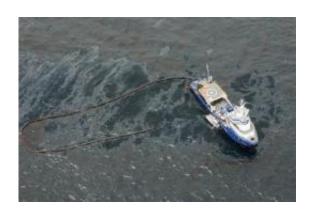


Gulf anniversary renews debate on Arctic drilling

April 23 2011, By DINA CAPPIELLO, Associated Press



In this April 23, 2010 file photo, taken in the Gulf of Mexico more than 50 miles southeast of Venice on Louisiana's tip, a boat with an oil boom tries to contain oil spilled from the explosion and collapse of the Deepwater Horizon oil rig, approximately seven miles from where the rig sunk. A year after one of the worst environmental disasters in U.S. history, drilling rigs once again are probing the depths of the Gulf of Mexico for oil. But the catastrophic prospect of a spill in oil's next frontier _ the icy waters off Alaska's north coast _ has experts far more concerned. (AP Photo/Gerald Herbert, File)

(AP) -- A year after the largest offshore oil spill in U.S. history, some experts are pondering the next doomsday scenario - a massive oil well blowout in the icy waters off Alaska's northern coast.

Like the deepest waters of the Gulf, the shallow but frigid seas off Alaska are a new frontier for oil and gas exploration. The reserves are



large but come with risks.

With no roads connecting remote coastal towns, storms and fog that can ground aircraft, no deep-water ports for ships and the nearest Coast Guard station about 1,000 miles away - it would be nearly impossible to respond on the scale that was needed last year to stop a runaway oil well and clean up the mess. That means the burden to respond would rest to an even greater degree on the company doing the drilling.

Like a backcountry camper, an oil company drilling off Alaska would have to bring all the equipment needed to the isolated drilling site. And the federal government, at least in the early stages, would be far away from the scene.

Unlike the Gulf, where tens of thousands of oil wells and runoff have tainted the waters for decades, a spill in the Arctic risks tainting a pristine and sensitive landscape, one that has not been as well studied and where drilling in federal waters is limited. That makes it harder to determine what toll a spill would have on the endangered polar bears, migrating whales and other wildlife that make use of the oil-rich seas.

While critics of offshore drilling in Alaska have long raised the specter of a massive spill, the accident in the Gulf last April highlighted shortcomings in spill preparedness. In the aftermath, experts such as Thad Allen - the government's point person on the Gulf spill - and the presidential oil spill commission have questioned whether companies and the government are adequately prepared to overcome the challenges of responding to an Arctic spill.

"We ought to be extremely careful about the Arctic, because we know that spill response and the Coast Guard cannot get to the Arctic very well," Cherry Murray, a member of the presidential oil spill panel, told a committee on ocean energy safety this week. "And cleanup is going to be



considerably more difficult."

Despite lessons learned from the massive response to the Macondo well blowout on April 20 a year ago, some of the techniques deployed - skimming, burning and the application of chemical dispersants - either wouldn't work in the frigid seas and stormy skies off Alaska or would be less effective.

Booms, depending on the degree of ice cover, can freeze. Ice can also clog the suction devices used to mop up the spill, reducing how much oil can be collected. Depending on the time of year a spill occurred, even daylight can be scarce.

"The problem is on what order of magnitude are you prepared to respond, and I don't really think we know that," said Allen, now a senior fellow at the Rand Corp. think tank. "That doesn't mean that we shouldn't proceed, but everyone needs to know that's a very, very difficult place to operate."

Allen, in an interview with The Associated Press, listed the challenges: The largest city anywhere close to the drilling, Barrow, has extremely limited motel space; there is no hangar for aircraft, a must in stormy and variable weather, and the shallow water means no port.

"One has to wonder, at the height of the Macondo spill, we engaged over 45,000 people and thousands of thousands of boats," Allen said.

"Depending on the type of problem you might encounter there, the lack of infrastructure, lack of forward operating bases, austerity of the environment, plus the distance to port is problematic."

The renewed focus on the obstacles to spill response off Alaska comes as the Obama administration is under increasing pressure to boost domestic oil production as a means of tempering high gasoline prices. President



Barack Obama last month set a target of reducing foreign oil imports by a third by 2025.

To reach that goal, he will need the oil and gas off Alaska, where an estimated 27 billion barrels of oil lies beneath the ocean floor. That's 2.5 times the amount produced in the entire Gulf of Mexico since 1990. Yet despite these huge reserves, the costs of drilling in the Arctic, along with permitting delays and lawsuits have resulted in fewer than 100 wells being drilled in federal waters there. Only about three dozen of those are in the Beaufort and Chukchi seas off Alaska's northern and northwest coasts.

In December, in part because of concerns about responding to an oil spill, Interior Secretary Ken Salazar canceled the sale of new oil and gas leases in the Arctic. And a federal court recently ordered the agency to go back and analyze the risks of a large oil spill for a 2008 Chukchi lease sale, including how it would be handled.

While the department said it would honor existing leases, delays in permitting have caused the only company that was seeking to drill a new exploratory well in federal waters off Alaska to postpone those plans until 2012.

That company, Shell Oil Co., says it will be fully prepared as the law requires to handle a worst-case spill, in the unlikely event that one occurs. Peter Velez, Shell's oil spill response manager, told the AP that equipment would be stationed offshore with the drilling rig and could start skimming oil within an hour of a spill.

The company also will have onsite back-up blowout preventers, the valve tower on the sea floor that is supposed to shut a well in the event of a blowout. The one on the Deepwater Horizon rig in the Gulf failed to halt the flow of oil and gas.



And in another difference from the Gulf disaster, a new capping and containment system still under construction could reach its target within a day. In BP's case in the Gulf, the equipment that eventually contained the spill before the well was killed needed to be built from scratch.

"We will have enough equipment at each of the locations to meet, and in most cases exceed, the worst-case discharge," Velez said.

In the spill last April, the worst seemed to happen - a super-deep well in about a mile of water and nearly 3 1/2 miles below the ocean floor erupted, spilling as much as 2.4 million gallons of oil into the Gulf each day.

A spill of that magnitude is much less likely in the Arctic, according to experts, because drilling would occur in shallow water, where pressures are much less than in the deep-water Gulf.

Ice, which can be an obstacle to clean up, can also act as a natural barrier to a spill. And the frigid water means the oil would be slower to degrade, buying more time to apply dispersants, burn off oil and use other clean-up techniques - though potentially exposing wildlife to more toxins. Exploratory drilling, as Shell points out, would be limited to the open water season from July-October.

Leslie Pearson, who for 19 years worked at the Alaska Department of Environmental Conservation, and who for the last six years was in charge of oil spill response - says it wouldn't take very long for a long-term blowout to exceed a single company's response capabilities.

"I have my doubts for sure, about being able to sustain a response," Pearson said. "What makes or breaks an oil spill response is whether you can get personnel or equipment to the site in a timely manner. In a long-term blowout, it will only be a matter of time before they are



overwhelmed."

©2010 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

Citation: Gulf anniversary renews debate on Arctic drilling (2011, April 23) retrieved 10 April 2024 from https://phys.org/news/2011-04-gulf-disaster-renews-debate-arctic.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.