# U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT

Imperium Grays Harbor Explosion - Removal Polrep Initial and Final Removal Polrep



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region X

Subject: POLREP #1

Initial and Final PolRep

Imperium Grays Harbor Explosion

Hoquiam, WA

Latitude: 46.9669730 Longitude: -123.8388270

To:

From: Kathy Parker, On-Scene Coordinator

Date: 12/3/2009

**Reporting Period:** 12/2/09 to 12/3/09

#### 1. Introduction

## 1.1 Background

Site Number: 10ZZ Contract Number: D.O. Number: Action Memo Date:

Response Authority: CERCLA Response Type: Emergency

Response Lead: PRP Incident Category:

NPL Status: Non NPL Operable Unit:

 Mobilization Date:
 12/2/2009
 Start Date:
 12/2/2009

 Demob Date:
 12/2/2009
 Completion Date:
 12/3/2009

CERCLIS ID: RCRIS ID:

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

## 1.1.1 Incident Category

Emergency response to provide air monitoring support to the state and local agencies.

#### 1.1.2 Site Description

Imperium Grays Harbor is the nations largest BQ-9000 certified biodiesel refinery, capable of producing up to 100 million gallons of biodiesel per year. The site consists of 8 large tanks for biodiesel storage, and several smaller tanks (between 1,000 - 10,000 gallons) containing chemicals for processing biodiesel.

#### 1.1.2.1 Location

Imperium Renewables, Inc - Grays Harbor 3122 Port Industrial Rd Hoquiam, WA 98550

### 1.1.2.2 Description of Threat

An explosion of a glycerin neutralization tank damaged a nearby tank containing sulfuric acid. The sulfuric acid spilled to the secondary containment and appeared to release vapor as it reacted with rain water and debris within the containment area.

### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

# 2. Current Activities

# 2.1 Operations Section

#### 2.1.1 Narrative

At, or around, 14:10 on December 2, 2009 a glycerin neutralization tank over-pressured and exploded at Imperium Renewables in Hoquiam, WA. The 5,000 gallon tank was roughly half full of neutralized glycerin and spread black glycerin compound and metal tank shards over the ground, in and around parts of the tank farm. The explosion also damaged one of the two nearby sulfuric acid tanks, which was within the secondary containment of the tank farm. Sulfuric acid from the tank spilled into the tank farm containment and perimeter walkway around the tank farm footprint. The walkway consist of a cement ditch varying from six inches to six feet in depth and covered with a metal grate for use as a walkway. The ditch drains to a sump that discharges to an oil/water separator and fromt there to Grays Harbor. Immediately following the explosion, the sump pump was turned off and the drain from the ditch was plugged.

The RP hired a contractor, CCS, to perform assessment and cleanup activities. Washington State Department of Ecology mobilized two state spill responders while the firefighting response that was ongoing. At 19:44 two EPA OSCs and three START contractors arrived at the site to provide air monitoring support. Unified Command/ICS had been established and OSC Parker integrated into the Unified Command. At that time an entry team from CCS was in the hot zone collecting pH measurements of the liquid in the ditch around the tank farm and air monitoring measurements utilizing Draeger tubes and wetted pH strips exposed to the air.

At 20:10 the entry team began exiting the hotzone and returned to the command post to brief Unified Command with the monitoring results. Air monitoring results were all negative for any sulfuric acid in the air directly over the spill area. pH tests of the liquid in the ditch indicated pH of 2 through most of the ditch approaching the sump. The pH of the water in the ditch just before the sump and in the sump was 7. These results indicated that the sulfuric acid may not have reached the sump by that time and that the air around the site was mostly non-contaminated. Based on these results Unified Command decided that the Emergency Response phase of the cleanup was over and the site was secured for the night. Unified Command tasked EPA and START to perform air monitoring and wipe sampling at several nearby businesses that had been evacuated during the initial response phase for the purpose of determining if employees at the businesses could safely return to work on 12-03-09.

At 21:13 EPA and START began collecting one air monitoring result from a Gastec tube and two wipe samples from door handles and handrails at the front doors of each of four neighboring businesses: the Longshoremans Union, Paneltech, Westport Shipyards, and Westway Terminals. All monitoring results and wipe samples displayed no presence of sulfuric acid. At 22:08 EPA provided the sample results through CCS to the Hoquiam Fire Captain who was the initial IC at the scene and who would make the calls to advise the businesses their facilities were safe to re-occupy on 12-03-09. EPA and START also collected one air and one wipe sample at the corner of 29th St. and Bay Ave. to confirm the safety of nearby residents. Neither the air monitoring tube nor the pH wipe sample displayed the presence of sulfuric acid, indicating the nearby residents were not exposed to sulfuric acid vapors.

#### 2.1.2 Response Actions to Date

None

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

None

### 2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

#### 2.2 Planning Section

## 2.2.1 Anticipated Activities

CCS will remove the black glycerin material and safely dispose of it as a solid.

CCS will use a vacuum truck to remove the sulfuric acid mixture from the containment ditch and the sump and safely dispose of it off-site.

## 2.2.1.1 Planned Response Activities

No further emergency response actions are necessary as the threat has been mitigated. The site has entered the clean up phase.

#### 2.2.1.2 Next Steps

None

2.2.2 Issues

# 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

2.6 Liaison Officer

# 2.7 Information Officer

# 2.7.1 Public Information Officer

EPA did not utilize a PIO. WDOE PIO provided the press release. OSC Parker provided a television interview to KIRO 7 on the area sampling efforts and results.

# 2.7.2 Community Involvement Coordinator

None

### 3. Participating Entities

# 3.1 Unified Command

IC - Hoquiam FD - Capt. Chuck Bates

State Representative - Department of Ecology - John Hanson

RP Lead - Imperium Grays Harbor - Mike Abel

Federal Representative - US EPA OSC- Kathy Parker

## 3.2 Cooperating Agencies

## 4. Personnel On Site

US EPA OSC - Kathy Parker
US EPA OSC - Angie Lopez-Mercado
E&E START - Bryan Vasser, Joe Fowlow, Bryce Robberts
CCS - Joe German and other CCS personnel
Washington Department of Ecology - John Hanson, Andrea Unger
Hoquiam Fire Dept - Capt. Chuck Bates and other Hoquiam FD personnel
Imperium Grays Harbor - Mike Abel and other Imperium personnel

#### 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.