

The Wreck of the *Exxon Valdez*

INTRODUCTION

In 1989, Exxon Corporation and Alyeska Pipeline Service Co., an eight-company consortium that operated the Trans-Alaska pipeline and the shipping terminal in Valdez, Alaska, were severely criticized for their handling of a major oil spill from an Exxon tanker. The *Exxon Valdez* ran aground near Valdez, Alaska, on March 24, 1989, and spilled 240,000 barrels—11 million gallons—of crude oil, which eventually covered 2,600 square miles of Prince William Sound and the Gulf of Alaska. Although the Exxon spill was not the largest ever, it was one of the worst in terms of environmental damage and disruption of industry, and it jeopardized the future of oil production in environmentally sensitive areas of Alaska. The effects of the spill can still be seen more than 20 years after the wreck.

THE WRECK

At 12:04 a.m. on March 24, 1989, the *Exxon Valdez* was under the command of Third Mate Gregory Cousins, who was not licensed to pilot the vessel through the waters of Prince William Sound. The ship's captain, Joseph Hazelwood, was asleep below deck. In an effort to dodge floating ice in the sound, Cousins performed what officials later described as an unusual series of right turns. The ship ran aground on Bligh Reef, spilling much of its cargo through the ruptured hull. The spill spread rapidly during the next few days, killing thousands of sea birds, sea otters, and other wildlife; covering the coastline with oil; and closing the fishing season in the sound for several years.

The Prince William Sound area was home to abundant wildlife. More than 200 species of birds had been reported there, including one-fifth of the world's trumpeter swans. The fishing industry derived annual sales of \$100 million from the sound's herring, salmon, Pacific cod, Alaska pollock, rockfish, halibut, flounder, and sharks, as well as crabs and shrimp. The world's largest concentration of killer whales and about one-fourth of the total U.S. sea otter population had inhabited the sound at the time of the wreck.

RESPONSE TO THE DISASTER

The events following the March 24 spill reveal what some observers say was a pattern of unpreparedness, mismanagement, and negligence. According to the transcripts of radio conversations between Captain Hazelwood and the Coast Guard immediately after the accident, the captain tried for an hour to rock the tanker free from the reef, an action that Coast Guard officials claim might have sunk the ship and spilled more oil. The Coast Guard claims that Hazelwood ignored their warnings that rocking the ship might make the oil spill much worse.

When Coast Guard officers boarded the tanker at 3:30 a.m., they reported that 138,000 barrels of crude oil had already been spilled. According to a contingency plan filed when the Valdez terminal first began operations, Alyeska crews should have arrived at the ship with containment equipment within a very short period of time; they did not. A frantic Coast Guard officer radioed, "We've got a serious problem...She's leaking and groaning. There's nobody here...Where's Alyeska?"

After being notified of the accident, Alyeska Pipeline Service, in the first line of defense against oil spills, sent an observation tug to the scene and began to assemble its oil-spill containment equipment, much of which was in disarray. It loaded containment boom and lightering equipment (emergency pumps to suction oil from the *Exxon Valdez* onto other vessels) onto a damaged barge. The Coast Guard decided that the barge was too slow and the need for the lightering equipment more urgent, so Alyeska crews had to reload the lightering equipment onto a tugboat, losing still more time.

The first Alyeska containment equipment did not arrive at the scene until 2:30 in the afternoon; the rest of the equipment came the next morning. Neither Alyeska nor Exxon had enough containment booms and chemical dispersants to fight the spill. They were not ready to test the effectiveness of the dispersants until 18 hours after the spill, and then they conducted the test by tossing buckets of chemicals out the door of a helicopter. The helicopter's rotor dispersed the chemicals, and they missed their target. Moreover, the skimmer boats used to scoop oil out of the sea were old and kept breaking down. The skimmers filled up rapidly and had to be emptied into nearby barges, taking them out of action for long periods of time. Some of the makeshift work crews were assigned to boats with no apparent mission. Cleanup efforts were further hampered by communication breakdowns between coordinators on shore and crews at the scene because of technical problems and limited range. Messages had to be relayed through local fishermen. In addition, although a fleet of private fishing boats was standing by ready to assist with the containment and cleanup, Exxon and Alyeska failed to mobilize them. Exxon admitted that the early efforts were chaotic but that they were no more so than the response to any major disaster.

The *Exxon Valdez* was not fully encircled by containment booms until Saturday afternoon, 36 hours after the accident. By then the oil spill covered an area of 12 square miles. Exxon conducted more tests with chemical dispersants Saturday night, but the tests were inconclusive because conditions were too calm (chemical dispersants require wave action to be effective). On Sunday afternoon the Coast Guard gave Exxon permission to use the dispersants on the spill. But that night a storm with winds as high as 73 miles an hour drove the oil slick 37 miles into the southwestern section of the sound. All cleanup efforts were halted until the next afternoon because of the weather. Exxon eventually applied 5,500 gallons of chemical dispersants; however, by then, because of the delay caused by the storm, the oil had become too emulsified for dispersants to work properly. By the end of the week, the oil slick had spread to cover 2,600 miles of coastline and sea.

Coast Guard officers tested Captain Hazelwood for alcohol nine hours after the wreck. The test showed that Hazelwood had a blood-alcohol content of 0.061. It is a violation of Coast Guard regulations for a person operating a ship to have a blood-alcohol level in excess of 0.04. Four other crewmen, including the third mate, tested negative for alcohol. Exxon officials later admitted that they knew the captain had gone through an alcohol detoxification program, yet they still gave him command of the *Exxon Valdez*, Exxon's largest tanker.

ALYESKA'S CONTAINMENT PLAN

Since the early 1970s, Alaskan officials and fishermen had expressed concern that a major oil spill was inevitable. In response, Alyeska Pipeline Service, its eight oil-company owners (which included BP), and federal officials promised in 1972 that the tanker fleet operating out of Valdez would incorporate safety features such as double hulls and protective ballast tanks to minimize the possibility of spills. By 1977, however, Alyeska had convinced the Coast Guard that the safety

features were not necessary, and only a few ships in the Valdez fleet incorporated them. The *Exxon Valdez* did not.

Alyeska Pipeline Service had filed a comprehensive contingency plan detailing how it would handle spills from the pipeline or the Valdez terminal. In the event of an oil spill from a tanker, emergency crews were to encircle the spill with containment booms within five hours—yet it took them a day and a half to encircle the *Exxon Valdez*. Alyeska's contingency plan further specified that an emergency crew of at least 15 people would be on hand at all times. However, in 1981 much of the team had been disbanded to cut costs. In 1989 Alyeska maintained a crew of eleven to monitor terminal operations, but because the *Exxon Valdez* spill occurred at the beginning of the Easter holiday weekend, the company had trouble rounding up the team. Furthermore, Exxon's staff of oilspill experts had been cut back since 1985. At least nine oil-spill managers, including Exxon's chief environmental officer, had left or retired. An Exxon spokesman said that he was not aware that the cutbacks affected Alyeska's initial readiness to combat a spill.

A state audit of Alyeska's equipment demonstrated that the company was unprepared for the spill. It was supposed to have three tugboats and 13 oil skimmers available but had only two and seven, respectively. Furthermore, the company had only 14,000 feet of boom for containing spills rather than the 21,000 feet specified in the contingency plan, and the barge that carried the booms and stored skimmed oil was out of service because it had been damaged in a storm. However, even if it had been available, the required equipment would not have been enough because a tanker like the *Exxon Valdez* is almost 1,000 feet long and holds 1.2 million barrels of oil. The booms available could barely encircle the giant ship, much less a sizable slick.

Alyeska violated its own contingency plans when it failed to notify state officials that the barge was out of service. A key piece of equipment in the contingency plan, the barge should have been loaded with 7,000 feet of boom. But the boom had been removed during the repair. A replacement barge had been ordered and was on its way from Texas. On March 24, it was in Seattle.

Although Alyeska conducted regular "spill drills," state monitors said that drills in the previous few years had been bungled and were considered unsuccessful. Among other things, the drills showed that crew members often did not know how to operate their assigned equipment. It was also noted that Alyeska's equipment and the crew's responses were inadequate for a real spill. Reporters Ken Wells and Charles McCoy wrote in the *Wall Street Journal*: "The oil companies' lack of preparedness makes a mockery of a 250-page containment plan, approved by the state, for fighting spills in Prince William Sound." Arlon R. Tussing, a Seattle oil consultant, commented, "The system that was set up early on has disintegrated."

CLEANING UP

Exxon's chairman, Lawrence Rawl, apologized to the public for the spill in full-page advertisements in many newspapers and in a letter to Exxon shareholders. The company accepted liability for the spill and responsibility for its cleanup. By summer Exxon had 10,000 people, 1,000 vessels, 38 oil skimmers, and 72 aircraft working to clean up beaches and wildlife.

Exxon hoped to have completed its cleanup before September 15, 1989, but a 1990 survey showed that much work remained to be done. Shoreline surveys and limited cleanup efforts were made in 1991, 1992, 1993, and 1994. In 1992 crews from Exxon and the state and federal governments reported that an estimated seven miles of the 21.4 miles of shoreline surveyed still showed some surface oiling. The surveys also indicated that subsurface oil remained at many sites that were

heavily oiled in 1989. The surveys determined that the potential environmental impact of further cleanup, as well as the cost, was greater than the problems caused by leaving the oil in place. The 1992 cleanup and the 1993 shoreline assessment were concentrated in those areas where oil remained to a greater degree: Prince William Sound and the Kenai Peninsula. In 1994 restoration workers cleaned a dozen important subsistence and recreation beaches in western Prince William Sound.

Exxon claims that it saved \$22 million by not building the *Exxon Valdez* with a second hull. During the period of the oil spill, Exxon spent more than \$2.2 billion for cleanup and for reimbursements to the federal, state, and local governments for their expenses in response to the oil spill. In addition, 31 lawsuits and 1,300 claims had been filed against Exxon within a month of the spill. On August 15, 1989, the state of Alaska also filed a suit against Exxon for mismanaging the response to the oil spill. The suit demanded both compensatory and punitive damages that would exceed \$1 billion. Captain Hazelwood, who was fired by Exxon soon after the accident, was found guilty in March 1990 of negligent discharge of oil, a misdemeanor. He was acquitted on three other more serious charges, including drunk driving.

Exxon also faced heated criticism from the public and from state and federal officials, who believed the cleanup efforts were inadequate. A Coast Guard spokesman in Valdez said, "We're running into a problem with the definition of the word 'clean.' The concept of being clean makes you think no oil is there. The oil is still there, but it may be three feet or two feet beneath the surface." Lee Raymond, Exxon's president, said, "Assuming that we can have people working till mid-September, we have a good shot at having all the beaches treated. But not clean like Mr. Clean who shows up in your kitchen. Our objective is to make sure the ecosystems are back in shape." Many Alaskans and environmentalists did not believe Exxon's idea of "clean" was clean enough. In addition, there were disputes as to how much oil had actually been cleaned up. By 1989 600 miles of shoreline had been "treated," but another 200 miles still required treatment. Moreover, incoming tides often brought new oil slicks to cover just-treated beaches, slowing cleanup efforts considerably.

In addition, Exxon came under fire for the way it had managed the crisis. Chairman Lawrence Rawl did not comment on the spill for nearly six days, and then he did so from New York. Although Rawl personally apologized for the spill, crisis-management experts say that it is important for the chief executive to be present at the site of an emergency. Harry Nicolay, a Boston crisis-management consultant, said, "When the most senior person in the company comes forward, it's telling the whole world that we take this as a most serious concern." The crisis-management experts believe that Rawl's delayed response and failure to appear on the scene angered the public despite Exxon's efforts to clean up the spill.

Some of Exxon's statements to the public have also been criticized as bad public relations moves. For example, one Exxon executive told reporters that consumers would pay for the costs of the cleanup in the form of higher gas prices. Although that statement may have been truthful, it did nothing to placate already angry consumers. The public also reacted skeptically to Exxon officials' attempts to blame cleanup delays on the Coast Guard and Alaskan officials. Gerald C. Meyers, a specialist in corporate crisis management, said that Exxon's newspaper apology was "absolutely insincere. They were ill advised to say they sent 'several hundred people' to the scene. This is a company with more than 100,000 employees." Furthermore, Exxon insisted that it would stop all cleanup operations on September 15, 1989, regardless of how much shoreline remained to be cleaned. In a memorandum released in July 1989, that September deadline was said to be "not negotiable." After much public and government protest, however, the company's president

promised that Exxon would return in the spring of 1990 if the Coast Guard determined that further cleanup was warranted. "It's our best guess that there will be a lot less oil than people think," he said. "But if the conclusion is reached by the Coast Guard that something needs to be made right and it can be made right, we'll be there. We're not trying to run off." Exxon did return that spring and for the next four years for further cleanup efforts.

Exxon's response to the crisis hurt its reputation and credibility with the public. National consumer groups urged the public to boycott all Exxon products, and nearly 20,000 Exxon credit card holders cut up their cards and returned them to the company to express their dissatisfaction with its cleanup efforts. Indeed, anger and resentment toward Exxon linger more than two decades after the disaster, and some consumers still refuse to patronize the company because of its handling of the spill.

THE EFFECTS OF THE *EXXON VALDEZ* DISASTER IN THE 21ST CENTURY

Many changes have occurred since the *Exxon Valdez* incident. Because Captain Hazelwood was found to have had a high blood-alcohol content after the spill, three of Alyeska's largest owners (including Exxon) began mandatory random drug and alcohol searches of all ships using the Valdez port. In 1999, Captain Hazelwood began serving a sentence of 1,000 hours of community service after he failed in a nine-year appeal of his 1990 conviction of negligent discharge of oil. Alaska's Governor Steve Cowper ordered Alyeska Pipeline to restock the Valdez terminal with all the booms, skimmers, and other equipment that were required by the original contingency plan. Alyeska was also ordered to form an emergency crew to respond immediately to spills. Governor Cowper demanded that Alyeska stock enough additional equipment to allow it to respond within two hours to a 10-million-gallon spill in Prince William Sound. Alyeska is now required to encircle all tankers with containment booms as they are loading and unloading, and it also had to change other procedures. The state of Alaska also eliminated many of the tax exemptions granted to oil companies producing in many Alaskan oil fields. The elimination of the tax breaks was expected to cost the affected oil companies about \$2 billion over the next twenty years. The *Exxon Valdez* was renamed the *SeaRiver Mediterranean*, but the new name failed to prevent environmentalists from regularly protesting the ship in ports along its new Middle East-Europe route. Prevented by law from entering Alaskan waters and too large and expensive for the Middle Eastern route, the ship was retired from service in the early 2000s.

In a civil settlement with the state of Alaska and the federal government, Exxon agreed to make ten annual payments totaling \$900 million, for injuries to natural resources and services and for the restoration and replacement of natural resources. In addition, \$5 billion was awarded in punitive damages, which must be divided evenly among the 14,000 commercial fishermen, natives, business owners, landowners, and native corporations that were part of the class-action suit. Exxon appealed this judgment, but in late 2000, the Supreme Court refused to free the company from having to pay the \$5 billion in damages; however, by 2009, that amount had been reduced to \$507 million.

In a criminal plea agreement, Exxon was fined \$150 million, of which \$125 million was remitted in recognition of its cooperation in cleaning up the spill and paying private claims. Of the remaining \$25 million, \$12 million went to the North American Wetlands Conservation Fund and \$13 million to the Victims of Crime Fund. In addition, Exxon agreed to pay restitution of \$50 million to the United States and \$50 million to the state of Alaska.

But the legal debate has not ended. Exxon was involved in a highly contested lawsuit with its numerous insurance providers over their refusal to pay Exxon for its spill-cleanup efforts. The insurance companies, led by Lloyd's of London, refused to pay Exxon because (1) the cleanup efforts engaged in were not required by law; (2) the efforts were conducted in substandard fashion; (3) Exxon's level of liability coverage was well below the expenses sought; and (4) the spill itself was a result of "intentional misconduct," thus disqualifying insurance coverage of the accident. In short, the insurance companies contend that Exxon's cleanup activities were little more than "an expensive public relations exercise," designed to make the public think of Exxon as an ethical and socially responsible corporation. Claiming that it had incurred between \$3.5 billion and \$4 billion in expenses for the cleanup, Exxon in turn filed suit against the 250 insurance companies, originally seeking around \$3 billion in compensation, even though it was covered for only \$850 million. Most of the original amount sought from the insurers, \$2.15 billion, was for "bad-faith" conduct related to initial refusals to pay, interest charges, and attorneys' fees. The original figure of \$3 billion was later reduced to about \$1 billion, and insurers agreed to pay Exxon \$300 million as a partial settlement of claims related to cleanup activities.

Exxon, now called ExxonMobil, insists the area has completely recovered. However, a study by the National Marine Fisheries Service found that toxins leaching from *Exxon Valdez* oil remaining on the beaches continued to harm sea life more than twelve years after the disaster. Most of the oil is now subsurface and hardened into a semi-solid layer underwater, which poses less of a threat to plants and animals than liquid oil. 20 acres of Prince William Sound shoreline are still contaminated, and there are several "pits" of oil and sludge in the area. Several species have completely recovered from the effects of the oil spill, but others are still in the process of recovery or may never fully recover. Alaska's fishing industry also continues to struggle after the oil spill. One Alaska fisherman says, "Time heals all wounds, but it takes a lot of time. You will be affected for the rest of your life [by] something like this."

The one positive consequence of the *Exxon Valdez* oil spill has been better industry response to the spilling of oil into our waters. According to one analyst, "We're still seeing the same number of spills. What has improved is the response to those spills." However, this hardly compensates for the harm inflicted by Exxon's negligent spillage of 11 million gallons (experts believe that the true amount may be higher) of crude oil into the Prince William Sound area.

Has the oil industry learned from the mistakes of the *Exxon Valdez*? The 2010 *Deepwater Horizon* oil spill in the Gulf of Mexico (which surpassed the *Exxon Valdez* as the largest American oil spill) suggests that oil companies are still engaging in risky behavior in order to increase profits. In 1989, BP was the controlling member of the Alyeska Pipeline Service Co., and the CEO of Alyeska was and continues to be a BP employee. The company's role was not emphasized in reports about the incident because Alaska commission officials wanted to avoid finger pointing. In a 2010 interview, Zygmunt Plater, the lawyer in charge of Alaska Oil Spill Commission, said, "In retrospect, it could've focused attention on BP and created transparency which would've changed the internal culture. As we see the internal culture appears not to have changed with tragic results."

QUESTIONS

1. In the context of *Exxon Valdez* incident and the circumstances that led to it, discuss the role of individual moral development and organizational factors in business decisions.

2. If Exxon had had an ethics program and compliance, would this have prevented the wreck of the *Exxon Valdez*?
3. What are the similarities and differences between the management of the *Exxon Valdez* spill and the more recent *Deepwater Horizon* disaster?
4. In future oil-production efforts, which should take precedence: the environment or consumers' desires for low-priced gasoline and heating oil? Why?

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