

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: POLREP #17
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: 3/30/2015
Reporting Period: 3/21/15 to 3/27/15

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) 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 21 – 27, 2015, CSX contractors continued cleanup activities at the derailment site. A trench was excavated along the eastern side of the spill site beginning from the railroad embankment and extending to the moat inside the sheet pile containment wall in Armstrong Creek. AquaBlok® was installed to form a subsurface containment barrier down to 2 ft. below the water table. The trench was excavated to approximately 13 ft. bgs near the embankment with groundwater encountered at approximately 11 ft. bgs. The trench became progressively shallower as it extended toward Armstrong Creek as the surface elevation decreased. Before completing the trench, the excavator broke a sewer line in the southeastern portion of the trench. PSD personnel were onsite on 3/27/15 to repair the sewer line before the AquaBlok® installation could continue. Work on the trench was resumed during a site visit conducted by WVDEP and the EPA START contractor on 3/27/15. CSX contractors planned to complete the AquaBlok installation before the end of the day. CSX contractors were also working to divert storm water from upgradient of the railroad tracks away from the spill area. A concrete catch basin was installed below a pre-existing storm water culvert at the constructed access road from State highway 61 to the derailment site. The culvert originated in the ditch on the opposite side of State Highway 61. Piping was installed to drain the storm water from the catch basin into the AquaBlok®-lined rail road ditch. An underflow dam was built in the railroad ditch line to the east of the drainage culvert. The ditch and underflow dam were also lined with AquaBlok®. Water from the culvert currently flows into an above-ground 24-inch diameter plastic pipe that extends across the site and drains into the moat area inside the sheet pile containment wall. The plan is to install pipe in the eastern trench, above the subsurface AquaBlok® containment barrier, and redirect the storm water pipe into it to allow the storm water to drain into the moat near the eastern end of the sheet pile wall. Additional AquaBlok® will be installed around and above the pipe in the trench prior to backfilling with soil. Overburden from the trench excavation was stockpiled onsite and will be used to mix with saturated contaminated soils to stabilize them prior to transporting off site for disposal. Water at the site is continuing to be managed using collection ponds with underflow dams, the diversion culvert, and collection sumps. Contractors continue to maintain the boom and periodically change the sorbent pads and sweep as required.

The Waste Management Charleston, WV landfill has reached its monthly tonnage limit and cannot accept any additional waste until 4/1/15. Transportation and disposal of excavated soils will not resume until on or after 4/1/15. As of 3/27/15, a total of 498 truckloads of oil-contaminated soil, totaling 9,249.65 tons have been shipped off site for disposal at the landfill. 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 3/27/15, a total of 217,647 gallons of oily water mixture has been recovered from vacuum operations, 21,661 gallons have been generated from decontamination activities, and a total of 236,508 gallons of oily water have been transported off Site to Washington, PA for disposal.

As of 3/27/15, other waste streams transported off site for disposal include: recovered crude oil -skimmed from frac tank and rail car heels (19,056 gallons); timber and cross ties (nine of nine roll-offs shipped, totaling 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 120.2 tons); septic/decon water (2,200 gallons); fiber optic cable (one roll-off generated and shipped); and rail car residue (one roll-off shipped, weighing, 2 tons).

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

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
oily water		236,508 gallons			X
oil-contaminated soil		9,249.65 tons			X
Off-spec crude oil w/ water (skimmed from frac tanks, decon sludge, and rail car heels)		19,960 gallons			X
Ties and timbers		64 tons			X
PPE/Sorbent		21.15 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
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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.

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 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.