

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Pilgrim's Pride Ammonia Release - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: **POLREP #1**
Initial
Pilgrim's Pride Ammonia Release
Marshville, NC
Latitude: 34.9865120 Longitude: -80.3638720

To:
From: Kenneth Rhame, OSC
Date: 8/17/2011
Reporting Period: 8/16 to 8/17

1. Introduction

1.1 Background

Site Number:	Contract Number:
D.O. Number:	Action Memo Date:
Response Authority: CERCLA	Response Type: Emergency
Response Lead: PRP	Incident Category: Removal Action
NPL Status: Non NPL	Operable Unit:
Mobilization Date: 8/17/2011	Start Date: 8/17/2011
Demob Date:	Completion Date:
CERCLIS ID:	RCRIS ID:
ERNS No.:	State Notification:
FPN#:	Reimbursable Account #:

1.1.1 Incident Category

1.1.2 Site Description

At 0436 hours on August 16, 2011, the food processing facility had an ammonia release. An unknown amount was released. Up to 35 homes in the surrounding area were initially evacuated by the local fire department, due to release to the air. CSX main rail line located 100 yards behind the facility was shutdown. CSX's contractors, HEPACO, is assisting the facility with the response. A 10-inch pipeline carrying ammonia may have been breached as well as a water line. The discharge may impact the Pee Dee River nearby. The facility remains shutdown due to elevated levels of ammonia in the facility. OSC Ken Rhame and START contractor, OTIE, have been dispatched to assist with the response.

1.1.2.1 Location

5901 HWY 74 WEST
MARSHVILLE, NC 28103

1.1.2.2 Description of Threat

Unknown quantity of anhydrous ammonia released from the plant. Release to air and nearby creek has been documented, air quality is being monitored water samples collected.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

A release of approximately 100 lbs of anhydrous ammonia was reported to the NRC by employees of the Pilgrim's Pride poultry processing plant at approximately 0436 on 8/16/2011. An explosion was reported to the NRC at approximately 0500 by Pilgrim's Pride employees, no evacuation was reported at the time and no assistance was requested. At 0645 a call was received by 911 requesting fire department assistance in dissipating an ammonia cloud in the vicinity of the plant. Fire department responded and evacuated approximately 1.5 miles downwind of the facility, including 35 homes. Employees of Pilgrim's Pride and refrigeration contractors attempted to isolate damaged tanks and lines in the refrigeration system. CSX was notified of the incident, who hired HEPACO to

perform air monitoring at the railroad to the North of the facility.

EPA did not receive any notification aside from the initial NRC Report, which reported a release of 100 lbs of ammonia, until approximately 1700. EPA received a call at approximately 1700 from local fire department reporting a potential release of greater than 20,000 lbs, EPA was also notified of the evacuation at this time. NC Outpost OSC Rhame notified phone duty, who placed follow up calls to local agencies and notified NCDENR. Phone duty collected information from local responding agencies. Fire department reported that no assistance was required at the time and that the incident was winding down based on information received from Pilgrim's Pride employees and contractors. Fire Department continued air monitoring at the evacuated residence and consistently observed 0 ppm of ammonia. Evacuated residences were allowed to return to their homes at approximately 1700. On 8/17/2011, OSC Rhame received a call at approximately 1030 from Mike Cooke with NC Emergency Management. Cooke indicated that the release was still not secured and that ammonia concentrations in the plant were rising, it was not known at the time when the release would be secured. Cooke also mentioned that a water line had ruptured and that a potential release had occurred to an unnamed tributary located to the east of the facility. OSC Rhame contacted local fire department who then requested EPA assistance. EPA mobilized START and EPA Mobil Command Post (MCP) with Area Raes and YSI water quality meters.

EPA arrived at fire department at approximately 1400 to meet with local responders. START arrived onsite at approximately 1600 and collected water samples for ammonia analysis. Pilgrim's environmental contractors CCI plugged water drainage lines and continued to offload ammonia tanks and lines. EPA MCP arrived onsite and set up Area Raes at ventilation exhaust point, southeastern property line on highway 74, northern property line on railroad tracks, western parking lot and northwestern property line. Levels on property lines have not exceeded approximately 1ppm. Several dead craw fish were observed approximately .5 miles downstream of the facility in one location and notified NC DENR DWQ, no other fish kills have been observed. At approximately 2350 Fire Department began positive air ventilation of the facility with large fans. EPA continuously monitored all Area Raes during ventilation. Approximately 5,000,000 lbs of chicken has been contaminated and will be disposed of in a landfill pending approval.

2.1.2 Response Actions to Date

Offloading tanks and lines in facility

Plugged water lines from facility.

Sampled nearby creek for ammonia analysis

Set up Area Raes to continuously monitor and record ammonia concentrations onsite and migrating off site at property boundary.

Established a strike team made up of one START and on haz-mat tech to respond to citizen complaints reporting ammonia odors.

Ventilating facility using positive air pressure

At approximately 02:00 (8/18) Area Rae #4 spiked at the Northeast corner of the facility near the railroad tracks at over 100 ppm. A visual vapor cloud could be seen migrating through a damaged area in the wall. This cloud is believed to be caused by freeze/thaw of a line in the North building causing a release. CSX was on site conducting air monitoring at the tracks. EPA conducted air monitoring North of the railroad along Union Street and observed 0 ppm ammonia. It is believed that periodic freeze/thaw events are causing intermittent releases of ammonia that is still present in the system.

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

Pilgrims Pride, EPCRA notified, NC DENR Air Quality and Water Quality notified.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Anhydrous Ammonia	Air	Unknown			
Contaminated Chicken	Chicken	5 Million Lbs.			

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

Continue off-loading ammonia from system.

Ventilate building for access.

Structural Engineer to evaluate safety of building for access purposes.

Remove and Dispose of contaminated meat.

Continue air monitoring.
Continue to monitor water quality in creek.

2.2.1.2 Next Steps

Continue Air Monitoring
Collect Water Samples and Monitor Creek.

2.2.2 Issues

Small Fish Kill observed in unnamed tributary to Salem Creek which is a tributary to Pee Dee River.

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

No information available at this time.

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.