



ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
Division of Spill Prevention and Response  
Prevention Preparedness and Response Program  
**SITUATION REPORT (SITREP)**

**CHANGES FROM PREVIOUS SITREPS ARE DENOTED IN RED**

## Hilcorp Natural Gas Leak from 8-inch Pipeline



**SITREP #:** 5

**SPILL #:** 17239903801

**TIME/DATE OF DISTRIBUTION:** 5:00 p.m. April 17, 2017

**POTENTIAL RESPONSIBLE PARTY (PRP):** Hilcorp Alaska, LLC (Hilcorp)

**INCIDENT LOCATION:** Cook Inlet between Platform A and Nikiski. (Lat/Long: 60.776367, -151.43365)

**TIME/DATE OF SPILL:** Unknown

**HOW/WHEN SPILL WAS DISCOVERED AND REPORTED:** A Hilcorp helicopter flying between Nikiski and Platform A around 3 p.m. on February 7, 2017, identified bubbles resulting from a natural gas leak. Hilcorp reported the gas leak to the National Response Center and to the Alaska Department of Environmental Conservation (ADEC) at 4 p.m. on the same day.

**TYPE/AMOUNT OF PRODUCT SPILLED:** The natural gas being released is not natural gas from the platform. The gas is processed dry natural gas (98.67% Methane), providing fuel gas to four platforms: Platform A, Platform C, Dillon Platform and Bakers Platform. The exact amount of gas released to water is unknown at this time.  
Following the placement of temporary clamp on the line, the pressure has stabilized at 66 psi.

**CAUSE OF SPILL:** Hilcorp was unable to determine the cause of the spill until recently when ice conditions allowed divers to access the site. A large rock, approximately 3 feet by 10 feet, was identified as causing a breach on the line that is 3/16 inch wide by 3/8 inch long.

**SOURCE CONTROL:** The 8-inch pipeline is an underwater pipeline at approximately 80 feet below Cook Inlet waters. Divers successfully installed a temporary repair clamp on the evening of April 13 and stopped the leak.

**RESPONSE ACTION:** On April 8, prior to conducting dive operations, Hilcorp further reduced the line pressure to 59 psi, reportedly reducing the line leak rate to 78,000 to 108,000 cubic feet per day. Following the placement of temporary clamp on the line, the pressure has stabilized at 66 psi. On April 9 Hilcorp's diving contractor successfully completed two dives. Divers characterized damage to the line as a 1 to 2 inches long transverse feature. A large rock was identified as the cause of the spill. It lies to the north of the pipeline and adjacent to the failure approximately 2 inches away. The rock is estimated to be approximately 3 feet by 10 feet and is deeply embedded in the seafloor. After preparing the pipeline surface to install a temporary clamp, a diver determined the actual defect (hole size) is 3/16 inch wide by 3/8 inch long.

Hilcorp has continued to conduct daily helicopter overflights as weather has allowed. Bubbles from the leak were not observed during any of the overflights. However, until the last week or two, the affected area has

been obscured by ice during overflights. Additionally, the reduction in line pressure on March 25 likely reduced the surface expression of the bubbles. Dive boat operators confirmed the cessation of bubbles after the clamp was installed on April 13.

To date Hilcorp has provided four extended wildlife observation overflights for state agency personnel utilizing their Otter, a fixed wing aircraft. The wildlife observation overflights were conducted on February 23, March 9, March 23, and April 6. Overflights have included personnel from the ADEC and Alaska Department of Fish and Game (ADF&G). Hilcorp has conducted several independent wildlife observation overflights utilizing a Cook Inlet Spill Prevention and Response, Inc. (CISPRI) protected species observer and a wildlife professional from International Bird Rescue. These overflights were conducted utilizing a helicopter at an altitude of 350 feet. No wildlife has been observed in the vicinity of the leak. However, visibility into Cook Inlet's waters is limited to the top 1.8 - 3.3 meters, and stationary waterfowl would not be visible at the speed/altitude used during agency overflights to avoid potential marine mammal harassment.

Hilcorp conducted background ambient air quality sampling for methane, carbon dioxide (CO<sub>2</sub>), and total volatile organic compounds (TVOC) within Cook Inlet between March 2 and March 7. Water quality sampling to determine methane and dissolved oxygen concentrations in the vicinity of the leak was initiated on March 18. Sampling to monitor concentrations of methane, carbon dioxide, and oxygen at the air/water interface was initiated on March 24. Acoustic monitoring using an Autonomous Multichannel Acoustic Recorder (AMAR) was initiated on March 27. To date Hilcorp has completed and submitted four sampling and monitoring reports. The department provided a response to Hilcorp on the first monitoring report. The department is currently reviewing the remaining reports.

ADEC continues to be in active communication with Hilcorp, and state and federal resource trustee agencies.

#### **RESOURCES AT RISK OR AFFECTED:**

**Shorelines** - Shoreline type varies throughout upper Cook Inlet. Shorelines around the East Forelands area include mixed sand and gravel beaches, coarse-grained sand, and exposed tidal flats. Redoubt Bay and Trading Bay on the west side of Cook Inlet include salt and brackish-water marshes and sheltered tidal flats which are of high importance to bird and invertebrate species.

**Marine Mammals** - Species likely to be present in upper Cook Inlet include Cook Inlet beluga whale (Endangered Species Act [ESA]-listed as endangered), western Distinct Population Segment (DPS) Steller sea lion (ESA-listed as endangered), Mexico DPS humpback whale (ESA-listed as threatened), harbor seals, killer whales, Hawaii DPS humpback whales, harbor porpoise, and Dall's porpoise. The Southwest Alaska DPS Northern sea otter (ESA-listed as threatened) is known to occur in lower Cook Inlet. The discharge location is within designated Critical Habitat for Cook Inlet beluga whales. Cook Inlet beluga whales are likely utilizing offshore waters in upper Cook Inlet during winter and will concentrate near forage fish locations as those populations arrive.

**Birds** - Steller's eiders are ESA-listed as threatened and are known to overwinter south of the gas release along both the eastern and western shores of lower Cook Inlet; however, a small portion of this species has been known to overwinter in the Nikiski area. Waterfowl and shorebirds are overwintering in upper Cook Inlet. Notably, rock sandpipers are known to overwinter in upper Cook Inlet feeding on bivalves, including almost the entire population of the subspecies *Calidris ptilocnemis ptilocnemis*. Bald and golden eagles are also present in Cook Inlet year round. Migratory birds, including waterfowl, seabirds, and shorebirds will likely begin arriving in high numbers in the Cook Inlet area in late March to early April.

**Fish** - Several species and different life stages of fish are likely present in Cook Inlet near the vicinity of the gas release, including all five species of Pacific salmon (Chinook, coho, sockeye, chum, and pink salmon), Dolly Varden, rainbow trout, Pacific eulachon, Pacific halibut (spawning and hatching occurs in winter months), Pacific herring, Bering cisco, Humpback whitefish, American shad, Walleye pollock, sablefish (adults spawn in winter in deep waters, larvae are present at the water surface, and juveniles are found in nearshore waters), Pacific and saffron cod, yellowfin sole, and smelt. This area is Essential Fish Habitat for all five species of Pacific salmon.

**FUTURE PLANS AND RECOMMENDATIONS:** Hilcorp is currently preparing the pipe for permanent repair. Hilcorp will facilitate another wildlife observation overflight on April 20 with personnel from ADEC and ADF&G.

**WEATHER:** Today: Windy with sunshine; high 23°F; winds north at 25 to 40 mph. Tonight: Clear; windy this evening; low 6°F; winds north 20 to 30 mph. Tomorrow: Partly cloudy skies with gusty winds; high near 20°F; winds north northeast 25 to 35 mph.

**COMMAND AND PERSONNEL:**

SOSC: Geoff Merrell, ADEC

**TIME/DATE OF THE NEXT REPORT DISTRIBUTION:** As the situation warrants.

**FOR ADDITIONAL INFORMATION CONTACT:**

AGENCY	NAME	PHONE NO.
ADEC – State On-Scene Coordinator	Geoff Merrell	(907) 269-7682
ADEC – PIO	Candice Bressler	(907) 465-5009
ADF&G	Jeanette Alas	(907) 267-2805
PHMSA	Dave Mulligan	(720) 963-3193
NOAA National Marine Fisheries Service	Julie Speegle	(907) 586-7032
Hilcorp Alaska	Lori Nelson	(907) 777-8300

**INCIDENT WEBPAGE:** [http://dec.alaska.gov/spar/ppr/response/sum\\_fy17/170215201/170215201\\_index.htm](http://dec.alaska.gov/spar/ppr/response/sum_fy17/170215201/170215201_index.htm)

**AGENCY/STAKEHOLDER NOTIFICATION LIST:** Please refer to the SITREP #3 distributed March 1 for the agency/stakeholder notification list. The link to the SITREP can be found in the **Additional Information** box above.