

United States Environmental Protection Agency
Region VI
POLLUTION REPORT

Date: Thursday, January 6, 2005

From: Chris Ruhl

Subject: Final Polrep

Teris El Dorado Explosion

309 American Circle, El Dorado, AR

Latitude: 33.2275000

Longitude: -92.6325000

POLREP No.:	5	Site #:	NRC745957
Reporting Period:	1/6/05	D.O. #:	
Start Date:	1/2/2005	Response Authority:	CERCLA
Mob Date:		Response Type:	Emergency
Demob Date:	1/6/2005	NPL Status:	
Completion Date:		Incident Category:	
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

At 10:28 am on January 2, 2005, the National Response Center (NRC #745957 and #745959) notified EPA Region 6 that Teris LLC, located at 309 American Circle, El Dorado, Arkansas had numerous explosions and fires. The explosions reportedly began at 0800.

The facility reported that an employee attempted to extinguish a small fire that quickly burned out of control in one of the waste storage warehouses. The warehouse stored an estimated 4500 drums of hazardous waste.

Local responders closed nearby highways and streets and imposed an evacuation. Approximately 2000 residents were evacuated.

EPA was originally requested to provide air monitoring support to the local and state responders.

Teris LLC is a hazardous waste incineration facility that operates rotary kilns for solid incineration and thermal oxidation for liquid incineration. Two warehouses are permitted for storage of containerized hazardous waste, as well as several agitated tanks for the storage of liquids awaiting incineration. The waste stored onsite are characterized as waste because there is no longer any economical use for them. Incineration has been determined to be the most cost effective and environmentally sound method of disposal for this waste. The waste are hazardous because they meet one or more of the standard hazard categories (flammable, reactive, toxic or corrosive). Teris handles two chemicals in the incineration process that are regulated under the EPA Risk Management Plan standard (40 C.F.R. 68), ethyl chloride and trimethylamine. Both flammable substances are present in mixtures (ethyl chloride in concentrations of 30% to 60% and trimethylamine in concentrations of 5% to 25%) and are liquids at ambient temperatures.

The products stored for incineration include a wide variety of petroleum based materials and other organic and inorganic chemicals in varying degrees of purity. The majority of the products are completely reacted, diluted, or mixed with dirt and debris. All products brought into the facility are profiled and analyzed by technical chemists to determine the proper disposition. The waste products are then subjected to extreme heat which breaks the chemicals down into its basic molecular structure, eliminating its hazardous components.

Current Activities

See POLREP 1, 2, 3 and 4 for activities prior to 0000 06 January 2005.

EPA demobilized from Teris at 1800. OSC Ruhl determined that based on current site conditions, past air monitoring results, available state and local resources that adequate response capabilities are in place for future actions. The fire continues to smolder, but appears to have stabilized and does not pose an eminent threat to the community.

EPA START contractors continued to perform air monitoring from 0900 to 1400. Parameters that were monitored include: VOC, Ammonia, Chlorine, Nitrogen Dioxide, Sulfur Dioxide, Ethylene Oxide, Phosphine, Carbon Monoxide, and Methane. For this monitoring period, data collected indicate that concentrations of constituents do not pose an acute risk to the community.

Teris' contractors HILPALCO completed relocation of the 117 drums of magnesium waste to the "Special Handling" building. Teris will continue to monitor the temperature of these drums.

Arkansas Department of Health (ADH) is currently reviewing the wipe sample results provided by Teris. ADH is expected to communicate the review of the data to the local judge. ADH continues to coordinate the release of their findings with EPA.

EPA and ADEQ discussed the sampling results of fire suppressant water and water stored in a storm water retention basin. Analytical results indicate that the fire suppressant water will not be permitted to be discharged through the facility's waste water treatment plant. The facility plans on disposing of the water using the on site incinerator. Sample results from the storm water retention basin indicated an elevated level of mercury. Teris and ADEQ believes that the facility's current treatment system may adequately treat the water. A trial run will be performed on January 7, 2005. Effluent will be sampled and results submitted to ADEQ. ADEQ will continue to the treatment of the water and contact EPA if additional assistance in necessary.

Next Steps

There are currently no outstanding EPA response issues. EPA will continue to be available for consultation. EPA remains available if future assistance in necessary.

Key Issues

- 1) Evacuations have been lifted.
- 2) The fire continues to smolder, however it has diminished greatly and appears to be stable.
- 3) Local fire department continues to monitor the fire and ongoing cleanup.
- 4) ADEQ will continue to have an on sight representative.
- 5) Teris' contractor Center for Toxicology and Environmental Health (CTEH) continues to conduct air monitoring. ADEQ will monitor results of future air monitoring.

response.epa.gov/terisexplosion