

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Spill Prevention and Response
Prevention and Emergency Response Program

SITUATION REPORT

INCIDENT NAME: Pump Station 1 Booster Pump Piping Incident **SITREP #:** 5

SPILL NUMBER: 11399900801 **LEDGER CODE:** 14307760

TIME/DATE OF SPILL: Alyeska Pipeline Service Company (APSC) employees discovered a spill of crude oil inside the booster pump building at Trans-Alaska Pipeline System (TAPS) Pump Station 1 at 8:16 AM on January 8, 2011. APSC reported the spill to ADEC at 8:39 AM on January 8, 2011. APSC cut the flow of oil to the TAPS line at approximately 8:50 AM, January 8, 2011.

With the temporary TAPS restart (see Sitrep #4), oil began flowing again through the leaking booster pump discharge piping shortly after 9:00 PM on January 11, 2011. Oil seeping into the basement of the booster pump building is being collected in and recovered from a containment tank.

TIME/DATE OF SITUATION REPORT: 4:00 PM, January 12, 2011

TIME/DATE OF THE NEXT REPORT: 4:00 PM, January 13, 2011

TYPE/AMOUNT OF PRODUCT SPILLED: Crude oil appears to have been released from part of the booster pumps' discharge piping located either in the wall of the booster pump building or in a concrete-encapsulated underground section outside the building. The flow rate of the seep into the building increased following the restart, and as of noon today, APSC crews monitoring it were recovering approximately 1.75 gallons of oil per minute. Since the restart, 2,310 gallons (55 barrels) of oil have been recovered. Including the 2,184 gallons (52 barrels) of oil recovered prior to the restart, a total of 4,494 gallons (107 barrels) have been recovered since the leak was discovered.

No oil has been observed during ongoing surface and subsurface monitoring of soil in the vicinity of the booster pump building or during inspections of the perimeter of the pump station's gravel pad.

LOCATION: TAPS Pump Station 1, Prudhoe Bay. Pump Station 1 is the point at which all oil from the North Slope oil fields enters the TAPS line.

CAUSE OF SPILL: Investigation is ongoing to determine the cause of the release and the precise location of its source.

RESPONSIBLE PARTY (RP): Alyeska Pipeline Service Company (APSC)

RESPONSE ACTION: At 5:20 PM on January 11, 2011, the Unified Command (UC) authorized APSC to restart the TAPS line in accordance with an approved interim restart plan. Restart procedures began at 5:30 PM, and oil began flowing just after 9:00 PM. At noon today, the rate of oil flow through the TAPS line was approximately 16,800,000 gallons (400,000 barrels) per day. The North Slope producers' lines were providing oil at a rate of 13,860,000 to 14,700,000 gallons (330,000 to 350,000 barrels) per day, with the remaining volume coming from the Pump Station 1 storage tanks. This production volume is roughly half of typical recent North Slope production.

As noted above, the rate of oil seeping into the booster pump building basement increased with the resumption of booster pump operation. The oil is being captured in the containment tank and recovered by vacuum trucks for re-injection into the TAPS system. Workers have limited the depth of oil in the containment tank to about 1 inch in the 5-foot deep tank.

Crews are monitoring for oil in the soil around the booster pump building through hourly surface and subsurface observations. Yesterday, crews dug a 10-foot deep hole on the west side of the building to use in addition to the

existing drainfield sumps for subsurface monitoring. Crews are also periodically checking the perimeter of the pump station gravel pad for oil. No oil has been observed during monitoring carried out before or since the restart.

An aircraft equipped with forward-looking infrared (FLIR) thermal sensors flew the length of the pipeline early this morning looking for thermal evidence of oil leaks. Warm areas near the pipe were identified at two sites on the North Slope and one close to Pump Station 8, which is near Eielson Air Force Base. Ground-based investigators found only natural water overflows at the sites. Daytime visual observations of the pipeline are being made from helicopters, and additional spill response crews have arrived in Fairbanks to stand by in case any spill may occur during the temporary TAPS operation.

The cleaning pig likely to be problematic during a cold restart was located last night at TAPS milepost 421.7 and is expected to arrive tomorrow at Pump Station 8, near milepost 490. The pig will be trapped between two valves in the main line while oil flows around it through a bypass pipe. A second pig in the TAPS pipeline, which is in a warmer section of the pipeline near its terminus, is expected to arrive at the Valdez Marine Terminal around mid-day tomorrow. Workers at Pump Station 9 are putting equipment in place to remove strainers from the line so they can be cleared of accumulated wax or ice, if necessary, so as not to impede oil flow.

APSC's fabrication shop continues today to manufacture parts for the booster pump discharge bypass pipe. Final deliveries of supplies to Pump Station 1 for construction of the bypass are expected to be made tonight. Crews at the pump station have continued with preparations to construct the bypass and expect to begin fitting and welding pipe on Friday, January 14.

APSC is planning for the upcoming shutdown and continues to prepare for a cold restart, should that be necessary. Field crews have installed 95 temperature monitors on the TAPS line and plan to add up to 18 more. Crews also continue to install additional piping and equipment at pump stations, including Pump Station 12, which is normally inactive but could play a role in a cold restart.

ADEC dispatched field crews yesterday north and south of Fairbanks to observe operations at various locations on the TAPS line. Crews have visited Pump Stations 3, 6, 8, and 9 and a remote gate valve where APSC crews are monitoring temperatures of the valve control modules. ADEC personnel will be visiting additional pump stations and valve sites, as well as checking the North Slope locations of interest identified by the FLIR flight.

More than 450 people across the state remain involved in the incident response, and no injuries have been reported to date.

SOURCE CONTROL: The TAPS line was shut down shortly after the spill was discovered. Workers continue preparations to isolate and drain the compromised discharge piping, though it is in use during the temporary TAPS operation. Isolation and draining can be completed once the TAPS line is again shut down for installation of the bypass. Containment and recovery equipment in place exceed the capacity necessary to manage the seep of oil into the booster pump building.

RESOURCES AFFECTED: Pump Station 1 is surrounded by tundra, marshland and ponds, but due to the location of the booster pump building on the interior of the station's gravel pad, there appears to be no immediate threat to sensitive habitat or wildlife. No oil has been observed outside the booster pump building.

FUTURE PLANS AND RECOMMENDATIONS: APSC will continue to prepare for the planned TAPS shutdown, currently targeted for January 14, and for the contingency of a cold restart thereafter. Personnel will continue to recover oil from the booster pump building and monitor the surrounding soil for oil contamination. Daytime visual and nighttime FLIR aerial monitoring for potential spills will continue.

Once the pig has been captured at Pump Station 8, the UC will decide whether to halt operation of the TAPS line at that time or have it continue until APSC is ready to install the bypass pipe at Pump Station 1.

WEATHER: An area of arctic high pressure is expected to hold through the remainder of the week, with mostly clear skies and subzero temperatures for inland parts of Southcentral Alaska. Hurricane-force winds are still likely in and near Valdez. Forecasts for several locations on the TAPS line for today through tomorrow (temperatures in ° F): Prudhoe Bay – high today 10 below, low tonight 10 below to 20 below, high tomorrow 5 below to 10 below; east wind around 10 mph, turning to southeast tomorrow.

Fairbanks – high today 0 to 10 below, low tonight 10 below to 25 below, high tomorrow 10 below to 20 below; temperatures on hilltops may be up to 25 degrees warmer; light wind at lower elevations, northeast wind to 25 mph on hilltops.

Glennallen – high today 10 below to 15 above, low tonight 5 below to 15 below, high tomorrow 0 to 10 below; north wind 5 to 25 mph with gusts to 40 mph today and tonight along the Copper River.

Valdez – high in the 30s today, low tonight around 10, high tomorrow 15, temperatures 10 to 15 degrees colder through Thompson Pass; high wind warning in effect until midnight today, northeast wind today 40 to 55 mph with gusts to 75 mph, diminishing to 15 to 20 mph except 40 to 50 mph in the pass.

Prudhoe Bay is located above the Arctic Circle. The next sunrise will occur at 12:42 PM on January 19, 2011; sunset will occur 44 minutes later.

UNIFIED COMMAND AND PERSONNEL:

Incident Commander: John Baldrige, APSC
F.O.S.C.: Matt Carr, EPA
S.O.S.C.: Tom DeRuyter, ADEC
Field S.O.S.C.: Paul Lhotka, ADEC

FOR ADDITIONAL INFORMATION CONTACT: Unified Command Joint Information Center 907-450-5857

AGENCY/STAKEHOLDER NOTIFICATION LIST

This sitrep has been distributed to the following agencies and stakeholders. The situation report was also distributed to the various agency staff listed on the standard distribution list. The receiving agencies listed in the standard distribution list includes: Governor’s office, Senator Begich’s office, ADF&G, ADNR, SECC, EPA, DOI, NMFS, and USFWS.

AGENCY/STAKEHOLDER	NAME	SENT VIA	ADDITIONAL INFO	TELEPHONE	FAX
ADNR	Melissa Head Justin Selvik Mike Thompson Alison Iversen	Fax email email email		451-2732	451-2751
ADF&G (Habitat)	Al Ott/Jack Winters Lee McKinley	Fax email		459-7285 or 459-7279	459-7303
AOGCC	Jody Colombie	email			
EPA	Matt Carr/Robert Whittier	Fax		271-5083 or 271-3247	271-6340
DOT/PHMSA	Tom Johnson Dennis Hinnah	email			
Attorney General Office	Cam Leonard/ Steve Mulder	Fax		451-2811/451-2914	451-2985/ 278-7022
Governor’s Office (Fairbanks)	Parnell/Treadwell	Fax		451-2920	451-2858
Lt. Governor’s Office (Juneau)	Mead Treadwell	Fax		465-3520	465-5400
Senator Murkowski’s Washington DC Office	Chief of Staff	Fax	North Slope only	(202) 224-6665	(202) 224-5301
Senator Murkowski’s Office in Fairbanks		Fax	North Slope only	456-0233	451-7146
Legislator (Senate T)	Donnie Olson (D)	Fax	Nome	465-3707	465-4821
Legislator (House 40)	Reggie Joule (D)	Fax	Kotzebue	465-4833 or (800) 782-4833	465-4586
Legislator (Senate F)	John Coghill	Fax	Valdez	488-1546 or 465-3719	488-4271 or 465-3258
Legislator (House 12)	Eric Feige	Fax	Valdez	269-0129 or 465- 4859	269-0128 or 465-3799
Other Agencies:					
North Slope Borough	Edward Sagaan Itta	Fax	Mayor	852-0200	852-0337
North Slope Borough	Dan Forster	Fax	Planning Director	852-0440	852-5991