



## Texas City Refinery Update: The Price of Safety Complacency

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*ES&H Safety Bulletin 2005-09 (July 2005) discussed the Texas City Refinery accident in the context of the need for vigilance in conducting infrequent, high-hazard operations. This advisory presents financial, regulatory, and legal impacts of the accident.*

The Occupational Safety and Health Administration (OSHA) fined BP Products North America, Inc. (BP) \$21,361,500 on September 22, 2005 following the agency's investigation of the March 23, 2005 explosion at BP's Texas City refinery. That explosion fatally injured 15 workers and significantly injured hundreds more. The fine against BP is the largest ever levied by OSHA. OSHA issued citations to BP for 303 willful safety violations, 26 serious safety violations, and 3 other-than-serious safety violations. OSHA's report cited BP's failure to:

- Use intrinsically safe electrical equipment;
- Record and compile written process safety information;
- Ensure employees receive refresher training at regular intervals;
- Correct deficiencies in equipment operating outside acceptable limits;
- Adequately identify and evaluate potential risks before facility operation;
- Adequately evaluate the safety and health impact of catastrophic events;
- Ensure that operators follow safe and consistent startup procedures; and
- Warn employees of developing conditions that could threaten safety.

OSHA classified several of the willful violations as "egregious," a term the agency only uses when violations occur in multiple instances across a range of activities. BP agreed to pay the multimillion-dollar fine as part of an agreement with the agency to improve safety conditions at the plant. OSHA, in conjunction with the Department of Labor, referred the Texas City refinery case to the Department of Justice on December 9. The managers and owners of BP now face not only monetary penalties, but also potential criminal penalties for poor safety oversight.

The fallout from the Texas City refinery explosion demonstrates the high cost of ignoring routine maintenance, process safety oversight, and opportunities for improvement at an aging facility. As a result of infrastructure downtime and repairs following the explosion, BP has lost an opportunity to invest approximately \$1 billion of business capital into new programs and budget items. BP must instead deploy that capital to compensate for asset damage, facility downtime, lost product, and the administrative disruption that follows in the wake of a major catastrophe and a Federal accident investigation.

Secretary Bodman stated in February, 2005 that "when it comes to our collective safety, we must never lapse into complacency...complacency is safety's enemy." BP has learned this lesson the hard way, and now faces years of unexpected setbacks that will hobble the company's productivity and growth. DOE and its contractors must often address safety conditions that parallel those that existed at the Texas City refinery prior to the explosion. The routine use of steadily decaying infrastructure poses an escalating probability of an event if managers and operators are unwilling to adopt an inquisitive safety posture and adjust their habits to reflect changing conditions.

As the principal trustee for the American public in a wide range of high-risk, high-consequence endeavors, it is the duty of the Department of Energy to build and maintain a sterling safety culture that will methodically eliminate accident precursors before they develop. The violations at BP's Texas City refinery represent the most common precursors for accidents that have occurred across the complex in the recent past. Any one of these safety violations, on its own, may justify a "stop-work" order and should be addressed immediately. Together, these violations can only co-exist if both management and operators consciously ignore opportunities to halt operations in an increasingly threatening environment.

The Office of Environment, Safety and Health requests that all DOE employees and contractors pay special attention to their colleagues' safety and security in the wake of this tragedy by reviewing the safety practices BP failed to implement (listed above) in its own operations and by reflecting on routine activities in their own workplaces. Facilities, equipment, and processes cannot adopt an inquisitive safety posture – only people can foresee and prevent accident precursors. With everyone's help, the Department can enhance its strong safety record and wholly eliminate the potential for catastrophic accidents.

