

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Bridger Pipeline Release - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VIII

Subject: POLREP #7
Progress-Phase II Transition
Bridger Pipeline Release

Glendive, MT
Latitude: 47.0316670 Longitude: -104.7708330

To: David Ostrander, EPA

From: Paul Peronard, On-Scene Coordinator

Date: 1/30/2015

Reporting Period: January 26-29, 2015

1. Introduction

1.1 Background

Site Number:	Z8FM	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:	1/18/2015	Start Date:	1/18/2015
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	E15804	Reimbursable Account #:	

1.1.1 Incident Category

Transportation-Related: Pipeline Petroleum Spill

1.1.2 Site Description

At approximately 1030 MST on Saturday, January 17, 2015, a Bridger Pipeline controller at the control room in Casper, Wyoming, noticed some abnormal pressure readings on their Poplar Pipeline near Glendive, Montana, and began to investigate. The pipeline's pressure alarms sounded and the pipeline was shut down. Bridger Pipeline personnel in the field then attempted to confirm a discharge. They initially did not observe any oil nor sheen due to ice cover on the river and they were unable to determine what the problem was. A National Response Center (NRC) incident report (#1105930) was filed by Bridger Pipeline LLC (Bridger) at 1430 MST stating that there was a potential release of crude oil into the Yellowstone River. Bridger's aerial patrol plane ultimately confirmed a sheen on the Yellowstone River in open water approximately 3/4-mile downstream of the pipeline crossing and also near the Glendive municipal drinking water intake 6.5 river miles downstream. A second NRC incident report (#1105969) was filed at 1012 MST on Sunday, January, 18, 2015, confirming the spill. Based upon the second NRC report (#1105969), and communication with the Department of Transportation Pipeline and Hazardous Materials Safety Administration (DOT PHMSA), the Environmental Protection Agency (EPA) immediately mobilized a Federal On-Scene Coordinator (FOSC) and contractors to the scene.

The section of Bridger's Poplar Pipeline that was compromised is 12 inches in diameter with a 0.500 inch wall thickness and is located where the pipeline crosses the Yellowstone River. There are two block valves on either side of the river that are spaced approximately 6,800 feet apart. That section of the pipeline holds approximately 900 barrels of oil and an estimated 300 barrels of oil, determined by pipeline metering, were reportedly discharged. Thus the quantity of crude oil released has been estimated at between 300 barrels and 1,200 barrels. The product in the pipeline at the time of the release was primarily Bakken Crude.

1.1.2.1 Location

The section of pipeline where the release occurred crosses the Yellowstone River between two block valves near 47.031667, -104.770833. This is approximately 6.25 river miles upstream of Glendive, Montana, in Dawson County.

1.1.2.2 Description of Threat

Crude oil released into the environment threatens downstream water users, including drinking water suppliers and agriculture, and could impact fish and wildlife along the river. The downriver cities with water intakes are Glendive and Sidney, Montana, and Williston, North Dakota. These water treatment plants were all notified of the threat to their intakes.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The Yellowstone River is largely covered with ice. Crews have been continually monitoring the river corridor by air and by land for signs of sheen and residual oil. On Sunday, January 18, 2015, sheen was reported as far downstream as Crane, Montana (12.5 river miles downstream from the pipeline crossing). As of January, 30, 2015, no sheen has been witnessed past the Highway 94 bridge (approximately 7 miles downstream of the pipeline crossing). The amount of observable sheen is diminishing. Recoverable oil is weeping to the surface at the location of the pipeline crossing, and a small nonrecoverable amount of oil was discovered in a narrow crack on the ice approximately 3.5 river miles downstream of the pipeline crossing. To date, no additional oil has been observed anywhere along the river. No impacts to wildlife have been observed.

By Monday, January 19, 2015, test results from the Glendive Water Treatment Plant (6.5 river miles downstream from the pipeline crossing) and odor complaints from residential water consumers indicated that the treatment plant had been contaminated by the oil spill.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The objectives of the response effort are to:

1. Provide for the safety of all response crews especially those working on the ice.
2. Monitor and protect the water quality of the Glendive Water Treatment Plant.
3. Identify and recover residual oil as appropriate.
4. Assess and address impacts to the environment as appropriate.

2.1.2 Response Actions to Date

Site Safety:

- Ongoing assessments of ice conditions indicated that the ice was stable enough to support reconnaissance, sampling and recovery operations on the river.

Protection of Glendive's Drinking Water Supply:

- Glendive's Water Treatment Plant is operational. Two samples (one inlet and one outlet) were collected from the plant each morning at 0700. These samples were analyzed on-site by EPA's Mobile Laboratory and all samples were found to be non-detect for benzene and all other contaminants of concerns (volatile organic carbons).
- The City of Glendive has ordered the equipment that it needs to independently monitor the water quality at its treatment plant. The latest projection is that this equipment will come on line in mid-February.

Identify and Recover Residual Oil:

- Sheen was observed in open water areas between the pipeline crossing and a point approximately 6 river miles downstream. The amount of sheen observed has declined since the beginning of the response and no other sheen was observed downstream of river mile 6. Very little sheen has been observed at the ice slot constructed approximately 3.3 river miles downstream of the pipeline break.
- Other than the area immediately around the pipeline crossing and a small amount of nonrecoverable oil discovered 3.5 miles downstream of the pipeline, no other oil was observed in the river.
- The National Oceanic and Atmospheric Administration (NOAA) attempted to conduct a spill trajectory model and, given the available data, determined that the analytes detected were well below public health concerns and may in fact be near background levels. Furthermore, NOAA determined that the results indicated that there was no significant source for continued water contamination and that finding a modeling a discernible plume was highly unlikely.
- Oil recovery around the pipeline crossing remains difficult due to the ice on the river. The crossing is just downstream of two convergent river channels where the ice is highly fractured and irregular. It appears that residual oil is trapped within the fractures and frazzle ice at this location. Crews continued to recover the oil that is finding its way to the surface at this location.

Assess Environmental Impacts:

- Crews complete collecting samples in support of the initial response. This sampling is laborious, costly and yielded low levels of detection for benzene in samples analyzed to date.
- Ambient air sampling was halted because no volatile organic compounds or other compounds associated with crude oil have been detected. Air monitoring continues to be performed in the work zone.
- No wildlife impacts have been observed nor reported up to date. Fish tissue samples were collected by Montana Fish, Wildlife and Parks (MT FWP) in support of the precautionary fish consumption advisory that was issued and results are pending. No fisherman have been observed on the river.

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

The pipeline is owned by Bridger Pipeline LLC.

2.1.4 Progress Metrics

As of January 29, 2015, 496 barrels of oil have been recovered from the broken pipeline segment itself, and 40 barrels have been recovered from the river at the location of the pipeline crossing. A total of 1,225 barrels were either discharged or hung-up in the pipeline after the pressure drop was observed. Hence, the current estimate is that approximately 689 barrels remain in the river.

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

EPA and MT DEQ have established overall objectives for the next phases of this response. Given that Phase I of the response dealt with the initial assessment and response activities, the next phases of the response are as follows:

Phase II: Interim Response Operations

1. Maintain Unified Command and coordinate Phase II response operations (See Plan).
2. Keep the community informed and maintain media relations.
3. Characterize oil degradation in the Yellowstone River.
4. Monitor water quality at the Glendive Water Treatment Plant.
5. Monitor the Yellowstone River for water quality, residual oil and wildlife impacts.
6. Classify interim incidents and implement appropriate response strategies.

Phase III: Post-Melt Response Operations

1. Maintain Unified Command and coordinate Phase III response operations (See Plan).
2. Keep the community informed and maintain media relations.
3. Monitor water quality conditions at the Glendive Water Treatment Plant. Collect confirmation samples as appropriate.
4. Monitor the Yellowstone River for water quality, residual oil and wildlife impacts. Collect confirmation samples as appropriate.
5. Assess sediment conditions in the Yellowstone River.
6. Conduct shoreline assessments.
7. Conduct additional assessment and response actions as required.

A detailed plan has been developed to meet these objectives and can be found at www.epaos.org/BridgerPipeline.

2.2.1.2 Issues

- River conditions are hampering access to the spilled oil. There is extensive ice cover on the Yellowstone River, but the ice is not structurally sound enough in many locations to conduct response efforts.
- Current reconnaissance indicates that there is not much oil remaining in the operational theater. Over 160 man hours per day, and an extensive array of equipment is being used to recover oil within the first three miles downstream of the pipeline break. Given the unsafe working conditions and the limited oil recovered, as discussed earlier in the pollution report, the response is rapidly approaching the point of diminishing returns. This is especially relevant given evidence of the physical damage caused to the river by the activity of the response crews and equipment. Representatives from Montana Department of Natural Resources and Conservation (DNRC) and FWP have expressed concern that this is likely to be the most significant source of damages to the riverine system.
- It has been brought to the attention of the UC by the US FWS that much of the river corridor hosts nesting sites used by bald eagles; least terns; piping plovers and great blue herons that are protected, threatened or endangered. Eagles have already returned to the area and it is expected that they will begin nesting as early as February. Other significant species include the endangered pallid sturgeon and the spiny softshell turtle. The UC is weighing the impacts of the response (airboats, helicopters and vehicular and foot traffic) along the shoreline versus the limited oil recovery and limited product remaining.

2.3 Logistics Section

Not Applicable

2.4 Finance Section


No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

2.5.2 Liaison Officer

2.5.3 Information Officer

- The Public Information Officers are responding to requests for information/interviews from the press. A hotline has been set up for the public to get more information and is staffed by contract toxicologists: HOTLINE NUMBER - 888-959-8351 

3. Participating Entities

3.1 Unified Command

EPA
MT DEQ
Bridger Pipeline LLC

3.2 Cooperating Agencies

Dawson County DES
MT DES
MT DNRC
MT FW&P
USFWS
DOI
DOT - PHMSA
ATSDR
USCG NPFC

4. Personnel On Site

EPA OSC - 1,
USCG (Strike Team) - 1
ESAT Contractor (Mobile Lab) - 1

5. Definition of Terms

START - Superfund Technical Assessment and Response Team
USCG - U.S. Coast Guard
PST - Pacific Strike Team
DOI - Department of Interior
DOT - PHMSA - Department of Transportation Pipeline and Hazardous Materials Safety Administration
NPFC - National Pollution Fund Center
ESAT - Environmental Services Assistance Team
ATSDR - Agency for Toxic Substances and Disease Registry
OSHA - Occupational Safety and Health Administration

6. Additional sources of information

6.1 Internet location of additional information/report

U.S. Environmental Protection Agency
<http://www2.epa.gov/region8/bridger-pipeline-release>

Montana Department of Environmental Quality
<http://www.deq.mt.gov/yellowstonespill2015.mcp>

Dawson County <http://www.dawsoncountymontana.org/>

Bridger Pipeline LLC Poplar Response
<http://www.poplarresponse.com>

CDC/ATSDR
http://www.atsdr.cdc.gov/yellowstone_river.html

6.2 Reporting Schedule

The next POLREP will be issued on Friday, February 6, 2015 or earlier if the situation warrants.

7. Situational Reference Materials

No information available at this time.