

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region III

**Subject:** POLREP #8  
CSX Mt. Carbon Crude Derailment

Mt. Carbon, WV

**To:**  
**From:** Dennis Matlock, OSC and Melissa Linden, OSC  
**Date:** 2/25/2015  
**Reporting Period:** 1900 2/23/2015 - 1700 2/25/2015

## 1. Introduction

### 1.1 Background

Site Number:	Z3MR	Contract Number:
D.O. Number:		Action Memo Date:
Response Authority:	OPA	Response Type:
Response Lead:	EPA	Incident Category:
NPL Status:	Non NPL	Operable Unit:
Mobilization Date:	2/16/2015	Start Date:
Demob Date:	2/16/2015	Completion Date:
CERCLIS ID:		RCRIS ID:
ERNS No.:		State Notification:
FPN#:	E15304	Reimbursable Account #:

#### 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, approximate 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 completed transfer of oil from the railcars to vac trucks and subsequently to frac tanks staged at Handley, WV. All of the product has now been pumped out of the railcars. A total of 172,105 gallons of oil has removed from the rail cars and is now being stored in double wall frac tanks at the Handley facility. The crude oil product stored in the frac tanks will eventually be loaded into clean rail cars to be transported off site.

The CSX wrecking crew completed clearing the impacted area on February 24, 2015. The remaining wrecked cars on the west end of the derailment were put on flat bed cars and were moved to the CSX Handley rail yard. All wrecked cars on the east end of the derailment were either re-railed or were loaded onto flatbed cars and will be moved to Handley after the railway is re-opened. Eighteen undamaged rail cars and eleven derailed cars plus a buffer car are located on the southeast end of derailment and will be moved to Handley when the tracks are repaired and the railway is open. CSX constructed a bermed containment area with an 80-mil liner at the Handley rail yard in preparation for beginning cleaning and purging of rail cars. Cleaning and purging operations are anticipated to begin on February 25, 2015.

CSX began excavation of the impacted areas on February 24, 2015. Excavation of the impacted areas in the rail bed was completed at 0500 hours on February 24, 2015. Post-excavation confirmation soil sampling was conducted. A total of 14 field screening samples were collected and screened for VOCs and eight samples were collected for laboratory analysis. CSX will begin backfilling the rail bed with stone later today.

Vacuum operations continued with pumping of 11,200 gallons of oil/water mixture from the sump area. To date, a total of 67,912 gallons of oil/water mixture have been collected from impacted area and stored in frac tanks at Handley. CSX has made arrangements to transport and dispose of the recovered oil/water mixture. CSX plans to separate the waste into oil and water phases at the Handley rail yard. The waste water will be transported to Petromax, located in Carnegie, PA, and has begun today. The oil phase will be transported to Ergon, located in Marietta, OH, and is currently being scheduled.

CSX began staging rail cars inside a constructed containment area at the Handley rail yard to begin cleaning/purging of the railcars. The operation was suspended after placing the first rail car inside the containment due to excessive compression of the 80 mil liner. CSX plans to place swamp mats in the containment to help better distribute the weight of the cars to lessen the compression. If this is unsuccessful, CSX will construct a new containment area for the rail cars.

Sheet piling installation continues. As of 0730 hours on February 25, 2015, the wall has been extended to approximately 340 ft. in length. There are two gaps in the wall. A gap in the wall within Armstrong Creek was left due to a buried gas line and a gap within the portion of the wall in the River was left open due to a sewer line.

Air monitoring continued in the communities surrounding the derailment area and in the work areas at the derailment and in Handley. Community readings continued to be non-detect. It was agreed upon to cease the roving air monitoring since over 40,000 readings have been taken; with non-detect results. There were a few minor spikes in the work areas, but they were all below action levels and no associated benzene hits were detected.

WVAWC continues to collect raw and finished water samples every two hours. Analytical results continue to remain below levels of concern. With the levels below concern WVAWC has adjusted their collection schedule to samples being taken every 6 hours.

CSX contractors have resumed collecting daily surface water samples from the Kanawha River at the following locations: at the Montgomery water intake; at the 87.1 day marker (west of Wheeler Island); and two locations near Armstrong Creek. CSX is also collecting samples of raw and finished water at the Montgomery water plant two times per day. The CSX samples are being analyzed at a West Virginia Certified laboratory. Analytical results received to date have been below action levels and non-detect for all VOCs.

WVDEP collected a sample of the crude oil product from one of the non-impacted railcars for laboratory analysis. The analyses requested were VOC, SVOC, PAH, GRO, DRO.

CSX contractors placed boom across the mouth of Armstrong Creek. CSX has also staged boom and a boat at the London lock and dam as a contingency.

CSX reported observation of a sheen in an area downstream of the barge in an area free of ice within the boom. They were directed to use sorbent pads to try to collect the material.

The Kanawha River in the vicinity of the derailment was re-opened to traffic and the Safety Zone cancelled at 11:57 hours on February 24, 2015. However, a Special Maritime Information Bulletin (SMIB) was issued for mariners transiting the area for the next three days to maintain a safe speed and proceed with caution due to ongoing cleanup operations related to the derailment.

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

CSX is the responsible party. 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>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

## **2.2 Planning Section**

### **2.2.1 Anticipated Activities**

EPA will continue to work within Unified Command to provide oversight throughout the incident.

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

Collect oil within the boom and from interceptor trench.

Continue collection/analysis of raw and finished water at the drinking water plant every six hours.

Install sheet piling to assist with containment of the oil along the shoreline of the spill area.

Utilize a barge and vac truck to collect oil from the surface waters of the Kanawha River.

Excavate impacted soil and dispose of appropriately.

Restore rail operations.

### **2.2.2 Issues**

## **2.3 Logistics Section**

EPA will continue to have 3 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**

2 Region 3 EPA OSCs

3 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 every 48 hours.

## **7. Situational Reference Materials**

No information available at this time.