

United States Environmental Protection Agency
Region VI
POLLUTION REPORT

Date: Sunday, March 27, 2005

From: Karen McCormick

Subject: and Final

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

POLREP No.:	5	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 naphtha 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 worked within the Unified Command to address any potential health and safety concerns in the BP Search and Rescue Operations along with the surrounding community.

All missing individuals have been located; therefore, the search and rescue efforts have been called off. The medical examiner positively identified 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.

Current Activities

The objectives during the day of 27 March 2005 of Unified Command were to proactively take care of all affected personnel; further clarify the exclusion zone borders and to identify the requirements of the Temporary Restraining Order (TRO) as it applies to the exclusion and controlled access zone ; support incident investigation(s); manage internal and external communications; continue to manage legal issues; provide consistent and reliable maintenance coverage for unplanned/unanticipated high priority work in the incident area; continue appropriate sampling and monitoring strategies to ensure the safety of the workers within the facility as well as the surrounding community; transition unified command from the Emergency Response phase to the Compliance and Investigation Phase.

Tank 108 was pumped down to a level of 11 feet of product within the tank. The process was stopped due to potential health and safety concerns. BP representatives will look into viable options to safely mitigate the emission source. In the mean time, a benzene exclusion zone was established so VOC and benzene emissions from the tank would not impact the health and safety of the workers around the tank. BP representatives will continue to air monitor the area surrounding Tank 108. Although air monitoring near Tank 108 still indicates elevated levels of benzene and VOCs around the firewall, no

elevated levels were detected in the offsite monitoring. Monitoring data indicate these two constituents are contained within the facility and are not impacting the general public. BP representatives are fabricating the necessary piping joints to install lift station pump to allow water to be removed from the area and discharged into a permitted storm sewer. Two pumps were chosen by manufacturer's specifications to be installed. As a contingency plan, BP representatives will have vacuum trucks on stand-by and will also install a small six inch pump in case of rain. Arching occurred at the transformer unit that supplies power to the pumps so it was shut down until a plant electrician could correct the problem. In case of rain, BP will increase the stormwater sampling from once every four hours to once every two hours.

A memo will be resent to all employees to state the basic information of the incident, the IMT, and the areas defined in the Temporary Restraining Order. Process managers and team leaders will make it clear to all personnel that if potential evidence is discovered that it remains where they found it. The Dolye Center will be used to communicate with all BP employees and to provide a question and answer session on Monday morning.

The Emergency Response (ER) phase of the incident is complete. All public health and environmental threats have been addressed. The incident will now move into the compliance phase. Ongoing investigations currently include OSHA, the Chemical Safety Board (CSB), PACE (Paper, Allied-Industrial, Chemical and Energy Workers International Union), and BP internal investigation(s).

BP, EPA, and TCEQ representatives conducted a hot wash to discuss lessons learned during the emergency response incident. FOSC McCormick expressed that it was evident that BP employees have had ICS training prior to this incident. The IMT was open minded with suggestions made by federal, state, and city agencies and the IMT was able to promptly provide information requested by the agencies. The ICS structure was followed very well. The operations personnel were able to stop work in a health and safety situation. TCEQ SOSC Rodriguez stated that the structure of ICS was very professional. BP could have done a better job in providing personnel with detailed knowledge of the process unit in question and by providing someone familiar with the compliance side of the process unit.

EPA START representatives have been demobilized by EPA FOSC McCormick. The emergency response portion of the incident is complete. EPA representatives will remain in contact with the IMT and Recovery Team.

Next Steps

Unified Command will remain established with BP Incident Commander 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 for this operational period 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

Key Issues

Although air monitoring near Tank 108 still indicates elevated levels of benzene and VOCs around the firewall, no elevated levels were detected in the offsite monitoring. Monitoring data indicate these two constituents are contained within the facility and not impacting the general public. A benzene exclusion zone was established to ensure the health and safety of the workers in the area.

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

Continue to support EAP activities.

response.epa.gov/bpexplosion