

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
New Augusta Train Derailment - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #5
Response Completed
New Augusta Train Derailment
Z4XW
New Augusta, MS
Latitude: 31.2055720 Longitude: -89.0592740

To: Jim Webster, USEPA R4 ERRB
Ernie Shirley, MDEQ

From: Leo Francendese, On-Scene Coordinator

Date: 9/4/2014

Reporting Period: 2/24/14 thru 7/30/14

1. Introduction

1.1 Background

Site Number:	Z4XW	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	Emergency
Response Lead:	PRP	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	1/31/2014	Start Date:	1/31/2014
Demob Date:		Completion Date:	7/30/2014
CERCLIS ID:		RCRIS ID:	
ERNS No.:	1072598	State Notification:	
FPN#:	E14428	Reimbursable Account #:	

1.1.1 Incident Category

Emergency: The On-Scene Coordinator (OSC) has entered into Unified Command with the Mississippi Department of Environmental Quality (MDEQ), Perry County Emergency Management Agency (EMA) Director and Canadian National Railway (CN). CN has been issued a verbal Notice of Federal Interest and has also been notified that a Clean Water Act (CWA) discharge has occurred which will warrant a CWA 311(c) Administrative Order.

1.1.2 Site Description

A train derailment along US Highway (Hwy) 98 in New Augusta, Mississippi. Twenty (20) rail cars carrying materials manifested as paper rolls, fuel oil, methanol, urea fertilizer, and an unplacarded material identified as environment sensitive petroleum product derailed. Thirteen (13) of the rail cars that derailed were carrying fuel oil (manifest designation). During the derailment, some of the fuel oil cars, one methanol rail car, and the material identified as environment sensitive petroleum product were damaged and released their contents.

1.1.2.1 Location

US Hwy 98, approximately 0.5 mile west of the intersection US Hwy 98 and Ms Hwy 29 in New Augusta, Mississippi.

1.1.2.2 Description of Threat

The methanol release represents a threat of fire or explosion and warranted the evacuation of nearby residents.

Up to an estimated 50,000 gallons of oil were discharged into navigable waters of the United States beginning at the drainage ditch between US Hwy 98 and the rail line. The 20 railcars that are derailed contain an approximate total volume of 360,000 gallons of crude oil as identified by the manifest, which represents an additional substantial threat of discharge to navigable waters of the US. The drainage ditch flows to the Leaf River. The approximate distance from the discharge to the Leaf River is 1/2 mile.

It is estimated that approximately 8,000 gallons of the environment sensitive petroleum product was identified as discharged to the creek adjacent to the railway on 2/2/2014.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

At approximately 0800 hours on January 31, 2014, a Canadian National Freight Train derailed in New Augusta, Perry County, MS. A total of twenty (20) tanker railcars derailed. Up to an estimated 50,000 gallons of fuel oil was discharged as a result of the derailment. The one (1) methanol rail car was reported leaking in a separate area from the crude oil. The fuel oil was discharged to a drainage ditch between the rail line and US Hwy 98. The drainage ditch drains to the Leaf River which is approximately 1/2 mile downstream. OSCs Francendese, Garrard, and Franco are on scene to oversee and direct response actions. Shortly after the derailment, local Emergency responders implemented a ½ mile evacuation zone surrounding the derailment and closed a section of US Hwy 98. The Red Cross opened an evacuation shelter to accommodate the evacuees. Eight (8) individuals remained at shelters during the evening of January 31, 2014. The shelter was closed on February 1, 2013.

2.1.2 Response Actions to Date

January 31st

- Earthen berms were constructed in the drainage ditch between US Highway (Hwy) 98 and the rail line to stop the migration of oil downstream.
- Responders plugged box culverts along US Hwy 98 which drain into effected areas to reroute runoff from precipitation. Responders temporarily stopped the leak from the methanol rail car.
- Earthen berms were constructed to contain the discharged crude oil located within the drainage ditch between US Hwy 98 and the rail line.
- Responders mobilized additional resources to address the derailed tank cars. Re-railing and wrecking activities began and continued through the night.
- US Hwy 98 eastbound was reopened and reconfigured to allow for east and west bound traffic.

February 1st

- During the morning hours of February 1st, all of the rail cars were moved and staged away from the rail line to allow for rail restoration activities. Rail restoration activities were completed and rail traffic resumed at 13:30.
- Evacuated residents along the southern side of US Hwy 98 were allowed to return to their homes on the morning of February 1st.
- Transfers from the methanol rail car began at approximately 10:30 and were completed at 22:45. The methanol was transferred into tanker trucks and transported to the final destination.
- Earthen berms were constructed and reinforced around oil-impacted areas. Reinforcing of berms was completed in anticipation of a predicted rain event. In anticipation of rain, standing water in the eastern end of the drainage ditch was pumped to increase freeboard.
- Solidification of spilled oil began in the impacted areas between US Hwy 98 and the rail line.
- Air quality monitoring was performed by Consetoga-Rover & Associates, contractor for CN, and United States Coast Guard (USCG) Gulf Strike Team (GST) in support of the EPA OSC. All air monitoring results indicated there have been no elevated readings of monitoring parameters above background.

February 2nd

- Evacuees from the northside of the US Hwy 98 began returning home this morning.
- MDEQ and USCG GST personnel accompanied the escort team. Air monitoring was conducted in homes prior to entry.
- The methanol car has been deconned and is prepared for scrap. Contents of the Urea rail cars have been transferred to frac tanks and the rail cars are being prepared for decontamination.
- The heating coils of the oil tank cars were prepared on five tank cars and are being heated for product transfer into tanker trucks for transportation to final destination.
- The heating coils on the rosin tank were prepped for heating in order to transfer to trucks.
- Solidification of discharged oil continues.
- Air quality monitoring is continuing to be performed by Conastego-Rover & Associates and USCG GST personnel. All results indicated there have been no elevated readings of monitoring parameters above background.
- An area approximately 300 yards long containing approximately 10,000 gallons of environmentally sensitive petroleum product has been discovered in the northside ditch. A small beaver dam prevented further migration of the discharge. In addition, the ditch has been bermed to prevent further downstream migration of environmentally sensitive petroleum product. The material is being recovered by vacuum trucks.
- MDEQ is coordinating with MDOT to prepare for potential impact of forecasted rainfall on Hwy. 98. Sand was placed on/in culverts as a precautionary measure to contain released materials within derailment area.

Estimates of material spilled:

(as of 02/02/2014)

Fuel Oil* - 50,350 gallons
Urea Fertilizer - 17,200 gallons
Environment Sensitive Petroleum Product - 10,000 gallons
Methanol - 100 gallons

*See Section 2.2.2 (Issues) regarding designation of "fuel oil" and "environment sensitive petroleum product"

February 3rd thru 7th

- The response continued to be managed under Unified Command consisting of CN, DEQ, EPA and Perry County EMA.
- Daily progress pertaining to response operations during this reporting period can be found in the IAPs located in the documents section of this website. The following is a summary of major operational milestones as of February 7th.
- All impacted railcars carrying either crude oil (formerly referred to as fuel oil) or petroleum distillate have been transferred and offloaded to approved locations. A detailed summary can be found at the end of IAP 5. The railcars have been deconned and await metal scrapping operations.
- Offsite disposal of crude oil impacted soils commenced as of the 7th in accordance with the overall site waste management plan also found in the documents section of this webpage.
- Containment and recovery of the environmental sensitive petroleum distillate continues in the unnamed ditch adjacent to the railway. A significant rain event was effectively managed during the course of this reporting period. Approximately 0.5 inches fell on the project while a far more substantial amount of 3 to 4 inches fell just to the NW in Hattiesburg. Improvements such as aggressively vacuuming impacted ditch water, instituting use of oleophilic fabric and increasing freeboard in downstream containment were executed to both speed up recovery and prepare for large rain events.
- USCG Marine Safety Laboratory submitted analysis of the previously identified fuel oils. This report can be found in the documents section of the webpage.
- USCG GST personnel demobed on Friday the 7th.
- USEPA support OSC's demobed during this reporting period as well as START contractor support.
- EPA OSC IC demobed on the 7th.
- EPA OSC IC continues to coordinate with DEQ and has tasked them with oversight and FOSCr duties pertaining to remaining onsite operational functions such as disposal, stream recovery and containment management, decon and demolition area recovery and containment.
- RP will continue to report in the form of Daily Status Reports (DSRs)

Estimates of material spilled:

(as of 02/07/2014)

Fuel Oil (crude oil)* - 50,350 gallons

Urea Fertilizer - 17,200 gallons

Environment Sensitive Petroleum Product (petroleum distillate) - 8,000 gallons

Methanol - 100 gallons

*See Section 2.2.2 (Issues) regarding designation of "fuel oil" and "environment sensitive petroleum product"

February 8th thru 25th

The following are highlighted items that occurred during this reporting period. More detailed coverage of the events during this operational period can be found in both the Unified Command Daily Reports and the MDEQ Sitreps. Those documents can be found under the documents section of this webpage.

- No reportable accidents occurred during this reporting period. The response has successfully maintained a "zero" accident safety record.
- The site experienced two significant rainfall events requiring the discharge of ponded sitewaters. The Unified Command decision and data evaluation can be found in the documents section of this webpage.
- Demolition and scrapping of railcars was completed
- Recovery of area used to conduct decontamination, demolition and scrapping continues.
- Containment and recovery of petroleum distillate from the the adjacent ditch continues. It is estimated that approximately 7000 gallons have been recovered.
- Disposal of wastestreams in accordance with the Waste Management Plan continues.
- The Operations and Maintenance (OM) Phase began on February 21st. CN will submit weekly updates in accordance with this plan. The plan can be found in the documents section of this webpage.

February 26th thru July 30

Unified Command has approved of the completion of the response. MDEQ performed a final inspection on 7/11/2014. A more detailed coverage of the events during this period can be found in the documents section under Operations and Maintenance Plan Reports.

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

CN (Canadian National Railway)

2.2 Planning Section

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2.3 Logistics Section

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2.4 Finance Section

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Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
MDEQ PRFA	\$66,000.00	\$65,000.00	\$1,000.00	1.52%
USCG GST	\$5,000.00	\$4,500.00	\$500.00	10.00%
TAT/START	\$15,000.00	\$13,000.00	\$2,000.00	13.33%
Contingency	\$14,469.00	\$0.00	\$14,469.00	100.00%
Intramural Costs				
USEPA - Direct	\$30,000.00	\$25,000.00	\$5,000.00	16.67%
USEPA - InDirect	\$19,531.00	\$19,531.00	\$0.00	0.00%
Total Site Costs				
	\$150,000.00	\$127,031.00	\$22,969.00	15.31%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

3. Participating Entities

3.1 Unified Command

Perry County EMA
EPA
MDEQ
CN - Canadian National Railway

3.2 Cooperating Agencies

Mississippi Department of Transportation (MDOT)
Mississippi Highway Patrol
Federal Railroad Administration (FRA)

3.3 Assisting Agencies

United States Coast Guard Gulf Strike Team (USCG GST)

4. Personnel On Site

5. Definition of Terms

MDEQ - Mississippi Department of Environmental Quality
MEMA - Mississippi Emergency Management Agency

6. Additional sources of information

7. Situational Reference Materials