

**Bp oil spill: it should  
have been prevented**



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## **Introduction**

Almost all of man-made disasters could be prevented in today's society. So, why are these disasters not prevented? Why do man-made disasters in which kill thousands of people each year still occur? The answer to these questions is due to improper or a lack of emergency management.

Emergency management refers to all things that need to be accounted for in regard to planning, preparing, responding, and recovering from any disaster or emergency situation (1). Emergency management is important because it promotes the safety of employees, the environment, and the surrounding communities. In addition, emergency management is important because if it is managed correctly, it will reduce panic if a disaster does occur, reduce the recovery time, and it may also prevent unnecessary shut downs of businesses (1).

Furthermore, emergency management is much more than just a series of procedures. Successful emergency management is having strong communication, a sense of stewardship, effective governance, effective training, prevention/response plans, and much more (1). Many corporations and small businesses require some sort of emergency procedure. In reality, 50% of Fortune 500 CEO's have an emergency management plan if a crisis occurs and 42% of those 500 CEO's that have previously experienced a crisis, still do not have any sort of emergency management plan (2). Studies show that many companies do not have crisis preparedness plans because they are in denial and they believe the likelihood of a crisis occurring is so unlikely that there is nothing to be concerned about (2). In addition, many multi-billion dollar corporations make so much money that they would rather

pay the fines for not having a safe and reliable crisis management plan because the fines are less than the cost of updating equipment and training. Overall, the federal safety guidelines and regulations need to be improved. All business companies and corporations need to understand the risks their business brings and that crisis' do occur and they can be severely impacted. With this realization, companies without plans need to focus on creating a plan and companies whom have a plan need to analyze it to make improvements. In addition, all emergency and disaster training should be given as individuals are hired, as well as 1-2 times per year to ensure the safety of individuals in emergency situations. As well as incorporating proper training, all companies should have risk assessments, equipment evaluations, and disaster plans analyzed every couple of years to take safety precautions. Although these procedures take time and money, it is much more worth spending money on preventative measures rather than spending more than quadruple the cost on response and recovery, as well as potentially costing lives.

One major manmade disaster that could have easily been prevented was the British Petroleum (BP) oil spill in the Gulf of Mexico back on April 20<sup>th</sup>, 2010. The BP oil spill was an explosion of a newly drilled oil rig in which the cement closure over the wellhead of the rig was faulty, causing a large build up in pressure in which ultimately resulted in an explosion (3). It was not until two days later (April 22<sup>nd</sup>) that officials realized that there was an oil leak (3). This huge blowout resulted in eleven deaths, and seventeen injuries (3). The well remained open and flowing for approximately three months when it was finally sealed off on July 15<sup>th</sup>, 2010. The blowout resulted in over 4.9 million

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barrels (over 210 million gallons) of oil in which leaked out into the Gulf affecting marine life (killing and causing abnormalities to ocean life species) (3). British Petroleum was cited as the main fault of the blowout in which they had to pay roughly \$42 billion in criminal charges and fines (3). The oil rig offered BP many disaster warning signs in which if corrective action would have been taken earlier, then the explosion most likely would not have occurred.

### Prevention

When creating an emergency management plan, it is extremely vital to focus on the prevention of a possible disaster. There are many aspects to be accounted for when analyzing how to prevent a disaster such as: what preventative measures need to be taken, design standards that are required, evacuation procedure, and environmental scheduling (1). The employees of British Petroleum lacked in their prevention of a possible crisis. BP had a poor sense of stewardship, meaning that they were not attentive to the long-term effects of the oil rig, and instead they were only focused on the immediate effects (1). Before the drilling process occurred, there was no sense of emergency plan created in case an explosion had occurred. BP had been in denial, and unwilling to believe that a blowout could happen to their oil rig, destroying their company. As a result, to not having some sort of plan, when the explosion did occur, lives were lost, employees were scrambling, and panic was induced. This created a stressful environment and if there was plan that had been set in stone, fewer lives may have been lost, and the response and recovery time could have been reduced. In addition, the equipment used to build the rig was very outdated and instead of purchasing <https://assignbuster.com/bp-oil-spill-it-should-have-been-prevented/>

newly updated equipment, BP stuck with the aged equipment taking their chances that there would be absolutely no faults to it (3). Furthermore, BP also lacked community resilience (managing hazards in attempt to decrease risk and to recover from any crisis' that do occur), or in other words BP was very robust prior to the explosion. When a company is considered to be robust it means that they may be able to take a hit by a disaster, but when they are hit they have no tractability (1). BP did not acknowledge the possibility of a disaster this large, so when the company took their hit (when the explosion occurred), the company was unable to bounce back and respond right away. It took British Petroleum months before they found a permanent solution to close off the wellhead, and it has taken the company even longer to clean up the ocean. With taking preventative measure into account and having a response plan in case of a potential disaster, then BP would have been much more resilient, and the resulting impacts would not have been so severe.

To continue, British Petroleum had no sort of evacuation plan in case a disaster occurred. Since, there was no evacuation route, no employees were trained as what to do during the blowout which ultimately left employees using any survival skills they had to survive. When the blowout occurred, the ones who survived were those who jumped off the rig into the ocean and got as far away from the rig as possible. Those who jumped off the rig, were left floating in the ocean until the Coast Guard arrived with lifeboats and helicopters to save the remaining employees (4).

In addition, BP violated many of the design standards that were set by the Minerals Management Service (MMS) who at the time was in charge of the <https://assignbuster.com/bp-oil-spill-it-should-have-been-prevented/>

offshore drilling in the Gulf (5). Prior to the spill, MMS had already been struggling as an agency and as a result they were too lenient with the risk management that BP had provided them with (5). The Minerals Management Service did not push BP to update their equipment and technology, and they did not push for more policies or procedures (5). In their defense, the maximum fine they could give BP for violating their regulations was \$35, 000 which meant nothing to BP who was a several billion-dollar corporation (5). British Petroleum decided that it would cost less to pay the fines from the MMS rather than updating their equipment and policies. The negligence of these policies and regulations resulted in BP losing several billion dollars and the shutdown of MMS, in which the Bureau of Ocean Energy Management Regulations and Enforcement eventually took over the responsibility of offshore drilling (5).

British Petroleum also did not have any plans regarding the environment. When a company begins drilling an oil rig in the Gulf, it would be logical to think that there is potential for poor weather, tropical storms, and hurricanes. Before beginning the drilling, BP knew that there was a suspected hurricane that they may encounter during their drilling (4). Instead of pushing off the drilling until the following year, they decided to go forward with the project. As the drilling company began the project, they ran into a few hiccups and other small issues that were resolvable, but enough to push back the completion date of the rig. Since BP was behind schedule, they were pushing the drilling company to speed up the process as much as they could so the rig could be finished before the severe weather approached. BP had hired Halliburton to cement the well, including sealing

off the wellhead (6). The cement that was used for this well was a newly developed formula in which did not undergo the correct testing before using it to seal off the wellhead (7). Although the cement did undergo a few tests prior to use, one of the tests returned some concerning results that the formula may not be as stable as it was supposed to be (7). Halliburton ignored these results and continued to seal off the wellhead with the cement due to the short time frame (7). Over time, warning signs were disregarded, excessive pressure built up in the pipe and exploded right through the cement (4). Halliburton should have run more tests on the cement, and used a different formula instead of disregarding the negative results. In addition, BP should have had an alternate option in case the drilling needed to be stopped due to severe weather. These alternate plans should have been accounted for prior to beginning the oil rig project to prevent malpractice and avoid the time vs weather issue. In addition, any company should always plan for getting behind schedule when they are planning a project. Everyone knows that most things do not go as planned and there are always hiccups in the process. BP should have analyzed the potential consequences they could run into if that were to occur.

### Preparedness

Being prepared for a disaster or any emergency situation is an important aspect in regard to response and recovery time if a disaster strikes. Key factors to being prepared is having appropriate working equipment, proper training, and evaluating corrective action (1). British Petroleum lacked in all of these factors prior to the blowout which again, could have ultimately prevented the entire explosion from occurring. As stated earlier, Halliburton

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used cement that they knew was going to be faulty, but they ignored the test results and moved forward with the project. BP also used an old and outdated blowout preventer which ultimately malfunctioned and clearly did not prevent a blowout (8). The blowout preventer was over 9 years old and tests were not run to be sure this equipment would withstand a possible blowout (8). In addition, investigators found that the system had a dead battery, faulty wiring, and a bent pipe which also played into the explosion (8). If evaluations would have been performed on this equipment prior to drilling, corrective action could have been taken to prevent the explosion. Furthermore, workers on the rig ignored warning signs from a pressure test on the rig (8). The test displayed high pressure levels, and instead of a worker asking their companies engineer, or a drilling engineer the results were disregarded and BP continued to speed up the drilling process. BP should have provided more training to their workers as how they should handle unexpected results.

British Petroleum did not provide their workers with the training necessary to work on the oil rig. Workers disregarded many warning signs and misread several negative test results instead of giving them the immediate attention that they needed (8). Halliburton should not have allowed BP to use their cement formula without providing further testing to be sure their cement was stable. BP had issues with Halliburton on previous projects, and the employees at BP did not supervise their work despite their past (6). As stated earlier, BP officials had not developed an evacuation plan for the rig, in which the employees had not been properly trained as how to remove themselves from a life-threatening situation and it inevitably resulted in eleven lives lost.



## Response

The way a company responds to a crisis can dictate how severe the impacts of a crisis are. For instance, without having a disaster plan prior to the crisis, the resulting impacts were much worse than what BP could have ended with. If BP would have developed an organized disaster plan in case of a blowout (which would have likely included the possible solutions to stopping an oil leak), then the coordination between their employees would have been present and many employees would have known how to evacuate and what measures needed to be taken in order to stop the rig's oil leak. With effective coordination, the response to the blowout and the search for a solution would have occurred quicker and more effectively. To add on, successful coordination would have allowed for the employees to develop an overall strategy and allow for the creation of achievable and realistic solutions in response (1). Unfortunately for BP, it took them several attempts to find a solution whereas a few of their " solutions" actually resulted in a worse situation. At first, the Coast Guard decided to burn all of the oil that was present on the surface of the ocean to prevent the oil from spreading to nearby shores (9). At the time to officials this solution seemed to be the quickest option, but in reality, a great amount of oil still reached the shores, the oil was still leaking, and now the atmosphere was heavily polluted (9). The next solution officials tried were adding barriers to the ocean to attempt to isolate the oil to one area (9). The issue with this solution was that much of the oil was settling to the sea floors and it overall was unable to contain the oil (9). Furthermore, containment domes and relief wells were potential ideas that ended up unsuccessful (9). Officials also attempted to spray the

regions of the ocean that had been contaminated by the spill through using chemical dispersants (10). Planes would fly over the areas, spraying these chemicals in hope to speed up the breaking down of the oil and allow for easier clean up. In contrast, this solution backfired by causing more harm to marine-life. In addition, studies have shown that the oil would have tarnished faster without the chemicals (10). Skimmers were used to remove as much of the oil off the surface of the ocean as possible, and finally a cap that could be tightly sealed onto the rig is what put the leak to an end (9). BP, the Coast Guard, and Transocean (owners of the rig), coordinated and collaborated with each other to put an end to the leakage, but the time that it took as well as the number of attempts that it had taken to stop the leak was unacceptable. BP also had to coordinate with other organizations and businesses to clean up and take care of as many marine-life species as possible. With a well thought-out and organized emergency response plan, this disaster would not have had as severe of impacts. With an effective plan, these companies would have most likely run into several issues along the way, but their time would have been used much more effectively and it would not have taken three months to develop a solution.

### Recovery and Mitigation

Today BP is still in the recovery phase of emergency management and will continue to be in this phase for many years to come (11). BP and other officials are still working to clean and skim oil out of the ocean. Marine-life species are still washing up on shores and being found floating dead in the Gulf (11). British Petroleum is still partnering with large companies to help restore the injured species in the ocean. Many animals are still covered in <https://assignbuster.com/bp-oil-spill-it-should-have-been-prevented/>

crude oil and are suffering (11). At one point, BP partnered with Dawn (yes, the dish detergent) in efforts to send employees and volunteers to the Gulf to aid in washing these animals with their detergents to help them recover as well. BP, Transocean, and Halliburton all were sited with some sort of fault (BP being most at fault) and they had to go through many court trials to determine who was at blame, what costs they would be responsible for, and what criminal charges they would be charged with (6). Overall BP had to put out roughly \$42 billion towards all damages (3). British Petroleum has not discussed how the company is currently doing in regard to recovering from the inside, and they have not expressed their ideas as to how they plan to recover (12). The only statements that have been in regard to recovery is from the CEO of BP stating that they will rebuild and regain the trust from the community (12). After a disaster of this nature, those words are unsettling. In times of recovery, many apologetic statements by the CEO should have been released as well as their plans to return to normal and become stable again. In addition to recovery, this is the time that BP and the other companies involved need to re-evaluate themselves, create new policies, and implement a crisis management plan. In parts of recovery, the MMS has been shut down allowing for the Bureau of Ocean Energy Management Regulations and Enforcement to take control of off shore drilling as well as updating many of the policies, regulations, and fines.

Overall the crisis could have definitely been prevented with effective crisis plans. Unfortunately, it has taken lost lives, billions of dollars, and damage to our environment for large companies (including the government), to see how important it is to be prepared in case of a disaster.

## References:

(7) Broder, John M. “ Halliburton and BP Knew of Cement Flaws, Report Says.” *The New York Times* , The New York Times, 28 Oct. 2010, [www.nytimes.com/2010/10/29/us/29spill.html](http://www.nytimes.com/2010/10/29/us/29spill.html).

(3) “ Deepwater Horizon oil spill.” *Wikipedia* , Wikimedia Foundation, 13 Dec. 2017, [en.wikipedia.org/wiki/Deepwater\\_Horizon\\_oil\\_spill](http://en.wikipedia.org/wiki/Deepwater_Horizon_oil_spill).

(10) D’Angelo, Chris. “ Products Used To Clean Up BP Oil Spill May Have Made Things Worse.” *The Huffington Post* , TheHuffingtonPost.com, 19 Dec. 2016, [www.huffingtonpost.com/entry/bp-gulf-oil-spill-cleanup\\_us\\_564a52f4e4b06037734a7558](http://www.huffingtonpost.com/entry/bp-gulf-oil-spill-cleanup_us_564a52f4e4b06037734a7558).

(12) Editors, The. “ Catastrophic Thinking: How to Ensure Oil Spill Disasters Do Not Happen Again.” *Scientific American* , 1 Aug. 2010, [www.scientificamerican.com/article/catastrophic-thinking/](http://www.scientificamerican.com/article/catastrophic-thinking/).

(11) Griffin, Drew, and Curt Devine. “ 5 years after the Gulf oil spill: What we do (And don’t) know.” *CNN* , Cable News Network, 20 Apr. 2015, [www.cnn.com/2015/04/14/us/gulf-oil-spill-unknowns/index.html](http://www.cnn.com/2015/04/14/us/gulf-oil-spill-unknowns/index.html).

(6) Krauss, Clifford. “ Halliburton to Pay \$1. 1 Billion to Settle Damages in Gulf of Mexico Oil Spill.” *The New York Times* , The New York Times, 2 Sept. 2014, [www.nytimes.com/2014/09/03/business/energy-environment/halliburton-to-pay-1-1-billion-to-settle-damages-in-gulf-of-mexico-oil-spill.html](http://www.nytimes.com/2014/09/03/business/energy-environment/halliburton-to-pay-1-1-billion-to-settle-damages-in-gulf-of-mexico-oil-spill.html).

(4) Meigs, James B. “ Blame BP for Deepwater Horizon. But Direct Your Outrage to Its Actual Mistake: Years of Cutting Corners.” *Slate Magazine* , 30 <https://assignbuster.com/bp-oil-spill-it-should-have-been-prevented/>

Sept. 2016, [www. slate.](http://www.slate.com)

[com/articles/health\\_and\\_science/science/2016/09/bp\\_is\\_to\\_blame\\_for\\_deepwater\\_horizon\\_but\\_its\\_mistake\\_was\\_actually\\_years. html.](http://www.slate.com/articles/health_and_science/science/2016/09/bp_is_to_blame_for_deepwater_horizon_but_its_mistake_was_actually_years.html)

(5) “ Minerals Management Service.” *Wikipedia* , Wikimedia Foundation, 11 Dec. 2017, [en. wikipedia. org/wiki/Minerals\\_Management\\_Service.](http://en.wikipedia.org/wiki/Minerals_Management_Service)

(9) Morrison, Chris. “ Seven Technologies Used to Clean the Gulf Oil Spill.” *CBS News* , CBS Interactive, 5 May 2010, [www. cbsnews. com/news/seven-technologies-used-to-clean-the-gulf-oil-spill/.](http://www.cbsnews.com/news/seven-technologies-used-to-clean-the-gulf-oil-spill/)

(2) Smith, Jack. “ Comprehensiveness: A Vital Principle in Emergency Management.” KNH 2420-01. Wright State University, Fairborn. 10 Dec. 2017. Lecture.

(1) Smith, Jack. “ Introduction to the Principles of Emergency Management.” KNH 2420-01. Wright State University, Fairborn. 10 Dec. 2017. Lecture.

(8) Washington, Associated Press in. “ Investigation into 2010 BP oil spill finds failures, poor testing and ongoing risks.” *The Guardian* , Guardian News and Media, 5 June 2014, [www. theguardian. com/environment/2014/jun/05/bp-deepwater-horizon-spill-report-failures-risks.](http://www.theguardian.com/environment/2014/jun/05/bp-deepwater-horizon-spill-report-failures-risks)