Alarm on BP oil rig disabled prior to explosion

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The chief electronics technician for the Deepwater Horizon oil rig told a federal investigative panel on Friday that the alarm system on the rig was intentionally partially disabled in the lead-up to the April 20 explosion that killed 11 workers and subsequently led to the disastrous oil spill in the Gulf of Mexico.

These revelations were made during the joint US Coast Guard & Bureau of Ocean Energy Management investigatory hearings into the causes of the explosion and subsequent oil spill.

Michael Williams's testimony documents only one of a series of decisions by BP and the oil rig owner Transocean sacrificing safety that led to the disaster.

Williams told investigators that all levels of management—from the chief mate, to the captain and ultimately the offshore installation manager (OIM)—had authorized and were aware that the general alarm system had been "inhibited," that the actual alarm had been disabled.

A year prior, when Williams first learned of the alarm being inhibited, he was told that management had requested the alarm system to be inhibited because "they did not want people to be woken up at 3 o'clock in the morning due to false alarms."

The general alarm system, Williams explained, should notify all of the workers aboard the rig when one of three conditions are present: fire, combustible gas, or toxic gas. When the alarm is inhibited, he continued, "the sensor is active, it is sensing, and it will alarm, and it will give the information to the computer, but will not trigger an alarm for it. It will give you an indication, but it won't trigger the actual alarm."

When asked if the explosion could have been prevented, or if more people could have escaped had the alarm system been functioning correctly, Williams answered: "When you get two detectors to go high in one zone the ESD [emergency shut down] for that affected zone should trip. That ESD is going to control your fire dampers, and your power and your 11KV switchboards. All those things should trip—air supplies, water tight dampers, all those things for the affected zone should trip. Also you're going to sound the general alarm. That's how the system is designed."

Williams was asked by investigators to recall the events leading up to the explosion. He answered that no general alarm was sounded, but that he did receive notification of elevated gas levels. The elevated gas levels were not out of the ordinary, Williams said, because high gas levels were frequent on the Macondo well.

In fact, workers aboard the rig often referred to the well as the "well from hell" because it exhibited similar characteristics (including elevated levels of gas) to a well many of the workers had worked on previously in an area dubbed "devil's tower." That well had been so problematic that it ultimately had to be shut down and abandoned.

In recalling the events, Williams gave chilling testimony of the moments just prior to the explosion through his rescue after being forced to jump from the rig. He recalled hearing a loud thump followed by a hissing sound—which he assumed to be a hydraulic leak. Moments after the thump he recalled numerous panel alarms and the third engine revving up much higher than normal.

After two explosions, and attempts to get the backup generator online, the captain gave the order to abandon the rig. Through all of this, Williams testified, he did not hear the general alarm.

Transocean responded to the Williams testimony by releasing a statement claiming that the inhibition of the

alarm “was not a safety oversight or done as a matter of convenience.” With the revelations of Williams being just the latest in a string of mounting evidence that safety precautions were skirted frequently on the Deepwater Horizon, the Transocean statement is hardly believable.

Earlier in the week, the investigative panel heard testimony from Ronald Sepulvado, a BP manager who was on the rig shortly before the explosion. Sepulvado said that the well’s blowout preventer—which failed on April 20, leading to the spill—had problems three months before the explosion.

“One of the [blowout preventer’s] functions was leaking hydraulic fluid—the fluid used in the system to operate it,” Sepulvado said. The problem was never fixed, and operations continued. This was a direct violation of regulations, which require that drilling be stopped if there are problems with the blowout preventer.

The panel also presented evidence showing that the blowout preventer was well past the required inspection every three to five years.