U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
CUC Rota Power Plant - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IX

Subject: **POLREP #9**
Work on interceptor trench continues
CUC Rota Power Plant

Songsong, MP
Latitude: 14.1366670 Longitude: 145.1358330

To:
From: OSC Chris Reiner
Date: 6/22/2014
Reporting Period: 6/16/14-6/22/14

1. Introduction

1.1 Background

Site Number:	Z9D9 / 09WV	**Contract Number:**	
D.O. Number:		**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:	4/3/2013	**Start Date:**	4/3/2013
Demob Date:		**Completion Date:**	
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:	E11903	**Reimbursable Account #:**	

1.1.1 Incident Category

1.1.2 Site Description

The Rota Power Plant Site is an active diesel-powered electrical plant where contaminated soil and groundwater are present. The contaminants of concern at the Site are polychlorinated biphenyls (PCBs) in soil and petroleum hydrocarbons in groundwater. The Site is located in Songsong Village on the island of Rota in the Commonwealth of the Northern Mariana Islands (CNMI). The power plant sits approximately 100 feet from the shoreline of the Philippine Sea. EPA is addressing the PCB contamination by excavating the contaminated soil and shipping it off-island for disposal. The estimated clean-up volume is 200 cubic yards.

Operations at the site include the generation of power for the island of Rota, storage of new and used oil, and oil/water separation. The Rota Power Plant site contains four primary aboveground storage tanks (ASTs) as well as day tanks and drum and transformer storage areas. There are two oil/water separator (OWS) systems are located at the Rota Power Plant site. One rudimentary OWS consists of drums from which oil is manually skimmed. The system is located inside the main Power Plant building and drains to the north of the building into a pit. A second in-ground OWS is piped from the secondary containment areas of the ASTs and the drum storage berm located in the western portion of the property. This OWS can hold 2,500 gallons of oil and water and discharges separated water directly to a pit dug in the ground.

In addition, there are several current and former transformer storage areas where PCB-laden transformer oil may have leaked onto the soil.

1.1.2.1 Location

Songsong Village, Rota, CNMI
Latitude: 14.1366670
Longitude: -145.1358330

1.1.2.2 Description of Threat

Release of PCBs and petroleum products to soil and groundwater.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Oil has been seeping out along the shoreline along a 200'foot stretch for an unknown period of time. The source has not been able to be identified, although it clearly comes from the CUC Rota Power Plant property, through Commonwealth Ports Authority (CPA) land to the ocean. Groundwater wells installed on the CUC Power Plant facility are contaminated with dissolved and free-phase product.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

During this time period, the ERRS contractor continued excavation and installation of the interceptor trench on CPA land. The START contractor collected samples of excavated soils.

2.1.2 Response Actions to Date

MONDAY June 16, 2014: Personnel on-site: EPA – 2, USCG – 1, START – 1, ERRS – 8.
The shipment of supplies and equipment from Hawthorne left Guam on a Cabras Marine vessel, due to arrive at the port of Rota early on June 17. In preparation for the arrival of Hawthorne mechanics, ERRS built a temporary containment structure and drained the hydraulic system of the CAT330. START received data indicating that stockpile 8 was below TPH action levels, and stockpile 7 was above the TPH action levels. ERRS began filling cubic yard boxes with contaminated soil from stockpile 7 and loading them into shipping containers. The first full container of contaminated soil was labeled and sealed for transport. ERRS also reinforced pallets to handle cubic yard boxes of soil, which weigh approximately 5000 lbs. Pallets available on-island are not strong enough for this weight and must be reinforced with plywood to safely carry boxes of soil. Sump pipe segments for risers 3, 4, and 5 were cut and capped to be ready for installation.

TUESDAY June 17, 2014: Personnel on-site: EPA – 1, USCG – 1, START – 1, ERRS – 8.
OSC Musante demobilized from site. The Cabras Marine vessel from Guam arrived, but the hydraulic hammer was not aboard, as it was too heavy for the boat with the additional supplies needed, including a compressor, hydraulic oil, and the mechanic' tools. The hammer will be shipped on its own on to arrive June 18. The Hawthorne mechanic and their Guam operations manager arrived on site and the mechanic purged the CAT330 hydraulic system, which had been contaminated with water while the hammer was operated below groundwater during trenching. The first container of contaminated soil was transported off-site to be staged for shipping. ERRS continued filling cubic yard boxes with contaminated soil from stockpile 7 and began loading the boxes into containers 2 and 3. START received analytical data indicating stockpiles 9 and 10 are below TPH action levels.

WEDNESDAY June 18, 2014: Personnel on-site: EPA – 1, USCG – 1, START – 1, ERRS – 8.
The hydraulic hammer arrived from Guam and was transported to the site. The non-operational hammer was loaded on to the Cabras Marine vessel and transported back to Guam to be repaired and held as a back-up in case the new one fails. The Hawthorne mechanic installed and tested the new hammer. ERRS resumed trenching and completed most of the excavation of trench segment #6. ERRS also completed loading cubic yard boxes of soil from stockpile 7 into containers and containers 2 and 3 were shipped off-site for staging.
THURSDAY June 19, 2014: Personnel on-site: EPA – 1, USCG – 2, START – 1, ERRS – 8.
ERRS backfilled and removed shoring from box #5, completed excavation of segment #6 and installed shoring box #6. ERRS also began digging overburden from trench segment #7. USCG Weil arrived on site from Guam. OSC met with CNMI Historic Preservation Office (HPO) staff to discuss the presence of pre-World War II Japanese tunnels at the southwestern end of the power plant site. The tunnels are reported to have a foot or so of water in them, with oil on the surface. If this is so, the tunnels may represent a preferential pathway for subsurface flow of oil and should be investigated.

FRIDAY June 20, 2014: Personnel on-site: EPA – 1, USCG – 2, START – 1, ERRS – 8.
ERRS backfilled shoring box #6, completed excavation of trench segment #7 and installed shoring box #7. The surface of the groundwater in segment #7 showed a black, oily layer, consistent with its proximity to MW-5, where free product has been observed. START sampled stockpiles, 11, 12 and 13 and shipped samples. In consultation with SEARCH archaeologist and HPO, ERRS conducted exploratory digging to locate the Japanese tunnels. At approximately 2-3 feet below ground surface, a flat concrete surface was found, which extended to at least 10 feet by 8 feet and appeared to possibly be hollow underneath. No means of entry was found and exploratory digging will continue on June 21.
SATURDAY June 21, 2014: Personnel on-site: EPA – 1, USCG – 2, START – 1, ERRS – 8.
ERRS placed sump 3 in shoring box #7, completed excavation of trench segment #8 and installed shoring box #8. Segment #8 showed heavy black spotting and streaking, comparable to segment #7. ERRS, with SEARCH oversight, completed investigation of the area where the Japanese tunnels were believed to be. No evidence of the tunnels was found, and SEARCH concluded that the tunnels were now likely covered by the secondary containment structures for the power plant fuel tanks. Further conversation with HPO staff suggested oil was not present in the tunnels in significant quantities, making it unlikely these tunnels are serving as a preferential pathway for subsurface oil transport. No additional investigation of this area will be conducted.

SUNDAY June 22, 2014: DAY OFF

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

Responsible party (CNMI CUC) has been providing assistance, logistical support and supplies, including diesel fuel for heavy equipment.

2.1.4 Progress Metrics

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*

2.2 Planning Section

2.2.1 Anticipated Activities
Work to continue on installation of interceptor trench.

2.2.1.1 Planned Response Activities
-Installation of interceptor trench on CPA land.
-Installation of recovery trench on CUC Rota Power Plant property.
-Loading of contaminated soil into boxes, and containers for off site transport to Mainland for disposal.
-Sampling of groundwater wells and sampling of soils generated from excavations.

2.2.1.2 Next Steps
Continue installation of interceptor trench segment by segment.

2.2.2 Issues
-Coral substrate is incredibly hard and has been a challenge to remove, slowing excavation operations.
-This site is extremely remote and located on an island with virtually no services or supplies available. This presents significant logistical challenges.
- There have been fewer issues with equipment now that the new hydraulic hammer has arrived on-site, but equipment challenges continue: the drive line on the CAT loader dropped out and repairs consumed much of a morning; the chisel-tip of the new CAT H160 hydraulic hammer is visibly changing shape after hammering the very hard coral substrate for several days, and arrangements are being made for a backup hammer

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

3.1 Unified Command

3.2 Cooperating Agencies
CNMI Division of Environmental Quality
US Coast Guard
CNMI Coastal Resources Management
CNMI Historic Preservation Office
Commonwealth Ports Authority

4. Personnel On Site

USEPA - 2
USCG - 1
START - 1
ERRS - 8
SEARCH - 1

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

6.2 Reporting Schedule
POLREPS will be generated on a weekly basis.

7. Situational Reference Materials

No information available at this time.