

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region III

**Subject:** POLREP #11  
Continuation of the Emergency Response/Removal Assessment Activities  
CSX Mt. Carbon Crude Derailment

**Mt. Carbon, WV**

**To:**  
**From:** Francisco Cruz, OSC  
**Date:** 3/4/2015  
**Reporting Period:** 3/2/15 to 3/4/15

## 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 4 samples were collected in the Kanawha River. WVDEP, EPA and CSX took split samples of those 4 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

CSX has completed cleaning and purging all of the derailed cars. The damaged rail cars that were cleaned and purged are staged on the ballast adjacent to the rail line. They will be kept on-site due to investigations by the FRA and NTSB. Following removal of the cleaned derailed cars from the containment area, the poly liner that the rail cars were staged on was placed into roll-off boxes for T&D.

All crude oil remaining in the heels of the rail cars involved in the derailment was transferred to frac tanks and subsequently pumped into rail cars for transport to the customer. Approximately 10,000 gallons of pure crude oil remains stored in one frac tank at Handley, which will require truck transport to the customer, as CSX will not partially fill a rail car.

Oil/water mixture from vacuum operations at the spill site is still being transported to Handley for storage in frac tanks, pending separation into an oil/water phase and subsequent T&D. To date, 147,790 gallons of oily water mixture have been recovered from vacuum operations. T&D of oily water continues; a total of 132,342 gallons of oily water has been transported off Site to Washington, PA, for disposal.

During transfer operations of crude oil into the rail cars, VOCs reached 436 ppm, 30 ppm benzene, and 12% LEL in the frac tank manway; personnel remained in Level C PPE during transfer operations. In all other work areas, minimal VOCs were detected, remaining under 5 ppm. In the past day, VOCs were minimally detected in all areas with sporadic readings of 0.1 ppm, as heavy rains began and continue to be steady.

T&D of stockpiled contaminated soil at the spill site continued. To date, a total of 315 truckloads, an estimated 6,484 tons, were transported off Site for disposal at the Waste Management Landfill located in Charleston, WV.

Vacuum recovery operations of oil from the sump areas and shore line of the Kanawha River continued. Sheen was identified in the runoff water that flows through the hillside, showing signs of crude contamination. Efforts were being made to control the flow of contaminated water into sump areas that are being manned with vac trucks. Additional stone was brought to the spill area to facilitate additional truck access. Four vac trucks are staged in the spill area and workers are continuously skimming oil from the seep areas and shoreline 24 hours per day.

An additional section of boom was deployed along the exterior of the outer boom in preparation for heavy precipitation and increased river flow, anticipated to reach 10,000 CFM. During this increased river flow, workers were not in small boats due to safety concerns. The inner oil-coated section of boom was replaced with 450 feet of new boom. For safety reasons, the barge was removed from the downstream side of the boom, and an additional outer section of boom was deployed.

CSX is currently focusing all efforts on diverting run off water away from the oil-contaminated areas in the derailment area. Culverts and a diversion trench are in the process of installation.

A certified diver with welding experience repaired breaks in the sheet piling. Additional welders are on Site to raise the two low sections of the sheet piling in order to prevent overflow of the oil-contaminated water contained beneath the shoreline and the sheet piling.

WVAWC and CSX contractors continued to collect samples of raw and finished water from the Montgomery WTP. No results exceeded MCL's; however, on 3/2/15, a low-level detection of benzene was reported in the finished water of the WTP.

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

CSX is the responsible party. EPA finalized its 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

<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>
oily water		132,342 gallons			X
oil-contaminated soil		6,484 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 raw and finished water at the drinking water plant twice per day.

#### **2.2.2 Issues**

Excessive precipitation and rising river levels have a potential to flood the spill area.

#### **2.3 Logistics Section**

EPA continued to have 2 START on-site. On 3/4/15, EPA reduced staff to 1 START on-site.

#### **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**

Montgomery Fire Department  
CSX  
United States Coast Guard (USCG)  
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  
1-2 START contractors

### **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.