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



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region IV

Subject: POLREP #3

**FINAL** 

MILLARD REFRIGERATED NH3 RELEASE

Theodore, AL

Latitude: 30.5316790 Longitude: -88.1030570

To:

From: Dean Ullock, On Scene Coordinator

Date: 11/23/2010

**Reporting Period:** 

#### 1. Introduction

### 1.1 Background

Site Number: B4B9 Contract Number: D.O. Number: Action Memo Date:

Response Authority: CERCLA Response Type: PRP Oversight
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:
 11/7/2010

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, a reported and 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 (PO HAWES) and EPAOSC Ullock initially responded to the Millard facility to provide technical assistance, oversight, air monitoring, to the SECTOR MOBILE USCG-FOSC-R. Approximately 104 persons sought medial 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 afternoon/early evening.

#### 1.1.2.1 Location

7730 Deer River Road, Theodore, Mobile County, Mobile, Alabama 36582

# 1.1.2.2 Description of Threat

The refrigeration facility had been evacuated and several reports had 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, over the Resolve marine facility (aka DWH Decon Staging Area) and

towards Mobile Bay.

Ammonia has a NIOSH REL TWA of 25 ppm (18 mg/m3), an OSHA PEL TWA of 50 ppm (35 mg/m3), 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 assumed the lead FOSC role and lead federal agency as prescribed by the NCP, on 08/25/10 @ 1700 hrs. EPA OSC and the USCG GST IH continued to provide direct technical assistance to the RP, and it's clean-up contractors (SRS, USES and CTEH). The NH3 release is secured, however much of the remaining released Ammonia remained frozen and sequestered within a 24000 sq. ft. freezer with a current internal temperature of 0 to 10 degrees F. The affected poultry and interior freezer environment was stabilized with the use and application of CO2 to neutralize the NH3. USCG GST and EPA OSC Ullock will continued to provide technical expertise and oversight assistance to RP throughout the stabilization phase of the incident..

## 2.1.2 Response Actions to Date

Response actions to date included the finalization of all applicable response plans (ie. air monitoring, communication/coordination plan, site health and safety plan). The continued application of CO2 proved highly effective with reducing the dangerous NH3 atmosphere within the affected freezer #5 and associated works spaces within as well as continued, comprehensive air monitoring. While these operations were ongoing, Millard coordinated through their corporate management and their legal department to determine what the final disposition of their poultry product would be, whether that would be landfilling the poultry, reuse or incineration. Sometime in late October 2010, Millard legal and their insurance underwriters determined that landfilling was the most suitable option for disposing the affected poultry.

While these determinations were being made, Millard continued to diligently maintain an emergency response contractor (SRS) and air monitoring contractor (CTEH) on-scene.

The RP was cooperative and secured proper remediation contractors to stabilize the ammonia, and continued to conduct comprehensive air monitoring throughout the facility and surrounding community. The DWH Unified Command (Mobile) continued to be briefed on a daily basis.

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

The PRP has been identified, Region IV EPCRA was notified and conducted an on-site risk assessment audit/investigation. A US EPA Site Attorney was also assigned to this incident.

# 2.1.4 Progress Metrics

# <><><>

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

NH3 contaminated poultry and cellulose packaging material and wooden pallets	8 Million lbs. of poultry	Special Waste	N/A	landfill

#### 2.2 Planning Section

# 2.2.1 Anticipated Activities

Prepare poultry pallets and warehouse for disposal and prepare bids for T&D.

#### 2.2.1.1 Planned Response Activities

Continued with application of CO2 into freezer #5 to neutralize and stabilize NH3. Continue with comprehensive air monitoring of the Millard facility and the Resolve marine facility (DWH Vessel Decon) area.

# 2.2.1.2 Next Steps

**DISPOSAL** 

#### **2.2.2 Issues**

High Visibility given the close proximity of the DWH Vessel Decon operation.

# 2.3 Logistics Section

All logistics were 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 Kennth Pounds of the USCG-GST was assigned as EPA OSC's lead Safety Officer.

#### 2.6 Liaison Officer

DWH Unified Command Chief Petty Officer-Robert Cox was 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. Under the NCP, US EPA is the lead Federal Agency for the duration of the response and continued 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
Chemical Safety Board

4. Personnel On Site

1 ea. EPA OSC 1ea. START

5. Definition of Terms

N/A

6. Additional sources of information

6.1 Internet location of additional information/report

A formal incident "Hotwash/Workshop is being coordinated and prepared with the effort of the USCG SECTOR MOBILE MER Section. A "draft" agenda will be developed and circulated around to the responding agencies for their ideas and inclusion. It is anticipated that this workshop will take place in January or February 2011.

Please refer to the EPAOSC.net website for more information related to this incident as it solely relates to the emergency response phase and activities.

\*\*\*Investigative Reports conducted and prepared by other State, local or Federal Agencies must be obtained through FOIA or through the respective agency\*\*\*.

6.2 Reporting Schedule TBD

7. Situational Reference Materials

N/A