

**United States Environmental Protection Agency**  
**Region VI**  
**POLLUTION REPORT**

**Date:** Tuesday, September 29, 2009

**From:** Bill Rhotenberry, OSC

**Subject:** Final

Norphlet Chemical Inc.

600 MacMillian Road, Norphlet, AR

Latitude: 33.3093000

Longitude: -92.6560000

<b>POLREP No.:</b>	17	<b>Site #:</b>	A6N8
<b>Reporting Period:</b>		<b>D.O. #:</b>	
<b>Start Date:</b>	4/16/2009	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	4/16/2009	<b>Response Type:</b>	Emergency
<b>Demob Date:</b>		<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>		<b>Incident Category:</b>	
<b>CERCLIS ID #:</b>		<b>Contract #</b>	
<b>RCRIS ID #:</b>			

#### **Site Description**

Norphlet Chemical Inc. (NCI) is located outside El Dorado, AR at the location of the former Macmillan Oil Refinery (a previous Non-NPL Removal Action). NCI is a chemical manufacturing facility in the business of producing a refrigerant (HFC-134A) used in automobiles. The primary raw materials used for producing this product is Anhydrous Hydrogen Fluoride, Trichloroethylene, and a catalyst. The company attempted to produce the intended product but was unable to do so. In September 2008, the company laid off all of its employees.

EPA became aware of this facility in March 2009 and immediately informed the ADEQ. EPA offered its assistance if deemed necessary by the ADEQ. On April 15, 2009, DHS conducted an Infrastructure Protection Inspection of the facility and was alarmed with its condition and the fact that it was abandoned. On April 15, 2009, DHS contacted EPA about their concerns with the site. The major concern was that the abandoned site had containers of Anhydrous Hydrogen Fluoride (AHF) and mixtures of AHF, TCE, and intermediate refrigerants. In addition, the condition of these containers were questionable. EPA and DHS contacted State authorities and participated in a call concerning the site. On April 16, EPA received a request from ADEQ to address the situation at the site.

EPA dispatched their START Contractors to begin air monitoring. EPA OSC Jones arrived on-site on Friday, April 17, 2009 and met with Federal, State, County, and City officials and evaluated the site. OSC Jones determined that an Imminent and Substantial Endangerment existed as a result of the abandonment of the facility, the conditions of the tankage, and the close proximity of the school and surrounding residents to the facility. On April 16, 2009, Union County Judge Bobby Edmonds declared an emergency. Because of the emergency order and the close proximity of the site to the school, the school was closed on Friday, April 17.

EPA mobilized their ERRS Contractor and began transferring the AHF mixtures from the onsite tanks into tanker trailers which would be shipped offsite for disposal.

#### **Current Activities**

From September 23 through 30, 2009, EPA completed site removal activities. All seven JB Kelley tanker trailers were transported off site to Amko Service Company (Hope Cryogenics) in Hope, Arkansas for valve and piping replacement. Decontamination and re-passivation activities were completed on Dana Tanker 1301. It was transported off site to Ingrams Inc. in El Dorado, Arkansas for a third party "visual inspection" prior to being returned to Dana. Baker Engineering (the metallurgists) reported that the integrity of the stainless steel tankers is within engineering guidelines, however they had concerns with the presence of metal oxides. Therefore Dupont was tasked to conduct a bench scale test to determine if the tankers are still compatible with hydrazine. Dupont immersed a small coupon from one of the tankers in hydrazine and documented the results including examining the hydrazine itself for any changes. After 4

hours of immersion there was no reaction and no change to either the coupons or the hydrazine.

Representative aqueous samples were collected from each of the two frac-tanks on site. The frac tanks contain the rinse waters from the tanker cleanings. Each sample was neutralized with nitric acid and submitted to Arkansas Analytical for laboratory analysis. No volatile organics (ie. TCE) were detected above regulatory levels. The contents of each tank was neutralized and discharged into the Norphlet wastewater treatment ponds.

Two roll-off boxes of site waste (one containing sodium fluoride solids and one containing spent carbon and alumina as well as contaminated PPE) were shipped off site to Phillips Services Company in Avalon, Texas for disposal.

EPA has completed all site related field activities. EPA and contractor personnel were demobilized on September 30, 2009.

#### **Planned Removal Actions**

No additional site activities are scheduled.

#### **Next Steps**

No additional site activities are scheduled.

[response.epa.gov/Norphlet\\_Chemical\\_Inc](https://response.epa.gov/Norphlet_Chemical_Inc)