

Going to extremes

Shell and Arctic oil exploration

Media briefing, September 2014

Introduction

The Arctic is undergoing fundamental and rapid change. Temperatures are rising faster at the top of the world than anywhere else on Earth¹. Arctic ice is vanishing. The extent of northern sea ice reached its lowest level in recorded history in 2012², while the figures for 2013 and 2014 remained far below the seasonal average³. Melting is occurring even more rapidly than many climate scientists had predicted⁴ and for the Arctic this means dramatic impacts on the landscape, on Indigenous communities and cultures and the unique wildlife of this region. For the rest of the world beyond the Arctic Circle, it means accelerating climate change impacts and extreme weather events around the planet.

What happens in the Arctic will affect every man, woman and child on the planet, but rather than seeing this melting as a grave warning, multinational oil companies see it as an opportunity to drill for yet more oil that is causing the ice to disappear in the first place.

According to the US Geological Survey, the Arctic could hold vast reserves of undiscovered oil and gas⁵, and leading the rush to exploit it is global energy giant Shell⁶. However, its attempts to open up this northern frontier since 2012 have met with almost complete failure.

But Shell hasn't given up on the far north. In August 2014 Shell submitted new plans to the US administration for offshore exploratory drilling in the Alaskan Arctic⁷, meaning it's on course to resurrect its Arctic drilling plans as early as summer 2015. And it has signed a deal with Russian company Gazprom to drill in the icy and remote waters off Russia's northern coastline⁸. Russia is a region where drilling regulations are lax, oil spills commonplace and corruption is rife.

A well blowout under icy Arctic seas would have a disastrous effect on the pristine local environment⁹, while freezing temperatures, raging seas, howling gales, months of twilight and tiny operational window, coupled with the extremely remote location and an almost total lack of infrastructure, raise serious concerns about Shell's ability to operate safely here.

Shell's Arctic ambition

The Arctic has long been seen by the oil industry as a potential goldmine and Shell, above almost any other company, has become synonymous with the rush to open up the world's last great frontier. Dwindling reserves and the end of easy-to-reach oil have forced the Anglo-Dutch giant into increasingly more remote, expensive, technically challenging and risky areas like tar sands, deep and ultra-deep oceans and, now, the Arctic.

Since 2005 it has invested heavily in license blocks covering vast tracts of the Beaufort and Chukchi Seas¹⁰ and to date has spent nearly \$6bn¹¹ trying to find oil in the Alaskan Arctic, in areas identified by the US Arctic Research Commission as being of "heightened ecological significance"¹². The company's ambition was to be "making energy history offshore Alaska"¹³ but things have not gone according to plan.

Shell's chequered history in the Arctic

2012

In July 2012 Shell's drill ship the Noble Discoverer came adrift from its moorings in the sheltered waters of Dutch Harbour, Alaska. News reports varied on how close to the shore it came, with Shell's spokesperson Curtis Smith stating that it "stopped very near the coast"¹⁴ and the harbour captain Kristjan Laxfoss saying "There's no question it hit the beach...that ship was not coming any closer. It was on the beach"¹⁵.

In September, Shell started preparatory drilling but after only 36 hours drilling operations had to be suspended due to a 30-mile by 12-mile block of ice being blown towards the drill site¹⁶.

In the same month, Shell tested safety equipment specifically designed for the Arctic Ocean. But during the test, undertaken in shallow waters in the calm of Puget Sound, off the coast of Washington State, the containment dome was “crushed like a beer can”¹⁷.

Then in November, only a few days after entering Dutch Harbour in Alaska, the Noble Discoverer rig caught fire. After “maintenance issues”¹⁸ it appears its engine backfired and caused a blaze in the smokestack that was eventually brought under control by the crew.

Criminal investigators boarded the rig for a marine safety inspection when it reached Seward, in Alaska. The inspection team found 16 discrepancies and serious issues with the rig’s safety management system and pollution control system¹⁹.

And on New Year’s Eve, Shell’s Kulluk rig was being towed back to harbour by Shell’s Aiviq tug during a violent storm²⁰. The Aiviq’s engines failed²¹ and its towline broke, causing the Kulluk to run aground on Sitkalidak Island²², where it remained for days. It was subsequently revealed that Shell towed the Kulluk away from Alaska during the rough mid-winter weather to avoid paying tax²³. Both the US government²⁴ and Coast Guard²⁵ opened investigations in to how this accident occurred.

2013

Following its disastrous 2012 exploration programme, when even the US government was forced to concede the company had “screwed up”²⁶, Shell was forced to reassess its operational plans for the Arctic.

In February 2013 following its repeated safety problems, government investigations and a criminal probe into its operations, Shell officially announces that “It will pause its exploration drilling activity for 2013 in Alaska’s Beaufort and Chukchi Seas to prepare equipment and plans for a resumption of activity at a later stage”²⁷.

In March a report drawn up by the US Department of the Interior examined Shell’s Arctic programme²⁸ and concluded that Shell “entered the 2012 drilling season with substantial uncertainty about the readiness of critical systems” and had “significant problems with contractors on which Shell relied for critical aspects of its programme.” Interior Secretary Ken Salazar said “Shell screwed up in 2012 and we’re not going to let them screw up whenever their pause is removed unless they have these systems in place”²⁹. Shell was told to develop a better exploration plan and undertake a full third party audit of its own systems before it will be allowed back.

In April, under the eyes of the President of Russia, Vladimir Putin, Shell and Gazprom signed an agreement to explore the Chukchi and Pechora Seas of the Russian Arctic in the coming years³⁰.

Gazprom owns the notorious Prirazlomnaya platform, where, in September 2013, 28 Greenpeace activists and two freelance journalists were seized at gunpoint by Russian commandos following a peaceful protest in 2013³¹. The Arctic 30 were detained for three months under charges of piracy and hooliganism, before being released on a parliamentary pardon after a global campaign generated a massive public support for their plight.

In November 2013 Shell submitted a new exploration plan to drill multiple wells in the Chukchi Sea during the short summer drilling window of 2014³². It also chartered another drilling vessel³³ to replace it’s heavily damaged³⁴ Kulluk rig in preparation for receiving the green light from US regulators.

2014

Shell soon ran into a legal obstacle that would quickly render its hopes of drilling in the summer of 2014 a pipe dream. In January, the 9th Circuit Court of Appeals ruled on a case brought by a coalition of Indigenous Peoples groups and NGOs against the granting of oil leases covering millions of hectares of the Chukchi Sea to Shell in 2008³⁵. The court decided that the US government had not considered the worst-case impact of an oil spill in these waters, instead using an “arbitrary and capricious” figure³⁶ that downplayed the consequences of a major accident. The US government was forced to reassess the environmental impact of oil drilling in these waters, a process that could take many months³⁷.

This proved a body blow to Shell’s 2014 programme. With no idea when or even if government approval for its operations might ever arrive, it cancelled the exploration programme. Lamenting unfair “obstacles” that had apparently been placed in Shell’s path³⁸, CEO Ben van Beurden said

that “the lack of a clear path forward means that I am not prepared to commit further resources for drilling in Alaska in 2014”³⁹.

To add insult to injury, in April 2014 the US Coast Guard published its report into the grounding of the Kulluk on Sitkalidak Island at the end of 2012⁴⁰. They concluded that the accident had been caused by Shell’s “inadequate assessment and managing of risks”⁴¹ and its attempt to avoid paying tax in Alaska⁴². The company’s recklessness, one expert said, had “guaranteed an ass kicking”⁴³.

But Shell still hasn’t given up. In August 2014 Shell submitted plans to the US federal government to try once again to explore for oil in the Alaskan Arctic. While the plan is just a first step in the process, it reflects Shell’s determination to go back to the Arctic, as early as summer 2015. Shell’s proposed programs consist of two drilling rigs working simultaneously in the Chukchi Sea, which could produce more than 400,000 barrels of oil a day⁴⁴.

Shell can’t drill safely in the Arctic

The underlying reason for Shell’s on-going Arctic troubles is simple: the company and its equipment, rather than being ready for the Arctic, is completely unable to meet any of the technical challenges posed by working in this remote, icy region.

While Shell confidently says that it has made numerous plans for dealing with oil in ice⁴⁵, the company also admits that the technical and environmental challenges of oil exploration in the Arctic “are immense”⁴⁶.

According to a senior official at a Canadian firm that specialises in oil spill response, “there is really no solution or method today that we’re aware of that can actually recover [spilt] oil from the Arctic”⁴⁷.

Analysis for WWF found that industry proposals for assessing the risks of a spill in the Arctic were inaccurate, describing it as “imagineering, not engineering”⁴⁸.

The Pew Environment Group recently examined oil spill response plans for operations in the Arctic⁴⁹ and warned that the oil industry is “not prepared for the Arctic, the spill plans are thoroughly inadequate”⁵⁰, adding that Arctic spill plans “underestimate the probability and consequence of catastrophic blowouts, particularly for frontier offshore drilling in the US Arctic Ocean”⁵¹.

Shell’s oil spill plan claims that oil would only “be released to a relatively small area on the water” even though US regulators have estimated that the hypothetical maximum discharge for wells in the Chukchi Sea could be as much as 61,000 barrels a day⁵².

One method Shell would use to respond to such a spill would be to try to burn leaking oil, even though oil in ice has only ever been burned in small-scale experiments and not in the harsh conditions of the Beaufort and Chukchi Seas, which could include ice, fog, darkness and hurricane-force winds⁵³.

The impact of an oil spill in the Arctic

Alaska has over 40,000 miles of coastline – more than the rest of the US combined – and an oil spill would have a catastrophic impact on local wildlife and fishing. The region is a vital habitat for species such as polar bears, muskoxen, bearded and ribbon seals, bowhead and blue whales⁵⁴, and fish including Arctic char, halibut and salmon shark, while Alaska is home to birds such as the king eider, gyrfalcon, bald eagle and trumpeter swan⁵⁵.

And the Pew Environment Group says that a spill in the Arctic would have dire consequences for local indigenous peoples who inhabit the region⁵⁶, while the USGS found that the long-term impact of oil development on indigenous communities is unknown, because “additional information” is required to “determine the potential hazard to native subsistence livelihoods”⁵⁷.

Serious impacts from the 1989 Exxon Valdez spill into the Gulf of Alaska continue to plague marine and coastal environments over two decades since the tanker ran aground on Bligh Reef. Twenty-five years on from the spill, which released over 250,000 barrels of oil into Prince William Sound⁵⁸, pockets of oil remain in sediment under gravel beaches⁵⁹. Populations of sea otters, whose numbers were cut in half, have yet to fully recover⁶⁰ and some marine mammal species, with toxins incorporated into their blubber, are nearing local extinction⁶¹. Numbers of killer whales were reduced by 40% and their survival in Prince William Sound remains uncertain⁶².

Eastern promise

In 2013 Shell signed a deal with Russian company Gazprom to drill in the icy and remote waters off Russia's northern coastline⁶³. Russia is a region where drilling regulations are lax, oil spills commonplace and corruption is rife.

Gazprom is one of the world's largest energy companies and one of only two companies licensed to drill in the Russian Arctic. It recently produced the first ever commercial quantities of oil from these icy seas⁶⁴. However, its efforts to drill in this freezing region so far have been characterised by delays, safety concerns, expired oil spill response plans and a complete inability to deal with any accidents. The company's equipment is decades out of date, and in 2011, one of its rigs sank while being towed in the Sea of Okhotsk, killing 53 of the crew onboard⁶⁵. Amazingly, Gazprom's reporting on injuries and fatalities in its 2010-2011 sustainability report fails to mention this incident entirely⁶⁶.

Gazprom's Prirazlomnaya platform was towed to its drill site in the Pechora Sea, even though the company involved in its construction admitted the rig was not fully completed or might not meet offshore operating standards⁶⁷. Just a few weeks after it was eventually positioned on site, the Prirazlomnaya's safety ladder was torn off in a summer storm⁶⁸. It was discovered that Gazprom's oil spill response plan for the Prirazlomnaya was out of date, meaning that any drilling the company undertakes without getting a new plan approved would be illegal under Russian law⁶⁹. No member of Gazprom's Board of Directors has specific offshore experience or special responsibility for offshore projects⁷⁰.

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