

BROKEN PROMISE #5

The Pervasiveness of Spills



Workers remove oil from the tundra following an August 2006 oil pipeline spill on Alaska's North Slope.

Al Grillo / Associated Press

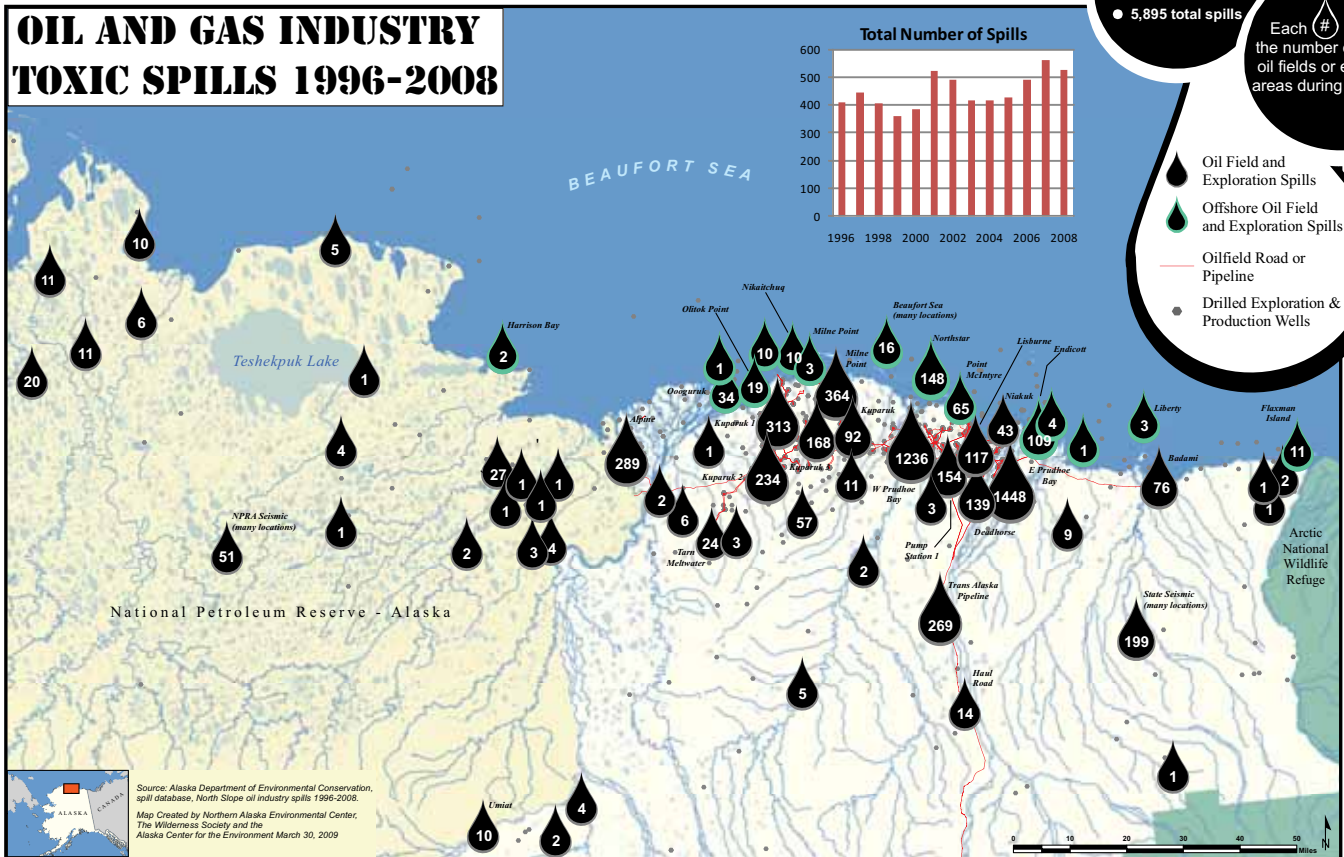
The Promise

Spills can be controlled through operational excellence, environmental safeguards, and spill response. Spills have short-term impacts but no lasting effects.

The Reality

Spills occur frequently, and failures to detect and respond to spills are common. The impacts of oil spills are cumulative and persistent, sometimes lasting for decades.

Each year, an average of 450 oil and other toxic spills occur on Alaska's North Slope as a result of oil and gas activity. More than 45 different toxic substances, including acids classified as extremely hazardous substances, have been spilled during routine operations. Between 1996 and 2008, 5,895 spills occurred totaling more than 2.7 million gallons of toxic substances, more than 396,000 gallons of crude oil, 122,000 gallons of drilling muds, and more than 1 million gallons of process water.¹



In the 12-year period between 1996-2008 5,895 toxic spills occurred as a result of oil and gas industry activity on Alaska’s North Slope. Source: Data compiled by Pam Miller, Northern Alaska Environmental Center. Mapping by Doug Tosa, Alaska Center for the Environment. Source data: Alaska Department of Environmental Conservation spill database.

Spills are common

In March of 2006 the largest crude oil spill in the history of North Slope operations brought national attention to the chronic problem of spills and the glaring discrepancies between oil company promises and the reality of their practices. The spill went undetected for five days.

This spill and many others might have been prevented had the industry not neglected operational safeguards such as corrosion maintenance and leak detection procedures.²

Other oil company violations over the years serve to illustrate that neglect and non-compliance are common practice. Violations of federal and state air and water quality regulations, as well as criminal charges

for illegal dumping of hazardous wastes are just some of the ways oil companies have failed to live up to their promises.³

- Spills of oil and other toxins of the trade occur frequently.
- Oil spills can have lasting impacts.
- Oil spill risks are greater in the Arctic, especially offshore. No known technology exists to clean up offshore spills in broken ice.

“[T]he fact of the matter is that sometimes leaks will occur.”⁴

Congressman Don Young, March 2006

OIL COMPANY VIOLATIONS

1998 Doyon Drilling was found guilty of 15 counts of violating the Oil Pollution Act of 1990 and fined \$3 million for dumping hazardous wastes.⁵

2000 British Petroleum (BP) paid \$6.5 million in civil penalties and \$15.5 million in criminal fines, plus five years probation for late reporting of illegal hazardous dumping.⁶

2001 When a vandal's bullet punctured the trans-Alaska oil pipeline, the spill response plans failed, leaving the leak uncontained for 36 hours and spilling 285,600 gallons of crude oil.⁷

2002 Following a 60,000-gallon pipeline spill, BP paid \$675,000 in civil fines⁸ and \$300,000 for delaying installation of leak detection systems for Prudhoe Bay crude oil transmission lines.⁹

2004 ConocoPhillips incurred \$485,000 in fines for 470 Clean Water Act violations in five years.¹⁰

2005 BP was fined \$1.3 million by the Alaska Oil and Gas Conservation Commission for safety violations after an explosion and fire at a Prudhoe Bay oil well.¹¹

2007 BP was fined \$20 million including criminal penalties and probation for knowingly neglecting corroded pipelines, which resulted in spills affecting fragile tundra and a lake.¹²

2009 The federal government and the State of Alaska filed separate lawsuits against BP over March and August 2006 oil spills on the North Slope. The federal government is seeking more than \$5 million, and penalties as much as four times that amount.¹³ The state suit seeks fines, back taxes and other damages approaching \$1 billion.¹⁴

Spills have lasting impacts

In addition to exaggerating safeguards and controls over oil spills, oil companies often downplay the impact of spills. For example, a spokesperson for Exxon commented that oil spills may have short term impacts, but over the long term "there is full recovery."¹⁵ In fact, the effect of an oil spill will depend on the amount and type of oil or other toxin spilled, where and when the spill occurs, and spill response. Spill impacts can persist for decades, as they have in Prince William Sound twenty years after the Exxon Valdez spill.¹⁶ Scientific studies of the Exxon Valdez spill have also shown that oil is several hundred times more toxic than previously thought.¹⁷

Pollution in the Arctic has more severe and persistent effects than in temperate regions. Recovery from spills in the Arctic is slower due to cold temperatures, slower growth rates for plants, fewer species and less variety of prey, and longer life spans of animals.¹⁸ Oil takes much longer to break down, in part due to fewer microorganisms, hence oil may persist for decades.¹⁹ Many spills on the North Slope do not spread beyond the gravel drilling pads, but the sites themselves can become contaminated and pose long-term restoration problems.²⁰ The Alaska Department of Environmental Conservation (ADEC) lists 192 contaminated sites caused by the North Slope oil industry. Fewer than a quarter of these have been cleaned to a level that meets state regulatory standards.²¹

No technology exists for cleaning spills in Arctic waters

The impacts of an oil spill in marine waters could prove to be much worse than spills on land, especially in the Arctic. No technology currently exists for cleaning oil in the presence of broken ice.²² Traditional oil spill response methods are ineffective in dynamic sea ice conditions and the kinds of weather conditions that are common in Arctic waters.²³

Industry leaders eager to begin drilling in the Chukchi and Beaufort Seas cite a December 2007 offshore oil spill in Norway as an example of how cleanups in Arctic waters are possible. But the comparison is misleading. For example, favorable weather conditions made it possible to contain that spill. Conditions in Arctic Ocean waters would be harsher and colder, making a spill harder to naturally dissolve or clean up.²⁴

Oil spills can and do occur during any phase of oil development, from exploration to production to transportation. Increased oil and gas exploration in Alaska, especially offshore, will only add to accumulating impacts and increase the chances of a catastrophic spill.



Alaska Department of Environmental Conservation

¹ Alaska Department of Environmental Conservation spill database 1996-2004. Statewide oil spill data base for North Slope region (available from Camille Stephens). Compiled by Pam Miller, Northern Alaska Environmental Center. Village and Military DEWine spills removed for the analysis.

² R.A. Fineberg, March 15, 2006, BP North Slope Spill Reveals a history of substandard environmental performance.

³ BP in Alaska: Beyond Propaganda, A Disturbing Decade of Poor Environmental Performance http://www.northern.org/artman/uploads/bp_performance_060803_rev_.pdf.

⁴ Congressman Don Young. (2006, March 16). Press release. House transportation committee hearing on pipeline safety.

⁵ Nelson, Eric. (1997). Poisoning the well: whistleblower disclosures of illegal hazardous waste disposal on Alaska's North Slope. The Alaska Forum for Environmental Responsibility. (<http://www.alaskaforum.org/reports.html>); U.S. Dept. of Justice. (1998, April 30). North Slope Driller Admits Illegal Disposal of Hazardous Waste; \$3 Million Plea Agreement Announced. United States Attorney, District of Alaska at Anchorage, press release.

⁶ "BP settles for \$15.5 million," Anchorage Daily News. February 2, 2000.

⁷ Alaska Department of Environmental Conservation. TAPS bullet hole spill after action report. Available from website: http://www.dec.state.ak.us/spar/perp/docs/report/aft_00.pdf.

⁸ State of Alaska. November 14, 2002. BPXA Flowline 86-D Settlement Agreement.

⁹ Fairbanks Daily News-Miner. June 5, 2002. State fines BP.

¹⁰ U.S. Environmental Protection Agency. (2004, August 13). ConocoPhillips to pay \$485,000 for Cook Inlet wastewater violations. Press release.

¹¹ Anchorage Daily News. January 8, 2005. BP to dole out \$1.4 million for safety violation cases.

¹² October 26, 2007 Wesley Loy Anchorage Daily News BP Fined \$20 million for pipeline corrosion

¹³ Loy, Wesley. March 31, 2009. State and U.S. sue BP over Slope spills. Anchorage Daily News.

¹⁴ Loy, Wesley. Week of May 31, 2009. BP fights state lawsuit. Petroleum News.

¹⁵ Arnold, Elizabeth. 2003. Valdez study reinforces fears about toxic spills. National Public Radio, All Things Considered.

¹⁶ Peterson et al. December 2003. Long-term ecosystem response to the Exxon Valdez Oil Spill. *Science* 19: 2082. <http://www.npr.org/templates/story/story.php?storyId=1553334> (last visited March 11, 2009).

¹⁷ Heintz, R.A., J.W. Short, and S.D. Rice, 1999. Sensitivity of pink salmon to weathered crude oil, *Environmental Toxicology and Chemistry* 18(3).

¹⁸ Arctic Monitoring and Assessment Programme (AMAP). 1997. Arctic Pollution Issues: A State of the Arctic Environment Report. Oslo, Norway. P. 157; Burger, Joanna. Oil Spills. Rutgers University Press. P. 88. 1997.

¹⁹ Burger, Joanna. Oil Spills. Rutgers University Press. P. 88. 1997.

²⁰ National Research Council. 2003. P. 7.

²¹ Alaska Department of Environmental Conservation. Contaminated sites database.

Downloaded March 14, 2009. Data analysis by Pam Miller, Northern Alaska Environmental Center. http://www.dec.state.ak.us/spar/csp/db_search.htm Sorted for only North Slope cities; excluded non-oil industry sites, military and former defense sites, and village sites unless oil industry is responsible party. A total of 192 North Slope oil industry sites are listed in ADEC database; 62 are Open sites (not yet cleaned up); 86 are Cleanup Complete – Institutional Controls (active cleanup ended but contamination still exists and continued monitoring is required); 44 are Closed (however, records show for at least 10 there may be samples with range organics, benzene and other toxics at levels exceeding state regulatory standards).

Alaska Department of Environmental Conservation, January 2007, Alaska's legacy of oil and hazardous substance pollution: Cleanup and management of Alaska's contaminated sites. <http://www.dec.state.ak.us/spar/csp/docs/csstory.pdf> (accessed July 19, 2009).

²² Minerals Management Service. (2007, April). Outer Continental Shelf Oil and Gas Leasing Program: 2007-2012, Final Environmental Impact Statement. Vol. IV, p. 236.

²³ World Wildlife Fund. (2007). Oil spill response challenges in arctic waters. Oslo, Norway. www.panda.org/arctic.

²⁴ Wojciech, Moskwa. (2007, December 13). Norway oil spill contained, stirs fears for Arctic.