

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
CPR Train Derailment - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VII

Subject: POLREP #8
Progress Report
CPR Train Derailment

Balltown, IA
Latitude: 42.6618336 Longitude: -90.8493948

To:
From: Eric Nold, OSC
Date: 2/13/2015
Reporting Period: 0800 2/11/15 to 0800 2/13/15

1. Introduction

1.1 Background

Site Number:	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: 2/5/2015	Start Date: 2/5/2015
Demob Date:	Completion Date:
CERCLIS ID:	RCRIS ID:
ERNS No.:	State Notification:
FPN#: E15703	Reimbursable Account #:

1.1.1 Incident Category

OPA Emergency Response

1.1.2 Site Description

Canadian Pacific Railroad train derailment of denatured (3-5% natural gasoline and/or gasoline) ethanol into the Mississippi River. This portion of the rail line is along a steep and remote river bluff. Access is difficult.

1.1.2.1 Location

Right descending bank of the Mississippi River, 10 miles north of Dubuque, Iowa near Balltown, Iowa.

1.1.2.2 Description of Threat

Approximately 55,000 gallons of denatured (3-5% natural gasoline and/or gasoline) ethanol were lost, much discharging to the Mississippi River. New estimate of gallons lost based on mass balance as of 2/12/15 is 53,785 gallons. This quantity represents ethanol that may have entered the river, permeated the soil, froze on the ice, and was burned in the fire. The quantity that actually discharged to the river is unknown.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Ongoing

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

At 1120 hours Central Time (CT), Wednesday, 2/4/15, a southbound Canadian Pacific freight train derailed 15 railcars on the right descending bank of the Mississippi River 10 miles north of Dubuque, Iowa near Balltown, Iowa. One buffer car contained sand and 14 cars contained denatured ethanol. Of the 14 cars containing product, 8 were determined to be compromised and leaking. Of those 8, three were involved in the fire and three were partially in the river. Initial reports indicated approximately 20,000-30,000 gallons (later revised to 53,785) of denatured (3-5% natural gasoline) ethanol were discharged impacting the Mississippi River. Local, State, and Federal resources responded and are coordinating the remaining response efforts with the responsible party.

As of 2/12/15, the estimate of denatured ethanol not recovered during transloading operations is approximately 53,785 gallons.

The range of the Higgin's Eye and Sheep Nose endangered mussels extends into the area and Unified Command are aware of the possibility of mussel beds nearby.

2.1.2 Response Actions to Date

2/12/15 Update from Unified Command on the scene:

- air sparging units in the river near the spill scene continue to operate
- monitoring and sampling continues minus eight (8) locations unified command agreed were no longer needed - CPR proposed only sampling at the spill location, since these are the only locations since the beginning (eight (8) days) where analytical results showed detections consistently
- data from river sampling continues to be similar as data previously reported - it should be noted that the highest detection to date from the water in the river was the day after the spill at the spill location with an ethanol concentration of 9,300 mg/L which is below the acute toxicity screening level for fish of 12,500 mg/L. Over 500 dissolved oxygen (DO) readings have been collected thus far with all readings within normal range (lowest readings thus far was approximately 7% at the bottom of Sunfish Lake which is in the normal range).
- Vacuuming of ethanol impacted slush on top of the ice in the creek was still ongoing as of 2/12.

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

The RP has been identified as Canadian Pacific Railroad (CPR).

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
denatured ethanol		~55,000 gallons discharged			
transloaded denatured ethanol		~305,000 gallons recovered			N/A
residual denatured ethanol		3,200 gallons			pending
denatured ethanol impacted water		16,100 gallons		solidification	landfill

2.2 Planning Section

2.2.1 Anticipated Activities

Unified command held a meeting to discuss long-term sampling and monitoring at the Holiday Inn in Dubuque, Iowa at 1400 hours on 2/12/15. Sampling and remediation plans going forward were proposed by CPR. IDNR will be the approving authority of this plan, and likely will do so today. CPR will primarily be sampling river water only at the spill scene vicinity. IDNR is directing CPR to also sample/monitor at the Davenport water plant intake, as long as access can be obtained.

2.2.1.1 Planned Response Activities

CPR began metal salvage activities after all tankers were rendered safe to do so. Railcars are being cut up for scrap metal/recycling and hauled out by truck.

CPR continues to collect river samples at established location.

IDNR Fish and Wildlife personnel will be analyzing the frozen substrate (sediment/mussel samples) that was collected thus far at the Upper Mississippi Environmental Science Center in LaCrosse, Wisconsin. State and Federal fish and wildlife agencies continue to assess the impact to fish and wildlife including possible populations of the endangered Higgin's Eye and Sheep Nose mussels. These officials are advising on response actions to minimize impacts to these populations.

A soil remediation plan has been posted for review on the FTP site. CPR would like to initiate that phase of the response as early as next week.

2.2.1.2 Next Steps

Adjustments to the river sampling plan will continue, as needed, as the remediation progresses.

No further pollution reports will be prepared until notable activities warrant or until the final pollution report is prepared.

2.2.2 Issues

Monitoring and sampling that informs certainty of pollutant conditions in the river, below the ice, and downstream of the scene is very challenging. IDNR has been made aware of USACE water quality monitoring downstream of the derailment.

2.3 Logistics Section

Logistical issues are being handled by the RP.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

Safety responsibilities are being fulfilled by CPR or their contractors.

2.5.2 Liaison Officer

N/A

2.5.3 Information Officer

EPA Region 7 Public Information Officers are coordinating with the IDNR PIO.

3. Participating Entities

3.1 Unified Command

The local Fire Department (Sherrill, Iowa) stood up the initial Incident/Unified Command. IDNR has assumed that role now that the threat of fire and explosion is gone and the FD is no longer on the scene.

3.2 Cooperating Agencies

EPA Region 5

USCG Sector UMR

USFWS

IDNR and IDNR Fish and Wildlife

WDNR

Illinois EPA

Sherrill Fire Department

Dubuque Hazmat

Dubuque Emergency Management Agency

4. Personnel On Site

IDNR's Chris Gelner remains on the scene overseeing all CPR activities.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

CPR contractor has established an FTP site where all pertinent documents they generate can be accessed by all responding agencies.

6.2 Reporting Schedule

Polreps after this one will only be prepared when deemed necessary or until the final polrep is prepared.

7. Situational Reference Materials

No information available at this time.