

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Cline Ave Ditch Oil Sheen Site - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #5
continued maintenance
Cline Ave Ditch Oil Sheen Site

Gary, IN
Latitude: 41.6203911 Longitude: -87.4313772

To: Ryan Groves, IDEM

From:

Date: 3/19/2015

Reporting Period: continuing

1. Introduction

1.1 Background

Site Number:	Z5KF	Contract Number:	
D.O. Number:	0059	Action Memo Date:	
Response Authority:	OPA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	3/21/2011	Start Date:	3/21/2011
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	E11513	Reimbursable Account #:	

1.1.1 Incident Category

1.1.2 Site Description

The Site consists of two vacant parcels (40-0150-002 and 40-0150-011). A roadway ditch runs along the west site of the site. The site was previously overgrown with vegetation and had areas of standing water. Much of the site is now under redevelopment by the Gary Airport Authority. An approximately 24 acre area of the property was historically used to dispose of tank pit bottoms.

1.1.2.1 Location

The Site is located along a drainage ditch at the intersection of Gary Avenue and Cline Avenue in Gary, Lake County, Indiana. The Site is located in an industrial area and is bordered by an electrical substation and Gary-Chicago Airport Expansion) to the north and east, Cline Avenue to the west, and Gary Avenue to the south.

1.1.2.2 Description of Threat

On January 10, 2011, the National Response Center (NRC) (Report No. 964208) received a call that oil sheen was observed in the Cline Avenue Ditch north of the intersection of Cline Avenue and Gary Avenue in Gary, Lake County, Indiana. British Petroleum (BP) investigated whether one of their pipelines underlying the Site was leaking. As a precaution, BP consultants, Heritage Environmental, placed absorbent boom in the ditch to remove the sheen and prevent contaminants from migrating to the nearby Grand Calumet River. Samples were collected of the spent absorbent boom from the ditch and analyzed for disposal parameters. Analytical results from a water sample collected by BP indicated that the sheen was not consistent with crude oil and is a mixture of components suspected to be a distillate and lube oil.

Oil is continuously releasing to a roadside ditch from the walls at multiple points and possibly from beneath, along Cline Ave. in Gary, IN. The sheen is visible for approximately 500 ft, at which point it enters a culvert underground. The sheen is once again visible in the Grand Calumet River at the point of discharge approximately, one half mile from the culvert. The Grand Calumet flows into Lake Michigan approximately five miles from the discharge point.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On March 21, 2011, the United States Environmental Protection Agency (U.S. EPA) and their Emergency and Rapid Response Services (ERRS) contractor, Environmental Restoration, LLC (ER), mobilized to the Site to place absorbent boom in locations where sheen was observed in the ditch. Four areas were observed with oil sheen, with the most upstream location observed at approximately 41°37'13.76" north latitude and 87°25'52.84" west longitude and the furthest downstream location observed at two outfalls that discharge from the ditch into the Grand Calumet River.

On April 1, 2011, U.S. EPA, ERRS, and WESTON START, mobilized to the Site to replace used absorbent boom in the ditch and conduct sampling activities. A total of 7 sheen samples (SHN01 through SHN07) and 3 soil samples (SOIL02, SOIL05, and SOIL06) were collected in and along the ditch. The sheen and soil samples were submitted to the U.S. Coast Guard (USCG) Marine Safety Laboratory (MSL) for fingerprinting (forensic oil) analysis. In addition, the soil samples were submitted to STAT Analysis Corporation (STAT) for analyses of total petroleum hydrocarbons (TPH) as gasoline range organic (GRO), diesel range organic (DRO), and extended range organic (ERO).

The USCG MSL fingerprinting analysis was inconclusive. Per the Oil Sample Analysis Report dated April 21, 2011, the sheen samples SHN01, SHN02, SHN05, SHN06 and soil samples SOIL02, SOIL05, SOIL06 were representative of spilled oil. The analyses indicated that these samples contained an intermediate to heavy mixture of petroleum hydrocarbons. Volatile organic compounds (VOCs) were present in these samples, which indicate that the samples are only slightly to moderately evaporatively weathered. These samples are all related to each other through a common source of petroleum oil; however, each sample had a unique PAH fingerprint which indicates they are not all from the same exclusive chemical source. Sheen samples SHN03, SHN04, and SHN07 did not contain a quantity of petroleum oil sufficient for comparison purposes. The analytical results from STAT were as follows:

- TPH GRO results ranged from 0.72 to 110 milligrams per kilogram (mg/kg)
- TPH DRO results ranged from 42,000 to 80,000 mg/kg
- TPH ERO results ranged from 38,000 to 100,000 mg/kg

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On going boom maintenance is being conducted weekly at the site. The effectiveness of the containment is being monitored by US EPA and IDEM. Quarterly gaugings of on site monitoring wells are being conducted. Monitoring well and all other data can be provided upon request to the OSC

Quarterly gauging will continue until further deemed unnecessary.

2.1.2 Response Actions to Date

The waterway has been boomed in four places. A map of the boomed waterway can be provided upon request.

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

US EPA is currently working with multiple stakeholders to enter into a long term plan for containment and maintenance.

2.1.4 Progress Metrics

Waste manifests can be provided by the OSC upon request.

2.2 Planning Section

2.2.1 Anticipated Activities

Legal agreements have been drafted with several different stakeholders. Upon completion and execution of these agreements they can be shared with any requestor. Plans from appropriate parties have been submitted and are currently under EPA review.

2.2.1.1 Planned Response Activities

Continued boom maintenance is scheduled weekly, and will continue until appropriate stakeholders agree and take control of boom maintenance or agreed equivalent measure. Quarterly well gauging will also continue accordingly.

2.2.1.2 Next Steps

Finalize agreements with stakeholders and execute accordingly

2.2.2 Issues

None.

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

No information available at this time.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

US EPA

Indiana Department of Environmental Management (IDEM)

Indiana Department of Transportation, Gary Sub-Division (INDOT)

US Fish and Wildlife Agency

Gary Airport Authority

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.