United States Environmental Protection Agency Region VI POLLUTION REPORT

Date: Friday, July 29, 2005 **From:** Scott Harris, Ph.D.

Subject: Initial POLREP

Valley Solvent and Chemical Fire 2573 N.E. 33rd St., Fort Worth, TX

Latitude: 32.8050000 Longitude: -97.3119000

POLREP No.: 1 **Site #:** A601

Reporting Period: 07/28/2005 **D.O.** #:

Start Date:Response Authority:CERCLAMob Date:7/28/2005Response Type:EmergencyDemob Date:7/28/2005NPL Status:Non NPL

Completion Date: Incident Category: Removal Assessment

CERCLIS ID #: Contract #

RCRIS ID #:

Site Description

On July 28, 2005, EPA Region 6 was notified of a large fire and heavy plume at the Valley Solvent and Chemical Company, Fort Worth, Tarrant County, Texas. Several explosions, injuries and nearby evacuations were reported. The smoke could be seen 30+ miles away in Dallas.

Valley Solvent and Chemical is a chemical repackaging facility located approximately four miles north of downtown Fort Worth. Valley maintains a large inventory and variety of hazardous substances in tanks, drums and smaller containers. The site is located in an industrial complex with adjacent residential areas located less than one mile to the south and west. The cause is under investigation.

Current Activities

FWFD issued a shelter-in-place order for residents in areas 5.5 miles to the south.

When OSC Scott Harris and five START contractors arrived on site, several FWFD units were battling intense flames, smoke and explosions. The fire was producing a dark, highly visible plume, drifting to the south, pushed by a 5-10 mph north wind.

After checking in with the FWFD-ICS, EPA representatives initiated air monitoring at 1700 hours approximately one mile downwind (south). Five monitoring locations were established; four on the border of the industrial complex and the nearest downwind residential neighborhood and one at the nearest downgradiant storm water outfall. The PRP contractor, Hultcher Services, created an earthen berm at the stormwater outfall to contain fire water runnoff. That structure was later reinforced and enlarged, and another structure added downstream when flow exceeded the original capacity.

A fire was reported in the stormwater system, and the pH of the leading edge of the runoff in that system was reported to be 0-1. Air monitoring at the discharge point from the system, near a residential area, indicated no elevated levels and no explosivity.

ASPECT maintained contact with OSC Harris, reporting low concentrations of iosbutylene, glycol, various alcohols, p-xylene and formic acid leaving the site in the plume. That information was very useful to responders trying to (1) determine what materials and concentrations to model, (2) evaluate whether the shelter-in-place was appropriate and (3) focus the air monitoring effort. ASPECT was also able to penetrate the flight-restriction area and provide excellent video and high-resolution photos of the incident.

Fallout of heavy, black ash was reported over one mile from the site.

A storage tank BLEVE sent the tank across the street and onto an adjoining building.

At 1645 hours FWFD reported the fire to be under control and turned control of site over to PRP and

PRP-led contractors. At 1900 hours, EPA terminated all air monitoring locations. All stations reported levels at background for volatile organic compounds, chlorinated compounds, phosphine, nitrogen dioxides, sulfur dioxides and amines.

It appears that the site was completely destroyed, along with the contents of all containers.

Planned Removal Actions

Fractionation tanks are being staged at the containment dam to process contaminated runnoff for later disposal.

The PRP (Valley), with guidance from the City of Fort Worth Water Division and TCEQ, will flush the stormwater drainage system to push residual contaminated water toward the containment dam. TCEQ will manage the removal / treatment of contaminated runoff water.

Key Issues

Toxic and flammable liquid fires and repeated storage tank BLEVEs created a very dangerous environment for responders.

FWFD reported three facility employees with minor injuries.

Local roads were open only to emergency vehicles.

Downwind residential areas were ordered by FWFD to shelter-in-place.

Up to one million gallons of contaminated runoff water (pH = 2) discharged / flushed from the storm water system and contained.

Flash fire reported in the enclosed portion of the storm water system.

response.epa.gov/ValleySite