United States Environmental Protection Agency
Region III
POLLUTION REPORT

Date: Saturday, July 16, 2005
From: Christine Wagner

Subject: Polrep #1 and Final - Lovings Produce Ammonia Emergency Response
Loving's Produce Ammonia Emergency Response
1601 East Grace St., Richmond, VA
Latitude: 37.5350000
Longitude: -77.4275000

POLREP No.:	1	**Site #:**	
Reporting Period:	7/13/05-7/16/05	**D.O. #:**	
Start Date:	7/15/2005	**Response Authority:**	CERCLA
Mob Date:	7/14/2005	**Response Type:**	Emergency
Demob Date:		**NPL Status:**	Non NPL
Completion Date:		**Incident Category:**	Removal Assessment
CERCLIS ID #:		**Contract #**	
RCRIS ID #:			

Site Description
On 7/13/05 at approximately 2215 hours, a fire occurred at the Loving's Produce facility, located at 1601 East Grace Street in the City of Richmond, Va. When firefighters responded, they were made aware of a pressurized anhydrous ammonia tank inside the building. The Haz-Mat team was notified and responded and the presence of a tank inside the building containing anhydrous ammonia was confirmed. The team members also noted another tank of an unknown substance used in the room used to ripen bananas. Another 30-40 drums were discovered; fortunately, they were empty.

Current Activities
On 7/14/05, OSC Wagner was contacted by Capt. Alan Brooke, Richmond's Hazardous Materials Coordinator. Capt. Brooke inquired about alternatives for extended air monitoring for ammonia. OSC offered EPA assistance, which was accepted.

OSC contacted START telephonically and requested them to respond to be on Site 7/15/05 @ 0900 hours.

OSC Wagner arrived on Site at 0700 hours and met with representatives from the Richmond Fire Department, including representatives from the Fire Marshall's Office. The goal of the response was to make the buidling safe so that the Fire Marshall could perform an investigation of the cause of the fire.

Two major operations needed to be performed on the building before it could be rendered safe:
1) Removal of ammonia from the pressurized tank and the refrigeration lines;
2) A partial dismantling of the second floor of the building to allow the fire investigators safe access for an investigation.

On 7/14/05, the owners' insurance company contacted LaRoche, now Airgas, a well-known ammonia distributor. LaRoche arrived on scene with a tanker truck for offloading on 7/15/05. Prior to the LaRoche representative entering the building, the Haz-Mat team members performed a Level B entry to determine the current ammonia concentrations. Ammonia was detected at approximately 70 ppm, but the Haz-Mat team identified a window on the eastern side of the building, which could be used to gain access to the tank for offloading. The LaRoche representative was able to hook into the system and begin offloading. However, because of the reduced pressure in the system, the liquid/gas phases quickly came to an equilibrium. Firefighters used water to cool the exterior ammonia tanker to try to drive some of the vapors in the tank into liquid form.

At approximately 1500 hours on 7/14/05, the system had reached an equilibrium whereby the vacuum on the tank had reached the maximum pressure of the tanker. The representative from LaRoche recommended mobilizing another tanker from LaRoche containing water to help "drive" more of the ammonia into the liquid phase of the tank. During these offloading operations, START remained on

standby for air monitoring and to respond to any reports of ammonia odors in the neighborhood. Fortunately, there were no releases.

Once the building was safe for the LaRoche representatie to enter, he was able to determine that the cause of the leak was damaged packing around the valve. However, other valves on the system were not opened and the LaRoche representative noted complications in the system. Once the system was brought under a vacuum, the release stopped.

The second tanker truck arrived on scene at approximately 1800 hours. Operations were suspended for the night at approximately 2000 hours. Police remained on scene to protect the scene as the fire had not yet been investigated.

Because the fire officials deemed the tank safe, the OSC demobilized START on 7/14/05.

OSC Wagner returned to scene on 7/15/05 to oversee the remaining operations. The facility is located within 50 feet of a local farmer's market, which receives hundreds of customers on Saturday mornings. At approximately 0915, LaRoche was able to confirm only vapor remaining. The next step was to cut the vapor lines to the portion of the building which required dismantlement.

Richmond Fire Department Rescue and Haz-Mat Units, along with assistance from the LaRoche representative, made an assessment of the area. The lines were elevated above the second floor; therefore, operations needed to be carried out from a ladder truck.

At approximately 1530 hours, the lines were successfully cut and the ammonia retrieval operation were completed.

Next Steps

EPA plans no further removal actions at this Site.

However, this facility has never complied with SARA Title III and had not made the Fire Department aware of hazardoous substances in the building. The OSC is preparing a referral letter to the SARA Title III Enforcement regional representative for follow-up.

The Site did not cause a release which would make the Site eligible for an NPL Listing. Therefore, the OSC Wagner recommends the Site be NFRAP'd.

Key Issues

1. The non-compliance of the facility with the SARA Title III requirements placed the firefighters and other first responders at unnecessary risk of exposure to a hazardous substance;

2. The working knowledge of ammonia systems brought to the scene by the LaRoche representative contributed significantly to the successful outcome of the response. OSC Wagner recommends that specialized contractors such as this be readily available to the OSC through alternate contracting means during an emergency response.

3. The presence of ammonia at this as well as many other facilities in the country has identified the possible need for OSCs to have other air monitoring equipment available, such as single gas sensors for chemicals such as ammonia and chlorine.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
Intramural Costs				
Total Site Costs	$0.00	$0.00	$0.00	0.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.