

United States Environmental Protection Agency
Region VI
POLLUTION REPORT

Date: Saturday, March 26, 2005

From: Karen McCormick

Subject: BP Texas City Refinery
2401 5th Ave. South, Texas City, TX
Latitude: 29.3745500
Longitude: -94.9287300

POLREP No.:	4	Site #:	
Reporting Period:		D.O. #:	
Start Date:	3/23/2005	Response Authority:	CERCLA
Mob Date:	3/23/2005	Response Type:	Emergency
Demob Date:		NPL Status:	
Completion Date:		Incident Category:	
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

The National Response Center (NRC 753543) notified EPA of an explosion at the BP petrochemical plant in Texas City, Texas on 23 March 2005. The explosion occurred at approximately 1:20 PM local time. BP representative Dan Lutz reported the process unit which was involved in the explosion, was an isomerization unit that produced high end naptha products with a feed line that contained 0.5% benzene. Fifteen fatalities have been confirmed and at least 77 were injured in the explosion.

A Shelter in Place was issued for nearby residents and schools in the Texas City Independent School District as a result of the explosion. The fire was put out at 3:22 PM on 23 March 2005 and a Shelter in Place was cancelled at 4:20 PM on the same day. The water used in the fire fighting efforts and to prevent airborne particulates from entering the air has been contained onsite. The stormwater runoff was analyzed for analytes associated with BETX compounds.

Unified Command was established with BP as the Incident Commander and other external agencies. EPA will continue to work within the Unified Command to address any potential health and safety concerns in the BP Search and Rescue Operations along with the surrounding community.

Current Activities

The objectives during the day of 26 March 2005 of Unified Command was to proactively take care of all affected personnel; secure incident site in compliance with Temporary Restraining Order (TRO; support incident investigation(s); manage internal and external communications; continue to manage legal issues; establish resources for the next operational period; establish a stabilization and transition plan so that the IMT will be able to transition to the Core Recovery Team; and to continue appropriate sampling strategies to ensure the safety of the workers within the facility as well as the surrounding community.

All missing individuals have been located; therefore, the search and rescue efforts have been called off. The medical examiner positively identified the fifteen bodies and notified the next of kin. Thirteen people remain hospitalized in the surrounding area, six of which remain in critical condition. BP EAP consultation and representation remain at each hospital for the families of the victims. BP EAP continues to operate a hot line number as well as onsite support.

EPA START representatives monitored the air for Benzene and VOCs near the area of Tank 108. Tank 108 has a compromised roof from the explosion. The monitoring in the surrounding area is in attempt to confirm once again that the fugitive emission source was Tank 108 and not another in the tank farm. EPA START representatives began by collecting monitoring data on Grant Avenue, an internal plant road that parallels the tank farm. Readings suggest that the source of the elevated levels are coming from the area of Tank 108. EPA START representatives then entered the tank farm area and monitored the tank farm in a grid pattern. All air monitoring results indicated non-detect with exception of the immediate down wind area near Tank 108. Since Tank 108 was suspect as the fugitive emission source, BP representative began to pump down the benzene levels in the tank early in the morning. BP representatives were able to

pump the levels in the tank to a depth of eleven feet. This activity was stopped due to the fact that the roof had loose debris and could have caused a spark. Until the time in which BP representatives put a mitigation plan into effect, the tank will remain untouched. A benzene exclusion zone has been established so that the VOCs and benzene emissions from the tank are not impacting the health and safety of the workers. The emissions from the Tank 108 are not an offsite impact thus, they do not affect the general public. BP representatives will continue to monitor the air near to and surrounding Tank 108.

Catalysts were suspected in the warehouse to the southwest of the isomerization unit with the threat of rain. BP operations personnel visually checked the presence of the catalysts and did not find them in the warehouse. Since the immediate threat to safety has been addressed, BP will focus their incident command team on the next objectives.

BP representatives are fabricating the necessary piping joints to install the in the lift station to allow for the water to be removed from this area and discharged in a permitted storm sewer. Two separate pumps were chosen to be installed by manufacturer's specifications. As a contingency plan, BP representatives will have vacuum trucks stand-by in the case of rain. In the case of rain, BP will increase the stormwater sampling to once every two hours, instead of once every four hours.

Unified Command met with the transition team, also known as the Core Team or the Recovery Team. The Recovery Team was briefed on the status of the incident. De-staffing of the IMT into the Recovery Team was supposed to begin, but after the meeting the IMT felt that the Recovery Team was not ready at this time to take over command of the incident. The IMT will remain in control of the incident until a time in which the transition can be made smoothly from IMT to long term management.

BP continues to operate the remainder of the facility that was not affected by the explosion. FOSC McCormick request a second time that the structural integrity of the surrounding unit processes, above ground storage tanks, and above ground piping be investigated to prevent potential releases and to protect the safety of the workers in the area. Plant worker will return to work on Monday 28 March 2005. A memo will be resent to all employees and will state the basic information of the incident, the IMT, and the Restricted Order. Process managers and team leaders will make it clear to all subordinates that if potential evidence is discovered that it remains where they found it.

Next Steps

Unified Command will remain established with BP Incident Commander, EPA FOSC McCormick, SOSC Rodriguez with Texas Commission of Environmental Quality (TCEQ) and Texas City Emergency Management Representative Clawson. BP established an operational period from 1600 on 26 March 2005 through 0800 on 28 March 2005. Objectives during the operational period previously mentioned are listed below:

- Proactively take care of all affected personnel and support their families
- Continue to secure the incident site
- Support incident investigation by OSHA, CSB, BP Internal, and PACE
- Manage internal and external communications
- Continue to manage legal issues
- Continue appropriate sampling and monitoring efforts to ensure safety of onsite workers and the surrounding community

Two EPA START representatives have been tasked by EPA FOSC McCormick to assist in the unified command system in operations and planning. EPA FOSC McCormick has also requested that two EPA START representatives perform air monitoring demobilized from the incident.

Key Issues

Air monitoring near Tank 108 indicated elevated levels of benzene and VOCs. A benzene exclusion zone has been established so that the elevated levels of these two constituents are not impacting the workers in the area. The elevated levels are not impacting the general public.

IMT to prepare for employees to return to work on Monday 28 March 2005.

IMT will downsize and begin to transition into the Core Team or the Recovery Team. The role and organizational chart of the Recovery Team need to be finalized before IMT will transition. IMT will retain command until this time.

As long as IMT is in command, the IMT will continue to work within the Unified Command and address any potential health and safety concerns in the BP Search and Rescue Operations along with the

surrounding community.

Continue to support EAP activities.

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