

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

**Date:** Monday, March 27, 2006

**From:** JJ Justice

**To:** Linda M. Nachowicz, U.S. EPA  
Jason El-Zein, U.S. EPA ERB RS1  
William Messenger, U.S. EPA ERB  
Mick Hans, U.S. EPA OPA  
Tracy Johnson, U.S. EPA ERB  
Afif Marouf, U.S. EPA H&S  
Stuart Hill, U.S. EPA OPA  
Scott Shane, Ohio EPA

Don Bruce, U.S. EPA  
David Chung, U.S. EPA  
Carol Ropski, U.S. EPA  
Virginia Narsete, EPA  
John Maritote, U.S. EPA ERB  
Steve Ostrodka, U.S. EPA  
Duty Office, NRC

**Subject:** Initial/Final Polrep  
Vickery Environmental 3/24/06 Release  
3956 State Route 412, Vickery, OH  
Latitude: 41.3685900  
Longitude: -82.9789900

|                          |                      |                            |                    |
|--------------------------|----------------------|----------------------------|--------------------|
| <b>POLREP No.:</b>       | 1                    | <b>Site #:</b>             | JJ04               |
| <b>Reporting Period:</b> | 03/24/06 to 03/26/06 | <b>D.O. #:</b>             |                    |
| <b>Start Date:</b>       | 3/24/2006            | <b>Response Authority:</b> | CERCLA             |
| <b>Mob Date:</b>         |                      | <b>Response Type:</b>      | Emergency          |
| <b>Demob Date:</b>       |                      | <b>NPL Status:</b>         |                    |
| <b>Completion Date:</b>  | 3/26/2006            | <b>Incident Category:</b>  | Removal Assessment |
| <b>CERCLIS ID #:</b>     |                      | <b>Contract #</b>          |                    |
| <b>RCRIS ID #:</b>       |                      |                            |                    |

**Site Description**

Vickery Environmental is located at 3956 State Route 412 in Vickery, Ohio and is bordered to the north by Interstate 80/90, to the east by State Route, to the south by State Route 412 and to the west by County Road 244. The surrounding area is largely rural and the land use is predominantly agricultural.

Vickery Environmental is operated by Waste Management and is an inorganic mixed waste disposal facility. The facility accepts both reducing and oxidizing acid waste predominately from metal treating and plating facilities. The waste streams are mixed to create a waste stream suitable for deep well injection. Once a waste stream is ready for injection it is filtered and pumped into two in-line acid filter tanks prior to injection into the well.

On March 24, 2006, at approximately 4:15 pm the facility reported a release from a 200,000 gallon above-ground storage tank (AST) to the Sandusky County Sheriff's office. The tank was filled to 92% capacity and was awaiting injection into the wells when the release occurred. A reaction within the tank caused a release of nitrogen dioxide resulting in a red plume from the pressure vent of the AST, the associated scrubber, and the pressure vents on the filtered acid tanks. Due to the size of the release, local officials evacuated residents up to 2 miles downwind of the facility.

Exposure to nitrogen dioxide can cause eyes, nose throat and lung irritation, shortness of breath and nausea. Exposure to high concentrations can cause rapid burning, spasms and swelling of tissues in the throat, respirator tract, fluid build-up in the lungs and sometimes death.

**Current Activities**

On March 24, 2006, U.S. EPA received a request for assistance from the Ohio EPA to respond to the release of nitrogen dioxide from Vickery Environmental. Other responding agencies included: Sandusky County Sheriff's Office, Emergency Management Agency, Hazardous Materials Response Team, Health Commissioner and Fire Departments from Clyde, Townsend Township, and Margareta Township. Due to the size of the plume and the unknown concentrations of the nitrogen dioxide residents downwind were evacuated until the release could be controlled and monitored. The release originated at the tanks pressure release valve that functions as a safety device to prevent the tank from rupturing under pressure

and lasted approximately 1 hour the cause of which is unknown.

Approximately 1 hour after the release was reported, Vickery Environmental conducted air monitoring at the facility fence line for nitrogen oxides and acid vapors and no detectable concentrations were detected. Air monitoring was conducted throughout the night as Vickery worked to empty the tank and stop the reaction that resulted in the release. Residents were allowed to return home at 8:00 pm.

At approximately 9:00 pm, Vickery was able to begin emptying the tank which resulted in a vacuum that stopped the release of residual gases from the tank.

On March 25, 2006, technicians were able to reset the pressure relief valve which eliminated the possibility of any additional releases.

On March 26, 2006 the tank was drained to 10% capacity. Vickery was preparing to open up the tank to begin an investigation to determine the cause of the release.

#### **Planned Removal Actions**

Vickery continues to investigate the cause of the release and the tank will remain out of service until the cause can be determined.

#### **Next Steps**

Ohio EPA RCRA and Air Division will be conducting follow-up inspections at the facility.

#### **Estimated Costs \***

|                         | <b>Budgeted</b> | <b>Total To Date</b> | <b>Remaining</b> | <b>% Remaining</b> |
|-------------------------|-----------------|----------------------|------------------|--------------------|
| <b>Extramural Costs</b> |                 |                      |                  |                    |
| <b>Intramural Costs</b> |                 |                      |                  |                    |
|                         |                 |                      |                  |                    |
| <b>Total Site Costs</b> | \$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.

[response.epa.gov/vickeryenv](http://response.epa.gov/vickeryenv)

POLREP #1 Last Updated 3/27/2006