

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Mirant Kendall Power Plant - Removal Polrep
Initial and Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region I

Subject: **POLREP #1**
First and Final
Mirant Kendall Power Plant

Cambridge, MA
Latitude: 42.3629266 Longitude: -71.0787591

To:
From: Gary Lipson, OSC
Date: 11/24/2009
Reporting Period:

1. Introduction

1.1 Background

Site Number:	Contract Number:
D.O. Number:	Action Memo Date:
Response Authority: OPA	Response Type: Emergency
Response Lead:	Incident Category: Removal Assessment
NPL Status: Non NPL	Operable Unit:
Mobilization Date: 11/22/2009	Start Date: 11/22/2009
Demob Date: 11/24/2009	Completion Date: 12/2/2009
CERCLIS ID:	RCRIS ID:
ERNS No.:	State Notification:
FPN#:	Reimbursable Account #:

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

The Mirant Kendall Cogeneration Plant produces electricity and steam for its customers. Lubrication oil used in the plant was inadvertently released from the lube oil house, flowed to a catch basin and drained into the Broad Canal which runs adjacent to the plant. The location where the oily/water mix entered the canal is in the vicinity of the facility cooling water intake. The oil was circulated along with the cooling water and discharged at the outfall point in the nearby Charles River. When it was discovered, the plant shut down its circulating pumps, but light sheening was seen up to approximately one mile upstream.

1.1.2.1 Location

The cogeneration facility is located at 265 First Street in Cambridge, MA. The latitude and longitude is 42.3629 and -71.0788 respectively. It is in a mixed industrial, commercial, and residential area and is within 100 yards of the Charles River.

1.1.2.2 Description of Threat

A relatively light sheen occurred on the Charles River as a result of this release. The amount of oil released from the system is believed to be approximately 200 gallons, with a portion of that reaching water. The majority of oil recovered was recovered from the lube oil house and the cooling water intake area. Little to no oil was recovered from the river, although the boom placed at the outfall was able to collect some of the oily sheen when the lines were purged prior to bringing the plant back on line.

The Charles is a well known Boston and Massachusetts iconic river. It flows 26 miles from Hopkinton, MA into Boston Harbor, approximately 1 1/2 miles from the point of discharge. This section of the Charles is mainly used for recreational purposes including sailing, sculling, and tourist sightseeing cruises.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

When the facility became aware of the discharge, the circulating pumps were shut down and all efforts were

made to recover whatever residual oil was available. After that was completed, the circulating pumps were slowly and individually brought up to speed, purging the discharge lines into the heavily boomed outfall. No samples were collected from the river, but attempts were made to collect any sheens seen on the river with absorbent boom and pads. No affected wildlife was seen.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

At approximately 2 AM on the morning of 11/22/09, the plants #3 turbine was taken off line for routine cleaning of the associated condenser. A high pressure water seal was compromised, allowing water to displace lubricating oil within the Bowser unit where purifying of the lube oil occurs. The Bowser, which is not a sealed unit, overflowed onto the floor of the lube oil house and eventually flowed to a catch basin outside of the house. The facility estimated that approximately 200 gallons of oil was released into the lube oil building, a portion of which remained within the building and was later captured with absorbent material. The catch basin drains into the Broad Canal, which is adjacent to the plant, at a point where the cooling water intake for the plant is located. The oil was collected along with canal water and circulated through the plant for cooling water and discharged via the outfall into the Charles River. At 5:45 AM, the oily/water mixture was seen on the floor of the lube oil house and shut down of the pumps began. By 6:05 AM, the facility began its notification procedures and its cleanup contractors were called to respond.

2.1.2 Response Actions to Date

During the morning of November 22, 2009, Mirant notified their oil spill response organization (OSRO), National Response Corporation (NRC) of the release who in turn brought two cleanup contractors to the site, Clean Harbors and Boston Line. Mirant also notified the appropriate local, state, and federal agencies.

Upon arrival, the cleanup contractors deployed hard and absorbent boom at the outfall on the Charles River and the confluence of the Broad Canal and the Charles. Absorbent boom and pads were placed around the cooling water intake screen house within the Canal and absorbent material was used within the lube oil house. A vacuum truck was used to skim oily water from inside the cooling water intake screen house and oily debris was manually skimmed from the Canal and from the Charles River. In addition, a boat dragged absorbent boom through any visible sheens on the Charles. Inside of the facility, absorbent material was deployed into three condenser cooling water manholes to remove any residual oil from the intake system.

By the end of the day, November 23, all of the residual oil was removed from accessible areas per the activities described above. Mirant then prepared a startup plan that was approved by USCG, MADEP, and USEPA. The plan provided for heavy booming of the outfall and a gradual startup of the cooling water circulating pumps on November 24, one pump at a time, to flush remaining pockets of oil from the system. After the pumps were started, sheening was seen within the boom, but no visible sheens were seen outside of the containment. When this was successfully accomplished, the plant brought the steam turbines on line along with the circulating pumps on November 25, 2009. The outfall was periodically monitored and on December 2, 2009, the boom on the Charles River was removed.

2.2 Planning Section

2.2.1 Anticipated Activities

Mirant will continue to gather and consolidate notes and other documentation generated during this release. A final report will be completed and issued as required under the Massachusetts Contingency Plan. The facility will also be working to determine the cause of the release and how to prevent any similar mishaps in the future.

2.2.1.1 Planned Response Activities

No additional field activities are planned by USEPA.

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

Unified Command consisted of Mirant personnel and officials with the USCG, MADEP and USEPA.

3.2 Cooperating Agencies

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.