

United States Environmental Protection Agency
Region VI
POLLUTION REPORT

Date: Monday, January 3, 2005

From: Chris Ruhl

Subject: Teris El Dorado Explosion
309 American Circle, El Dorado, AR
Latitude: 33.2275000
Longitude: -92.6325000

POLREP No.:	2	Site #:	NRC745957
Reporting Period:	1/3-4/2005	D.O. #:	
Start Date:	1/2/2005	Response Authority:	CERCLA
Mob Date:		Response Type:	Emergency
Demob Date:		NPL Status:	
Completion Date:		Incident Category:	
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

At 1028 hours 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 hours.

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 contains 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 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 for activities prior to 0000 January 3, 2005

EPA OSC Ruhl and EPA START contractors continue to perform continuous air monitoring. Monitors remained in original locations until approximately 0830 January 3, 2005. The monitors were then relocated to the perimeter of the facility. EPA air monitoring data does not indicate elevated levels of contaminants at locations monitored. Teris air monitoring contractors, Center for Toxicology and Environmental Health, LLC (CTEH), reported elevated levels of particulate matter in areas adjacent to the

fire. CTEH and EPA air monitoring results appear to be generally consistent. Wind direction and speed remains generally south to north at 8-10 mph.

EPA's Airborne Spectral and Photographic Environmental Technology (ASPECT) plane completed its final aerial monitoring of the site. Preliminary air data from ASPECT indicated a smaller plume associated with fire. Constituents identified in previous flights were seen with the addition of ammonia.

The fire continues to smolder and flare up in hotspots within the warehouse. EPA observed flare ups and small explosions throughout the day. The hotspots continue to be monitored by Teris fire-fighting personnel. Teris remains reluctant to fight the fire with water due to the collapsed roof structure and the nature of the waste.

At 1600 hours, local officials reported that all evacuation orders and road closures were lifted.

EPA and ADEQ coordinated with Teris the collection of water samples from fire suppression runoff that was collected in two on-site retention basins. A total of five water samples were collected representing the top, middle, and bottom of one basin and the top and bottom of the second. These samples will be analyzed by Teris for a complete Priority Pollutant Scan (PPS) under guidance of ADEQ and EPA. The run off will remain contained in the impoundment until analytical results are received. Teris, ADEQ, and EPA will discuss the disposal/treatment of the collected fire suppression runoff once results are received.

OSC Ruhl contacted EPA's National Emergency Response Team (ERT). Ruhl discussed current air monitoring and fire fighting strategies and findings. ERT concurred with current strategy. ERT is available for mobilization to the site if necessary.

Next Steps

EPA will continue air monitoring under the established air monitoring program and may add additional monitoring locations or contaminant-specific monitors if necessary. EPA will coordinate results with all stakeholders.

EPA will commence air sampling the morning of January 4, 2005.

EPA will continue to monitor fire fighting activities.

EPA will coordinate the collections of approximately 20 wipe samples at 10 locations. Wipe samples will be collected by CTEH with EPA oversight. Samples will be analyzed for magnesium, lithium, and mercury. Results are expected within 48 hrs of collection. Results will be shared with the Arkansas Department of Health (ADH) and the Arkansas Department of Environmental Quality (ADEQ). Locations being sampled will be of private and public properties within the previously evacuated area.

Key Issues

- 1) Evacuations have been lifted.
- 2) The fire continues to smolder/flare up.
- 3) Unknown quantities of unknown materials are located in the warehouse.
- 4) During the press briefing numerous citizens were concerned about any contaminants that may have settled out into yards and homes.

response.epa.gov/terisexplosion