

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Hoss/Moore Tank Site - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #2
Final
Hoss/Moore Tank Site

Statesville, NC
Latitude: 35.9663840 Longitude: -80.9346149

To:
From: Kenneth Rhame, OSC
Date: 3/15/2011
Reporting Period: 03/05/2011 to 03/10/2011

1. Introduction

1.1 Background

Site Number:	B4G1	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	3/4/2011	Start Date:	3/4/2011
Demob Date:	3/15/2011	Completion Date:	3/15/2011
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Emergency Response

1.1.2 Site Description

120 Estes Road
Statesville, Iredell County, NC
Site is currently being utilized as a residential and horse pasture owned by Shirley Moore. It is a former scrap yard that has buried solid waste and compressed gas cylinders containing ethylene oxide. The property is located at the end of Estes Road and is located in a residential neighborhood. A creek flows adjacent to the property.

1.1.2.1 Location

120 Estes Road, Statesville, Iredell County, NC.
Residential Neighborhood

1.1.2.2 Description of Threat

Explosion/Release of Ethylene Oxide
A Carcinogen

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On Monday 03/07/2011 EPA formed an incident response team with local authorities, ERRs, and START contractors who conducted site recon identifying 4 cylinders believed to be intact. Information from RP suggests additional cylinders of ethylene oxide are buried on property.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On 03/08/2011 members of the Winston-Salem Police Department Bomb Squad detonated 5 cylinders in holes dug in close proximity where they were discovered; 4 of ethylene oxide, and one suspected to contain nitrous oxide. Air monitoring was conducted prior to, during, and after the detonation and Tedlar bag samples were taken down-wind on the edge of the exclusion (Hot zone) to ensure that no significant exposure was present. CAMEO models were also prepared to assist in anticipating potential down-wind hazards from both the exposure and heat. The models were also run real-time with meteorological data obtained by a mobile weather station. The exclusion zone was established based on information from

CAMEO modeling. In addition to the Bomb Squad, representatives from NC DENR RCRA, Central Fire Dept. Fire Chief, USCG GST, a security contractor, Environmental Restoration (ER), and Tetra Tech START were present supporting the response.

After the site was secured from the detonation, efforts focused on ensuring that no flammable levels of ethylene oxide remained in the holes. Air monitoring did not identify any measurable ethylene oxide outside the exclusion zone but did identify some residual gas in several of the holes used to detonate the cylinders. A Tedlar bag air sample was taken from one hole.

On 03092011 ER trackhoe operator identifies 8 additional cylinders, 4 of which appeared to contain ethylene oxide. Preliminary air sampling information positively identifies the material as ethylene oxide gas in one of the first the detonation holes and no exposures outside the exclusion zone. Winston-Salem Police Bomb Squad returns and detonates the 4 cylinders in one hole. Air monitoring conducted prior to, during, and after did not identify any potential for exposures outside the exclusion zone but again did identify residual gas in the hole where the detonation occurred. The residual gas was allowed to dissipate over night.

On 03102011 air monitoring was conducted of the area and no residual ethylene oxide gas was identified outside or within the exclusion zone. All trenches and holes were filled in and the site released to the property owner.

2.1.2 Response Actions to Date

EPA has secured site, identified and explosively vented 8 ethylene oxide cylinders, conducted air monitoring and sampling, decontaminated the tank fragments, dug several extensive exploratory trenches in an effort to identify additional buried cylinders and filled in the trenches once it did not appear any further cylinders were present. Additional cylinders are reported to be present, possibly buried, at two other properties in the Statesville area.

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

PRP is Dave Moore (deceased).
Property Owner is Shirley Moore.

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

Investigating reports of additional sites where ethylene oxide cylinders may be buried. Working to identify additional response alternatives.

2.2.1.1 Planned Response Activities

None

2.2.1.2 Next Steps

SESD will conduct a sub-surface investigation at another property that reportedly has ethylene oxide cylinders buried.

This property is owned by a Mr. Finley and is located in Statesville, NC.

2.2.2 Issues

Relative response of 13:1 on PID equipment makes real-time monitoring of ethylene oxide only useful at high concentrations.

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.