

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Johnson Road Trail Creek Suspected Pipeline Oil Spill - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #2
Progress & Final POLREP
Johnson Road Trail Creek Suspected Pipeline Oil Spill

Michigan City, IN
Latitude: 41.6744300 Longitude: -86.8456300

To:
From: Ramon Mendoza, On-Scene Coordinator
Date: 6/16/2011
Reporting Period: 1/2/2011-6/09/11

1. Introduction

1.1 Background

Site Number:	Z5K8	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:	12/31/2010	Start Date: 12/31/2010
Demob Date:	2/17/2011	Completion Date: 6/9/2011
CERCLIS ID:		RCRIS ID:
ERNS No.:		State Notification:
FPN#:	E11506	Reimbursable Account #: 2/V/SZ/172/95/0/E11506/74100/XXXX

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

Site is a rural area south of Michigan City, Indiana where Trail Creek, Johnson Road, and I-94 intersect. There is a Indiana DNR (INDNR) Fisheries public access adjacent and the creek is a designated salmon/trout stream. The creek is a direct tributary to Lake Michigan and is approx 7.5 stream miles from Lake Michigan. The area is primarily in a natural state with mostly rural residential and some commercial uses just out of site of the creek. Free product and oil sheen has been observed flowing out of a storm water outfall from I-94, Locaton of the storm water outfall area is N41.67443 Deg W 86.84563 Deg. This outfall is discharging an oil sheen into Trail Creek, which flows about 7.5 miles into Lake Michigan.

There is a 10 inch Marathan Pipeline located about 160 feet west of the storm water outfall. The pipeline if a 10" refined product line from terminals in Griffith, IN to another near Muskegon, MI operated by Marathon Pipe Lines installed in the 1960's. It also follows I-94 just south of Trail Creek, but turns north along the west side of Johnson Rd and passes under the creek and highway before turning east again. This line moves various product types through it by means of batching.

1.1.2.1 Location See Site Description.

1.1.2.2 Description of Threat

Indiana DNR rec'd initial report about Dec. 21, 2010 from citizen and confirmed presence of sheen and odor. Indiana Department of Environmental Management (IDEM) and LaPorte County Haz Mat (LCHM) investigated and discovered a steady oil sheen being discharged from I-94 storm drain into Trail Creek. They deployed containment measures such as underflow dams and absorbent booms on Trail Creek and worked to identify possible sources. Initially thought to be an unreported diesel release from unidentified truck, the county was going to monitor until it finished washing out.

After over 1 week of monitoring IDEM observed increasing levels of free product. No UST or AST's can be identified in the area, nor any record or evidence of any large vehicular release found and **suspected** that the Marathon Pipe Line closeby may be the possible source. Upon notification Marathon shut down the pipeline, which means it has been without flow but contains product under pressure, since about 4:20 pm Thur Dec. 30,

2010. Marathon has indicated that the line is holding pressure with nominal loss.

IDEM requested USEPA Region 5 assistance on Dec. 30, 2010 and the LCHM reported the spill to the NRC on Dec. 30, 2010. USEPA OSC mobilized to the site on Dec. 31, 2010.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

NA

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

(Actions from 12/31-1/1 in POLREP #1)

On 1/2/2011 at 0900 hours, Marathon put the pipeline back into operation. Marathon's "Start-up Plan" includes continuous monitoring for 24-48 hours after the pipeline was put back into operation. The continuous monitoring included the use of an LEL meter and visual observation of the creek. No LEL readings were reported and no increase in sheen or odors were observed on Trail Creek. Since 1/3/2011, Marathon has returned to check the discharge location and the boom site at a frequency of twice every 24 hours (morning and afternoon). These visual walkover inspections were conducted until 1/7/11 to ensure that a release has not occurred.

On 1/1/2011 and 1/2/2011, Marathon consultants (Arcadis) collected soil samples from soil borings surrounding the pipeline. Soil samples were collected from 5-6 feet bgs and 9-10 feet bgs. USEPA START contractor collected split samples with two of the soil samples collected from 9-10 feet bgs. Marathon submitted the samples for laboratory analysis of VOCs, SVOCs, and PAHs. START submitted the samples for laboratory analysis of VOCs, SVOCs, GRO, and DRO. Analytical results from Arcadis' and START samples confirmed that the soils near the pipeline are not grossly contaminated and are well below the background soil sample. As a result of these analytical results, EPA has determined that Marathon's pipeline is not leaking at this time.

On 1/4/2011, analytical results were received for the liquid split sample collected by USEPA from the outfall pipe on 12/31/2010. The analytical results indicated GRO at 6,100 ppm and DRO at 650,000 ppm. This confirms that gasoline range organics type oil was the type being discharged.

On 1/4/2011, INDOT drilled soil borings in the median of I-94 and IDEM collected three soil samples from the soil borings. The samples were collected at 42 inches below ground surface and submitted for laboratory analysis of GRO and DRO. Analytical results for GRO and DRO were non-detect in all 3 samples.

On 1/5/2011, a conference call was held between all participating agencies. In attendance were USEPA, START, IDEM, LCHM, Marathon, and RAD Analytical Services (Marathon laboratory). Topics discussed during the meeting included sample analytical results, and action items. The results from the Marathon and USEPA data did not show contaminants above background and did not indicate that the Marathon Pipeline was leaking.

Based on the information available, USEPA ordered its response contractors to stand down from the staging areas on 1/5/11.

Marathon decommissioned and grouted the soil borings installed on 1/2/11, mostly for security reasons.

INDOT and Marathon have maintained the containment and absorbent booms deployed in Trail Creek until the IDEM investigation is over.

LCHM , with INDOT assistance continued to maintain and recover oil sheen from the storm drain outfall.

IDEM and LCHM continued their investigation into the source of the mystery oil sheen discharge and kept USEPA informed. They continued to observe oil sheen discharging from the storm drain pipe through February 2011.

At the request of IDEM, USEPA collected samples from the storm pipe in 2/8/11 and confirmed the presence of small concentrations of fuel.

IDEM and EPA observed small amounts oil sheen still discharging from the storm drain into the overflow dams and into Trail Creek on 2/17/11. However, the volume was much reduced from December and is reflected by the lab results.

A meeting was held on 2/17/11 between the INDNR, IDEM, INDOT, USEPA, and LCHM. The Parties agreed that the oil sheen discharging from the storm water pipe has gone down in volume and concentrations compared to December 2010.

The Parties believe that the actual source of the oil sheen is still a **mystery** at this time. Since the outfall is on INDOT property, INDOT agreed to consider the installation of a more permanent oil/water separator system should the sheen continue for a multiyear period. LCHM with INDOT assistance will maintain the current underflow dam and absorbent booms to prevent anymore more discharge of oil into Trail Creek.

On 2/17/11, IDEM requested that USEPA be available to respond to a catastrophic pipeline failure since, IDEM continues to suspect that the Marathon Pipeline may be the source of the

intermittent/small amounts petroleum releases.

Inspections/site visits were conducted by IDEM and LCHM from February through May 2011. During this period. IDEM reported that small amounts of intermittent sheen and odors still appear but only at major rain events at the discharge of the I-94 storm drain to Trail Creek.

On 6/9/11 IDEM and LaPorte County Emergency Responders informed the USEPA OSC that they will continue routine inspections and regulatory oversight of the Site. IDEM will oversee INDOT's commitment to operate and maintain the underflow dam/absorbent boom system currently in place until the intermittent sheen releases disappear. IDEM will also request for Marathon's results from their pipe inspection schedule later in 2011. After a period of one year, IDEM, LCHM, and USEPA will discuss the effectiveness of the underflow dam/boom system and determine if further action is necessary.

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

USEPA issued a Notice of Federal Interest to Marathon representatives on January 1, 2011. Marathon chose to not sign the Notice in a response letter dated January 2, due to lack of evidence that their pipeline was leaking.

The outfall infrastructure where the discharge is occurring is owned by INDOT. USEPA issued a notice of federal interest to representative of INDOT on 2/17/11. INDOT has promised to cooperate.

IDEV has requested that they be the enforcement lead on 06/09/2011.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

Contaminated sorbent booms and free product disposal was being conducted by the LaPorte County Hazardous Materials Team until May 2011. Indiana Department of Transportation will assume responsibility for operations, maintenance and waste disposal from June 2011.

R5 Priorities Summary		
This is an Integrated River Assessment. The numbers should overlap.	Miles of river systems cleaned and/or restored	1
	Cubic yards of contaminated sediments removed and/or capped	0
	Gallons of oil/water recovered	0
	Acres of soil/sediment cleaned up in floodplains and riverbanks	0
Stand Alone Assessment	Acres Protected	
	Number of contaminated residential yards cleaned up	0
	Human Health Exposures Avoided	100
	Number of workers on site	12

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

INDOT will maintain and operate the underflow dam and absorbent booms to ensure no more discharges of oil into Trail Creek for up to a year.

IDEML and LCHM will maintain oversight and monitoring of the Site to ensure INDOT carries out its voluntary action.

2.2.1.2 Next Steps

See Section 2.2.1.1.

2.2.2 Issues

Trail Creek is a spawning and fishing ground for salmon and trout. All concerns from the INDNR and community will be addressed as soon as possible.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

USEPA and IDEM have identified the following as a main safety issues at the site:

- Working with steep embankments along Trail Creek (slips, trips, falls).
- Working next to a freeway in service (I-94)
- Working in cold weather/winter conditions.
- Working next to a flowing body of water

2.6 Liaison Officer

2.7 Information Officer

2.7.1 Public Information Officer

2.7.2 Community Involvement Coordinator

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

LaPorte Co HazMat (LCHM)

LaPorte Co EMA (currently leading Logistics)

Indiana Department of Environmental Management (IDEM)

US Coast Guard

Indiana Dept of Transportation [InDOT] (as default RP for the time being)

Indiana Dept of Natural Resources [INDNR]

LaPorte Co Sheriff

Coolspring Volunteer Fire Dept

Marathon Pipe Line LLC

4. Personnel On Site

INDOT, LCHM, INDNR personnel are onsite on a weekly or as needed basis to observe and maintain the storm water outfall and absorbent booms.

5. Definition of Terms

See cooperating agencies

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

