11 and 12; and
- Soil samples and air clearance samples will be collected by AES adjacent to Buildings 11 and 12.
- Soil samples will be collected adjacent to the concrete pad to determine if asbestos contamination has migrated into adjacent soils;
- Sanco personnel will continue to provide analytical testing services to support the evaluation of on-site chemicals and wastestreams.

#### 2.2.1.1 Planned Response Activities

#### 2.2.1.2 Next Steps

Continue the mitigation of ACM, final packaging of laboratory chemicals and the pumping of petroleum-based liquids from machine pits and ASTs.

#### 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

- Andrew Confortini, OSC;
- Mark Gallo, OSC;
- Angel Alicea, RST 3 PM;
- Rafael Espasa, Environmental Coordinator PRLA;
- Victor Pagan, RICLEM Project Manager;
  - 14 employees on scene.

Other companies involved include:

- Central Industrial, Asbestos Removal;
  - 12 employees on scene;
- AES, Asbestos Third Party Monitor/Laboratory;
  - 5 employees on scene;
- Sanco Laboratory, Additional Laboratory Testing (HAZCAT, TCLP, etc.);
  - 4 employees on scene;
- Environix Group, HAZWASTE (Lab Packs);
  - 2 employees on scene;
- AquaClean, HAZWASTE (Lab Packs);
  - 2 employees on scene;
- Security;
  - 3 daily shifts with 3 employees.

## 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.