Page 1 of 4

### U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Canadian Pacific Brownsville Derailment - Removal Polrep



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **Region V**

Subject: POLREP #2 Progress **Canadian Pacific Brownsville Derailment** Brownsville, MN Latitude: 43.6524939 Longitude: -91.2750713 From: Craig Thomas, OSC 1/28/2016 Date: **Reporting Period:** 0/128/16 05:00 - 01/28/16 22:00

#### 1. Introduction

To:

1.1 Background			
Site Number:		Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority: OPA		Response Type:	Emergency
Response Lead:	EPA	Incident Category:	
NPL Status:		Operable Unit:	
Mobilization Date:	1/27/2016	Start Date:	1/27/2016
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	E16509	Reimbursable Account #:	

### 1.1.1 Incident Category

**Emergency Response** 

### 1.1.2 Site Description

### 1.1.2.1 Location

A Canadian Pacific train derailment occurred at approximately 2230 hrs on January 26, 2016, 4 miles south of Brownsville, MN. A total of fifteen cars derailed along the banks of the Mississippi River.

# 1.1.2.2 Description of Threat

Of the fifteen cars that derailed, three cars containing commodities remained upright, six cars of vegetable oil are in the Mississippi River, and the remaining six cars are on land on their sides, three of which contain sodium chlorate.

One of the hopper cars containing sodium chlorate released a limited quantity of sodium chlorate from the top of the car. It appears that the car is not breached.

In addition, two of the vegetable oil tank cars appear to have released an unknown amount of oil. It is currently believed that both releases occurred through vent valves that were sheared off during the derailment.

This pool of the Mississippi River is home to the endangered Higgins eye pearlymussel. USFWS is concerned about potential impacts to the mussel bed.

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

Air boat operations were conducted to drill sampling locations in the ice with ice augers. YSI meters were installed at these sample locations to monitor for conductivity, pH, and dissolved oxygen, along with depth to bottom measurements and visual sheen inspections. Water quality sampling was conducted on 1/27/16 and 1/28/16 upstream, downstream and around the rail cars along with visible inspections for oil sheen. Water samples were collected on 1/27/16 and 1/28/16 for Oil and Grease (EPA 1664) and Chlorides (SW 9056). Results of the sampling collected on 1/27/16 were received on 1/28/16 and did not indicate any elevated readings.. Results of the sampling conducted on 1/28/16 are expected on 1/29/16. Sheen was observed in one of the ice auger borings on 1/27/16 and was believed to come from one of the vegetable oil tanks that had a sheared off vent valve, as previously discussed. Sheen was also observed coming from the furthest downstream tank car on 1/28/16 and was also believed to be coming from a sheared off vent valve near the man-way.

### 2. Current Activities

## 2.1 Operations Section

### 2.1.1 Narrative

## 2.1.2 Response Actions to Date

A train derailment occurred at approximately 2230 hrs on January 26, 2016, 4 miles south of Brownsville, Minnesota. A total of 15 cars were derailed. Three cars containing commodities remain upright, six cars of vegetable oil are in the Mississippi River and the remaining six cars on land are on their sides, three of which contain sodium chlorate.

A small amount of sodium chlorate was released from the top of a hopper car; none of the cars containing the sodium chlorate appear to have a critical breach. Three 55-gallon drums of material were recovered from that release. Sodium chlorate is a strong oxidizer and poses significant health and safety issues during trans-loading. Canadian Pacific hired a contractor from Manitoba to conduct the trans-loading, and the contractor is still en route. The contractor will use a machine that creates a vacuum during the transfer, so no fugitive dust is created during the transfer process. Set up for this activity is on-going.

The six cars that are in the Mississippi River contain vegetable oil. Two of these six cars (car # TILX 270708) and the most downstream car (car #TILX270683) have released oil which is believed to have leaked out of sheared off vent pipes from each car. Contingency boom was installed and maintained downstream of the incident. An oil recovery contingency plan was developed. Two diversions were put in the river downstream of the vegetable oil cars. A plywood dam with soft boom was installed downstream of the suspected leaking car. A vac truck continued pumping out material from around the dam. Observations show mostly water with only a small amount of oil recovered during this reporting period.

Crews worked to transfer vegetable oil from railcars TILX27078, TILX291151 and TILX270581. This was completed in early afternoon on 1/28/16. Based on the transfer volume, railcar TILX27078, which was found to be leaking on 1/27/16 from a valve vent, is estimated to be approximately 790 to 934 gallons less than a full car. However, it is believed there are still several hundred gallons of residual oil in the tank that could not be pumped out, so the actual volume of oil that was released from the tank is estimated to be a few hundred gallons.

On 1/28/16, CP sampling crews collected water quality samples at 12 locations, 6 locations adjacent to tanks cars at the downstream end, two locations at the center of tank cars, one upstream location and three downstream locations in the vicinity of Lock & Dam No. 8. EPA START collected 10 surface water samples(SW-01 through SW-09, and SW-13) on 1/28/16. Sample SW-13 was collected approximately 100 meters from the furthest downstream railcar (car #TILX270683). START also collected water quality parameter readings from these locations with a YSI meter.

On 1/28/16, crews worked to repair the leaking oil car furthest downstream (car #TILX270683). Divers installed a wooden plug in the sheared off vapor valve which appears to have secured this release.

OSC Thomas responded during a limited night shift on 1/28/16. Crews remained to monitor the oil tanks and river conditions, and continued to work on track repairs and improvements.

Responding agencies include, but are not limited to local Police, Fire Departments, USFWS, USCG, EMA, FRA, MDNR and MPCA.

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

#### 2.1.4 Progress Metrics

Progress Metrics will be provided as they become available.

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

#### 2.2 Planning Section

#### 2.2.1 Anticipated Activities

The next 12-hour operational period will begin at 06:00 on 1/29/16.

A track block will again be on 1/29/16. During this operation period, the three railcars that were pumped out on 1/28/16 (car numbers TILX27078, TILX291151 and TILX270581) will be removed. In addition, crews will transfer vegetable oil from car numbers SHPX20315, SHQX7034, and TILX270683 to new rail cars.

#### 2.2.1.1 Planned Response Activities

Continue recovering vegetable oil from the Mississippi River. Continue collecting soil and water samples.

CP will construct roads necessary to complete the trans-loading of sodium chlorate.

Transfer remaining vegetable oil and sodium chlorate to new railcars.

#### 2.2.1.2 Next Steps

Continue seeking transition to a State-lead unified command.

Ensure USFWS is able to evaluate impacts to the endangered Higgens eye pearlymussel bed.

#### 2.2.2 Issues

### 2.3 Logistics Section

N/A

# 2.4 Finance Section

N/A

# 2.5 Other Command Staff

## 2.5.1 Safety Officer

OSCs Faryan, Morrison and Thomas serve as Safety Officers for EPA.

# 2.5.2 Liaison Officer

N/A

# 2.5.3 Information Officer

N/A

## 3. Participating Entities

No information available at this time.

## 4. Personnel On Site

EPA 3

START 2

## 5. Definition of Terms

No information available at this time.

# 6. Additional sources of information

## 6.1 Internet location of additional information/report

### 6.2 Reporting Schedule

The next PolRep will be issued the afternoon of January 29, 2016

### 7. Situational Reference Materials

No information available at this time.