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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: **POLREP #3**
CSX Mt. Carbon Crude Derailment

Mt. Carbon, WV

To:
From: Dennis Matlock, OSC and Melissa Linden, OSC
Date: 2/19/2015
Reporting Period: 1900 2/18/15 - 1900 2/19/15

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:	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 decending 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 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

During the night of 2/18/2015, vacuum operations at the incident site were impeded by cold temperatures. Vacuum lines repeatedly froze during the night, thwarting pumping operations of spilled product from the trench area and waterway surfaces. In addition, pumping recovery operations on the surface of the waterways was not possible due to ice cover. In total, 6,810 gallons of oil/water mixture are in the frac tank storage area located in Handley, WV. Two additional frac tanks were delivered to the Handley, WV storage area to total seven frac tanks utilized for storage of the product.

During the night, a flare up occurred under tanker #8. The flare up was extinguished and operations continued. The temperature of the product in tanker #8 increased to approximately 140°F from 100°F. In order to off-load the product from the railcars, the temperature of the railcars is required to be 70°F to 80°F. CSX will continue to obtain temperatures from the railcars in order to facilitate pumping operations. Preparation work for transfer of the product will begin as soon as conditions allow and UC approves the plan.

At 1300 hours on 2/19/2015, a flare up was reported from the area of tank #8. A plan was created to continually monitor this area for flare up. It was hypothesized that the flare would continue until the tank was moved from this area. Oil was thought to be leaking from the underside of the tank onto a hot area that could not be reached with extinguishing media due to the positioning of the tank.

As of the morning report on 2/19/2015, six cars had been re-railed. CSX continues to conduct a railcar assessment and determine a plan to maneuver all of the unaffected railcars in order to safely re-rail them.

Ice on the river hampered the effectiveness of the booms; the ice was freezing the booms in place.

The main hazards at the Site remained cold stress and the danger of fire and flare-ups. The Safety Officer posted signs around the Site warning of the dangers and symptoms of cold related stresses, such as hypothermia. Dehydration was also addressed as part of the safety briefing. Ice cleats were made available to the responders. The need for flame retardant suits in the area of the affected railcars was emphasized.

Some safety issues were reported from the derailment area of the Site. Traffic was a problem, but the crews and safety officers had a meeting and discussed the regulations for traveling in that area. A speed limit of 30 mph was enforced, and emergency lights or flashers were to be on when any vehicle was on the road to or from the derailment Site. A second safety issue at the derailment Site was due to equipment failure. A crane at the derailment work area had a cable that snapped twice. The cable was replaced after the first break. After the second break, the crane was placed out of service until it could be inspected for issues that could cause the breakage and the cable replaced. The cage around the cables contained the breakage and prevented injuries.

The field teams continued to conduct air monitoring, both at fixed and roving locations throughout Boomers Bottom and Adena Village. Particulate levels were slightly above background, but were attributed to be from residents in the surrounding communities using fire places in their homes. Data was received from the fixed location VOC and PAH analysis. One location reported a reading of one ppt naphthalene; this was attributed to background contamination from passing vehicles. Work area air quality monitoring remained at 0 ppm for VOCs.

Congressman Alex Mooney was on Site during the day. He met with representatives from the involved agencies, including CSX, EPA, USCG, and WVDEP. The Congressman was escorted to the incident site.

The United States Fish and Wildlife Service (US FWS) had representatives on the Site. The US FWS inspected an area at the confluence of Armstrong Creek and the Kanawha River, and an area downstream from Armstrong Creek in the Kanawha River where beds of mussels were said to be located.

NTSB, FBI, and FRA were on site conducting investigations into the derailment incident.

At approximately 1400 hours, WVAWC lifted the boil advisory for the area. Analytical testing at their facility confirmed that water quality met drinking water standards.

Complaints were received from residents about the closure of Highway 61. Residents had safety concerns about the safety of alternative routes to and from the un-evacuated areas of Adena Village. A plan was drafted for the re-entry of residents into the evacuated areas. It was determined that Zone 1 - Boomers Bottom could begin re-entry to their homes when the VOC and PAH analytical data was received from the laboratory. Concerns about the safety of the alternate routes into the area of Adena Village were raised. These concerns led to amending the re-entry plan for the first stage of residential re-entry to Adena Village. The UC met with the WVDOT – Highway Division and amended the re-entry plan for Mount Carbon - Zone 2 - include air monitoring on Highway 61, flaggers, a pilot car, and making Highway 61 a one-lane road at the derailment Site. Zone 3 re-entry would not begin until after the railcars were cleared from the derailment Site.

2.1.2 Response Actions to Date

Response actions to date focused on restricting access to the incident location, evacuating residents in the Boomer Bottom and Adena Village areas, extinguishing fires and flare ups originating from the railcars, and conducting constant mobile air monitoring in the residential and work areas.

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 USCG 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 oversight throughout the incident.

2.2.1.1 Planned Response Activities

Continue to collect oil within boom and from interceptor trench.
Continue assessment of railcars impacted by the fires.
Extinguish all flare ups and fires.
Continue air monitoring and air sampling within the impacted communities.
Continue collection of raw and finished water at the drinking water plant.
Transfer product from impacted cars and remove impacted cars from the rail line.
Excavate impacted soil and dispose of appropriately.
Restore basic functionality of maritime transportation system infrastructure.
Restore rail operations.

2.2.2 Issues

Threat of additional flare ups.
Winter temperatures may increase safety concerns of responders, including vehicular traffic on icy roads, cold stress, and slips/falls.
Freezing temperatures will continue to hinder effectiveness of booming operations along the shorelines of the spill 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

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 (WVSP)
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

2 Region 3 EPA OSCs
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

7. Situational Reference Materials

No information available at this time.