

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VIII

Subject: POLREP #6
Progress
Bridger Pipeline Release

Glendive, MT
Latitude: 47.0316670 Longitude: -104.7708330

To: David Ostrander, EPA

From: Paul Peronard, On-Scene Coordinator

Date: 1/25/2015

Reporting Period: January 24-25, 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, the Bridger Pipeline controller at the control room in Casper, Wyoming, noticed some abnormal pressure readings on the Bridger Pipeline's Poplar Pipeline and began to investigate. The pipeline system pressure alarms sounded, and the pipeline was shut down. Bridger Pipeline personnel then attempted to confirm a release and were unable to determine what the problem was and did not observe any oil releases due to ice cover on the river. 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. A second NRC incident report (#1105969) was filed at 1012 MST on Sunday, January, 18, 2015, confirming the spill.

The section of the Bridger Poplar Pipeline that was compromised is 12 inches in diameter with a 0.500 inch wall thickness and is located in the area of the Yellowstone River crossing. There are two block valves on either side of it approximately 6,800 feet apart, and this is where the pressure drop was located. The pipeline fill was approximately 900 barrels of oil at the time of the incident, and an estimated 300 barrels of oil, determined by pipeline metering, were reportedly discharged. The crude oil in the line at the time of the release was primarily Bakken Crude. The operator's aerial patrol plane confirmed a sheen on the Yellowstone River in open water approximately 3/4-mile downstream and also at the first intake 8.9 river miles downstream. 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 an On-Scene Coordinator (OSC) and contractors to the scene. The quantity of crude oil released has been estimated at between 300 barrels and 1,200 barrels.

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. Downriver cities with water intakes are Glendive and Sidney, Montana, and Williston, North Dakota, which have all been notified of the threat to their intakes. At these locations, the intakes are below the surface of the river, but they are monitoring the situation and tracking the response actions.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Bridger, CTEH (contractors for Bridger), the EPA OSC, and four START contractors have been working to collect field data regarding river conditions, ice thicknesses, and the presence/absence of sheen or recoverable oil.

On Sunday, January 18, 2015, an oil sheen was identified 3/4-mile downstream of the Yellowstone River pipeline crossing, and at the Glendive, Montana, surface intake. No sheen was identified at the town of Savage, approximately 20 miles downstream of the spill site. Further downstream, where there is not an ice sheet, there were observations of sheen near Crane, Montana. ND DOH sent spotters to look for oil sheen between Sidney, Montana, and the confluence with the Missouri River. Assessment activities are ongoing and being conducted by Bridger and its contractors, Montana Department of Environmental Quality (MT DEQ), the EPA Region 8, and the ND DOH. Bridger and MT DEQ contacted downstream drinking water utilities to advise them to shut down their intakes.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The incident objectives are to investigate and identify locations for the reasonable recovery of free product.

2.1.2 Response Actions to Date

Operational tasks for Unified Command (UC) during the January 24-25, 2015, operational periods are as follows:

Drinking Water System Operations:

Glendive, Montana

- The raw water that is being drawn into the plant is not currently being aerated but air stripping can be used in the future as a contingency, if needed. Currently, water is subjected to supplementary treatment with charcoal and activated carbon filtration to remove any dissolved or emulsified hydrocarbons. Samples from the river water intake on Jan. 24 and 25 show volatile organic compound (VOC) levels to be well below instrument detection limits.
- Water samples that were concurrently analyzed by the EPA Region 8 Mobile Analytical Laboratory and Energy Laboratories in Billings, Montana, confirmed compliance with Safe Drinking Water Act (SDWA) standards, including bacterial (BacT) screening samples.
- The Glendive Water Treatment Plant is operational and providing drinking water to all municipal water users. The "do not drink" advisory was lifted on Friday, Jan. 23.
- Some residents reported a dark brown to black material coming out of taps at or near the end of the flushing process. EPA evaluated several of these incidents and determined the material is not related to the spill. It is naturally occurring sediment that built up when the water system was shut down.
- City officials have confirmed that this sediment is produced each year when the fire hydrants are flushed.
- Bottled drinking water distribution ended at 1600 on Jan. 23.
- No additional residential sampling is planned.

Williston, North Dakota

- EPA coordinated with the ND DOH and collected samples at the Williston Water Treatment Plant. All samples were analyzed and found to be well below the MCL for benzene.

Pipeline Operations:

- The response teams have finished removing oil from the pipeline and have cut and capped the ends of the damaged line.
- Responders recovered a significant amount of oil from the pipeline over Jan. 23 and 24. A final tally of the total oil recovered from the pipeline is still being calculated.
- Bridger has used a submersible robot with camera and sonar capability to collect pictures and measurements of the pipeline. Information from the submersible camera showed 120 feet of pipeline is exposed and located one foot off the river bed for 16-22 feet. The pipeline is anchored every 25 feet.

Oil Spill Containment and Recovery Operations:

- SWAT Consulting, Inc. from Alberta, Canada, has been on-site and lending their expertise in cold water oil spill containment and recovery. The team is considered to be a leader in its field.
- Crews working on oil recovery at the ice slot in the river at a milepost 3.3 miles downstream of the spill site have recovered no oil. Because of this lack of recovery production and increased health and safety risks due to ice conditions, no ice slot will be established at milepost 6.1 and crews have abandoned ice slotting operations near Crane, Montana, which is approximately 35 miles downstream.
- The National Oceanic and Atmospheric Administration (NOAA) is conducting spill trajectory modeling to determine the reach of the oil plume downstream of the spill site.

- Reconnaissance crews continued flyovers to spot and characterize residual and oil sheen in open water areas.
- Oil recovery remains difficult due to the ice on the river. However, crews did recover approximately ten barrels of oily water of which approximately 50% is oil from the vicinity of the pipeline break.
- On Jan 25, surface water sampling from nine locations was completed. Sampling is laborious, costly and yielded low levels of detection for benzene in samples analyzed to date.
- Air sampling continued but will likely stop on Jan. 26 or 27 because no volatile organic compounds or other compounds associated with crude oil have been detected.

Other Operations:

- Sampling and Analysis Plans are being implemented to characterize the extent of environmental impacts, including surface water quality and soil/sediment impacts.
- Shoreline assessments and clean-up are planned to support the work being done to develop containment and recovery locations.
- No wildlife impacts have been observed/reported up to this point. Montana Fish, Wildlife and Parks (MT FWP) and U.S. Fish and Wildlife Service (FWS) are preparing wildlife recovery plans.

Notifications and Coordination:

- EPA is coordinating with the North Dakota Department of Health (ND DOH) to maintain situational awareness.
- EPA is actively coordinating with elected officials about the status of the response to the spill.
- Bridger, EPA, MT DEQ, Dawson County Disaster and Emergency Services (DES), and ATSDR have established spill-specific websites for pushing out information on the response to the media and the public.
- A Joint Information Center (JIC) has been established and is still responding to media inquiries. Media interest in the spill has tapered over the weekend but may increase at the start of the week.

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

2.1.4 Progress Metrics

TBD as released oil quantities are calculated and oil is recovered from the river.

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

- Ice conditions are making oil recovery operations difficult and unsafe. The UC is developing plans to maintain a state of readiness until the ice breaks up and operations can continue.
- Continue coordination with the Glendive Water Treatment Plant.
- Continue coordination with ND DOH.
- Continue to recover product where it has surfaced in a constellated pattern immediately downstream of the pipeline break.

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. Significant thawing has occurred in the past two days and is increasing the risk of oil assessment and recovery 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

No information available at this time.

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 
- 313 calls have been received since the hotline became operational. It has been almost 24 hours since a hotline call came in.

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 – OSCs - 3,
PIO - 1
START Contractor – 2
USCG - Strike Team – 5,
NPFC - 1
ESAT Contractor (Mobile Lab) - 2

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 Jan 30, 2015 or earlier if the situation warrants.

7. Situational Reference Materials

No information available at this time.