

Breaking the ice: Oil from the offshore Arctic

October 2014

Introduction

In December 2013 the Russian energy giant Gazprom began producing oil at its *Prirazlomnaya* platform in the Pechora Seaⁱ, becoming the first company to start permanent commercial operations in the icy waters of the Arctic. The platform was supposed to start commercial drilling in 2005ⁱⁱ but was hit by a series of long delays and technical problemsⁱⁱⁱ that meant first oil was not struck until December 2013^{iv}. It took a total of 15 years to build the platform, during six of which the construction lay rusting in a shipyard in Severodvinsk^v. Parts of a discarded North Sea oil platform were used in its construction and overall the platform is regarded as technically obsolete^{vi}.

It is estimated that the oilfield where *Prirazlomnaya* sits contains an estimated 500m barrels (72m tons) of recoverable oil^{vii} and Gazprom plans to drill 40 separate wells there in the next 25 years with the peak production being achieved in the 7th or 8th year^{viii}. The quality of oil from these wells is low^{ix}. The *Prirazlomnaya* project is regarded as economically uncertain - the potential profitability of its operation depends solely on tax exemptions granted by the Russian government^x.

Despite the extreme conditions Gazprom says that it has anticipated all possible risks and can deal with any oil spill in the region^{xi}. However, all available information indicates that Gazprom is incapable of dealing adequately with even smaller accidents.

The platform was the scene of a high profile protest in September 2013, which led to the imprisonment of 28 Greenpeace activists and two freelance journalists. The "Arctic 30", as they became known, spent two months in Russian prisons on charges of piracy and hooliganism before being freed on bail and further on the prosecution was stopped under the terms of an official amnesty.

Arctic oil in Europe

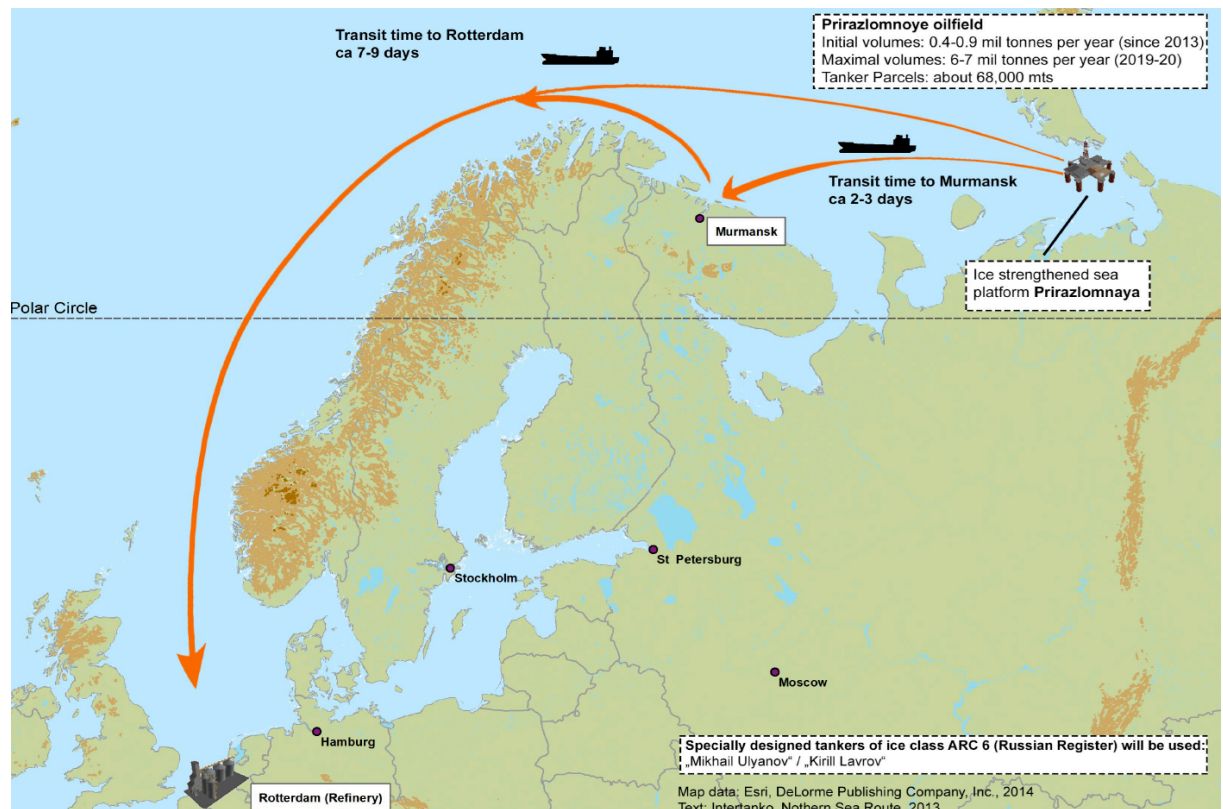
In February, Gazprom spokesman Vadim Yakolev announced that this first consignment of oil from the icy offshore Arctic would be shipped directly from the Pechora Sea to the port of Rotterdam in the Netherlands^{xii}. He added that, beginning in the first quarter of 2014^{xiii}, one tanker would export around 2 million barrels of oil from *Prirazlomnaya* to Rotterdam every three months^{xiv}.

Gazprom will transport this Arctic oil using one of two ice class tankers, the *Mikhail Ulyanov*^{xv} and the *Kirill Lavrov*,^{xvi} it has chartered on a long term deal for this specific purpose^{xvii}. The tanker that carried the first oil from *Prirazlomnaya* was the *Mikhail Ulyanov*.

This 257m long vessel can carry around 500,000 barrels of crude oil^{xviii} and is designed to operate in ice up to 1.5m thick, allowing it to transport oil from *Prirazlomnaya* all year round^{xix}. The platform, which has storage capacity for just over 800,000 barrels of oil^{xx}, is fitted with two offloading systems that allow the

tankers to sit alongside and pump oil on-board oil at a rate of around 6,300 barrels per hour^{xxi}.

The first delivery took place in April 2014 directly from the platform to Rotterdam. The second shipment was announced in September, 2014. A further two tankers will transport around one million barrels of oil from the *Prirazlomnoye* field before the end of the year. In total, approximately 2.2 million barrels (or around 300,000 tonnes of oil) will be produced at the *Prirazlomnoye* field by the end of 2014^{xxii}.



Western markets?

According to Gazprom the first oil from the icy waters of the Arctic is to be sold on the European spot market (where commodities are bought for immediate delivery)^{xxiii}, with the company suggesting that its price will be around \$80 per barrel^{xxiv}. This low price reflects the poor quality of the oil from the Pechora Sea, being a heavy, sour crude containing high quantities of sulphur^{xxv}. This, coupled with the astronomical operating costs of drilling in such an extreme polar environment, probably explains why the Russian government is subsidising the operations at *Prirazlomnaya*, going to far as to confirm “state subsidies will be increased in case of a drop in oil prices.”^{xxvi}

The first shipment of off-shore Arctic oil was bought by the French company Total SA, which itself ruled out drilling in the Arctic offshore due to excessive risks back in the late 2012.^{xxvii}

The risks of Arctic oil

Drilling in the ice infested waters of the far north poses overwhelming technical and environmental challenges, which, when coupled with the out dated technology Gazprom is using in the Pechora Sea, make responding to an accident practically impossible. Some of the main areas of concern are:

- The *Prirazlomnaya* platform is now thirty years old^{xxxviii}. It was constructed from parts of a decommissioned North Sea rig and sat rusting in a Murmansk shipyard for several years^{xxix}. The project has been plagued by delays. Production was originally intended to begin production in 2010^{xxx}, before a slew of problems^{xxxi} saw this date slip back until 2014. Even now industry sources have questioned whether *Prirazlomnaya* meets Russian operating standards^{xxxii}.
- Gazprom has refused to publish the full text of its oil spill response plan for *Prirazlomnaya*, contrary to the guidelines of organisations like the Arctic Council^{xxxiii}, which makes it impossible to say how prepared it is to respond to an accident in icy conditions. A short summary of this document was formerly available but has now been removed from the company website^{xxxiv}, but even this document showed that Gazprom will rely on clean up methods that simply do not work in the Arctic.
- The company has no detailed plan to respond to a large spill that could be caused by a tanker accident^{xxxv}, while there are insufficient quantities of basic spill response equipment like oil booms located close to the *Prirazlomnaya*.
- Gazprom's response plan relies on a handful of shovels, buckets, axes and a sledgehammer being sufficient to clean hundreds of miles of oiled coastline. The company also overestimates the effectiveness of response technologies such as booms and skimmers and assumes it will be able to clean up nearly 100% of any oil spilled in icy conditions. This is totally overoptimistic. Only 16% of the oil spilled during the *Deepwater Horizon* disaster in the warm waters of the Gulf of Mexico was recovered using these methods^{xxxvi}. To date, the only example of a real oil spill response operation in icy conditions is after the grounding of the vessel *Godafoss* off the coast of Norway and Sweden in February 2011. Less than 50% of spilled oil was collected in that case in ice-free waters. According to the National Energy Board (NEB), in the conditions of the Beaufort Sea, during the period from November until May, clean-up efforts would be impossible in case of the ice presence.
- Expert analysis has supported the assessment that Gazprom could not deal with an Arctic oil spill, concluding that an accident "could lead to serious, long term pollution of this fragile region, including nearby protected coastal areas and crucial wildlife habitat."^{xxxvii}
- The *Prirazlomnaya* was the focus of a peaceful protest that led to the imprisonment of the Greenpeace Arctic 30 in September 2013^{xxxviii}. Two activists attempted to attach a small banner to the side of the structure but were challenged by armed commandos who fired shots into the water^{xxxix}. The imprisonment of the 30 on charges first of piracy and later hooliganism led to^{xl} a global outcry. The activists remained in jail for over two months before an official amnesty law was passed in late December^{xli}.

Is Arctic oil inevitable?

Until recently, the oil industry has told anyone who would listen that large scale commercial production from the icy waters of the Arctic was inevitable. Now, however, the prospects look less rosy. Despite spending billions of dollars and years of effort, Shell recently announced it had cancelled plans to drill in the Alaskan Arctic in the summer of 2014, blaming a lack of clear regulations from the US government^{xiii}. Norwegian energy company Statoil has confirmed it would “slow down exploration efforts” in the Arctic in a bid to control costs^{xliii}. Elsewhere US oil giant ConocoPhillips cancelled its own plans to drill in the Chukchi Sea off Alaska^{xliiv}, while British wildcat firm Cairn Energy, who spent over \$1bn drilling a series of dry wells in Greenland, claimed it is now “too busy” to return to the Arctic^{xliv}. Alongside these delays, industry analysts are now suggesting the on going crisis in Ukraine could undermine western companies’ attempts to set up Arctic joint ventures with Russian firms such as Gazprom and Rosneft. Shell has such a deal in place with Gazprom, but questions are now being asked by shareholders on the companies’ ability to drill safely in the Russian Arctic. Currently, ExxonMobil is suspending cooperation with Russia's state-owned company Rosneft on offshore drilling in the Arctic due to the sanctions.^{xlvi}

Greenpeace Arctic demands:

- A ban on off shore oil drilling in icy waters
- A ban on destructive industrial fishing
- A global sanctuary in the uninhabited area around the North Pole

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