Russia Oil Spills Wreak Devastation

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USINSK, Russia (AP) — On the bright yellow tundra outside this oil town near the Arctic Circle, a pitch-black pool of crude stretches toward the horizon. The source: a decommissioned well whose rusty screws ooze with oil, viscous like jam.

This is the face of Russia's oil country, a sprawling, inhospitable zone that experts say represents the world's worst ecological oil catastrophe.

Environmentalists estimate at least 1 percent of Russia's annual oil production, or 5 million tons, is spilled every year. That is equivalent to one Deepwater Horizon-scale leak about every two months. Crumbling infrastructure and a harsh climate combine to spell disaster in the world's largest oil producer, responsible for 13 percent of global output.

Oil, stubbornly seeping through rusty pipelines and old wells, contaminates soil, kills all plants that grow on it and destroys habitats for mammals and birds. Half a million tons every year get into rivers that flow into the Arctic Ocean, the government says, upsetting the delicate environmental balance in those waters.

It's part of a legacy of environmental tragedy that has plagued Russia and the

countries of its former Soviet empire for decades, from the nuclear horrors of Chernobyl in Ukraine to lethal chemical waste in the Russian city of Dzerzhinsk and paper mill pollution seeping into Siberia's Lake Baikal, which holds one-fifth of the world's supply of fresh water.

Oil spills in Russia are less dramatic than disasters in the Gulf of Mexico or the North Sea, more the result of a drip-drip of leaked crude than a sudden explosion. But they're more numerous than in any other oil-producing nation including insurgency-hit Nigeria, and combined they spill far more than anywhere else in the world, scientists say.

"Oil and oil products get spilled literally every day," said Dr. Grigory Barenboim, senior researcher at the Russian Academy of Sciences' Institute of Water Problems.

No hard figures on the scope of oil spills in Russia are available, but Greenpeace estimates that at least 5 million tons leak every year in a country producing about 500 million tons a year.

Dr. Irina Ivshina, of the government-financed Institute of the Environment and Genetics of Microorganisms, supports the 5 million ton estimate, as does the World Wildlife Fund.

The figure is derived from two sources: Russian state-funded research that shows 10-15 percent of Russian oil leakage enters rivers; and a 2010 report commissioned

by the Natural Resources Ministry that shows nearly 500,000 tons slips into northern Russian rivers every year and flow into the Arctic.

The estimate is considered conservative: The Russian Economic Development Ministry in a report last year estimated spills at up to 20 million tons per year.

That astonishing number, for which the ministry offered no elaboration, appears to be based partly on the fact most small leaks in Russia go unreported. Under Russian law, leaks of less than 8 tons are classified only as "incidents" and carry no penalties.

Russian oil spills also elude detection because most happen in the vast swaths of unpopulated tundra and conifer forestin the north, caused either by ruptured pipes or leakage from decommissioned wells.

Weather conditions in most oil provinces are brutal, with temperatures routinely dropping below minus 40 degrees Celsius (minus 40 Fahrenheit) in winter. That makes pipelines brittle and prone to rupture unless they are regularly replaced and their condition monitored.

Asked by The Associated Press to comment, the Natural Resources Ministry and the Energy Ministry said they have no data on oil spills and referred to the other ministry for further inquiries.

Even counting only the 500,000 tons officially reported to be leaking into northern rivers every year, Russia is by far the worst oil polluter in the world.

—Nigeria, which produces one-fifth as much oil as Russia, logged 110,000 tons spilled in 2009, much of that due to rebel attacks on pipelines.

—The U.S., the world's third-largest oil producer, logged 341 pipeline ruptures in 2010 — compared to Russia's 18,000 — with 17,600 tons of oil leaking as a result, according to the U.S. Department of Transportation. Spills have averaged 14,900 tons a year between 2001 and 2010.

—Canada, which produces oil in weather conditions as harsh as Russia's, does not see anything near Russia's scale of disaster. Eleven pipeline accidents were reported to Canada's Transport Safety Board last year, while media reports of leaks, ranging from sizable spills to a tiny leak in a farmer's backyard, come to a total of 7,700 tons a year.

—In Norway, Russia's northwestern oil neighbor, spills amounted to some 3,000 tons a year in the past few years, said Hanne Marie Oeren, head of the oil and gas section at Norway's Climate and Pollution Agency.

Now that Russian companies are moving to the Arctic to tap vast but hard-to-get oil and gas riches, scientists voice concerns that Russia's outdated technologies and shoddy safety record make for a potential environmental calamity there.

Gazpromneft, an oil subsidiary of the gas giant Gazprom, is preparing to drill for oil in the Arctic's Pechora Sea, even as environmentalists complain that the drilling platform is outdated and the company is not ready to deal with potential accidents.

Government scientists acknowledge that Russia does not currently have the required technology to develop Arctic fields but say it will be years before the country actually starts drilling.

"We must start the work now, do the exploration and develop the technology so that we would be able to ... start pumping oil from the Arctic in the middle of this century," Alexei Kontorovich, chairman of the council on geology, oil and gas fields at the Russian Academy of Sciences, told a recent news conference.

The same academy's Barenboim said, however, that Russian technology is developing too slowly to make it a safe bet for Arctic exploration.

"Over the past years, environmental risks have increased more sharply compared to how far our technologies, funds, equipment and skills to deal with them have advanced," he said.

In 1994, the republic of Komi, where Usinsk lies 60 kilometers (40 miles) south of the Arctic Circle, became the scene of Russia's largest oil spill when an estimated 100,000 tons splashed from an aging pipeline.

It killed plants and animals, and polluted up to 40 kilometers (25 miles) of two local rivers, killing thousands of fish. In villages most affected, respiratory diseases rose by some 28 percent in the year following the leak.

Seen from a helicopter, the oil production area is dotted with pitch-black ponds. Fresh leaks are easy to find once you step into the tundra north of Usinsk. To spot a leak, find a dying tree. Fir trees with drooping gray, dry branches look as though scorched by a wildfire. They are growing insoil polluted by oil.

Usinsk spokeswoman Tatyana Khimichuk said the city administration had no powers to influence oil company operations.

"Everything that happens at the oil fields is Lukoil's responsibility," she said, referring to Russia's second largest oil company, which owns a network of pipelines in the region.

Komi's environmental protection officials also blamed oil companies. The local prosecutor's office said in a report this year that the main problem is "that companies that extract hydrocarbons focus on making profits rather than how to use the resources rationally."

Valery Bratenkov works as a foreman at oil fields outside Usinsk.

After hours, he is with a local environmental group. Bratenkov used to point out to his Lukoil bosses that oil spills routinely happen under their noses and asked them to repair the pipelines. "They were offended and said that costs too much money," he said.

Activists like Bratenkov find it hard if not impossible to hold authorities to account in the area since some 90 percent of the local population comprises oil workers and their families who have moved from other regions of Russia, and depend on the industry for their livelihood.

Representatives of Lukoil denied claims that they try to conceal spills and leaks, and said that no more than 2.7 tons leaked last year from its production areas in Komi.

Ivan Blokov, campaign director at Greenpeace Russia, who studies oil spills, said the situation in Komi is replicated across Russia's oil-producing regions, which stretch from the Black Sea in the southwest to the Chinese border in Russia's Far East.

"It is happening everywhere," Blokov said. "It's typical of any oil field in Russia. The system is old and it is not being replaced in time by any oil company in the country."

What also worries scientists and environmentalists is that oil spills are not confined to abandoned or aging fields. Alarmingly, accidents happen at brand new pipelines, said Barenboim.

At least 400 tons leaked from a new pipeline in two separate accidents in Russia's Far East last year, according to media reports and oil companies. Transneft's pipeline that brings Russian oil from Eastern Siberia to China was put into operation just months before the two spills happened.

The oil industry in Komi has been sapping nature for decades, killing or forcing out reindeer and fish. Locals like the 63-year-old Bratenkov are afraid that when big oil leaves, there will be only poisoned terrain left in its wake.

"Fishing, hunting — it's all gone," Bratenkov said.

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