

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: POLREP #9
Continuation of the Emergency Response/Removal Assessment Activities
CSX Mt. Carbon Crude Derailment

Mt. Carbon, WV

To:
From: Dennis Matlock, OSC and Melissa Linden, OSC
Date: 2/28/2015
Reporting Period: 2/25/15 to 2/27/15

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:		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

On February 25, 2015, WVAWC reduced the sampling frequency of raw and finished water to four samples per day. CSX's contractors continued collecting daily surface water samples from the Kanawha River and samples of raw and finished water at the Montgomery Water Plant twice per day. No results that exceeded action levels have been reported.

A total of 172,105 gallons of oil have been removed from the derailed damaged rail cars and is 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.

CSX completed backfilling of the railway excavation area with limestone and constructed the missing rail line track on 2/26/15. Utilizing the repaired rail line, all of the remaining rail cars from the spill area were moved to the Handley rail yard on the morning of 2/26/15. The rail cars were staged in a containment pad at Handley in preparation for cleaning and purging operations. The railway has been opened to all rail traffic.

On 2/26/15, WVDEP issued a permit modification to authorize the Waste Management Landfill located in Charleston, WV, to accept soil waste generated during cleanup operations at the site. A modification was also issued to authorize the landfill to remain open 24 hours per day to accept the contaminated soil waste from the train derailment. CSX is expected to begin transporting the soil to the landfill for disposal on 2/27/15 after the truck access road is completed and the CSX Road Master authorizes the transfer across the tracks.

CSX contractors replaced a culvert that drained the area above the derailment. The water originates from an area outside the derailment/contamination zone. CSX plans to treat the water prior to discharging into the river.

CSX contractors reported seeing an oil sheen on the Kanawha River upstream of the derailment area on 2/26/15. The sheen appeared to begin between mile marker 89 to 90, near an industrial facility located in Alloy, WV. OSC Matlock called to report the incident to the NRC. A WVDEP inspector went to the industrial facility to investigate. The inspector did not observe any sheen in the River at the plant.

CSX began installing Aqua Block® at the derailment site on 2/26/15. Aqua Block® is a bentonite-based product that will be installed in a trench to a depth of 2 ft. below the water table. It will set create barrier to prevent groundwater contaminated with light non-aqueous phase petroleum hydrocarbons from migrating off-site into the River.

Installation of the sheet piling wall was completed on 2/26/15. The wall extends for approximately 500 feet, beginning in Armstrong Creek and extending along the creek downstream into the Kanawha River, ending just upstream of a boat house.

CSX contractors continued to maintain the boom located across the mouth of Armstrong Creek. Additional boom remains staged at the London lock and dam as a contingency.

Vacuum operations to recover spilled oil continued from the sump areas and shore line of the Kanawha River. Vacuum trucks and equipment were removed from Adena Village. CSX contractors utilized sorbent booms to collect the minimal surface oil sheen at the mouth of Armstrong Creek. The contractors also utilized a jon boat to recover oil in the River within the containment area between Armstrong Creek and the barge. Recovered oil and water waste was transported to Handley to be stored in frac tanks. CSX reported that as of 1600 hours on 2/27/15, a total of 102,021 gallons of oil/water had been recovered and transported to Handley for storage. As of the end of day on 2/26/15, a total of 81,542 gallons of the waste water had been transported offsite to Petromax, located in Washington, PA, for disposal.

CSX implemented changes in the air monitoring plan beginning at 1900 hours on February 26, 2015. Following approval by the UC, community air monitoring and sampling was discontinued. CSX contractors continued to conduct work zone and work perimeter air monitoring. The perimeter air monitoring was conducted at the same locations on Hwy 61 above the derailment area and on Gina Street in Adena Village that were part of the community air monitoring program. No detections above action levels have been reported.

The oil from two of the six derailed rail cars that were relocated to the Handley facility has been pumped into two new clean rail cars for transport to the customer. The remaining rail cars that were damaged are staged in a containment area, scheduled to receive cleaning/purging and subsequent staging with security, pending a NTSB investigation.

The forward command post located at the church on Highway 61 will be demobilized this weekend. CSX moved the office buses from the Montgomery Fire Department to Handley on the evening of 2/27/15. All operations will be coordinated and conducted from Handley.

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. 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		81,542 gallons		X

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

Continue to collect oil within the boom and from interceptor trench.

Continue collection/analysis of raw and finished water at the drinking water plant twice per day.

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

Conduct T&D of oil-contaminated soil from the excavation area.

Transfer oil from rail cars staged at Handley to new rail cars and transport off Site.

Clean/purge damaged rail cars at Handley.

2.2.2 Issues

Excessive road traffic during load-out of soil. Trucks will run 24/7.

2.3 Logistics Section

EPA continued to have 3 START on-site. Beginning 2/28/15, EPA will reduce staff to 2 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

1-2 Region 3 EPA OSCs

1 Region 3 EPA PIO

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.