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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IX

Subject: **POLREP #8**
Work on interception trench continues
CUC Rota Power Plant

Songsong, MP
Latitude: 14.1366670 Longitude: 145.1358330

To:
From: OSC Jason Musante for OSC Michelle Rogow
Date: 6/16/2014
Reporting Period: 6/9/14 - 6/15/14

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 disolved 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 from the groundwater monitoring wells and stockpiled soils.

2.1.2 Response Actions to Date

MONDAY June 9, 2014: Personnel on-site: EPA – 1, START – 1, ERRS – 8, SEARCH – 1. OSC Rogow departed Rota for Saipan today. ERRS completed rock backfill around sump riser pipe in trench segment #2, removed the shoring system, and installed soil backfill to grade. Excavation on trench segment #4 was begun and approximately 90% completed by the end of the day. A welder was brought back to the site to cut the 1" trench plate shoring system box endplates down to size for a better fit. Delivery of washed rock was planned, but did not occur due to the vendor being busy at another job. The problem with the lower grease seal of the hydraulic hammer slipping out of place continued and ERRS managed to get it partially back into position.

TUESDAY June 10, 2014: Personnel on-site: EPA – 1, START – 1, ERRS – 8, SEARCH – 1, USCG – 1. ERRS completed excavation of coral substrate in trench segment #4 and set shoring box #4 into place. Backfill of trench segment #3 with rock, removal of the shoring system, and soil backfill to grade was also completed. Excavation on trench segment #5 was begun. The archeologist identified another small piece of human bone and excavation was stopped temporarily while the find was processed. Thirty cubic yards of washed rock was delivered today. START collected soil samples from new soil stockpiles and shipped them for analysis. The lower grease seal of the hydraulic hammer slipping out of place continues to be problematic, requiring extra efforts to return it to the correct position and extra lubrication. A serious problem with the pin on the master link of the CAT330 excavator coming out of position was noticed and ERRS was able to get it back in place. Also, during backfilling operations, heavy equipment slightly damaged a CUC facility transformer storage impoundment wall. The damage was reported to the plant manager and the wall secured with plastic liner and sandbags pending repair by ERRS.

WEDNESDAY June 11, 2014: Personnel on-site: EPA – 1, USCG – 1, START – 1, ERRS – 8, SEARCH – 1. ERRS completed excavation of coral substrate in trench segment #5 and set shoring box #5 into place. ERRS completed installation of sump riser pipe and began rock backfill in trench segment #4. No rock washed rock was delivered today, but the ERRS RM visited the quarry and washing operation were being conducted. A welder was onsite to tack weld the master link pin on the track of the CAT330 and keep it from slipping again. The ERRS RM had discussions with the heavy equipment vendor Hawthorne about a service visit by a mechanic to address the failing grease seal on the hydraulic hammer. Towards the end of the day, the CAT330 excavator operator experienced jerky movements of the hydraulic system. When inspected the hydraulic fluid had a milky color rather than the normal clear, indicating air entrainment or water contamination.

THURSDAY June 12, 2014: Personnel on-site: EPA – 1, USCG – 1, START – 1, ERRS – 8, SEARCH – 1. ERRS performed preventative maintenance on the CAT330 hydraulic fluid system by cleaning all filters prior to beginning work for the day. ERRS completed rock backfill around sump riser pipe in trench segment #4, removed the shoring system, and installed soil backfill to grade. Excavation on trench segment #6 was begun. The archeologist identified another small piece of human bone and excavation was stopped temporarily while the find was processed. Forty cubic yards of washed rock was delivered today. START received the second set of TPH analysis data on the overburden stockpile samples. Stockpile 3 TPH data was below action levels, indicating suitable for reuse as backfill, and this material was relocated to the trench area. Around mid-afternoon, hydraulic fluid was observed leaking from the hydraulic hammer indicating a serious internal failure. Inspection revealed that the unit was no longer operational and it could not be serviced in the field. Excavation activities were halted and the equipment vendor was contacted regarding the situation and need for a replacement hammer. OSC Reiner was on Guam, en route to Rota, and went to the offices of Hawthorne (equipment vendor) to facilitate options for replacement of the hydraulic hammer. Since no further excavation work could be performed due to the hard coral substrate in the trench excavation area, ERRS had 2 - 20 cubic yard shipping containers on chassis brought to the site and began loading them with one cubic yard boxes of contaminated soil from Stockpile 5 for disposal.

FRIDAY June 13, 2014: Personnel on-site: EPA – 1, USCG – 1, START – 1, ERRS – 8. ERRS completed loading one cubic yard boxes with contaminated soil from stockpile 5 for disposal shipment. When full, the boxes were loaded into the shipping containers and braced to prevent movement during shipping. One container was completely filled with 16 boxes and 6 boxes were loaded into the second container. START collected soil samples from new soil stockpiles and shipped them for analysis. START also return shipped equipment used for the groundwater sampling last week. OSC Reiner reports that Hawthorne has located a replacement hydraulic hammer and is preparing it for use at the site by installing a snorkel attachment for use underwater. Hawthorne is also making transportation arrangements to get the equipment from Guam to Rota.

SATURDAY June 14, 2014: DAY OFF

No work today due to the hydraulic hammer being non-operational and the completion of stockpile 5 loading. OSC Reiner and START Tiballi arrived on Rota this afternoon. OSC Reiner reports that Hawthorne has confirmed transportation of the replacement hydraulic hammer on Monday, June 16th, and it will arrive on Rota by the end of that day. The plan is for Hawthorne mechanics to flush the CAT330 hydraulic system and attach/test the replacement hammer on Tuesday, June 17th. If all goes as planned, excavation of the interception trench could resume by Wednesday, June 18th.

SUNDAY June 15, 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 has been a challenge to remove and has been 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.
-Numerous problems with the CAT330 this week have slowed progress including: slipping pin on the master link of a track, slipping grease seal on the hydraulic hammer, and failure of a hydraulic seal resulting in contamination of the hydraulic fluid system. This made the hammer non-operational. Arrangements with the equipment vendor for a replacement hammer have been made; the replacement will tentatively arrive on Rota sometime Monday 6/16. The CAT330 will need to have the hydraulic system flushed of contamination before use and resumption of excavation operations will be delayed until Wednesday 6/18 at the minimum.

2.3 Logistics Section

-All of the equipment and supplies, including the excavators and forklift had to shipped in from Guam, since no available, properly working equipment is available on island. If any maintenance is needed, there will be a long lead and response time due to limited flights from Guam to Rota.
-Shipping on and off island is subject to weather conditions and issues with the transporation barge to and from Rota.
-Shoring brought from the mainland is being used for trench system.
-Other supplies and equipment are extremely limited in Rota.

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.