

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Plains Pipeline Oil Spill - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #8
Final
Plains Pipeline Oil Spill

Pocahontas, IL
Latitude: 38.8317351 Longitude: -89.5980074

To: Mike Buss, City of Highland

From: Kevin Turner, OSC
Andrew Maguire, OSC

Date: 9/14/2015

Reporting Period: 7/21/2015 - 9/1/2015

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: 7/10/2015	Start Date:	7/10/2015
Demob Date: 7/23/2015	Completion Date:	9/1/2015
CERCLIS ID:	RCRIS ID:	
ERNS No.:	State Notification:	IEPA
FPN#: E15520	Reimbursable Account #:	

1.1.1 Incident Category

Emergency Response related to an estimated 4,200 gallons of crude spilled from the Plains Pipeline pump station near Pocahontas, Illinois, that was reported to the NRC Spill Hotline (NRC#: 1122376) on Friday, July 10, 2015, with oil reaching Silver Creek and ultimately into the mouth of Highland Silver Lake. The crude oil material released was a bottomless Canadian Sour Crude Blend, an MSDS is located in the documents section of the website at: www.epaos.org/PlainsPipelineOilSpill.

1.1.2 Site Description

The Plains Pipeline (MP-29) Release ER Site encompassed a 12 mile stretch of unnamed ditches that combined into Silver Creek which ultimately discharged into Highland Silver Lake. Highland Silver Lake is a small recreational lake which also serves as a water reservoir that also supplies the City of Highland, Illinois, with its drinking water.

1.1.2.1 Location

The Plains Pipeline Release ER Site address is 17720 Baumann Road, Pocahontas, Illinois. The release site was at an active petroleum crude oil pumping station.

1.1.2.2 Description of Threat

While the upper most portions of the release site is situated in a rural agricultural environment, crude oil was observed approximately 8 miles away (and downstream of the pumping station) in the upper (northern) portion of Highland Silver Lake. Highland Silver Lake is a 574 acre water-body and there is a drinking water intake in the southern most end of the Highland Silver Lake for the City of Highland operated water treatment plant. The discharge presented a threat to the primary source of drinking water for Highland's 10,000 residents.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Please refer to POLREP # 1, 2, 3, 4, 5, 6 and 7.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The Operations Branch was divided into 5 Divisions and 2 Groups to support the objectives of the response. Divisions A-E are divided geographically and covered booming, recovery, remediation, and pipeline repair operations.

The Environmental Group provided air monitoring, environmental sampling and shoreline assessment throughout to the end of the response.

The Waste Management Group supported waste collection and characterization for all the project disposal needs.

2.1.2 Response Actions to Date

On July 10, 2015, Plains Pipeline, LLC, reported the release of approximately 100 barrels (4,200 gallons) of crude oil from a pipeline fitting at a pump station located in Pocahontas, Bond County, Illinois (NRC Incident Report 1122376). The main pipeline is a 20 inch line that runs to a refinery in Wood River, Illinois. Plains Pipeline did shut-off two pipelines — Line 901 and Line 903 — in response to that incident while an investigation was conducted into the cause of the spill.

The oil was a “bottomless Canadian Sour Crude Blend” that was discharged onto the ground within the facility and ultimately into a series of storm water ditches leading to the tributary of Silver Creek. Unusually higher than normal seasonal rainfall proceeded several days before the actual release and storm water flow velocities were very high during the release. Silver Creek ultimately discharges into Highland Silver Lake (a drinking water reservoir). The Highland Silver Lake is a 574 acre water-body used for not only fishing and water recreation purposes which also supports the City of Highland Parks & Recreation Department, but, also serves as the primary drinking water source for a community of approximately 10,000 people.

Overall, significant progress was made in recovering oil from the Site. On July 25, 2015, the last oil recovery underflow dam location was removed. The present IAP for O&M activities has been amended to extend until August 28, 2015.

Due to the progress in the oil recovery and cleanup operations, the Planning Section was de-mobilized and is was operating offsite but with a local emphasis. The ICS was streamlined to a local operations chief as the IC lead. Unified Command with the City, Illinois Environmental Protection Agency (IEPA), and United States Environmental Protection Agency (USEPA) was maintained and has ultimately allowed a transition from USEPA to IEPA jurisdictional authority.

An O&M Plan was developed and approved by Unified Command to address any lingering concerns from past oil recovery operations and to address the potential oil sheen that might be observed during local rainfall events. Please refer to the previously submitted Rapid Assessment Team (RAT) maps for reference to completed oil recovery and Shoreline Cleanup Assessment Techniques (SCAT) that occurred during the response.

The past O&M activities were:

- First rainfall event occurred on August 5, 2015, of approximately 2.5 inches with no observed sheen
- Removed both Underflow Dams 1 & 2 on August 6, 2015, as approved by both agencies
- On August 7, 2015, O&M was required with all established boom sites and replaced sorbent boom and removed hard boom from the State Road 160 Bridge
- Second rainfall event occurred on August 9, 2015, of approximately 0.7 inches with no observed sheen
- Third rainfall event on August 19, 2015, of approximately 2.25 inches with no observable sheen and replaced adsorbent boom at Fairview Road
- Fourth Significant Rain Event on August 6, 2015, of approximately 0.6 inches with no observable sheen
- On September 1, 2015, USEPA and IEPA approved the removal of all remaining adsorbent and hard booms

The details in each division were as follows:

Division A:

Impacted soils within the pumping station facility has been removed and delivered to a local Subtitle Class “D” Landfill.

Many roll-of-boxes of oil impacted absorbents, vegetation and miscellaneous debris materials were staged at the pumping station or at the Plains Pipeline Patoka, Illinois, facility awaiting final disposition arrangements.

While the amount of total oil recovered is under evaluation, please note that the largest amount of observed oil that coated vegetation and shoreline was in Division A. At this time, the Agencies await the mass balance calculations of recovered oil totals.

All underflow dams have been removed and cleaned along with two cascade boom locations that will be maintained as part of O&M activities.

On July 20, 2015, water flushing operations were discontinued to allow rain events naturally flush the ditches into the dams for lingering oil sheen recovery.

SCAT assessment teams reported mortality of fish, frog, and crawfish all along Division A. This report was shared with the IEPA and IDNR contacts.

All oiled vegetation and impacted debris was removed to the best extent practical. O&M procedures are being fully

addressed by Plains Pipeline personnel or its contractors.

Division B:

Previously, sheen upon the water surface and oiled vegetation was sparsely observed downstream of the former boom location #3. Crews worked on areas identified by SCAT, recovered both collected oil and oiled vegetation from several locations along the creek. As of July 20, 2015, cleanup operations are completed.

The Fairview Bridge boom location was maintained as specified by the O&M Plan. This boom location was modified from a cascading system to a single oil absorbent boom on August 6, 2015.

Division C:

Crews completed work on areas identified by SCAT assessment team recovering collected oil from locations along the creek. As of 7/25/2015, crews completed recovering oil.

On July 30, 2015, absorbent booms were removed from the Ludwig Road location.

On August 6, 2015, absorbent boom at the Pocahontas Road location was removed.

Division D:

Previously, EPA and START conducted daily visual assessments of Silver Creek and Highland Silver Lake to ensure the sheen was contained by allowing no oil getting past Boom Site #7 in Silver Creek.

Note: On July 18, 2015, EPA approved the relocation of Boom Site #7 to a cascading boom system and approved the removal of Boom Site #8.

The SCAT assessment team previously identified a 20-yard long area of oiled shoreline along with minor amounts of oil impacted debris and vegetation at the State Road 160 Bridge boom location. On July 20, 2015, the State Road 160 Bridge cascade booming location added solar power lighting to the "no-wake" caution buoys so as to warn members of the public that crossing the boom could potentially damage the boom. This cascade boom location remained as part of the approved O&M Plan until September 1, 2015.

Division E:

As of July 20, 2015, observations by the OSC and START confirm that there is no oil sheen from the Plaines pipeline spill.

The City of Highland, Illinois, fire department's boom which was deployed on the first day of the response has been removed, cleaned and replaced. This boom is now staged at the Plains Pocahontas Station for deployment if needed in the future. Plains Pipeline has acquired a new boom for the fire department.

The protective cascade booms at the City of Highland water treatment plant intake was being maintained until further notice.

Environmental Monitoring:

The results of the SCAT team assessment were used to drive the oil recovery operations. Due to the threatened consideration of this municipal water supply reservoir, twice daily sampling was performed. A total of 81 surface water and 51 drinking water samples were collected with preliminary and final results that showed no detections of crude oil constituents.

A total of 85 air samples were collected with final results showing no detections of crude oil constituents.

In all, a total of 1,958 direct reading instrument monitoring readings were taken with no detections of Benzene, Hydrogen Sulfide, Hexane, Toluene, VOCs, or LEL.

Additionally, a total of 16 sediment samples, 69 soil samples, 174 waste characterization samples and 3 flush water samples were also collected.

The City of Highland continued to use the drinking water intake in Highland Silver Lake. As a precautionary measure, an emergency source of drinking water was set up from a different non-impacted watershed but was never utilized.

At 0924 hours on July 18, 2015, the pipeline between the Pocahontas Pumping and Wood River, Illinois, was returned to normal system operation.

2.1.2.1: Public Outreach

On July 17, 2015, Highland, Illinois, City Manager, Mark Latham, and Congressman John Shimkus, R-Collinsville, took a 30-minute helicopter ride over the site. OSC Maguire also met with the congressman to tour the area of the boat launching operation on Prairie Road near Grantfork, Illinois. The congressman said he believes the company's response was "adequate" and also said he was "confident that all necessary steps are being taken to contain and clean up the oil." Congressman Shimkus further stated that he was "especially pleased" by the cooperation between landowners, Highland, Plains Pipeline and government regulators.

On July 20, 2015, Senator Dick Durbin visited the Plaines Pipeline Spill Site accompanied by OSC Mendoza, Highland's City Manager, Police Chief, Illinois EPA, and Plains Pipeline Personnel (Management) met with him at the Site of the release (Pocahontas, IL, pump station) and travelled to Fairview bridge boom site, and City of Highland water treatment/intake facility. Plains Pipeline managers briefed the Senator and showed him photos showing the progress of the cleanup from the first day of the spill to current conditions on that day. Senator Durbin asked the Plains people lot of questions on the cause of the release, what failed, how the spill was discovered, and their response timeframe, (mostly PHMSA related questions). OSC Mendoza showed the Senator the extent of the oil contamination in relation to the intake at Silver Lake and the status of the cleanup in general. Senator Durbin thanked everyone and left to another venue

at about 11:50am. The media was invited but did not show up.

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

A Notice of Federal Interest was issued to Plains Pipeline on 7/11/2015.

On July 14, 2015, the U.S. DOT, Pipeline and Hazardous Materials Safety Administration issued a Corrective Action Order to Plains Pipeline, LP's, Pocahtontas, Illinois, facility. (CPF No. 3-2015-5007H)

On August 10, 2015, the IEPA issued a "Violation Notice" to Plains All American GP LLC., (VN # E-2015-0022 – Release Incident: 20150760).

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Oily Rock/Dirt	Crude Oil impacted solids	1,185.3 tons	NA	Land Applied	Republic Services Allied Waste Services Roxana Sanitary Landfill Edwardsville, IL
Oily Debris/Vegetation	Crude Oil impacted debris	102.19 tons	NA	Land Applied	Republic Services Allied Waste Services Roxana Sanitary Landfill Edwardsville, IL
Oily Water	Crude Oil impacted water	83,036 gallons	NA	Biological	Illini Environmental, Inc. Caseyville, IL
Oily Water (Haz)	Crude Oil impacted water	19,058 gallons	NA	Biological	Heritage Environmental Services Wood River, IL

Regional Metrics

This is an Integrated River Assessment. The numbers should overlap.	Miles of river systems cleaned and/or restored	12.5
	Cubic yards of contaminated sediments removed and/or capped	1185 tons rock/dirt 102.19 tons oiled vegetation
	Gallons of oil/water recovered	102,094 gallons
	Acres of soil/sediment cleaned up in floodplains and riverbanks	0
Stand Alone Assessment	Number of contaminated residential yards cleaned up	0
Contaminant(s) of Concern	Number of workers on site	225
	Crude Oil	

Oil Response Tracking

Estimated volume	Initial amount released	4200 gallons
	Final amount collected	170 gallons
CANAPS Info	FPN Ceiling Amount	
	FPN Number	
	Body of Water affected	Highland Silver Lake

Administrative and Logistical Factors (Place X where applicable)

Precedent-Setting HQ Consultations (e.g., fracking, asbestos)	X	Community challenges or high involvement	Radiological
More than one PRP		Endangered Species Act / Essential Fish Habitat issues	Explosives
AOC		Historic preservation issues	Residential impacts
UAO		NPL site	Relocation
DOJ involved	X	Remote location	X Drinking water impacted
Criminal Investigation Division involved		Extreme weather or abnormal field season	Environmental justice
Tribal consultation or coordination or other issues	X	Congressional involvement	High media interest
Statutory Exemption for \$2 Million		Statutory Exemption for 1 Year	Active fire present
Hazmat Entry Conducted – Level A, B or C	X	Incident or Unified Command established	Actual air release (not threatened)

Green Metrics

Metric	Amount	Units
Diesel Fuel Used		gallons
Unleaded Fuel Used		gallons
Alternative/E-85 Fuel Used		gallons
Electricity from electric company		kWh
Electric Company Name and Account #		
Electricity from sources other than the electric company		kWh
Solid waste reused		enter
Solid waste recycled		enter
Water Used		gallons

2.2 Planning Section

2.2.1 Anticipated Activities

None. All work is completed at this time

2.2.1.1 Planned Response Activities

None. All work is completed at this time

2.2.1.2 Next Steps

No additional steps are required as O&M phase response milestones were completed on September 1, 2015, including the final transition to IEPA jurisdictional authority.

2.2.2 Issues

No issues at this time.

2.3 Logistics Section

Plains Pipeline personnel: 5

Plains Pipeline contractors: 7 – 15 as needed depending on assignment.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

Steve Miller, Lee Haslam (Plains)

2.5.2 Liaison Officer

Kevin Cunningham (Plains)

2.5.3 Information Officer

Brad Leone (Plains)

3. Participating Entities

3.1 Unified Command

US EPA
City of Highland
Plains Pipeline
Illinois EPA

3.2 Cooperating Agencies

PHMSA
Illinois Department of Natural Resources
Illinois Department of Public of Health

4. Personnel On Site

IEPA: 1
RP: 5
RP Contractors: 7 - 15

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

www.epaossc.org/PlainsPipelineOilSpill
www.mp29response.com

6.2 Reporting Schedule

This is the final POLREP.

7. Situational Reference Materials

Archived at:

www.epaossc.org/PlainsPipelineOilSpill
www.mp29response.com