

United States Environmental Protection Agency
Region VI
POLLUTION REPORT

Date: Wednesday, July 29, 2009

From: Mark Hayes

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

POLREP No.:	6	Site #:	
Reporting Period:		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 27 July 2009 EPA perimeter air monitoring for VOCs and HF continues to reflect non-detect. CITGO continues to discharge the saltwater used in fire fighting and vapor suppression through storm water outfall 004 at approximately 3,500 gpm. CITGO samples the Outfall 004 at 4 hour intervals for the parameters of storm water plus pH and fluoride. CITGO reports the results are within permit limits, with fluoride running equal to and less than 10 ppm. TCEQ is grabbing split samples twice a day and analyzing for the waste water parameters in CITGO's discharge permit. CITGO estimates they use 3,000 gpm of water for vapor suppression and may continue to at that rate until the unit's internal monitoring system in the area of where the fire occurred is restored and all leaks are sealed. At 1500 hours attempts to repair or replace these monitors were initiated. CITGO monitoring at the perimeter of the alkylation unit has not identified any airborne releases of HF. CITGO is depressurizing the unit through an acid gas removal system and flaring the remaining gas. CITGO has indicated that the unit pressure in the leaking circuit is down 1 to 1.5 psig. After treating the fresh water stored in secondary containments 116 and 117 with soda ash to adjust the pH from around 2 to around 6.5, CITGO is considering options for disposal. The fresh water used in fire fighting and vapor suppression that was stored into tanks 116 and 117 is being routed through the plant wastewater treatment system and discharged at outfall 001. CITGO reports the discharge from outfall 001 is within permit limits except for fluoride concentrations, which is running at 57 ppm. Citgo suspects additional unknown leaks near where the fire occurred and will continue to assess.

Planned Removal Actions

Incident response is being monitored. No removal actions planned at this time.

Next Steps

Coordinate with state and federal agencies and continue to monitor the situation.

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 hydrocarbons are 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.

