The explosion followed by a fire on the deepwater horizon semi-submersible mobile...

Literature, Russian Literature

The paper " Human Behaviours That Leads to Catastrophic Fires: Deepwater Horizon Fire" is a brilliant example of a case study on environmental studies. The synopsis is in relation to the detonation of the drilling rig Deepwater Horizon. The explosion occurred on April 20, 2010, which was consequently followed by a fire on the Deepwater Horizon semi-submersible Mobile Offshore Drilling Unit. This led to the death of 11 workers while 16 more were injured. The incident made the Deepwater Horizon be on fire and it submerged which leading to the huge offshore oil spill. The incident was well-thought-out as the leading marine spill oil accident worldwide and was concluded that it was disastrous to the environment. When the incident occurred, the Deepwater Horizon was on Mississipi Canyon Block 252 which was by then known as Macondo Prospect. In March 2008, the rights for the mineral to bore for oil on the Macondo Prospect were purchased by BP. The raised area started to be drilled on in February 2010 at a depth of around 1500 meters. It was supposed that the well could be drilled up to5600 meters below sea level and was to be plugged and balanced for later finishing as a subsea manufacturer. It was ready to be tested for reliability and a cement plug set to momentarily desert the well for later achievement as a subsea producer (Camilli et al, 2010). Previously, there had been fires at the Deepwater Horizon and issuing of effluence credentials by US Coast Guard. The incident of the explosion started at around 9. 56 pm C. D. T in April 2010. Among those who were present were; 7 people employed by BP, 79 from the Transocean and people employed by different companies who participated in the action of the rig. The first people to realize the signs were

the employees of the transocean who said that the lights had flickered which were closely followed by two burly vibrations. One of the members of the Transocean said that something was wrong and immediately after the explosion, the executive said that nonstandard pressure had accumulated in the marine riser. As the marine riser tried to find its way up, it stretched out speedily and caught fire. Those who survived testified the incident as an unexpected explosion which only left them with 5 minutes to run for their safety as the alarm subsided. The incident was followed by a conflagration that engulfed the platform (Diercks et al, 2010).

The fire Deepwater Horizon sank after the fire burnt for like a day. The report that was later produced by the BP stated that the blast-off basis for the incident was brought about by the hydrocarbons that were ingested to the diesel generators through the intake of the air and hence closing the area from which the hot exhaust gas was to be released through. In total, 115 lives were evacuated. The survivors were interviewed by the Coast Guard for some time before they were later transferred to a different rig. Despite the fact that they arrived in Louisiana late than expected, they were taken to a hotel in Louisiana where they were given the necessary attention like; food, medical consideration and good rooms to shower (Reddy et al, 2012).

When they arrived at Port Fourchon, the members of the squad were permitted to leave. The members of the crew were also given medical attention, places to shower, food and rooms. Thereafter, the members of the crew were served with a one-page document by the representatives of the

transocean which they were to fill in. It was later reported that 12-15 workers could not be traced and it’s then the United States Guard initiated a rescue operation of the workers (Camilli et al, 2010).

The causes of the explosion include; failure of the valves not closing which were used to put a stop to the backflow of the cement, the small hole of the diameter which hindered the circulation of the dirt, the cementing was insufficient hence could not enable flushing of the annulus around the shoe truck, the wrong interpretation of the test of pressure, the rising of the gas and the oil were not closely monitored which led to the arrival of the hydrocarbons and lastly the difficulty of closing the fail-safe that was on the seabed hence the failure of closing the BOP stack which was worsened by the presence of the off-centre drill pipe. All these factors contributed to the explosion of the Deepwater Horizon causing the explosion and the fire. If only the correction of the above-stated factors could have been looked into, then the incident could have been avoided. The regulations that were violated are inclusive of BP refusing to listen to the recommendations proposed by Halliburton and BP not taking into consideration the findings of the advanced modeling software that had ascertained over three times that many centralizers were needed on the rig. Bp also assumed warnings that came from other key tests. If BP could have taken these into consideration, the incident could have been avoided.