
CHAPTER I

The Grounding and Early Response

The Alaska pipeline carries crude oil from the Arctic coast south to the Port of Valdez on Prince William Sound, where it is loaded onto tankers for transport to refineries in the lower forty-eight states. Prince William Sound is in south central Alaska, about eighty or ninety air miles southeast of Anchorage. This transportation system had been in use since 1977 without any major oil spills. The pipeline and Valdez terminal are operated by Alyeska Pipeline Service Company, a consortium of the seven major oil companies, including Exxon, involved in North Slope oil production.

Shortly before 9:30 P.M. on Thursday, 23 March 1989, a tanker owned by Exxon, Inc., the *Exxon Valdez*, departed Valdez bound for Long Beach, California, loaded near capacity with 1.2 million barrels (53 million gallons) of Prudhoe Bay North Slope crude oil. The ship was 987 feet long, 166 feet wide, and 88 feet deep and traveled at about 12 knots. Turning or stopping required several miles to accomplish. As was customary, the ship was piloted by a local marine pilot and accompanied by a tug from the port to the three-mile neck known as the Valdez Narrows. At 10:17 it turned left into the narrows, which is less than a mile wide at its tightest point. At Rocky Point, five miles out of the narrows, the local pilot left the ship.

From the narrows to Hinchinbrook Entrance, the passage into the Gulf of Alaska, specially designated deep-water corridors were reserved for tanker traffic. There was an inbound lane, a buffer zone, and an outbound lane, each roughly three miles wide. Outbound tankers traveled in the west lane and inbound tankers in the east. Tanker captains were required to notify the Coast Guard before leaving their lanes.

A tanker that had left Valdez a few hours before the *Exxon Valdez* reported that ice from the Columbia Glacier had drifted into the shipping lanes. At 11:31 P.M. Captain

Joseph Hazelwood notified the Coast Guard that he was diverting his ship from the outbound lane to the inbound lane, and he retired to his cabin leaving his third mate in charge. The third mate was not certified to pilot through that particular part of Prince William Sound. The tanker passed through the inbound lane and into the vicinity of Bligh Island. The crew attempted to correct their course, but they were not able to turn the ship in time.

At 12:04 A.M. local time on a dark, drizzly Good Friday morning, 24 March 1989, the *Exxon Valdez* ran aground on a pinnacle at Bligh Reef in Prince William Sound. Eight of its eleven cargo tanks extending the full length of the ship were ripped open and three saltwater ballast tanks were pierced. At 12:28 Hazelwood informed the Coast Guard Marine Safety Office (MSO) in Valdez of the collision and spent an hour trying to maneuver the tanker off Bligh Reef despite warnings that his ship might be too unstable to float. Oil gushed from the ruptured tanks. Over the next day, the crippled ship would pour roughly eleven million gallons of North Slope crude oil into the icy waters of the Prince William Sound.

The Coast Guard Marine Safety Office at Valdez immediately began the state and federal notification process. At 12:30 the Coast Guard vessel tracking center in Valdez contacted Alyeska Pipeline Service Company, and Alyeska in turn notified Exxon officials, as well as state and federal officials. The ship was in danger of capsizing if it floated off the reef, so oil spill response and the removal of the remaining oil from the ship became the top priorities. In the first hour the Captain of the Port, Steve McCall, closed the Port of Valdez to vessel traffic and the rescue tug *Stalwart* was dispatched from the Alyeska Marine Terminal to aid the stranded *Exxon Valdez*. It took the tug two hours to make the twenty-five mile trip to Bligh Reef.

At 2:49 A.M. the Coast Guard put out an urgent call to its Pacific Strike Team for pumps and personnel to off-load the barge. Team members would arrive in Alaska that evening. Around noon Exxon relieved Alyeska of financial and logistical responsibility for the response.

Although the state-approved oil spill contingency plan called for a quick response, there were frustrating delays at

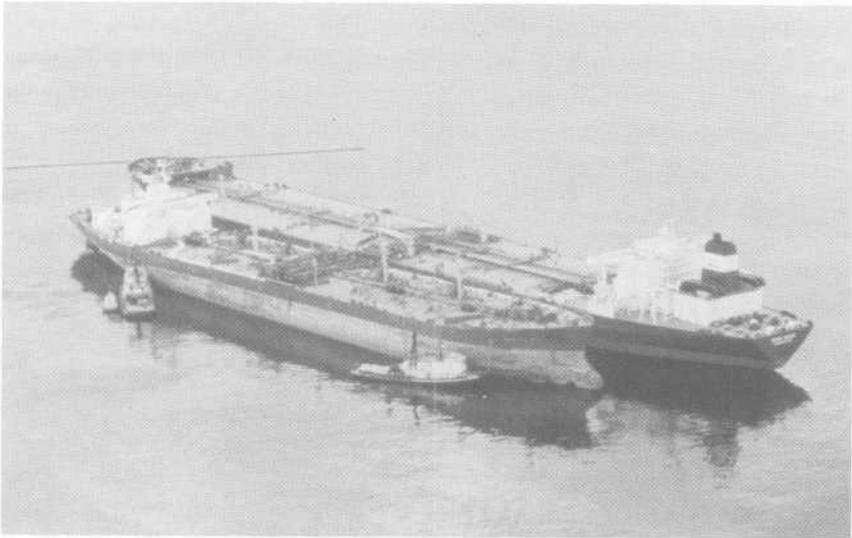
the Alyeska terminal. Employees and contract laborers who came to pick up their gear so they could head to the spill scene found that vital cleanup equipment had to be dug out of warehouses and loaded on vessels. Deep-water skimmers and booms designed for a spill in the sound, rarely brought out in the dozen years of pipeline operations, were buried under stacks of the heavy booms used to contain oil in a warehouse. Huge ship fenders — used to hold two ships apart while one takes on the other's cargo — could not be found initially. They were later discovered under several feet of Valdez snow.

A contingency barge that state and federal officials thought was always kept loaded with containment equipment so it could be launched at a moment's notice was empty. Its cargo had been stacked in a warehouse. Alyeska officials later contended that the contingency plan did not require the barge to be loaded, but state and Coast Guard officials were stunned to find that the barge was not ready.

Workers described the scene early that Good Friday morning as frantic as people ran around trying to get equipment ready. They had to fill boats with gas, patch booms, and load the barge. For several hours only one person was on hand to drive the forklift and operate the crane to load the barge. The barge finally left the terminal at 11:00 A.M. with 50,000 pounds of equipment onboard. Tugs carried another 22,000 pounds. Despite existing response plans that required Alyeska to be on scene and placing containment booms within five hours, it was between 12:00 P.M. and 5:00 P.M. on 24 March, twelve to seventeen hours after the grounding, before the first booms were deployed.

Later that evening a smaller vessel, the *Exxon Baton Rouge*, came alongside and began pumping oil off the *Exxon Valdez*. By then the oil slick covered roughly thirty square miles south and west of the reef.

All available oil spill response equipment was mobilized from the Alyeska Pipeline terminal and both Exxon and the Coast Guard began mobilizing equipment from other areas. Operators tested dispersants with little success; Prince William Sound was too calm for adequate mixing of the dispersant with the oil. On Saturday morning, 25 March, Exxon announced that 175,000 barrels had spilled. By noon this figure reached 260,000 barrels.



Exxon Valdez off-loading oil into the Exxon San Francisco after the spill in Prince William Sound.

On Easter Sunday morning, 26 March, Alaska Governor Steve Cowper declared a state of emergency. The slick stretched one hundred square miles, and only about three thousand barrels (126,000 gallons) had been skimmed off the water. State, federal, and Exxon officials made plans to use air-delivered dispersants, fire, and skimmers in a full attack on the spill beginning Monday, but early Monday morning, 27 March, high winds exceeding seventy miles an hour developed in the sound. The heavy winds grounded aircraft, prevented boat operations, and emulsified the oil so that both dispersants and burning became ineffective. The winds pushed the oil slick to the southwest in the shape of a forty-mile-long spear. The next day calm weather returned to the sound, but significant amounts of oil hit the shores of Smith, Green, Knight, Naked, and Eleanor Islands about 35 miles southwest of Bligh Reef. The spill was out of control. Following the prevailing currents, the oil would begin entering the Gulf of Alaska through Montague Straits on 30 March. It continued to follow the Alaska Stream, which flows southwest along the coast until it splits around Kodiak Island.

On 28 March operators abandoned the use of dispersants because of the size of the spill and the cold water temperatures. Attempts to burn the oil in concentrated slick

areas failed because the volatile ingredients had evaporated. The mixture in the burning areas was 23 percent oil and 77 percent water, which would no longer support combustion. At midnight a large group of distraught fishermen from Cordova, about eighty water miles southeast of Valdez, left by boat with oil containment booms provided by the state. They attempted to block the oil from entering the major fish hatcheries on the southwest edge of the sound (Main Bay, Eshamy Bay, Ester Bay, and Sawmill Bay). By 5:00 P.M. fishermen had deployed oil booms in the fish hatchery areas.

On Monday, 3 April, the Coast Guard reopened the port to tanker traffic during daylight hours only. Two days later the *Exxon Valdez*, drained of most of its oil, was refloated by Exxon and taken to Outside Bay on the west side of Naked Island for temporary repairs.¹

On 5 April, Governor Cowper delivered a letter to Rear Admiral Edward Nelson, Jr., Commander, 17th Coast Guard District, requesting that the Coast Guard take over coordination of the cleanup under the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300). Exxon would continue to retain primary responsibility. Less than four percent of the spilled oil had been recovered, and the oil slick had moved into the Gulf of Alaska. "Under these circumstances," Cowper declared, "the State of Alaska, many of the federal agencies, and the participating citizen groups believe that a change in approach to the management of this disaster is necessary. . . . Due to its formal responsibilities and familiarity with the Alaska coastline, we believe the Coast Guard is uniquely suited to coordinate the response to this disaster."²

A carefully crafted national contingency response system had been developed over a twenty-year period. In 1967 after the tanker *Torrey Canyon* grounded off the British coast, spilling millions of gallons of oil, the need for effective contingency planning to respond to the environmental threat posed by the bulk transport of oil became more apparent. The Federal Water Pollution Control Act Amendments of 1972 (33 USC 1321), also known as the Clean Water Act, provided for a National Oil and Hazardous Substances Pollution Contingency Plan.

The National Contingency Plan was developed to insure that the resources and expertise of the federal government would be immediately available for serious oil and hazardous substance incidents that required a regional or national response. It applies to all federal agencies and provides the framework for management of cleanup activities. Responsibilities are divided into two zones, inland and coastal. The Environmental Protection Agency (EPA) has jurisdiction in the Inland Zone and the Coast Guard has jurisdiction in the Coastal Zone (all U.S. waters subject to the tide, U.S. waters of the Great Lakes, and specified ports and harbors). If the responsible party does not take proper action or is unknown, under the Clean Water Act the on-scene coordinator determines whether the federal government should take over.

The National Contingency Plan requires three activities: planning and coordination, on-scene operations, and communications. Planning and coordination are done at the national, regional, and local levels. At the national level they are done by the National Response Team (NRT), which is usually chaired by a representative of EPA and made up of representatives of federal agencies that have responsibilities outlined in federal regulations or executive orders. The Coast Guard provides the vice chairman and manages the Revolving Fund established by section 311(k) of 33 USC 1321 that is used for the cleanup of oil and hazardous substances discharged into navigable waters of the United States.

The Defense Department provides expertise through the Corps of Engineers and the Navy. The Corps has specialized equipment and personnel for use in ship salvage, shipboard damage control, and diving. Fourteen federal agencies have roles in response.³ Oil pollution response is not a new role for the Corps of Engineers. The Oil Pollution Control Act of 1924 gave the Corps primary responsibility for controlling problems caused by pollution of navigable waters. The Corps continued to play a leading role in regulating pollution until Congress passed the first Water Pollution Control Act (33 USC 1151) of 1948.⁴

At the regional level, the Regional Response Teams (RRT) provide regional planning and preparedness before a pollution incident occurs, and they coordinate and advise after an

incident. RRTs have two principal components, the Standing RRT and the Incident Specific RRT. The Standing RRT is comprised of representatives of departments and agencies on the NRT plus the involved states. The Incident Specific RRT is comprised of RRT members that have equipment and expertise that could help the on-scene coordinator (OSC) in combating a specific incident. There are thirteen RRTs with geographically defined zones of jurisdiction.

The next level of pollution response is performed by the OSC, usually Environmental Protection Agency or Coast Guard staff who have been trained to respond to pollution incidents. Coast Guard OSCs are the designated Captain of the Port for the various ports of the United States. Their jurisdiction is outlined in federal regulations. The OSC can draw on the expertise and resources of the RRT. His primary focus is to ensure a timely, effective response, and his duties include: assessing the extent of the spill, the potential hazards, the types of resources needed, and the ability of the spiller or local officials to handle the spilled oil; monitoring the cleanup activities of the spiller; and determining if federal management and federal funds are needed to handle the incident (i.e., whether to “federalize”). Once federal funds are activated, the on-scene coordinator is in charge of the response. Using the Oil Revolving Fund, the OSC can secure contractors and mobilize response equipment, resources, and personnel.⁵

The traditional role of the Corps of Engineers under the National Contingency Plan is to respond to requirements from the National Response Team and to provide general engineering and construction support to that body. In responding to the *Exxon Valdez* spill, however, the Corps would go beyond its traditional role.