

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Heimdal Crude Oil Train Derailment - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VIII

Subject: POLREP #2
Final
Heimdal Crude Oil Train Derailment
Z8FQ
Heimdal, ND
Latitude: 47.7916693 Longitude: -99.6385554

To:
From: Curtis Kimbel, On-Scene Coordinator
Date: 7/26/2016
Reporting Period: 5/6/2015-7/26/2016

1. Introduction

1.1 Background

Site Number:	Z8FQ	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	5/6/2015	Start Date:	5/6/2015
Demob Date:		Completion Date:	7/26/2016
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	E15808	Reimbursable Account #:	2015 HR 08LAXHR 303D91 Z8FQ

1.1.1 Incident Category

1.1.2 Site Description

On May 6th, 2015, at approximately 7:30 AM a BNSF freight train derailed near Heimdal, North Dakota, a community of approximately 30 people. Five tank cars carrying Bakken crude oil were derailed and caught fire resulting in oil spilling onto the tracks and surrounding area. 90,000 gallons of crude were released, of which 30,000 gallons were estimated to have burned. The remaining 60,000 gallons flowed into a slough on the north side of the tracks and into a ditch on the south side of the tracks. BNSF, Wells County Sherriff and local fire departments responded to the fire, and the town of Heimdal was evacuated.

1.1.2.1 Location

Approximately 1/2 mile east of Heimdal, North Dakota, at the intersection of the rail line and 44 Ave. NE.

1.1.2.2 Description of Threat

There was crude oil in the wetland north of the derailment site. There had been limited migration of oil in Big Slough, due to hard boom and absorbent boom sets installed early in the response. Crews using airboats reported no visible sheen beyond the booms. Oil had traveled in a ditch along the south side of the train tracks approximately 100 yards to the east and was contained via a series of dams and booms.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The fire was allowed to burn itself out, which took most of the first day. After extinguishing the fire, crews cooled the tanks through the night with water and foam until it was possible to remove the remaining oil from the tank cars. The following day, Thursday, May 7th, 80,000 gallons of oil were recovered and transferred to frac tanks. An additional 30,000 gallons of oil were estimated to have been consumed in the fire, and 60,000 gallons were believed to have been spilled. Tanks failed due to

puncture, heat induced tears and/or valve failure. NTSB arrived and began their investigation. The cars were then moved into a nearby field for sampling access and observation. Oil had flowed into the slough on the north side of the tracks and contaminated an area of shallow water (less than one foot deep, 150-foot long and 75-foot wide) with dense cattails.

Two rows of hard boom and absorbent boom were immediately deployed to limit the flow of material into the slough. Oil and oil contaminated soil were also visible in a 100-yard section of a ditch on the south side of the tracks. A series of berms and booms were installed in the ditch to contain the material. BSNF contractors implemented an air monitoring program, which included sampling for both VOCs and particulate matter, in the town of Heimdal as well as in and around the contaminated area.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

Residents of Heimdal were allowed to return to their homes Thursday morning, May 7th. OSC Kerry Guy, participating in an exercise 90 miles from the site in Minot, ND, was diverted to the site, arriving approximately 2:30 PM on Wednesday, May 6th. OSC Curtis Kimbel was deployed from Denver, CO, arriving on scene at 5:30 PM on May 6th to relieve OSC Guy. Two START contractors, with equipment to conduct air monitoring and multimedia sampling, were also deployed from Denver.

The derailed rail cars, emptied of their residual oil, were removed from the derailment site and placed into an adjacent field to the north, where the NTSB continued to gather data and investigate the cause of the derailment. Once the investigation is completed, the cars will be cut up and scrapped. Any surface contamination on the field will be excavated and disposed of in a suitable landfill. The track has been repaired by BNSF Railway and was reopened to rail traffic as of 10:30 AM CDT on Friday, May 8th.

BNSF consultants initially were collecting air monitoring data, including particulates and VOCs, throughout the community and around the perimeter of the derailment site. Perimeter air monitoring and airborne particulate measurements at the derailment site have been curtailed, and BNSF consultants are now only conducting air monitoring for worker protection. There were no measurable VOCs or particulate at the perimeter of the site prior to suspending these activities.

Crews have contained the crude oil spilled into the slough on the north side of the site and the material spilled into the ditch on the south side of the rail line. BNSF, EPA and North Dakota Department of Health (ND DOH) personnel developed and implemented a mitigation plan and a sampling plan to clean up the site, while ensuring the material is not migrating off the site and into the slough. Wildlife hazing was ruled out, due to the proximity to residents in Heimdal, ND, but decoys of birds of prey (Bald Eagle effigies) were installed in the impacted wetlands area to minimize the chance of wildlife impacts. No oiled wildlife or waterfowl were found at the derailment site.

An FPN was opened with the Oil Spill Liability Trust Fund. A formal Unified Command was established with representation from BNSF, EPA and ND DOH. Unified Command met every morning and evening to review progress and plan the next day's activities. An Incident Action Plan was developed and continuously modified as events unfolded. Media interest was significant during the first two days of the derailment but decreased rapidly after Senator Heidi Heitkamp visited the site on Friday evening, May 8th.

As of Sunday evening, May 10th, ND DOH assumed responsibility for day-to-day oversight of BNSF clean-up activities and monitored natural attenuation and wetlands restoration. EPA will continue to be involved in support of ND DOH.

As of July 26th 2016 ND DOH has assumed responsibility for oversight of the site. EPA is no longer involved but will be available if required.

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

BNSF is the responsible party.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
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2.2 Planning Section

No information available at this time.

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

EPA
ND DOH
BSNF

3.2 Cooperating Agencies

US EPA
ND DOH
USDA
NTSB
FRA
PHMSA
Fessenden ND Fire Deptment
Harvey ND Fire Department
Governor Dalrymple of ND
US Senator Heitkamp of ND

4. Personnel On Site

Approximately 150 personnel were on site initially consisting of personnel from the following:

Local Fire Departments
BSNF
Wenck Engineering
RJ Corman Derailment Services
CTEH
EPA
ND DOH
Pinnacle Engineering
NTSB
FRA
USDA
ND State representatives
ND Department of Emergency Services
Bowdon Ambulance

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.