

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
CSX Mt. Carbon Crude Derailment - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region III

**Subject:** POLREP #16  
Continuation of the Emergency Response/Removal Assessment Activities - CSX Mt.  
Carbon Crude Derailment  
CSX Mt. Carbon Crude Derailment  
Mt. Carbon, WV

**To:**  
**From:** Dennis Matlock, OSC  
**Date:** 3/23/2015  
**Reporting Period:** 3/18/15 to 3/20/15

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	Z3MR	<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>	2/16/2015	<b>Start Date:</b>	2/16/2015
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>		<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#:</b>	E15304	<b>Reimbursable Account #:</b>	

#### 1.1.1 Incident Category

Oil Pollution Act (OPA) Response; Emergency Response

#### 1.1.2 Site Description

The location of the CSX derailment is along the left descending bank (LDB) of the Kanawha River, approximately mile point (MP) 88.7, at the confluence of Armstrong Creek. The derailment originated on the eastern descending hillside adjacent to Rt. 61, directly west of Adena Village and northwest of the Town of Mt. Carbon, WV. The train consisted of 109 railcars (107 tank cars and two buffer cars), with two locomotives. Of the 107 tank cars containing oil, 28 of the cars derailed and 19 cars were involved in fires. The discharge area is located between the railroad track, along the eastern descending hillside towards the confluence of Armstrong Creek and the Kanawha River. The Site consists of: the 28 derailed tank cars and associated oil-contaminated soils, approximately 35 by 115 feet in area; the adjacent LDB of the Kanawha River and shore line; and the surface waters of the confluence of Armstrong Creek and the Kanawha River.

##### 1.1.2.1 Location

The incident is located in Mount Carbon, WV.

##### 1.1.2.2 Description of Threat

Discharge of Bakken Crude from 28 derailed traincars that spilled into Armstrong Creek; which flows into the Kanawha River, a navigable waterway.

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

The Responsible Party (RP) has mobilized their hazmat team, security and cleanup contractors to the site. Initial efforts consisted of controlling fires and placing initial boom in Armstrong Creek. Local Fire Department responded to the incident. Initial surface water sampling was done by barge where four samples were collected in the Kanawha River. WVDEP, EPA and CSX collected split samples of those four initial surface water samples. CSX began collecting roving air monitoring data and set sample locations for VOCs and PAHs in the community impacted.

## 2. Current Activities

### 2.1 Operations Section

### 2.1.1 Narrative

From March 18-19, 2015, CSX contractors continued to excavate oil-contaminated soils from the railroad embankment at the site. The CSX Road Master was onsite to determine and approve how far into the embankment could safely be excavated without compromising the stability of the railway. Excavated soils were temporarily stockpiled at the site until they could be transported off site for disposal at the Waste Management Landfill, Charleston, WV. Most of the visibly contaminated soil was excavated from the railroad embankment; however, water with oil sheen and crude oil product continue to seep through the embankment after the excavation was complete. The crude oil and water were collected in a collection pond and the oil was removed using a vacuum truck. After excavation of the embankment was completed, six rail cars with stone were dumped and spread over the central portion of the excavated area for stability and erosion control. Water at the site is continuing to be managed using collection ponds with underflow dams, a diversion culvert, and collection sumps. Contractors continue to maintain the boom and periodically change the sorbent pads and sweep as required.

On March 18-20, 2015, CSX contractors excavated contaminated soils from the railroad ditch line. The excavated soils were loaded directly into trucks to be transported off site to the Waste Management Landfill, Charleston, WV. After excavating the ditch line, Aqua Blok<sup>®</sup>, which consists of a mixture of small gravel and bentonite, was placed into the ditch line to improve conveyance of storm water in the ditch. The contractors excavated as close to the railway as possible without undermining the tracks; however, crude oil product was observed seeping out from under the ballast when the excavation was completed. The contractors were preparing to construct an underflow dam to separate the oil from storm water prior to draining into the culvert that crosses under the tracks. Transportation and disposal of excavated soils from the railroad embankment and ditch line began on 3/18/15 and continued through 3/20/15. As of 3/20/15, a total of 487 truckloads of oil-contaminated soil, totaling 8,870.6 tons have been shipped for disposal (plus 16 loads shipped that the weight was unavailable at the time of this report). Oil/water mixture from vacuum operations at the spill site continued to be transported to Handley for storage in frac tanks, pending separation into an oil/water phase and subsequent T&D. As of 3/20/15, a total of 213,111 gallons of oily water mixture have been recovered from vacuum operations, 18,767 gallons have been generated from decontamination activities, and a total of 210,042 gallons of oily water have been transported off Site to Washington, PA for disposal. The remaining waste streams stored in roll-off boxes at the Handley rail yard are continuing to be transported to the Waste Management Landfill in Charleston, WV, for disposal. As of 3/20/15, other waste streams transported off site for disposal include: recovered crude oil -skimmed from frac tank and rail car heels (14,081 gallons); timber and cross ties (nine of nine roll-offs/64 tons); PPE and sorbent pads (12 of 12 roll-offs shipped, totaling 21.15 tons); poly sheeting and hay (12 of 12 roll-offs plus two triaxle truck loads shipped, totaling 116.9 tons, not including the triaxle loads); septic/decon water 22,200 gallons); fiber optic cable (one roll-off generated and shipped); and rail car residue (one roll-off shipped, 2 tons).

On 3/18/15, CSX proposed to reduce the frequency of river surface water sampling from daily to weekly and to discontinue collection of raw and finished water from the Montgomery Water Plant. The OSC approved the request.

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

CSX is the responsible party. EPA finalized it's Recommendation for Determination of Imminent and Substantial Threat to Public Health or Welfare at the CSX Mount Carbon Train Derailment Site on 2/27/15.

EPA also issued a unilateral administrative order (UAO) to CSX on 2/27/15. An Administrative Order on Consent was signed on 03/04/2015 by CSX, detailing their responsibilities at the Site.

CSX has been responsive, employing multiple cleanup contractors and environmental consultants to advise them on the technical aspects of the response. CSX has also provided their hazmat team and security on-site. OSC Matlock will coordinate with EPA and WVDEP enforcement personnel, as appropriate.

### 2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
oily water		210,042 gallons			X
oil-contaminated soil		8,870.6 tons			X
recovered crude oil (skimmed from frac tanks and rail car heels)		14,081 gallons			X
Ties and timbers		64 tons			X
PPE/Sorbent		21.15 tons			X
Poly sheeting/Hay		116.9 tons			X
Septic/decon water		2,200 gallons			X
fiber optic cable		1 roll-off			X
rail car residue from decon		2 tons			X

## 2.2 Planning Section

### 2.2.1 Anticipated Activities

EPA will continue to provide oversight for those activities specified in the UAO.

#### **2.2.1.1 Planned Response Activities**

Divert runoff water in the spill area.  
Continue to collect oil within the boomed area on the Kanawha River, shoreline of the spill area, and from the seeps and trenches in the spill area.  
Continue collection/analysis of surface water on a weekly basis.  
Continue excavation of oil-contaminated soil in the spill area and railroad embankment.  
Continue T&D of wastes generated.

#### **2.2.2 Issues**

Stabilization of the railroad embankment during excavation operations

#### **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**

CSX  
United States Environmental Protection Agency (EPA)  
West Virginia Department of Environmental Protection (WVDEP)

#### **3.2 Cooperating Agencies**

National Oceanic and Atmospheric Administration (NOAA)  
U.S. fish and Wildlife Service (USFWS)  
Federal Railroad Administration (FRA)  
National Transportation Safety Board (NTSB)  
Pipeline and Hazardous Material Safety Administration (PHMSA)  
WV Army National Guard Civil Support Team (ANG CST)  
WV State Police  
Montgomery Police Department  
WV Department of Highways (WV DOH)  
WV Department of Military Affairs and Public Safety (DMAPS)  
WV American Water Corporation (WVAWC)  
Red Cross

### **4. Personnel On Site**

1 Region 3 EPA OSC  
1 START contractor

### **5. Definition of Terms**

No information available at this time.

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

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

<http://www.epaosc.org/CSXMtCarbonCrudeDerailment>

#### **6.2 Reporting Schedule**

POLREPs will be issued as activities change on site.

### **7. Situational Reference Materials**

No information available at this time.