

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
BNSF Alma Ethanol Release - Removal Polrep  
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region V

**Subject:** POLREP #1  
Initial  
BNSF Alma Ethanol Release  
E16501  
Alma, WI  
Latitude: 44.3199654 Longitude: -91.9148839

**To:**  
**From:** Andrew Maguire & Kathy Halbur  
**Date:** 11/9/2015  
**Reporting Period:** 11/7/2015 - 11/8/2015

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	E16501	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	
<b>Response Authority:</b>	OPA	<b>Response Type:</b>	Emergency
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	11/7/2015	<b>Start Date:</b>	11/7/2015
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>		<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	WI Spill #9770 ID 20151107WC06-1-UNK
<b>FPN#:</b>	E16501	<b>Reimbursable Account #:</b>	

#### 1.1.1 Incident Category

Emergency Response

#### 1.1.2 Site Description

The incident is a freight train derailment of approximately 25 cars on a rail line that runs north-south along a man-made embankment constructed within the Mississippi River. Five of the tanker cars were reported to have released denatured alcohol (ethanol) to the river.

##### 1.1.2.1 Location

BNSF Railroad Milepost 353, St. Croix Subdivision, Buffalo County, near the City of Alma, Wisconsin.

##### 1.1.2.2 Description of Threat

Release of denatured alcohol (ethanol) from railroad tanker cars to the Mississippi River. Releases were reported from at least 5 tanker cars. BNSF estimated that approximately 18,000 gallons was released from one tanker car and between 5-500 gallons were released from the other four tanker cars. Denatured alcohol is flammable and toxic to aquatic organisms. The spill poses a threat to both human health and the environment.

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

The LaCrosse Fire Department made preliminary entry to the derailment site by watercraft within hours of the reported derailment. There was no fire, smoke or injury reported. Firefighters confirmed that denatured alcohol (ethanol) product was releasing from the top vents of five of the derailed tanker cars onto the ballast and to the Mississippi River. BNSF provided an estimate that approximately 18,000 gallons were released from one tanker and between 5-500 gallons were released from the other four tanker cars.

A secondary release occurred the afternoon of 11/8 due to high pressure in one of the tanker cars.

The site of the derailment is very remote, situated along a narrow, man-made embankment, with no land access other than along the tracks from the north and south. The Buffalo County Sheriff's Office initially closed sections of State Highways 35 & 37 and conducted a voluntary evacuation of approximately 150 residents until it was confirmed safe for the public to be in the area.

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

In the hours following the derailment, firefighters focused on accessing the derailment site to assess the damage to tanker cars, other freight cars, and rail infrastructure. Crews also confirmed the release to the environment. Un-impacted railcars and tankers were removed from the railway to the north and south of the derailment area to establish an access route.

#### 2.1.2 Response Actions to Date

A train list and Safety Data Sheet for the released material was provided by BNSF Railway to the OSC and is posted in the 'documents' section of the website. An incident command post was established by local authorities at the Alma Elementary School located at S1618 State Route 35, Alma, Wisconsin. The incident command post was moved at 1000 on 11/8 to the Alma Marina located at 125 Beach Harbor Rd, Alma, Wisconsin. U.S. EPA, BNSF Railway, BNSF contractors, WDNR, and U.S. F&WS are continuing work on implementing ICS.

Land and water (work barge) access was established into the derailment site. BNSF and their contractors began transferring ethanol from damaged/leaking tankers to intact tankers on site. All observed leaks have been stopped. BNSF's environmental contractor, Pinnacle Engineering, is continuing to sample and monitor Dissolved Oxygen (DO), Conductivity, and Temperature in the river around the site. START is documenting and overseeing all sampling and monitoring activities.

BNSF laid boom around the spill area on both the east and west sides of the tracks. Air sparging equipment is also in place in the River.

One railcar is upright in the River on the west side of the track. The contents of this railcar are currently being transferred. The end of a second rail car is at the water level on the east side of the track. All other ethanol rail cars are on the track, not in contact with the River. All but one of the derailed auto rack cars have been removed from the Site. Crews are also concurrently removing debris and rebuilding the damaged tracks. Operations have been 24 hours/day since the start of the incident.

Downstream drinking water intake managers and US EPA Region 7 have been notified of the derailment and ethanol release.

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

BNSF Railway was issued a Notice of Federal Interest by OSC Maguire on 11/7/2015. BNSF Railway has accepted responsibility for the release and is responding in coordination with federal, state and local response agencies.

#### 2.1.4 Progress Metrics

Cumulative totals (to date) are found in the table below.

<i><b>Waste Stream</b></i>	<i><b>Medium</b></i>	<i><b>Quantity</b></i>	<i><b>Manifest #</b></i>	<i><b>Treatment</b></i>	<i><b>Disposal</b></i>
Denatured alcohol (ethanol) product	liquid	TBD	various	recovery	
Contaminated soil	solid	TBD	various	landfill	
Contaminated water	liquid	TBD		treatment	

### 2.2 Planning Section

#### 2.2.1 Anticipated Activities

Denatured alcohol (ethanol) product will continue to be off-loaded from derailed tanker cars and removed from the area. Damaged tanker cars will continue to be up-righted and placed on flat bed railcars for transport to railyards for assessment, cleaning, purging and either recovery or scrapping.

Environmental controls (absorbent and containment boom) placed in and around the derailment site to contain spilled product will be monitored and maintained. Air sparging equipment in the river will be utilized as needed based on DO readings.

##### 2.2.1.1 Planned Response Activities

The derailment site will be cleared of damaged railcars, tank cars and damaged infrastructure. Sampling will be conducted in the spilled area prior to replacing ballast and repairing track to understand the extent of contaminated ballast and soils. BNSF contractors will delineate the spill radius using a PID and laboratory samples analyzed for BTEX, VOC's, and ethanol. A center point will be established in the spill zone and points will be collect horizontally and vertically from the central point. START will collect spilt samples for the EPA. Excavation options are limited based on the spill location and track stability concerns (removing hard pan layer in man-made embankment).

##### 2.2.1.2 Next Steps

A streamlined IMT was established to manage the incident utilizing ICS and a Unified Command. IAPs are established to define response activities during specified operational periods.

A regular schedule for both air and water monitoring was established around the derailment site to protect human health and monitor impacts to the environment. Downstream jurisdictions will be notified of potential impacts to wildlife management areas and drinking water intakes located along the Mississippi River.

#### **2.2.2 Issues**

The derailment site is on a remote right of way located within the Mississippi River. Access to the area is primarily by water and work is proceeding slowly as a result.

### **2.3 Logistics Section**

The incident command post was moved from Alma Elementary School to the Alma Marina located at 125 Beach Harbor Road, Alma, Wisconsin, 54610. BNSF Railway, Hulcher, Pinnacle Engineering, WCEC, WDNR, US F&WS and START are providing ground support.

### **2.4 Finance Section**

No information available at this time.

### **2.5 Other Command Staff**

#### **2.5.1 Safety Officer**

OSC Andrew Maguire is serving in this role at this time. An incident HASP is under development by BNSF Railway. Individual contractors and response agencies are currently working under HASPs established for emergency response activities.

#### **2.5.2 Liaison Officer**

OSC Andrew Maguire is serving in this role at this time.

#### **2.5.3 Information Officer**

OSC Andrew Maguire is serving in this role at this time.

## **3. Participating Entities**

### **3.1 Unified Command**

A Unified Command was established consisting of U.S. EPA, WDNR, U.S. F&WS, and BNSF Railway. IAPs are being developed utilizing the ICS planning process to govern response activities during defined operational periods.

### **3.2 Cooperating Agencies**

Wisconsin DNR

Wisconsin Emergency Management

Buffalo County Sheriff's Office

USDOT Federal Railroad Administration

USDOT Pipeline & Hazardous Material Administration

US F&WS

LaCrosse Fire Department HAZMAT

BNSF Railway

## **4. Personnel On Site**

FEDERAL: 4

STATE: 2

LOCAL: 10

BNSF: 10

CONTRACTORS: 50

TOTAL: 76 (estimated)

## **5. Definition of Terms**

BNSF	Burlington Northern Santa Fe
CTEH	Center for Toxicology and Environmental Health LLC
FPN	Federal Project Number
HASP	Health & Safety Plan
IC	Incident Commander
ICS	Incident Command System
IMT	Incident Management Team
ICP	Incident Command Post
NRC	National Response Center

OSC	On-Scene Coordinator
POLREP	Pollution Report
SDS	Safety Data Sheet
START	Superfund Technology Assessment and Response Team
VOC	Volatile Organic Compound

## **6. Additional sources of information**

### **6.1 Internet location of additional information/report**

Photographs, data, work plans and other supporting technical information can be found at:  
<http://www.epaosc.org/bnsfalmaethanol>.

### **6.2 Reporting Schedule**

POLREPs will be issued as milestones are met.

## **7. Situational Reference Materials**

No information available at this time.