1
MAYDAY IN THE GULF

At 9:53 P.M. on April 20, 2010, Andrea Fleytas sent a "Mayday" signal from the *Deepwater Horizon*, a mobile oil rig sitting some 50 miles off the coast of Louisiana in the Gulf of Mexico. The rig was connected to a BP oil well a mile down on the ocean's floor. The well had suffered a blowout. When a well blows out, it can mean total loss of control, just like when a tire blows out on a car traveling at high speed. Fluids and natural gas shot up from the well, causing an explosion on board the rig, which became engulfed in flames. Disaster had struck.

Fleytas, a 23-year-old junior bridge officer, was a 2008 graduate of the California Maritime Academy. This was her first job on a vessel. She later reported that when she told the rig's captain about the distress call, he turned to her and cursed, asking: "Did I give you authority to do that?"[1]

Given the dire circumstances on the *Deepwater Horizon,* Fleytas did not jump the gun in sending for help. The Mayday signal was relayed to the U.S. Coast Guard. It sent two vessels, a rescue plane, and four helicopters. By the time they arrived at the scene, their rescue effort was futile. Eleven people were dead, most likely as a result of the explosion itself. The remaining 115 crew members,

some seriously injured, survived. Two of the survivors were high-level BP executives. In an ironic coincidence, they were on board the *Deepwater Horizon* to give its crew an award for safety.

Two days later, Earth Day, the *Deepwater Horizon* sank. In the process, the pipe connecting it to the well snapped. Oil from the well started to spout uncontrollably into the Gulf's waters. For days, then weeks, then months.

Nearly two months later, President Barack Obama gave his first Oval Office address ever, calling the incident the nation's "worst environmental disaster."[2] By then, June 15, the discharge of oil already far exceeded the 11 million gallon total that flowed from the *Exxon Valdez* tanker after it hit a reef in Alaskan waters in 1989. By the time the BP well was finally capped on July 15, 2010, 134 million gallons (3.19 million barrels) of oil had spewed into the ocean, nearly surpassing the world record of 147 million gallons from the Ixtoc well in Mexican waters in the Gulf in 1979.

What happened was also the nation's worst sustainability disaster. Sustainability typically includes three pillars: social, environmental, and economic. The consequences of the accident were devastating from all three perspectives. In addition to taking the lives of 11 people, the disaster affected the lives, livelihoods, and health of millions more. The oil also caused severe environmental damage. Depending on how the total cost of the disaster is calculated, it could approach a far higher number than the $62 billion BP is expected to pay out.

This is the story of that disaster. The word "disaster" is used here instead of "spill" because spill is much too mild a term for what happened. Bob Bea, a disaster expert, a distinguished professor emeritus at the University of California Berkeley School of Engineering (who once worked on oil rigs and also as a BP consultant), has used much more graphic language: "I call it a massive cluster f___."[3]

Whatever it is called, with the passage of time, we now know more than ever before about the disaster—what caused it and its

social, environmental, and economic ramifications. We now have the benefit of extensive evidence from a lengthy federal court trial, as well as scientific and medical studies and financial data. And there is new information from people who want the story told as completely as possible, including those who worked for BP and the federal government. It is an important story for anyone concerned with sustainability, whether in their day-to-day life, the classroom, or the boardroom.

WHAT WENT WRONG AND WHY?

What caused the worst sustainability disaster in American history? Human error. Lots of it. Enough to constitute "gross negligence," according to the federal judge who presided over the civil trial and wrote a lengthy decision explaining BP's mistakes.[4] One of the world's largest oil companies and multinational corporations badly mismanaged an offshore oil venture.

Deepwater drilling can be highly lucrative but also very dangerous. As any scuba diver knows, pressure increases with depth. Deep water therefore brings higher risk. And this wasn't just deep water, it was ultra-deep water. The wellhead was one mile below the surface of the ocean, and the bottom of the well was another two miles down. Most wells in the Gulf are located in much more shallow water (1,000 feet or less).

Despite the inherent danger of this type of offshore drilling, BP repeatedly made decisions that made the project substantially riskier:

—BP cut safety corners in drilling the well, violating federal regulations in the process;

—After completing the drilling, BP rushed to close the well, making many mistakes in the process;

—BP ignored final test results showing that the well had been improperly plugged.

Although BP should have done better, the same can be said of the federal government, which regulates offshore drilling. The

Interior Department, the primary agency responsible for oversight of the oil industry, simply was not equipped for the job, politically or practically.

THE ENVIRONMENTAL AND HUMAN IMPACT

The BP well blowout took a terrible toll on the environment. Flowing profusely and for great distances, the oil had devastating ecological effects on- and offshore. Ocean currents took the oil hundreds of miles away from the well site, and over a huge surface area of water. Ocean oil slicks reached more than 43,300 square miles, comparable to the total land area of Louisiana. Oil was also found on more than 400 square miles of the sea floor.[5]

Once it surfaced, oil worked its way in one direction to Texas, and in the other direction to Florida, hitting a total of some 1,300 miles of shoreline in the five Gulf states (Alabama, Florida, Louisiana, Mississippi, and Texas). Louisiana incurred the worst damage.[6]

Beaches and wetlands were contaminated with oil, as was wildlife. The effect on living organisms was toxic and often deadly, with estimates of dead animals ranging in the tens of thousands. Containment and cleanup efforts caused further ("collateral") damage. For example, the decision to use chemical dispersants involved a balance between breaking up the oil in the ocean and risking harm from exposing humans and marine wildlife to the chemicals. Similarly, boats entering wetlands to clean up the oil and retrieve boom that had flowed into them caused harm to the fragile marshes themselves.

The impact of the disaster on humans also was devastating. The fear of economic ruin was very real to hundreds of thousands of Gulf residents, many of whom were still recovering from the effects of Hurricane Katrina in 2005. As the oil gushed out into the water and up on the beaches, fishing and tourism suffered in a part of the country that relies heavily on both. The federal

government closed down large areas of the Gulf waters to fishing. Tourists cancelled their trips to the region, not just to beach areas that had been hit with oil, but also to areas they thought might be hit. Given their lost income, Gulf residents were fearful about how they would pay rent; make payments on their homes, cars, or boats; and put food on the table for their families. Residents also feared the effects of the oil—and the tons of chemical dispersants used on it—on their health and the health of their children.

Clean-up workers especially had reason to be concerned about their health. Who were these "first responders?" Just about anyone who was willing to help. Offshore, they included fishermen who had been idled by the oil. Onshore, they included people from a variety of occupations who lost work due to the oil, but also many others, including the unemployed, homeless, and reportedly even inmates. Many were poor. Many were minorities.

By any measure, the response to the disaster was a major effort, involving nearly 50,000 workers at its peak. Many of the first responders were poorly trained, protected, and treated. Some became sick from exposure to the oil, the chemical dispersants, or the heat.

WELL CONTROL AND DAMAGE CONTROL IN THE GULF

There were two immediate tasks after the oil started spewing into the Gulf. First, stopping the oil from coming out of the well. Second, containing the oil that did. The U.S. Coast Guard was in charge of both missions, and it committed vast resources to them. The Coast Guard mobilized thousands of active duty and reserve personnel. At first, many Coast Guard personnel were put on standby in New Orleans area motels until their superiors figured out what they should do. Most had not been trained for this type of work. As a practical matter, neither the Coast Guard nor any other federal agency had the skills or equipment to respond to

such a catastrophe. The staff of the Presidential Commission set up to study the disaster later observed: "When responders looked around in the government for specific expertise on well blow-outs, including in the military and in the scientific agencies, they found little to none."[7]

As a result, the federal government called in a little-known team of elite scientists known as the "Jasons," who often work on secret defense projects. President Obama turned to Steven Chu, his Nobel Prize–winning secretary of energy, to oversee the scientific effort. These acknowledged geniuses probably could solve just about any problem given enough time—even outside their normal areas of expertise—but time was one thing they did not have.

Although technically in charge, out of necessity, the federal government wound up relying heavily on BP. The awkwardness of this symbiotic relationship was on full display at an April 29 White House press conference when a Coast Guard admiral called BP a "partner." She was quickly corrected by Secretary of Homeland Security Janet Napolitano, who interrupted to say, "They are not our partner."[8]

In the end, the two entities did wind up working closely together on a number of fronts, ranging from technical issues to public relations. They established a Joint Information Center at the Unified Area Command Post in Robert, Louisiana, about 50 miles north of New Orleans across Lake Pontchartrain. There, they shared space in a Shell training facility leased by BP.

With all the amazing brainpower available, it still took nearly three months to come up with a workable solution to stop the oil flow.[9] It involved using the same type of cap that is usually applied to such wells—stacked on top of the existing one that hadn't worked. It took time to custom-build the cap, and there was fear that it might actually make things worse. Ultimately, the scientists decided that the risk was worth taking.

The cap worked, and the oil finally stopped flowing on July 15, 2010, 87 days after the blowout.

SPIN CONTROL IN WASHINGTON AND LONDON

The Mayday sounded in the Gulf was also heard in Washington and London. According to an official White House blog, President Obama was alerted that evening.[10] According to various reports, BP CEO Tony Hayward received the news at 7:24 A.M. London time (1:24 A.M. local time in the Gulf).[11]

The pressure on the president to stop the oil did not just strike close to home, but *in* his home. While he was shaving one morning, he recounted, his 10-year-old daughter Malia had asked, "Did you plug the hole yet, Daddy?[12]

The federal government and BP shared not only the goal of stemming the seemingly unending tide of oil, but also of repelling the impression that they were essentially impotent to do so. Sensitivities to image were especially high because both Hayward and President Obama were competing with the ghosts of prior Gulf tragedies. An explosion at a BP refinery in Texas City, Texas, that left 15 people dead in March 2005 was a major embarrassment for Lord John Browne, Hayward's predecessor. Hurricane Katrina, in August 2005, left more than 1,800 people dead and a permanent stain on the legacy of George W. Bush, Obama's predecessor.

The Obama administration was in an awkward political position from the start. Just three weeks before the BP well blew out in the Gulf, the White House had stunned environmentalists and its own allies in Congress by announcing that it was going to open up vast new swaths of American waters to offshore drilling, including areas off the Alaskan and East coasts. It staged the president's announcement at a military base, presumably to highlight how increased domestic oil production would improve the nation's security. Only a few months later, in his Oval Office address, President Obama portrayed BP's oil as the enemy.

The spin battle that summer produced a number of embarrassments. Initially, the administration grossly understated the amount of oil flowing from the well, and later grossly overstated

the amount captured. The administration also misrepresented independent scientific support both for its decision to declare a moratorium on deepwater drilling and of a breakdown of the amount of oil captured. As Jane Lubchenco, head of the National Oceanic and Atmospheric Administration at the time, later put it, "The whole thing was a public relations nightmare."[13]

On August 14, 2010, a month after the well had been capped, the president took Malia swimming in the Gulf. The nation could infer that the water was safe again.

Meanwhile, BP was also struggling to put on its best face, and Tony Hayward was determined to be it. This turned out to be a big mistake. In the first of many gaffes that were both very revealing and ultimately would cost him his job, Hayward insisted early on that the amount of oil going into the Gulf was "tiny" relative to the size of the ocean.[14] A UCB Comedy spoof ("BP Coffee Spill") that went viral on the Internet ridicules that comment, as well as BP's inability to stop the flow.[15]

Hayward became a human punching bag when he testified before Congress. He was beaten up badly by Republicans and Democrats alike in both the House and the Senate. His repeated verbal fumbles brought disdain inside and outside the company. A high-level member of BP's public relations team described Hayward's public appearances as "a running sore."[16] President Obama said that he would have fired Hayward for his public statements. The CEO ultimately resigned in late July.

BP's own public relations nightmare turned into reality not just because of Hayward's misguided efforts but also because of Spillcam—cameras that BP had robotically placed at the wellhead. BP reportedly had initially resisted supplying footage from the cameras but ultimately caved in to a demand by Representative Edward Markey, chair of a House subcommittee investigating the disaster. After that, it was only a short matter of time before the subcommittee was relaying the footage to the press. Network television provided a worldwide audience with a live feed of the

oil gushing into the Gulf, sometimes using a split screen for effect with other coverage of the disaster (such as when Tony Hayward testified before Congress).

The BP employees in the Robert Joint Command Center were watching CNN just like everyone else, and the BP public relations team soon came to scorn CNN (and CNN anchorman Anderson Cooper in particular). "The optics were terrible," said one of BP's top PR people.[17] By contrast, the optics were great for Markey, who used the footage in campaign ads when he ran successfully for the U.S. Senate from Massachusetts in 2013.

BP SURRENDERS AT THE WHITE HOUSE

The day after Obama's June 15 Oval Office address, BP's top brass came to the White House. Was the federal government picking on BP because it was a British company? Some thought so. "Make them stop calling us British Petroleum," BP's British marketing staff begged its American crisis management team.[18] The company had been rebranded simply "BP" in 2000, when a campaign was launched to identify those initials with "Beyond Petroleum" instead of "British Petroleum." British employees feared federal officials were intentionally using the outdated company name to stir up resentment against the company because it is British.

Whether inadvertent or intentional, such references likely served as less of a reminder that BP was a British company than Tony Hayward's British accent. Moreover, one prominent British magazine rejected outright the notion that the Americans were motivated by animosity towards the Brits.[19]

In a carefully staged series of meetings at the White House on June 16, 2010, top BP officials, including Hayward and Chairman of the Board Carl-Henric Svanberg, met with President Obama and other senior government officials. In what was likely a predetermined outcome, BP agreed to set up a $20 billion trust fund to

pay expenses related to the disaster. Svanberg was given a photo op with the president traditionally reserved for heads of state—seated in an armchair in front of the Oval Office fireplace.

THE PRIVATE CLAIMS

The $20 billion trust fund was used to pay for a broad range of expenses, including private claims. More than $6.2 billion was handed out in the first stage of the private claims program run for BP by a prominent Washington-based lawyer, Kenneth Feinberg. Feinberg brought to the task the gravitas, experience, and credibility of having been the administrator for the private claims in several major cases, including those resulting from the September 11, 2001, terrorist attacks against the United States. Nonetheless, he became unpopular with some of the Gulf claimants by insisting on the type of documentation that some of them could not produce given the cash economy in which they operated.[20]

Feinberg was eventually replaced by Patrick Juneau, a seasoned mediator from Louisiana. Juneau operated under a different set of guidelines, one that BP and the private parties had agreed upon in a lengthy court-approved settlement, and was overseen by the court. The new rules were less stringent than Feinberg's in some respects.

In the summer of 2013, BP started to push back hard against the court-administered claims process, fighting aggressively in court first to get the entire settlement thrown out and then to get Juneau removed. BP's hard-press offense offended the judge overseeing the case and ultimately failed. By April 2016 Juneau's awards totaled nearly $7.4 billion. Together with Feinberg's awards, then, BP was responsible for paying some $13.5 billion in private claims in the six years following the disaster.

No doubt some people tried to take advantage of BP's deep pocket by filing false claims, but it was the administrators' job to catch them. Some of the fraudulent claims, whether relatively

petty or serious, wound up in the hands of the Justice Department for prosecution. A handful of employees at the Pensacola Beach, Florida, branch of the Hooters restaurant chain known for scantily clad waitresses, exaggerated the amount of their lost wages or helped others to exaggerate theirs.[21] Another Hooters employee claimed to have been let go from the Pensacola Beach location because of the disaster when he had really been fired from an inland branch for unrelated reasons.[22] A creative Michigan resident said he was stranded for 15 days in the Gulf on a boat fouled by BP's oil. He was never even there.[23]

The Justice Department reported that it prosecuted more than 300 individuals for BP claims fraud. Seventy-five defendants received prison sentences, some of them very substantial. The sentences of the Hooters employees ranged from six to 33 months. The Michigan offender was sentenced to 15 years in prison—the equivalent (coincidentally) of one year for each day he said he was adrift on his boat in the Gulf of Mexico.

THE UNITED STATES V. BP

The federal government brought criminal and civil cases against BP as a result of the accident. The company avoided a trial in the criminal case by agreeing to plead guilty to manslaughter, obstructing Congress, and environmental crimes—and to pay a record $4 billion.[24] In accepting the plea in January 2013, Chief U.S. District Judge Sarah Vance noted the need for the record payment "to protect the public from future misconduct by BP."[25]

The civil case against BP went to trial on January 20, 2013, in New Orleans. The line to watch the proceedings had started to form the night before, during a torrential thunderstorm, with placeholders making as much as $100 each. Just as soon as the courthouse opened at 7:30 A.M., the lawyers, reporters, and observers began filing in. The courtroom quickly filled to the brim. Lawyers even sat in the jury box since it was not a jury case.

Extra courtrooms had been set aside for video feeds to the overflow crowd.

A different federal district judge, Carl Barbier, presided over the civil trial. A native of Louisiana, with a touch of a Cajun accent, he had been handpicked by a special panel of federal judges to preside over most of the BP disaster civil litigation.

The stakes were high. BP was facing a maximum civil penalty of more than $16 billion. Ordinarily, under the Clean Water Act, any penalty would go in its entirety to the U.S. Treasury. But this was no ordinary case, and Congress had passed a law, sponsored by Louisiana senator Mary Landrieu, allocating 80 percent of any civil penalty to Gulf remediation. The law provided extra incentive for Gulf residents to hope that Judge Barbier would throw the book at BP.

The trial was split into three phases that continued over the course of two years, with lengthy breaks in between. In a nutshell, BP lost big in the first phase; the second phase was a draw; and BP settled before the judge issued an opinion in the third phase.

In the first phase, the judge found that BP had been "grossly negligent" in its conduct leading up to the blowout. This meant that the maximum civil penalty allowed by law would be $4,300 per barrel, nearly four times what it would be if BP had been only negligent. In the second phase, BP got a break. The judge found that more than 3 million barrels of oil had been discharged from the well, about a million fewer barrels than the government alleged. Thus, the maximum civil penalty would be $13.7 billion.

In the third phase, finally concluded in February 2015, the government and BP debated the amount of the penalty. Predictably, the government argued the penalty should be at the top end of the scale, whereas BP argued for the low end. Part of BP's argument was that it had suffered a drop in revenue due to lower oil prices.

The phase three decision was expected in early summer 2015. But just before the July 4 holiday weekend, BP suddenly announced a settlement in principle. BP would pay roughly a record $20 billion,

over time, to finally put to rest all of its remaining civil liability for the disaster. This included a $5.5 billion civil penalty, $8 billion in natural resource damages, and nearly $6 billion in state and local economic damages.

THE COST OF THE ACCIDENT

What ultimately will be the total cost of the BP disaster? Just before BP announced major budget cuts and layoffs in early 2015 in the wake of the decline in oil prices, Hayward's successor, CEO Bob Dudley, attended the World Economic Forum. This annual extravaganza of corporate and world leaders takes place in the posh ski resort town of Davos, Switzerland.

As a "strategic partner" of the Forum, the highest-level membership reserved for a "select group of 100 leading global companies," BP gets five invites.[26] The cost of strategic partnership: 600,000 Swiss francs (roughly $685,000 at the time of the 2015 Forum).[27]

At Davos, Dudley was quoted by the BBC as saying that BP's accounting charge of more than $43 billion at the time to cover the costs of the disaster exceeded the costs of Hurricane Katrina.[28] The BBC speculated that Dudley was counting only insured hurricane losses, given that most estimates of total Katrina damage exceed $100 billion.[29]

By mid-2016 BP had increased the cost accounting charge to nearly $62 billion.[30] The true cost of the disaster, when the additional costs to society are included, possibly could be closer to the total cost of Katrina. Based on available information, BP is responsible for the world's costliest manmade corporate disaster.[31]

THE "MOTHER OF ALL RESTORATIONS"

In 2014 a panel of journalists covering environmental issues addressed a Washington, D.C., audience at the Woodrow Wilson Center in the Ronald Reagan Building. A questioner inquired

about the long-term environmental remediation of the Gulf of Mexico necessitated by the BP disaster, a process known as restoration. He coined the term "The Mother of All Restorations."

The official federal and state government natural resource damage assessment for the restoration was finally completed in 2016. Under the civil and criminal settlements, more than $15 billion will be available to fund it. Projects are already under way, many of them very expensive ones. For example, the cost to restore one 7.5-mile stretch of critical beach and dune habitat on a Louisiana barrier island was estimated at more than $113 million.

LESSONS LEARNED

The BP disaster provides important lessons in corporate leadership, risk management, and sustainability—economic, social, and environmental—as well as in public policy.

BP's leadership put undue emphasis on profits and insufficient weight on compliance with federal laws and regulations. These leadership priorities—especially misguided given BP's past record of environmental violations—filtered down to the operational level. BP's leadership should have made legal compliance a higher priority.

BP should have invested in a state-of-the-art risk management program, especially given earlier deadly and damaging incidents. Instead, it failed to heed systemic warnings signals, just as it failed to heed specific danger signs just before the well blowout.

BP lacked progressive sustainability practices. It failed to properly take into account the social, environmental, and economic ramifications of its actions, causing immense harm on all three fronts.

In light of changing circumstances in the energy field, it is time for the United States to more closely examine how much offshore oil drilling it permits, especially from deepwater wells. The United States also needs more stringent regulations and enforcement to ensure that there are no more disasters.