U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT

Lynchburg Crude Oil Train Derailment - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region III

Subject: POLREP #4

Special Polrep Updating Incident Information Lynchburg Crude Oil Train Derailment

Lynchburg, VA

Latitude: 37.4100000 Longitude: -79.1394000

To:

From: Christine Wagner & Francisco J. Cruz, OSC

Date: 5/6/2014

Reporting Period: 5/5/2014-1200 hours 5/6/2014

1. Introduction

1.1 Background

Site Number: 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: 4/30/2014 Start Date: 4/30/2104

Demob Date: Completion Date:

CERCLIS ID: RCRIS ID:

ERNS No.: State Notification:

FPN#: E14309 Reimbursable Account #:

1.1.1 Incident Category

Crude Oil Spill

1.1.2 Site Description

Train derailment in historic district of Lynchburg, VA

1.1.2.1 Location

Rail line in front of 10 9th Street in the City of Lynchbug, VA

1.1.2.2 Description of Threat

Oil discharge onto the James River. Estimated volume 29,600 gallons of crude oil. Potential impact to drinking water intakes in Richmond and Henrico County, VA

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

This polrep continues documentation of activities at a CSX derailment site in the City of Lynchburg, VA. The incident involves a partial 16-car derailment of a 105 car crude oil train. The incident occurred on the afternoon of April 30, 2014. No injuries occurred.

This polrep updates and clarifies facts of the incident that were reported in previous polreps.

- 1. The train involved in the incident consisted of 105 cargo cars, all containing Bakken crude oil.
- 2. The cars that derailed were cars #35-#50. Of these 16 cars, 13 derailed and were de-trucked. These 13 overturned cars were uprighted onto the CSX right-of-way.
- 3. Three of the 16 cars derailed over the embankment of the James River. Of these 3, one completely lost its contents. The content of that car was 29,600 gallons. Another (upstream) car was intact. No product was released from this car. The third card was originally reported to contain approximately 25% of its

contents. This assessment was performed by the First Responders on scene using a thermal imaging camera. However, when the car was extracted from the bank and placed upright, CSX personnel were able to ascertain that the car did not breach.

- 4. In summary, the release of crude oil into the James River was caused by the release of one tank car carryinjg 29,600 gallons of crude oil. The vapors from this oil reached an unknown ignition source, and caught fire, which also spread to the river bank. EPA does not have knowledge and cannot speculate on the quantity of the oil which was involved in the fire.
- 5. Cars #34 and #51 did not derail, but the wheels went off track. Car #34 was removed with the cars unaffected by the derailment. Car #51 will be offloaded due to a damaged wheel.
- 6. Booming is still in place. Oil sheen is still leaching from the embankment where the cars overturned.

The incident remains in the emergency phase, but operations at this time are limited to daylight hours. CSX and Lyncburg Police Department are maintaining 24-hour scene security. For more details regarding the day of the incident, please refer to POLREP #1.

NTSB has demobilized from the incident scene to continue the investigation offsite.

2.1.2 Response Actions to Date

Operations

CSX Operations Pertaining to Derailment

The transfer operation was scheduled to begin on Sunday 5/4/14, but was postponed due to the NTSB investigation. Twenty empty rail cars arrived on Site on Monday 5/5/14 at approximately noon. These cars have less capacity then the original cars, so some of the product will be divided among the new cars. CSX completed transferring 4 of the cars by 11 pm on 5/5/14.

On 5/6/14, CSX contractors were preparing to resume transfer operations. A contractor disconnected a line which was still under pressure which resulted in 5 contractor personnel becoming contaminated with oil. Firefighters who are on standby performed emergency decon. The workers removed their clothing and performed a full decon. The workers were evaluated by EMS, also already on Site. None of the workers experienced any injuries. The CSX Incident Commander directed a safety shutdown of all personnel. CSX and the contractor reconstructed the incident and documented the events that led up to the incident. Several more safety briefings were held before work resumed several hours later.

WEL, a CSX contractor, applied absorbent to the spill area and bagged up all of the contaminated soil. Decon water was drummed and staged for disposal.

Transfer operations resumed at approximately noon. CTEH continues to perform air monitoring in the area

Environmental Operations

The live online reporting system for sheen sightings is active. Access to the system is limited to Unified Command agencies. CSX contractor Arcadis sent email information on the system to the Unified Command Members.

EPA and VDEQ reviewed surface water sample results to date. No elevated levels of fuel compounds were detected in any of the surface water samples. The samples are collected daily at 4 locations, each with 3 depth transects. VDEQ and EPA offered recommendations to CSX for modifications to analysis as needed.

CSX contractor Arcadia received preliminary soil results from the excavation area. Elevated levels of semivolatile organic compounds suggest that additional remediation will be needed in this area.

CSX contractor Arcadia submitted a draft shoreline assessment plan. CSX, VDEQ, and EPA will discuss this plan and make recommendations later today.

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

CSX has accepted responsibility for the cleanup...

2.2 Planning Section

2.2.1 Anticipated Activities

Transfer operations will continue during daylight hours. Transfer operations are expected to be complete tomorrow or Thursday.

Once transfer operations are complete, the empty cars will be transferred by flatbed truck to a CSX yard in Gladstone, VA. The vapors will be removed and scrubbed at that location

CSX contractors will continue to maintain boom at the spill Site and downstream of the incident location.

VDEM will continue to coordinate Unified Command activities on Site.

VDEQ will continue to monitor environmental sampling and analysis work.

The City of Lynchburg continues to provide Fire, Medical, and Law Enforcement Support.

The EPA OSC will deliver product samples to the EPA Fort Meade Laboratory.,

2.2.1.1 Planned Response Activities

CSX will continue daylight operations to transfer and remove the damaged cars. Once the cars are removed from the Site, CSX will cease logistics at the current location. CSX will continue to work with local, Commonwealth, and Federal agencies from an alternate location.

Environmental work will continue to perform extent of contamination assessment, document sheen sightings, and prepare for cleanup and waste disposal.

CSX is planning to bring in rip-rap by rail for soil and erosion control on the embankment where the release occurred.

2.2.2 Issues

- 1. During sampling, CSX contractor EnviroScience recorded low pH levels in a section of the James River in Powhatan County. VDEQ Piedmont Region is investigating. This low pH level is likely unrelated to this spill. However, this finding may indicate a release of a hazardous substance from another location.
- 2. The Depot Grille, which has been closed since the incident occurred, was granted permission to re-open today.
- 3. The OSC advised CSX that any remediation products used on Site must be approved on the NCP Product Schedule.
- 4. EPA will complete onsite operations today. EPA will continue to coordinate with CSX and VDEQ.

2.3 Logistics Section

CSX is handling all logistics for the cleanup and derailment.

The City of Lynchburg is providing fire, medical, and law enforcement support

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 City Of Lynchburg VDEM VDEQ NTSB EPA

3.2 Cooperating Agencies

Virginia Department of Health Virginia Department of Public Safety EPA Office of Water EPA Environmental Science Center Fort Meade Henrico County City of Richmond

4. Personnel On Site

City of Lynchburg

Fire & Eemrgency Services EMS Law Enforcement Public Works

CSX

Hepaco

WEL Arcadis CTEH Enviroscience Cranemasters

VDEQ VDE

EPA

5. Definition of Terms

VOA (or VOC) - Volatile Organic Analysis or Volatile Organic Compounds \mbox{SVOC} - Semi-volatile organic compounds

6. Additional sources of information

Additional photos have been added to the "IMAGES" section of the website

7. Situational Reference Materials

No information available at this time.