

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
CNMI CUC Power Plants 1 and 2 - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IX

Subject: POLREP #12
Removal of treated soil from biocell
CNMI CUC Power Plants 1 and 2
Z9CS
Lower Base, Saipan, MP
Latitude: 16.000000 Longitude: 145.5003000

To: Harry Allen, EPA Region 9

From: Chris Reiner, OSC

Date: 12/11/2014

Reporting Period: 12/1/14-12/11/14

1. Introduction

1.1 Background

Site Number:	Z9CS	Contract Number:	EP-W-07-022
D.O. Number:	022-9063	Action Memo Date:	
Response Authority:	OPA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	11/6/2009	Start Date:	11/11/2009
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	E10901	Reimbursable Account #:	Z9CS

1.1.1 Incident Category

Oil Spill Response

1.1.2 Site Description

The Commonwealth Utilities Corporation is a public entity which is responsible for supervising the construction, maintenance, operation and regulation of all CNMI utility services, including power, sewage, and water. EPA has identified violations of the CWA, SDWA and CWA 311 at a number of the CUC facilities. On March 11, 2009, the United States District Court entered into two Stipulated Orders ("SO") that includes Clean Water Act violations, Safe Drinking Water Act violations and Oil Pollution violations. Specifically, SO 2 required CUC to secure all sources of oil discharges, take appropriate measures to prevent further discharges and assess and remediate its facilities, including but not limited to the Power Plant 1 and 2 facility. CUC owns six and currently operates three of the six power plants on Saipan, Tinian and Rota in the Commonwealth of the Northern Mariana Islands. SO 2 addresses CUC's four Power Plants in Saipan, a Power Plant in Rota and a Pipeline located in Saipan. SO 2 also contains numerous compliance requirements to address CUC's Oil spill prevention, preparedness and response issues. SO 2 also set deadlines for the for these compliance measures.

This site is Saipan's Main Power Plant (Power Plant 1 and 2), two power generation facilities which are co-located on a contiguous parcel of land. This facility was issued Expedited Settlement Agreements (ESA) for violations of the SPCC regulations and failed to come into compliance. EPA issued a CWA 311 Order to the facility for its drum storage area in October 2006 and immediately after that the facility had an oil spill into waters. EPA issued another CWA 311 Order to the facility in October 2007. Subsequently, SO 2 was entered and oversight with SO 2 is being conducted by EPA's Emergency Response Section.

Associated with the facility is a transportation pipeline which has numerous spills due to heavy corrosion and poor maintenance practices. The US Coast Guard has requested EPA assistance with this facility. During the oncoming Typhoon Melor in October 2009, the US Coast Guard opened the OSLTF to conduct mitigation activities at the facility. After the storm had passed, USCG passed responsibilities back to EPA and EPA accessed the OSLTF to further assess and characterize oil contamination at the Site.

1.1.2.1 Location

The Power Plants 1 & 2 Site and associated oil storage areas located in the area designated as Lot 205 E 01, Lower Base, on the west coast of the island of Saipan in the CNMI. The Power Plants 1 & 2 site is located at 15°13'50" North Latitude, 145°44'29" East Longitude. The Power Plants 1 & 2 site covers approximately 28,767 square meters (309,645 square feet) and is located primarily in an industrial/commercial area, approximately 100 feet inland of Tanapag Lagoon.

1.1.2.2 Description of Threat

Power Plant operations include the use of petroleum products such as diesel fuel, lube oil and products containing hazardous materials such as degreasers, thinners, solvent, cleaners and paint. A large quantity of used oil is generated from Power Plant operations and is stored in drums and tanks on site.

Years of poor oil management practices have resulted in releases of oil in many areas of the Site.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The CUC Power Plants 1 & 2 site has a history of oil spills. Known spill areas include the pipeline, tank areas, fuel transfer areas, and drum storage areas. Previous investigations conducted at the Power Plants 1 & 2 facility consist of a Phase II Environmental Site Assessment by Allied Pacific Environmental Consulting in 2004 and a Phase II Remedial Subsurface Investigation by Allied Pacific Environmental Consulting in 2005. Sampling results from these investigations indicate that total petroleum hydrocarbon (TPH) contamination in the diesel and motor oil ranges is present in site soils at concentrations up to 111,000 milligrams per kilogram (mg/kg) and 204,000 mg/kg, respectively. Free product was reportedly observed on groundwater in the subsurface during the 2005 investigation.

In March 2008 and April 2009, the U.S. EPA and the CNMI Division of Environmental Quality (DEQ) sampled drums and tanks of waste oil at the CUC Power Plants 1 & 2 site and other CUC-related sites on Saipan. Soil and groundwater at the Power Plants 1 & 2 site have not been previously investigated by the U.S. EPA.

As a result of assessments in 2010, EPA documented discharge to waters of the US, even though CUC's contractors claimed that there was no evidence of discharge.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

MONDAY December 1, 2014: Personnel on-site: EPA – 1, ERRS – 4. OSC Reiner mobilized to site. ERRS Chernick and crew, including 2 APEC subcontract staff, mobilized to site. Initial health and safety discussion held. OSC visited Marpi landfill to assess location where treated soils will be stored. ERRS began removing geotextile cover from biotreatment cells and stacking soil in preparation for loading into trucks.

TUESDAY December 2, 2014: Personnel on-site: EPA – 1, ERRS – 4. ERRS began loading treated soil from biotreatment cells into trucks for transport to Marpi landfill, where it will be used as daily cover. 33 truckloads of treated soil were taken to Marpi.

WEDNESDAY December 3, 2014: Personnel on-site: EPA – 1, ERRS – 4. ERRS continued transporting treated soil to Marpi landfill. 28 truckloads of treated soil were taken to Marpi. ERRS worked on removing old, degraded collection lines from oil skimming pumps in collection sumps, in order to replace them with new lines.

THURSDAY December 4, 2014: Personnel on-site: EPA – 1, ERRS – 4. 30 truckloads of treated soil were taken to Marpi landfill. ERRS began set-up of a new sock filter system on the wastewater treatment system used to treat water from the collection sumps.

FRIDAY December 5, 2014: Personnel on-site: EPA – 1, ERRS – 4. 32 truckloads of treated soil were taken to Marpi landfill. ERRS completed installation of sock filter system on the wastewater treatment system and general system maintenance.

SATURDAY December 6, 2014: Personnel on-site: EPA – 1, ERRS – 2. 18 truckloads of treated soil were taken to Marpi landfill. Mechanical issues with two of the four haul trucks made one unavailable all day and the other only available a part of the day.

MONDAY December 8, 2014: Personnel on-site: EPA – 1, ERRS – 4. 25 truckloads of treated soil were taken to Marpi landfill. Continued mechanical issues made only three haul trucks available today. OSC Reiner and ERRS inspected all sumps in the interceptor and barrier trenches installed previously on the site. For the most part, the sumps showed little to no sheen.

TUESDAY December 9, 2014: Personnel on-site: EPA – 1, ERRS – 4. 4 truckloads of treated soil were taken to Marpi landfill. Mechanical issues with trucks continued today, with only one haul truck available. Nevertheless, hauling of the last load of treated soil was completed today. ERRS crew assessed damaged spots of biocell liner and applied patches to four sections ranging from 2' to 12' across. OSC Reiner and ERRS dug test pits in two locations: immediately outside the PP1&2 fence adjacent to the drum storage containment area and in the old leach field by the oil/water separator at Tank 104. A very faint sheen was detected in the first location, but that may have been due to hydraulic oil on the backhoe arm. A more

distinct and lasting sheen, with evident rainbow coloration, was detected on the surface of groundwater at the second location, by Tank 104.

WEDNESDAY December 10, 2014: Personnel on-site: EPA – 1, ERRS – 3. OSC Reiner collected influent and effluent samples from the wastewater treatment system and shipped them to the lab for analysis. ERRS conducted a detailed inventory of EPA supplies stored in two shipping containers on the PP1&2 site, to be used in planning the next phase of work.

THURSDAY December 11, 2014: Personnel on-site: EPA – 1, ERRS – 2. EPA and ERRS demobilized from site.

2.1.2 Response Actions to Date

See above and previous polreps

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

CNMI Commonwealth Utilities Corporation

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
petroleum contaminated soil	soil	2000 cu yds			used as daily cover at Marpi landfill

2.2 Planning Section

2.2.1 Anticipated Activities

Continue to operate and monitor oil recovery system and waste water treatment system for water collected in active trenches.

Plan next phase of excavation in order to address petroleum source materials still on site.

2.2.1.1 Planned Response Activities

Oil recovery, treatment of contaminated water and contaminated soil.

2.2.1.2 Next Steps

See above

2.2.2 Issues

Sources and extent of contamination is not known.
 Facility is an operating power plant and infrastructure is in operation.
 Containing, recovering and controlling the source(s) is a technical and logistical challenge.

2.3 Logistics Section

Logistics are always difficult in the pacific islands. Maintenance and monitoring of biotreatment cells and waste water treatment system is a challenge due to remote location of site.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

CNMI Division of Environmental Quality

4. Personnel On Site

EPA OSC - 1
 ERRS - 4 (subcontractor)

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.

POLREP #12 Last Updated 7/13/2017