

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
MILLARD REFRIGERATED NH3 RELEASE - Removal Polrep  
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region IV

**Subject:** POLREP #1  
Initial US EPA POLREP  
MILLARD REFRIGERATED NH3 RELEASE  
  
Theodore, AL  
Latitude: 30.5316790 Longitude: -88.1030570

**To:**  
**From:** Dean Ullock, On Scene Coordinator  
**Date:** 8/25/2010  
**Reporting Period:** 8/23/2010 - 8/25/2010

1. Introduction

1.1 Background

|                     |           |                         |                |
|---------------------|-----------|-------------------------|----------------|
| Site Number:        | B4B9      | Contract Number:        |                |
| D.O. Number:        |           | Action Memo Date:       |                |
| Response Authority: | CERCLA    | Response Type:          | Emergency      |
| Response Lead:      | USCG      | Incident Category:      | Removal Action |
| NPL Status:         | Non NPL   | Operable Unit:          |                |
| Mobilization Date:  | 8/23/2010 | Start Date:             | 8/23/2010      |
| Demob Date:         |           | Completion Date:        |                |
| CERCLIS ID:         |           | RCRIS ID:               |                |
| ERNS No.:           |           | State Notification:     |                |
| FPN#:               |           | Reimbursable Account #: |                |

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

At approximately 0910 CDT on 8/23/2010, an estimated 250 to 600 gallons of ammonia was released from the Millard Refrigerated facility. The vapor plume escaped the facility and was confirmed at other local facilities located across the Theodore Ship Channel near the mouth of the channel that leads to Mobile Bay. USCG GST and EPAOSC Ullock initially responded to the Millard facility to provide oversight, air monitoring, and technical assistance to the USCG-FOSC-R. Approximately 104 persons sought medical attention and/or were hospitalized, including 5 in ICU. Approximately 65 persons affected by the ammonia cloud were BP-related contractors associated with the DWH oil spill. The Fire Department cleared the scene late Monday.

1.1.2.1 Location

7730 Deer River Road, Theodore, Mobile County, Mobile, Alabama

1.1.2.2 Description of Threat

The refrigeration facility has been evacuated and several reports have been filed of off-site impacts where people experienced difficulty breathing as the vapor plume of ammonia traveled southeastward towards the mouth of the Theodore Ship Channel and towards Mobile Bay.

Ammonia has a NIOSH REL TWA of 25 ppm (18 mg/m<sup>3</sup>), an OSHA PEL TWA of 50 ppm (35 mg/m<sup>3</sup>), and an IDLH of 300 ppm. Exposure to high levels of ammonia in air may be irritating to skin, eyes, throat, and lungs and cause coughing and burns. Lung damage and death may occur after exposure to very high concentrations of ammonia. Some people with asthma may be more sensitive to breathing ammonia than others. Swallowing concentrated solutions of ammonia can cause burns in mouth, throat, and stomach. Splashing ammonia into eyes can cause burns and even blindness.

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

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

OSC Ullock continues to provide direct technical assistance to the USCG Sector-MOBILE FOSC-R, the RP, and clean-up contractors (SRS, USES and CTEH). The release is secured, however much of the released Ammonia remains frozen and sequestered within a 24000 sq. ft. freezer with a current internal temperature of 0 to 10 degrees F. The clean up will be complex, involving the use and application of CO<sub>2</sub> to stabilize and neutralize the NH<sub>3</sub>. USCG GST and EPA OSC Ullock will continue to provide technical expertise and oversight assistance to USCG FOSC-R Sector Mobile as the incident transitions from an Emergency Response to clean up phase.

#### 2.1.2 Response Actions to Date

RP is cooperative and has secured proper remediation contractors to stabilize the ammonia, response and stabilization actions are ongoing. The DWH Unified Command (Mobile) has been briefed.

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

A cooperative PRP has been identified, Region IV EPCRA has been notified and a Site Attorney has been assigned

#### 2.1.4 Progress Metrics

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| <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

Continue with the development of Site Safety Plans, Air Monitoring Plans and Communication/Coordination Plans.

##### 2.2.1.1 Planned Response Activities

Continue with application of CO<sub>2</sub> into freezer #5 to neutralize and stabilize NH<sub>3</sub>.

##### 2.2.1.2 Next Steps

Assume Response and removal activities from the USCG-Sector MOBILE FOSC-R at 1700 hrs on 08/25/10.

### **2.2.2 Issues**

**High Visibility given the DWH Vessel Decon operation proximity.**

### **2.3 Logistics Section**

All logistics are being arranged by the RP.

### **2.4 Finance Section**

No information available at this time.

### **2.5 Other Command Staff**

#### **2.5.1 Safety Officer**

**Lt . Commander Kenneth Pounds of the USCG-GST has been assigned as EPA OSC's lead Safety Officer.**

#### **2.6 Liaison Officer**

**DWH Unified Command Chief Petty Officer-Robert Cox has been identified as the liaison officer between the DWH UC and this incident.**

#### **2.7 Information Officer**

**N/A**

#### **2.7.1 Public Information Officer**

**N/A**

#### **2.7.2 Community Involvement Coordinator**

**N/A**

## **3. Participating Entities**

### **3.1 Unified Command**

**On the afternoon of 8/25/2010 at approximately 1700 hrs., EPA OSC Ullock assumed responsibility as lead-OSC, and under the NCP, US EPA is the lead Federal Agency for the duration of the response and will continue to oversee all ongoing removal activities.**

### **3.2 Cooperating Agencies**

**OSHA**

**USDA**

**ADEM**

**USCG-Sector Mobile**

**USCG-Gulf Strike Team**

**CDC/ATSDR**

**Mobile County Dept. of Public Health**

## **4. Personnel On Site**

**1 ea. EPA OSC**

**1ea. START**

**1ea. USCG IH**

## **5. Definition of Terms**

**N/A**

## **6. Additional sources of information**

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

**Please refer to the EPAOSC.net website for more information related to this incident.**

### **6.2 Reporting Schedule**

**NEXT POLREP WILL BE GENERATED NLT COB 08/27/10.**

## **7. Situational Reference Materials**

**N/A**