

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Little Traverse Lake H2S - Removal Polrep  
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region V

**Subject:** POLREP #2  
Second POLREP  
Little Traverse Lake H2S  
  
Maple City, MI

**To:** Tom Fountain, BLHD  
Lisa Quiggle, MDCH

**From:** Ralph Dollhopf, OSC

**Date:** 2/24/2015

**Reporting Period:** January 29 - February 23, 2015

1. Introduction

1.1 Background

<b>Site Number:</b>	<b>Contract Number:</b>
<b>D.O. Number:</b>	<b>Action Memo Date:</b>
<b>Response Authority:</b> CERCLA	<b>Response Type:</b> Emergency
<b>Response Lead:</b> EPA	<b>Incident Category:</b> Removal Assessment
<b>NPL Status:</b> Non NPL	<b>Operable Unit:</b>
<b>Mobilization Date:</b> 12/18/2014	<b>Start Date:</b> 12/15/2014
<b>Demob Date:</b>	<b>Completion Date:</b>
<b>CERCLIS ID:</b>	<b>RCRIS ID:</b>
<b>ERNS No.:</b>	<b>State Notification:</b>
<b>FPN#:</b>	<b>Reimbursable Account #:</b>

**1.1.1 Incident Category**  
Emergency Response

**1.1.2 Site Description**  
Residential home on Little Traverse Lake where elevated levels of hydrogen sulfide were previously identified.

**1.1.2.1 Location**  
Maple City, Michigan

**1.1.2.2 Description of Threat**  
See Initial POLREP (POLREP #1)

**1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results**  
See previous POLREP for additional background information

2. Current Activities

2.1 Operations Section

**2.1.1 Narrative**  
Screening and sampling results will be presented to the Benzie Leelanau Health Department and to MDCH.

**2.1.2 Response Actions to Date**  
Initial and follow-up screening and sampling has been conducted. On December 18, 2015, START collected water samples from the house drainage system and sump discharge pipes and submitted them for analysis of sulfate, sulfide, sulfite, pH and VOCs. Sulfate concentration was 110 mg/L in the house discharge and 19 mg/L in the sump discharge. Sulfide concentration was 1.5 mg/L in the house discharge and below the method reporting limit in the sump discharge. Sulfite concentrations were below method reporting limits in both the house discharge and sump discharge samples. As discussed in POLREP #1, VOC analysis was added after samples were submitted to the laboratory and are therefore, considered estimated (biased low). Toluene was detected at 8.3 ug/L in the house discharge and 11 ug/L in the

sump discharge, which is below EPA Residential Removal Management Levels. The laboratory made an error and did not analyze the samples for pH.

On January 28, 2015, START collected a water sample from the house drainage system pipe a second time and submitted it for analysis of pH and VOCs.. There was insufficient water to collect a sample from the sump discharge pipe (no discharge) as described in POLREP #1. No VOCs were detected above method reporting limits. The pH was measured at 7.56 pH units. Based on the second round of VOC results, it is likely that the toluene detected previously was from residual VOCs present from installation and sealing of the house and sump drainage systems.

Silicone lined summa canisters equipped with 24-hour regulators were placed on the main floor, crawl space and in the garage of the residence and on the south side of the home's exterior on January 27, 2015 and submitted for analysis of hydrogen sulfide, methane and VOCs. All methane and hydrogen sulfide concentrations were below method reporting limits. Low levels of VOCs were detected in the crawl space and the first floor of the residence although all concentrations were below EPA Residential Indoor Air VISLs (10-4 risk level for carcinogens and hazard quotient of 3 for non-carcinogens). Benzene, n-hexane and 1,2,4-trimethylbenzene were detected in the garage above appropriate EPA Indoor Air VISLs. VOCs detected in the residence and garage are considered typical contaminants from use and storage of common household products including gasoline, air fresheners and cleaners.

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

The homeowner provided EPA with a signed access agreement to conduct screening and sampling activities.

### 2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

## 2.2 Planning Section

### 2.2.1 Anticipated Activities

Follow-up activities referred to BLHD.

#### 2.2.1.1 Planned Response Activities

None at this time.

#### 2.2.1.2 Next Steps

BLHD and MDCH will advise EPA if similar conditions develop in the future.

### 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

### 2.5.1 Safety Officer

No information available at this time.

### 2.5.2 Liaison Officer

No information available at this time.

### 2.5.3 Information Officer

No information available at this time.

## 3. Participating Entities

### 3.1 Unified Command

### 3.2 Cooperating Agencies

BLHD

Michigan Department of Community Health

## 4. Personnel On Site

Initially:

EPA: 1

START: 2

BLHD: 2

Follow-up:  
START: 1

**5. Definition of Terms**

No information available at this time.

**6. Additional sources of information**

**6.1 Internet location of additional information/report**

No information available at this time.

**6.2 Reporting Schedule**

No information available at this time.

**7. Situational Reference Materials**

No information available at this time.