United States Environmental Protection Agency
Region VI
POLLUTION REPORT

Date: Monday, July 27, 2009
From: Mark Hayes

Subject: Continueing Monitoring
Citgo Refinery Fire
1801 Nueces Bay Blvd, Corpus Christi, TX
Latitude: 27.8093090
Longitude: -97.4266880

POLREP No.:	5	**Site #:**	
Reporting Period:	25 and 26 July 2009	**D.O. #:**	
Start Date:	7/19/2009	**Response Authority:**	CERCLA
Mob Date:	7/20/2009	**Response Type:**	Emergency
Demob Date:		**NPL Status:**	
Completion Date:		**Incident Category:**	
CERCLIS ID #:		**Contract #**	
RCRIS ID #:			

Site Description
On 19 July 2009, at approximately 0835 hours, an equipment failure resulted causing a fire of released Butane and a potential release of Hydrogen Fluoride from a #2 Alkylation Unit at the Citgo Corpus Christi east plant. Perimeter monitoring conducted by TCEQ and Citgo did not detect any VOCs or Hydrogen Fluoride. The fire fighting and water spray suppression appear to have prevented any releases from being detectable at the site perimeter. One injury resulted from the initial fire.

Current Activities
On 25 July 2009 EPA perimeter air monitoring for VOCs and HF continues to reflect non-detect of HF. At the 0800 briefing CITGO identified the Sealtech, the company contracted to seal the HF leaks on the Alkylation Unit, had sealed the fourth of the 4 known leaks, and discovered 3 more leaks one from the packing of a 12-inch valve. CITGO continues to discharge the seawater used in fire fighting and vapor suppression through Outfall 004, a storm water outfall at approximately 3,000 gpm. CITGO samples the Outfall 004 at 4 hour intervals for the parameters for storm water plus pH and fluoride. The TCEQ is grabbing split samples twice a day and analyzing for the waste water parameters in CITGO's discharge permit. CITGO estimated that 12,000,600 gallons of fire fighting water had been discharged. CITGO estimates they use 3,000 gpm of seawater for vapor suppression and may continue to use vapor suppression water at that rate until the unit's internal monitoring system is in the area of the fire is restored and all leaks are sealed. CITGO monitoring at the perimeter of the unit has not identified any airborne release from the unit. CITGO is depressurizing the unit through an acid gas removal system and flaring the remaining gas through the flare and has indicated that the unit pressure in the leaking circuit is down to 4 psig. EPA demobilized from the site as the TCEQ was maintaining a 24-hour presence at the facility until all vapor suppression is discontinued. After treating the fresh water used in fire fighting and vapor suppression with soda ash to adjust the pH from around 2 to around 6.5 CITGO is adding this water with elevated fluoride concentrations into the plant waste water treatment system. On 26 July 2009 the three additional leaks identified yesterday had been stopped and 2 more leaks were identified bringing the total of newly identified leaks to 5. The 2 remaining of the 5 leaks was expected to be stopped on 27 July 2009.

Planned Removal Actions
Incident response is being monitored. None planned by EPA at this time.

Next Steps
Coordinate with other state and federal agencies and monitor the situation by telephone

Key Issues
There has been a non-detect of VOCs and HF from air monitoring around the perimeter of the facility. The pressure in the unit is low and CITGO indicates that only trace HF is being released, and the vapor suppression efforts continue so there have been no detections outside the unit. Unauthorized discharge of untreated seawater used in fire fighting and vapor suppression that contained elevated levels

of fluoride into the nearby ship channel continues. Treated fresh water used in fire fighting and vapor suppression had elevated fluoride concentrations in the plant discharge.

response.epa.gov/CitgoRefineryFireCorpus