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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VIII

Subject: **POLREP #7**
Final
Chevron-Willard Bay Oil

Box Elder, UT
Latitude: 41.3777102 Longitude: -112.0414925

To:

From: Joyel Dhieux, OSC
Curtis Kimbel, OSC

Date: 12/11/2013

Reporting Period: May 1, 2013 - December 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:**	12/3/2013
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:	E13807	**Reimbursable Account #:**	

1.1.1 Incident Category

Emergency Response
Major Inland Oil Spill
Responsible Party 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 was located roughly one quarter mile to the east of the reservoir shoreline. The cracked seam in the pipeline was approximately 74 inches in length. Initially, Chevron estimated 600 - 650 bbls were released from the cracked seam. Chevron later reduced this estimate to approximately 485 bbls based on diesel that was directly recovered from the pipeline section and re-calibration of the estimation methodology.

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 boom 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.

Unified Command, including US Environmental Protection Agency (EPA), the state of Utah, and Chevron Pipeline, was established on Tuesday, March 19, 2013. That same day the Utah Department of Environmental Quality (DEQ) Drinking Water Program, Utah Department of Natural Resources (DNR), Bureau of Recreation (BOR), and the U.S. Fish and Wildlife Service (FWS) arrived on site.

1.1.2.1 Location

The pipeline break occurred approximately one quarter 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 discharged, 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 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 were discharged into a wetland area, and some fuel reached the edge of the shoreline of Willard Bay Reservoir. Boom placed along the shoreline at a distance of approximately 10 feet from shore appeared, 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.

The Utah Division of Water Quality actively collected environmental sampling results. Sampling results collected in late March and early April 2013 indicated trace amounts of hydrocarbons outside of the containment boom. However, concentrations of hydrocarbons both inside and outside of the containment boom have decreased since March 23, 2013. There have been no detections above drinking water standards in Willard Bay Reservoir. The state of Utah has posted sampling results to their website (See: http://www.deq.utah.gov/locations/willardbay/willardbay.htm).

Six beavers were captured by the Utah DNR and 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, frogs, rodents, as well as deer. Migratory fowl have been observed in Willard Bay outside of the site. Seven deceased birds, five mammals, 1574 fish, seven amphibians, one reptile and three crustaceans were recovered. The majority of the deceased fish were identified as three-fin stickleback, a non-native invasive species. All effected wildlife were collected by Utah DNR personnel.

2. Current Activities

2.1 Operations Section

2.1.1 Response Actions to Date

For a more detailed description of response actions through April 30, 2013, please refer to Polrep 6.

In summary, Chevron mobilized several well-equipped response contractors. Crews worked 24 hours a day at the site during the initial weeks of the response. Hard booms, check dams and underflow dams were placed in strategic locations along the drainage ditch and wetland complex leading to Willard Bay Reservoir. Crews used vacuum trucks to recover diesel fuel. This effort was augmented with low volume flushing and skimming. Contaminated vegetation within the impacted area and contaminated sand on the Willard Bay beach were removed. A French drain and monitoring wells were installed along the beach to collect and assess diesel moving through the sand and gravel banks towards Willard Bay. The response actions were designed to remove as much residual diesel from the impacted wetland and shoreline areas as possible, while minimizing damage the response efforts cause to the area.

Following the initial response actions, Unified Command approved a plan to install water control structures in order to refill the wetlands to their previous capacity. The structures were installed in May 2013 and replaced the beaver dams that were removed due to heavy diesel contamination. In addition, the Unified Command approved a wetland re-vegetation and seeding plan. The plan was implemented in the summer and fall of 2013. Chevron installed fencing around the impacted area to prevent inadvertent public exposure, pending results of a Utah DEQ risk assessment. The fencing also protects newly planted wetland vegetation from hungry deer and will provide a better opportunity for the wetland to recover.

Since the initial spill, the Utah DEQ has actively collected environmental samples, including water, sediment, soil and fish. In conjunction with the Utah State Parks and the Utah State Risk Management, DEQ is conducting a human-health and ecological risk assessment to determine that no long term threats to public health or the environment remain. In August 2013, environmental sampling suggested a pocket of contaminated soil remained in the wetland. With EPA's concurrance, this area was approved by Unified Command for additional cleanup activities.

EPA continued to monitor cleanup efforts throughout the summer and early fall 2013. EPA conducted a site visit on September 9, 2013, to review additional removal efforts conducted by Chevron. A final site visit was conducted on December 2, 2013, with EPA, Chevron, Utah DEQ and Utah State Parks.

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

At the time of the incident, Chevron Pipeline owned the pipeline in question and furnished the majority of assets for the spill response.

2.2 Planning Section

2.2.1 Anticipated Activities

No further response activities are planned.

2.2.1.1 Planned Response Activities

None

2.2.1.2 Next Steps

The wetland remains fenced, pending the results of the state of Utah's risk assessment.

2.2.2 Issues

None

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 provided 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 provided 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 continued to be engaged throughout the summer.

3. Participating Entities

3.1 Unified Command

Unified Command included EPA, Utah DEQ, and Chevron Pipeline.

3.2 Cooperating Agencies

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

4. Personnel On Site

Response activities have been completed. Chevron, Utah DEQ and DNR will continue to monitor the Site and wetland rehabilitation.

EPA - 0
START - 0
Chevron - 0
UDEQ - 0
UDNR - 0
BOR - 0
FWS - 0
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 DEQ
http://www.deq.utah.gov/locations/willardbay/willardbay.htm

6.2 Reporting Schedule

This is the Final Polrep. No additional reports will be prepared.

7. Situational Reference Materials

No information available at this time.