

Hilcorp gas pipeline leaking into Cook Inlet

A damaged underwater pipeline is leaking between 210,000 and 310,000 cubic feet of natural gas per day into Cook Inlet, according to estimates by the pipeline's owner, Hilcorp.

The leaking 8 inch-diameter pipeline runs approximately 80 feet below the surface of Cook Inlet and carries processed natural gas to Hilcorp's oil-producing Platform A, which burns it as fuel and distributes it to the three other Hilcorp platforms in the Middle Ground Shoal field, also powered by the piped gas. Platform A is about 5 miles off the East Forelands area of the Cook Inlet shoreline, near Nikiski.

According to an <u>Alaska Department of Environmental Conservation situation report</u> released Wednesday, a Hilcorp helicopter spotted a surface disturbance from the leak Feb. 7, and Hilcorp reported the leak to the Coast Guard's National Response Center about an hour later.

Since spotting the leak, Hilcorp has reduced the pressure in the pipeline and, according to its statement, shut down non-essential equipment on the platforms. DEC's report states that as of Tuesday Hilcorp estimated a leak rate between 225,000 to 325,000 cubic feet per day; <u>the Hilcorp statement released late Wednesday</u> lowered that estimate to between 210,000 and 310,000 cubic feet per day.

Hilcorp flights in subsequent days continued to see gas release until ice covered the area, the DEC report states. The ice has also delayed a planned examination by a dive team.

The U.S Coast Guard's weekly <u>Local Notice to Mariners, released Thursday</u>, states that "due to the current level of ice in lower Cook Inlet, natural gas may be accumulating under the ice and unable to be dissipate (sic) safely into the atmosphere."

The notice advises boat captains to "transit the area with caution" and keep outside a 1,000yard radius of the leak.

Bob Shavelson, advocacy director of conservation nonprofit Cook Inletkeeper, announced <u>in a</u> <u>Wednesday letter to Hilcorp CEO Jeffery Hildebrand</u> that Cook Inletkeeper plans to sue the company over the leak via the federal Clean Water Act, which allows citizens to file suits against alleged violators of Clean Water Act standards.

"Inletkeeper's letter today is meant to provide a back-stop in the event Hilcorp opts to continue to put profits over fish, wildlife and water quality in Cook Inlet, and to press Hilcorp to address the larger issue of relying on antiquated infrastructure as part of its Cook Inlet business model," Shavelson wrote in an email media release.

According to an information sheet by the nonprofit oil spill prevention advisory group Cook Inlet Regional Citizen's Advisory Council, Platform A is among the first in Cook Inlet, having been built by Shell Oil Company in 1964. <u>The Clarion previously reported</u> Hilcorp bought Platform A from XTO Energy in 2015, after it had acquired the other Middle Ground Shoal platforms from Chevron Corp in 2012 — a period in which Hilcorp officials said the company was spending about \$350 million a year refurbishing old Cook Inlet facilities.

Shavelson previously called on Hilcorp to shut off the pipeline in <u>a Feb. 10 letter to DEC</u> <u>Commissioner Larry Hartig.</u>

Before being used for natural gas, the pipeline transported crude oil, according to the Hilcorp statement. In addition to the fact that it supplies power to the four platforms, Hilcorp stated that the pipeline must be pressurized to keep it from flooding and possibly sending residual oil into the inlet.

The DEC doesn't explicitly regulate natural gas leaks — its authority is liquid spills, wrote DEC public information officer Candice Bressler in an email.

"That said, DEC does have authority for the release of hazardous substances to the environment and we are monitoring the release," Bressler wrote. "We are also looking into a number of legal authorities, including the Clean Water Act, under which we can respond to this release, but first and foremost, we are focusing on this situation being safely and expeditiously mitigated."

DEC sent a letter Friday seeking information from Hilcorp, requesting a response by Feb. 20, Bressler wrote. Among the information DEC requested was an environmental monitoring plan from the company.

Spokesperson Julie Speegle of the National Oceanic and Atmospheric Administration said her agency is also working with DEC on a plan to monitor air and water quality at the leak site. Spokesperson Darius Kirkwood of the federal Department of Transportation's Pipeline and Hazardous Materials Safety Administration wrote in an email that members of his agency "are investigating and actively monitoring" the leak and are "in the process of collecting information to inform our approach moving forward." Susan Saupe, Director of Science and Research for CIRCAC, wrote in an email that there is little historical information about long-term gas leaks into cold water environments, though two such incidents that occurred in Russia in the 1980s "showed significant impacts" to local fish and invertebrates. Saupe wrote that certain factors make it possible this leak might be less damaging.

Having already been processed into fuel, the gas in the pipeline is 98.67 percent methane, according to DEC's situation report. This means the escaping gas will carry fewer larger hydrocarbons into the Inlet. The pipeline's relatively shallow depth makes the gas more likely to escape into the atmosphere than to saturate the water, Saupe wrote.

The gas's atmospheric presence won't be benign — <u>the U.S Environmental Protection Agency</u> <u>has estimated that methane's atmospheric warming effect can be up to 36 times greater than</u> <u>that of carbon dioxide</u>. Saupe wrote that the water will likely be less affected than the atmosphere.

"The strong tidal currents mean that high concentrations won't build up in any one place and we shouldn't see areas of hypoxia (depleted oxygen levels) caused by this leak," Saupe wrote. "The longer the leak continues, though, the greater are the concerns that there could be impacts."

Hypoxia and anoxia — the total depletion of oxygen from water — are concerns Shavelson cited in his letter to Hildebrand. Others include the effects of dissolved methane on aquatic life and the fact that the pipeline is in an area the National Oceanic and Atmospheric Administration has designated as critical habitat for beluga whales.

CIRCAC Executive Director Mike Munger wrote that his organization is giving responders access to its <u>network of ice cameras</u> and encouraging them "to consider other means to obtain information about the pipeline, since they've determined that diving is not safe at this time."

"We'd like to see if more information about the cause could be determined; for example, is this due to an unsupported span in the pipeline or did a large glacial erratic boulder impact it?" Munger wrote. "That can potentially be determined through other means."

The 53-year-old Platform A is one of many pieces of Cook Inlet infrastructure of similar vintage. <u>According to CIRCAC's website</u>, 14 of Cook Inlet's 16 platforms were installed between 1964 and 1968.

"We do not know the specific cause of this particular leak, but just by virtue of age — many of the platforms and pipelines in Cook Inlet are near or have surpassed 50 years of age — we believe the infrastructure warrants increased oversight and close scrutiny," CIRCAC director Munger wrote.

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