

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: POLREP #19
Commencement of Additional Remediation - Soil Excavation
CSX Mt. Carbon Crude Derailment

Mt. Carbon, WV

To:
From: Dennis Matlock, OSC
Date: 8/11/2015
Reporting Period: April 4, 2015 to August 10, 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

From April 3, 2015 until the current follow-on excavation activities began, the water seeping from the railroad embankment and surface water runoff at the site continued to be managed using trenches, collection ponds with underflow dams, the diversion culvert, and collection sumps. CSX contractors continued to make bi-weekly site visits to change out sorbent pads in the water management features, including sorbent pads in the moat area in the river between the containment wall and the river bank. Contractors continue to maintain the boom deployed in the Kanawha River outside the containment wall.

EPA approved the *Focused Soil Excavation Work Plan* (Work Plan) submitted by contractors on behalf of CSX. The Work Plan estimated that approximately 3,200 cubic yards (CY) of soil was excavated from the site during previous response operations and estimated approximately 1,500 CY of soil may be excavated during the current operations. The initial volume estimate was based on the results of a Laser-Induced Fluorescence (LIF) investigation that was conducted in conjunction with the initial response/cleanup operations.

CSX contractors mobilized to the site to begin excavating contaminated soil as proposed in the approved Work Plan on July 29, 2015. Excavation activities have continued through the period of this report. Transportation and disposal (T&D) of the contaminated soil to the Waste Management Charleston, WV Landfill began on July 31, 2015. The depth and horizontal extent of the excavation is being guided based on visible oil-contaminated soils and PID screening of the soils. The excavation depths in the north central portion of the site have been to approximately 10 to 12 feet below ground surface (bgs) and the horizontal extent of excavation has been expanded well beyond the planned areas as presented in the approved Work plan. The contractor has revised the estimate of the total volume to be excavated from 1,500 CY to 5,000 CY.

Residual oil product was observed seeping into the western portion of the excavation pit near the railroad embankment, but the seep had diminished by August 7th. The contractors pumped the oil/water from the excavation pit into an on-site frac tank for temporary storage until T&D could be arranged.

The U.S. EPA and WVDEP are providing periodic oversight of the current cleanup activities.

For the current cleanup activities as of 8/10/15, a total of 2,876.59 tons (98 truckloads) of soil had been transported off site to the landfill and 6,100 gallons of oil/water had been transported off site for treatment/disposal at EnviroTank. Other waste streams transported off site for disposal during the initial response and cleanup operations include: recovered off-spec crude oil -skimmed from frac tank and rail car heels (19,960 gallons); timber and cross ties (14 roll-offs shipped, totaling 96.5 tons); PPE and sorbent pads (16 roll-offs shipped, totaling approximately 30.76 tons); poly sheeting and hay (12 roll-offs plus two triaxle truck loads shipped, totaling 120.2 tons); septic/decon water (2,200 gallons); fiber optic cable (one roll-off generated and shipped); rail car residual (one roll-off shipped, weighing, 2 tons); and Frac tank residual - solidified (five rollofs, totaling 34.77 tons).

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 (as of 8/10/15)

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
oil and water		244,163 gallons			X
oil and water (from dewatering during August 2015 hot spot excavation)		6,100 gallons			X
oil-contaminated soil (previous response activities)		10,600 tons			X
oil-contaminated soil from hot spot excavation (August 2015)		2,876.59 (98 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		27.12 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

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

Continue collection/analysis of surface water on a quarterly basis.
Continue excavation of oil-contaminated soil in the spill area.
Continue T&D of wastes generated.
Continue to maintain boom on the Kanawha River and shoreline of the spill area.

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.epaosoc.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.

