

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: POLREP #20
Completion of Focused Soil Excavation
CSX Mt. Carbon Crude Derailment

Mt. Carbon, WV

To:
From: Dennis Matlock, OSC
Date: 11/11/2015
Reporting Period: August 11, 2015 to October 29, 2015

1. Introduction

1.1 Background

Site Number:	Z3MR	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	2/16/2015	Start Date:	2/16/2015
Demob Date:		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, 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) 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

CSX contractors continued excavating oil-contaminated soil and pockets of residual crude oil product as per the approved Focused Soil Excavation Work Plan. The soil excavation in the primary areas designated for excavation in the Work Plan had been completed by September 16, 2015 and most of the excavation had been backfilled with clean fill dirt. CSX reported that Filtermat AS liner was installed along the bottom of the excavation before backfilling. On September 16, 2015, CSX contractors began installing a reactive core mat (RCM) liner along the slope of the railroad embankment, between the tracks and the residential property. The excavation was backfilled after the RCM liner was installed. A small area along the surface of the river bank was also excavated to a depth of approximately 3-inches depth to remove residual crude oil in the soil. Focused soil excavation and site restoration activities were completed on September 25, 2015.

CSX reported that a freshwater mussel survey had been completed from September 28 to 30, 2015 in the Kanawha River proximal to the site. CSX reported that the survey was completed with oversight from the U.S. Fish and Wildlife Service (USFWS) and the West Virginia Department of Natural Resources (WVDNR). A separate report is to be prepared and submitted to the Natural Resource Trustees. CSX contractors also collected 11 sediment samples from the vicinity of the incident location for chemical analysis in conjunction with the mussel survey. Analytical results for the sediment samples will be assessed in conjunction with the Natural Resource Trustees.

All wastes generated during the Focused Soil Excavation had been transported off site for disposal as of October 23, 2015.

CSX contractors continue to conduct weekly boom inspections and metal sheet pile wall inspections. Absorbent pads and booms are replaced as necessary.

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
oil and water		244,163 gallons			X
oil and water (from dewatering during August 2015 focused soil excavation)		49,250 gallons (49,085 gal. water and 165 gal. oil)			X
oil-contaminated soil (previous response activities)		10,600.4 tons			X
oil-contaminated soil from focused soil excavation (August 2015)		8,028.71 tons (301 loads)			X
Off-spec crude oil w/ water (skimmed from frac tanks, decon sludge, and rail car heels)		19,056 gallons			X
Ties and timbers		96.5 tons			X
PPE/Sorbent		30.76 tons			X
Poly sheeting/Hay		120.2 tons			X
Septic/decon water		2,200 gallons			X
fiber optic cable		1 roll-off			X
rail car residue from decon		2 tons			X
frac tank residual (solidified)		34.77 tons			X
cooking oil from the food tent		1 drum			X
Asbestos (sealant)		1/4 CY			X

2.2 Planning Section

2.2.1 Anticipated Activities

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

2.2.1.1 Planned Response Activities

Continue to maintain boom on the Kanawha River and shoreline of the spill area.

CSX will submit a Focused Soil Excavation Summary Report to detail activities completed and confirmation sampling results.

The last quarter of surface water sampling is planned for November 2015.

2.2.2 Issues

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 and 1 START contractor on a periodic, as-needed basis.

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.epaossc.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.