

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: POLREP #1
Initial POLREP
CSX Mt. Carbon Crude Derailment

Mt. Carbon, WV

To:
From: Dennis Matlock, OSC and Melissa Linden, OSC
Date: 2/18/2015
Reporting Period: 2000 2/16/2015 - 1900 2/17/15

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:	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 into Armstrong Creek; which flows into the Kanawha River, a navigable waterway.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The Potentially Responsible Party (PRP) 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

At approximately 1320 on 2/16/2015 a CSX train derailed near the town of Mount Carbon, WV. The train was hauling 109 cars, with 107 containing crude oil, reportedly Bakken Crude. It was estimated that 28 cars were derailed. Fires were reported in the area, both structural and at the cars themselves. There was a significant power outage in the area due to the fires melting power lines. The Adena Village and Boomer Bottom areas were evacuated as a result of the derailment and subsequent fires. One person was treated for inhalation at a local hospital and released. No other injuries were reported. One home was destroyed by the fires. West Virginia American Water Company (WVAWC) shut down their water intake at the town of Montgomery, WV. The Montgomery water system is about three miles downstream of the derailment. The Cedar Grove intake is approximately 10 miles downstream from the derailment. The Montgomery and Cedar Grove water systems reported that they did not notice any oil or oil odor at their intakes. The shutdown of the Montgomery intake affected approximately 2,000 customers. Red Cross and other volunteer organizations set up evacuation shelters for evacuees. The governor of the state of West Virginia, Earl Ray Tomblin, declared a state of emergency for Fayette and Kanawha counties. CSX provided air sampling and monitoring in local communities in the vicinity of the derailment. There were no reported detections of concern in the air monitoring conducted in the nearby communities.

EPA OSC and their START contractor mobilized to the site on the evening of 2/16/2015. An Emergency Operation Center (EOC) was set up at the Montgomery Fire Department. Entities included in the UC are CSX, West Virginia Department of Environmental Protection (WVDEP), United States Coast Guard (USCG), U.S. EPA, and Montgomery Fire Department.

Response efforts of 2/16/2015 focused on preventing access to the derailment scene where fires were continuing. The access road to the scene was closed and air monitoring continued in the surrounding areas and communities. Oil was reported to have reached Armstrong Creek but no oil had been observed in the Kanawha River.

The WVDEP, EPA contractor, and a CSX contractor collected four split samples from the Kanawha River overnight. The sampling locations were accessed via a tug boat. Samples were collected at the Montgomery water intake, at the 87.1 mile marker (west of Wheeler Island), and two locations downstream of the confluence of Armstrong Creek with the Kanawha River. WVDEP delivered samples to be analyzed for volatile organic compounds (VOCs) at the WVAWC laboratory in Charleston, WV. The EPA START contractor sent samples to a local laboratory to be analyzed for VOCs, semivolatile organic compounds (SVOC), and polycyclic aromatic hydrocarbons (PAH).

In the morning of 2/17/2015, it was confirmed that 28 cars, numbered 2-29, were derailed and 20 of the derailed cars were on fire. It was reported that there were seven explosions from the time of derailment until midnight 2/16/2015. Response efforts for the day continued to be containment of fire and human health protection. The plan was to let the fires burn out and then attempt to work on the derailed cars. After the fires were out, CSX planned to decouple the cars that were not affected and remove them from the scene. The fires continued to burn throughout the day. Local fire fighters planned to pull back their teams for the night due to decreasing temperatures. They planned to attempt to extinguish the remaining fires in the morning of 2/18/2015.

Water intakes at the Montgomery plant were reopened after WVAWC received the results of their sampling. The samples were reported to be clean of contaminants. When the water was restored to residents, a boil water advisory was issued to residents. An agreement was reached with the UC that water could be restored as long as frequent sampling was conducted. WVAWC was sampling the raw and processed water every hour. The USCG Strike Team was planning to conduct sampling upriver from the spill location. It was previously believed that no oil had entered the Kanawha River, however it was observed during the morning of 2/17/15 that an unknown amount of oil had reached the river from Armstrong Creek. Oil has been observed on top of the ice in the river. CSX began to dig an interceptor trench around the spill area. Vacuum trucks were deployed to collect oil from the surface of the water. A skimmer was also deployed to collect oil from the surface of the water. Boom was placed along the shore line to contain a seep in the area of the spill. It was confirmed that no rail cars were in the river.

During the evening, it was reported that a raw sewer line had broken up-stream from the spill location, and was spilling raw sewage into Armstrong Creek. The Montgomery Fire Department attempted to contact the PSD to get the lift station shut down.

CSX made and began to implement a booming strategy across Armstrong Creek and in the River to contain the oil. Vacuum trucks were used to begin recovering oil product. Pockets of oil were still present in the soil surrounding the site.

Governor Tomblin, General Hoyer of the Army National Guard, Randy Huffman of the WVDEP, and Congressman Evan Jenkins were on site to receive an update from CSX.

2.1.2 Response Actions to Date

Response actions to date focussed on restricting access to the incident site and evacuating residents in the Boomer Bottom and Adena Village areas. Local Fire Department assisting control of the fires and assiting with evacuation process. WV state police have shut down a section of route 61 near the incident area. Boom has been placed in the Armstrong Creek along with absorbents.

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

CSX is the potentially 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

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

2.2 Planning Section

2.2.1 Anticipated Activities

EPA will continue to work within Unified command to provide oversite throughout the incident.

2.2.1.1 Planned Response Activities

Additional Boom will be placed within Armstrong Creek and the Kanawha River. Install an interceptor trench to collect oil before entering the Armstrong Creek. Place vac trucks to collect oil within boom and from interceptor trench. Containment of the fires and beginning assessment of impacted rail cars. Air monitoring and air sampling within the impacted communities will continue. Hourly sampling of raw and finished water of the drinking water plant will continue. Transfer product from impacted cars and remove impacted cars from the rail line. Excavate impacted soil and dispose of appropriately.

2.2.2 Issues

Approximately 225 people were evacuated from their homes around the incident area. Due to shutting down the Montgomery water intake a boil water advisory has been issued for the area.

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

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 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

No information available at this time.

7. Situational Reference Materials

No information available at this time.

