# U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Chevron-Willard Bay Oil - Removal Polrep



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region VIII

Subject: POLREP #5

**Progress** 

Chevron-Willard Bay Oil

Box Elder, UT

Latitude: 41.3777102 Longitude: -112.0414925

To:

From: Curtis Kimbel, OSC

Paul Peronard, OSC Joyel Dhieux, OSC

**Date:** 4/3/2013

**Reporting Period:** 3/27/13 - 4/2/2013

#### 1. Introduction

# 1.1 Background

Site Number: Z8EP Contract Number: D.O. Number: Action Memo Date:

 Response Authority:
 OPA
 Response Type:
 Emergency

 Response Lead:
 PRP
 Incident Category:
 Removal Action

NPL Status: Non NPL Operable Unit:

Mobilization Date: 3/18/2013 Start Date: 3/18/2013

Demob Date: Completion Date:

CERCLIS ID: RCRIS ID:

ERNS No.: State Notification:

FPN#: E13807 Reimbursable Account #:

# 1.1.1 Incident Category

Emergency Response, Oil Major Inland Spill RP Lead

## 1.1.2 Site Description

On March 18, 2013, at 2045 MDT Chevron Pipeline notified the NRC that they had a break in an 8" transmission line near Box Elder, Utah. The report indicated that a "significant" amount of diesel fuel had been discharged into a ditch that runs adjacent to, and then into Willard Bay Reservoir, which borders on the Great Salt Lake. The pipeline break was due to a cracked seam, and is located roughly 1/4 mile to the east of the reservoir shoreline. The cracked seam in the pipeline is estimated to be approximately 74 inches in length. Chevron estimates that approximately 600 - 650 BBLs were spilled from the cracked seam.

Chevron Pipeline took immediate action to secure the pipeline and shortly thereafter initiated countermeasures. Most of the diesel fuel was trapped behind a series of check dams and booms placed throughout the ditch. Containment boom was placed along the shoreline of Willard Bay Reservoir to keep the diesel from entering the main body of the reservoir. Vacuum trucks began removing diesel on the evening of March 18, 2013, and countermeasures continue.

Unified Command, including US EPA, State of Utah, and Chevron Pipeline, was established on Tuesday, March 19, 2013. UDEQ Drinking Water, Utah DNR, BOR, and FWS arrived on site Tuesday, March 19, 2013.

## 1.1.2.1 Location

The pipeline break occurred approximately 1/4 mile to the east of the Willard Bay Reservoir, located adjacent to Willard Bay in the northeast portion of the Great Salt Lake. The spill site is within Willard Bay State Park located approximately eight miles north of the city of Ogden.

#### 1.1.2.2 Description of Threat

Diesel fuel accumulated in a drainage ditch and wetland area adjacent to Willard Bay Reservoir. Although initial response actions by Chevron appear to have contained most of the diesel fuel discharge, some fuel did reach the Willard Bay Reservoir shoreline. Booms were placed approximately 10 feet from the shoreline in an effort to contain the diesel and preclude it from entering the main water body of the Willard Bay Reservoir. In addition to being a supply of fresh drinking water, the Willard Bay Reservoir and adjoining shoreline provides critical habitat for migratory birds and waterfowl. The spill site is within Willard Bay State Park which is a popular destination for camping, fishing, boating and outdoor recreation.

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

Significant amounts of diesel fuel have been discharged into a wetland area, and some has reached the edge of the shoreline of Willard Bay Reservoir. Boom placed along the shoreline at a distance of approximately 10 feet from shore appears, via visual inspection, to have contained fuel from entering the main water body of Willard Bay Reservoir. The shoreline remains very shallow as it departs from the wetland at a depth of several inches for some distance before reaching the main water body of Willard Bay Reservoir.

Sampling results reveal trace amounts of hydrocarbons outside of the containment boom. However, concentrations of hydrocarbons both inside and outside of the containment boom have been decreasing since March 23, 2013. There have been no detections above drinking water standards in Willard Bay Reservoir. The state of Utah will continue to post sampling results to their website (See: <a href="http://www.deq.utah.gov/locations/willardbay/willardbay.htm">http://www.deq.utah.gov/locations/willardbay/willardbay.htm</a>). Several additional sampling locations outside of the boom have been identified for daily sampling. The samples are taken approximately 30 feet from the shoreline at a water depth between 12 - 18 inches.

Six beavers were captured by Utah Department of Natural Resources and are being rehabilitated at the Wildlife Rehabilitation Center of Northern Utah in Ogden. The beavers were soiled with diesel fuel and required cleaning. Other observed wildlife include nonpoisonous snakes, rodents, as well as deer prints. Migratory fowl have been observed in Willard Bay outside of the site. Within the next two or three weeks the area is expected to be popular with returning bird populations. Two deceased birds have been recovered, one swallow and one duck, causes of death undetermined, as well as over 110 deceased fish which were identified as three-fin stickleback, a non-native invasive species. On March 26, 2013, a deceased muskrat was collected. All effected wildlife are collected by Utah Department of Natural Resources personnel.

#### 2. Current Activities

#### 2.1 Operations Section

#### 2.1.1 Response Actions to Date

Chevron Pipeline has brought in several well equipped response contractors. Crews are working 24 hours a day at the site. The spill site has been divided into five areas, each with its own team and section manager. Several hard booms and check dams have been placed along the drainage ditch leading to Willard Bay Reservoir with underflow dams installed in strategic areas. As of March 27, 2013, 2,070 feet of boom had been deployed. A french drain was installed along the beach to collect diesel that may be moving through the sand and gravel banks towards the bay.

Crews continue to actively use vacuum trucks to recover diesel fuel. The collected fuel/water mix is then taken to Chevron's refinery in North Salt Lake City for processing. The amount of diesel being recovered by the vacuum trucks has decreased since the first week of the spill. As of April 2, 2013, Chevron estimated cleanup efforts have collected 389.6 bbls of diesel. This estimate has fluctuated as Chevron has re-calibrated the estimation methodology and separately accounted for the diesel that was directly removed from the pipeline section.

Specifically, Chevron revised the estimate down from 644 BBLs previously reported. The discrepancy is due to readings recorded before recovered material had properly settled in collection tanks. A revised measurement plan that allows product to settle for 24 hours before measurement is now in place. Chevron will also confirm measurements at their Salt Lake City refinery, where the material is being shipped. After further observation of diesel settling in the tanks for an additional 24 hours (48 hours total), it was determined that 24 hours is sufficient settling time to get an accurate measurement based on the time it takes material to separate.

A sampling protocol has been implemented in which UDEQ Div of Water Quality will take custody of samples, deliver them to the lab, analyze/QC the data, and provide data to the public. On March 22 Unified Command reviewed the sampling plan based on initial results to increase sampling locations outside of the booms within Willard Bay Reservoir and to incorporate groundwater sampling into the plan. The sampling results are being made available to the public through the UDEQ.

On Saturday, March 23, Chevron completed initial repair work on the damaged portion of the pipeline under direction from DOT and the State. **Under direction of PHMSA**, the pipeline began flowing at 80 percent capacity on Sunday, March 31, 2013.

Six beavers have been captured, five of which were soiled with diesel fuel. The beavers were transported to the nearby Ogden Wildlife Rehabilitation for observation and cleaning. The wildlife rescue center is cautiously optimistic that all of the beavers will recover. Utah DNR has continued to assess beaver lodges within the park to determine if additional offspring or adults have been affected or abandoned.

Incident Action Plan for operational period 4 has been approved by Unified Command and runs from **April 1** 0700 to **May 1**, 2013 0700.

#### 2.1.2 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Chevron Pipeline owns the pipeline in question and is furnishing the majority of response assets for the spill response.

#### 2.2 Planning Section

#### 2.2.1 Anticipated Activities

Bulk diesel recovery is resulting in significantly reduced quantities of product and will be augmented with low volume flushing to move material to areas where it can be removed via skimming. Clipping, cutting and bagging contaminated vegetation will begin based on SCAT team feedback. State and federal partners working with Chevron Pipeline agreed on a work plan for sections 1, 2, 3 an 5 employing a flush, cut and bag approach along with minimal excavating in areas approved by Utah DNR. A work plan for the wetland area in sections 3 and 4 was approved March 26, 2013. The plan is designed to remove as much residual diesel from the impacted wetland and shoreline areas as possible, while minimizing the damage the response efforts cause to the area. These activities will then likely need to be followed by a revegetation/rehabilitation effort.

A Shoreline Cleanup and Assessment Technique (SCAT) team arrived on scene and has begun assessing the shoreline as of Thursday, March 21. Input from the SCAT team will help provide additional information for the work plan. UDEQ will have staff members accompany SCAT team during assessment activities. Chevron also plans to add a second SCAT team next week. The SCAT teams will be available to consult on soiled vegetation removal in the primary wetland areas in sections 3 and 4.

Any fish or wildlife found on the site will be reported to Utah Sate Department of Natural Resources and logged in the daily ICS 209 report.

#### 2.2.1.1 Planned Response Activities

Crews will continue recovering free product, and then transition into residual recovery and remediation. Daily sampling will continue.

At the request of Tribal partners, the Bureau of Reclamation will provide an archeologist to oversee any excavation at the site to ensure any Native American artifacts and/or unmarked burial sites are not disturbed. According to reports from the local Tribe, two sets of skeletal remains have been discovered in the past near Willard Bay State Park.

Cutting and bagging of vegetation will continue to be a larger part of the response effort and will be overseen by Utah DNR and DEQ personnel.

#### 2.2.1.2 Next Steps

Unified Command has developed the mitigation plan, sampling plan and wildlife plan in conjunction with Unified Command partners while continuing current operations. A revised wildlife plan is under review by the Unified Command, State and Federal partners.

A 30 Day IAP cycle began on Monday, April 1, 2013, at 0700. OSC Dhieux continues to monitor the site from Denver and will return to the site April 9, 2013. The Unified Command continues to meet daily via conference call.

Willard Bay Parks and Rec personnel placed buoys in the reservoir to keep boat traffic clear of the site and will monitor the area with a patrol boat during daylight hours. The picnic areas and marina located adjacent to the site will remain closed to the public.

#### 2.2.2 Issues

Because of the high value habitat the area provides, coupled with the fast approaching Spring migratory bird nesting season, response efforts must be expedited with care so as to minimize damage to habitat. The Unified Command is working with affected Natural Resource Trustees to develop the proper path to this end.

#### 2.3 Logistics Section

NA

#### 2.4 Finance Section

No information available at this time.

#### 2.5 Other Command Staff

#### 2.5.1 Safety Officer

START and Chevron contractors are providing general health and safety monitoring. To date there are no significant incidents to report.

#### 2.5.2 Liaison Officer

Many participating agencies (see roster next section) and stakeholders are providing input to the spill response.

#### 2.5.3 Information Officer

EPA PIO Matthew Allen was deployed to the site to assist with media and public information efforts. EPA PIO Allen returned to Denver on March 28, 2013, and continues to be engaged.

# 3. Participating Entities

# 3.1 Unified Command

EPA, UDEQ, and Chevron Pipeline are running Unified Command

#### 3.2 Cooperating Agencies

Utah DEQ Utah DNR Utah Parks and Recreation BOR DOI US FWS DOT PHMSA

#### 4. Personnel On Site

EPA START Chevron UDEQ UDNR BOR	0 (OSC Dhieux montoring the site from Denver and returning to site April 9, 2013) 0 133 3 4 2
BOR FWS	2 1
PHMSA	0

#### 5. Definition of Terms

No information available at this time.

#### 6. Additional sources of information

#### 6.1 Internet location of additional information/report

**EPA** 

www.epaosc.org/chevronwillardbayoil

UT DEG

http://www.deq.utah.gov/locations/willardbay/willardbay.htm

# 6.2 Reporting Schedule

The project transition into the non-emergency phase on April 1, 2013. The next Polrep will be provided when additional information is available.

#### 7. Situational Reference Materials

No information available at this time.