

**United States Environmental Protection Agency**  
**Region X**  
**POLLUTION REPORT**

**Date:** Monday, August 14, 2006  
**From:** Carl Lautenberger/Matt Carr

**To:** Eugene Lee, EPA HQ (POLREP List)                      Pamela Bergmann, US Department of Interior  
Ed Meggert, ADEC    Catherine Berg, USFWS

**Subject:** Progress Report  
BP Alaska Flow Station 2 Transit Line Crude Oil Discharge  
BP Exploration Alaska, Prudhoe Bay, AK  
Latitude: 70.2652700  
Longitude: -148.3463100

<b>POLREP No.:</b>	6	<b>Site #:</b>	AK -BP-02-06
<b>Reporting Period:</b>		<b>D.O. #:</b>	
<b>Start Date:</b>	8/7/2006	<b>Response Authority:</b>	OPA
<b>Mob Date:</b>	8/7/2006	<b>Response Type:</b>	Emergency
<b>Demob Date:</b>		<b>NPL Status:</b>	
<b>Completion Date:</b>		<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>		<b>Contract #</b>	
<b>RCRIS ID #:</b>		<b>Reimbursable Account #</b>	
<b>FPN#</b>	E0612		

#### Site Description

At approximately 1400 hours ADT on August 6, 2006, Region 10 Phone Duty Officer (PDO) Matt Carr received notification from BP Exploration (Alaska) (BPXA) of a leak from a 30-inch diameter, elevated, crude oil transit line located between Flow Station 2 (FS2) and Flow Station 1 (FS1) within the Eastern Operating Area (EOA) of the Prudhoe Bay oilfield. BPXA reported that 4 to 5 bbls (168 - 210 gallons) of crude oil was released to the wet tundra below (this volume has been revised – see “Current Activities”).

The cause of the leak is under investigation. Pipeline integrity data collected from "smart pig" operations in July 2006, released in a preliminary report obtained on Friday, August 4, 2006, revealed 16 significant anomalies at 12 locations along this pipeline. These anomalies are associated with corrosion-related pipeline wall thinning. On August 6, 2006, upon observing oil-stained insulation at one of the anomaly locations (but no active leak), BPXA shut down the FS2 facility that fed this pipeline and closed off the FS2 transit pipeline at the source (FS2) and receiving (FS1) ends. This pipeline leak was discovered on August 6, 2006 shortly after the FS2 facility shutdown. The leak is at a location other than the oiled insulation site first observed, and at least one other anomaly site shows evidence of minor oil seepage. BPXA has since initiated a voluntary shut down of Prudhoe Bay's Eastern Operating Area oil production work due to concerns posed by the current oil leak and related pipeline integrity issues as well as those posed a larger crude oil spill from the nearby GC2 transit pipeline in March, 2006.

Weather conditions are mostly cloudy with variable light winds. Daytime temperatures are approximately 50 degrees F and nighttime temperatures are around 40 degrees F.

#### Current Activities

The oil leak stopped on August 8, 2006. The leak location, along with several other anomaly locations that exhibited minor signs of oil seepage, have been patched. Nine of the 10 bolt-on clamps intended to secure all 16 significant anomaly locations on the FS2 transit line (several anomalies are grouped together) have been installed. The remaining clamp is expected to be installed within several days. The leak location as well as the other significant anomaly locations are all located on or near the bottom of the pipeline. The transit line remains nearly full and blocked in with a vacuum on each end.

Mechanical recovery of oil on water (via skimming and direct-suction methods) within the 6,200-square foot, oil-impacted tundra area was suspended on August 13, 2006, due to diminishing recovery rates. This effort ended with a modified flushing technique, conducted on August 12 and 13, that involved flooding the impact area to float residual oil. Vegetation burning using propane weed burners, planned as the final tundra remediation method, was tested on a limited scale on August 13 and began as a full-scale

effort on August 14. Initial observations indicate the burning is successful in removing the uppermost grass and leaf layer where oil contamination is still located. Up to eight burner units are being used at a time and as of August 15, burning was approximately 25% complete.

BPXA has revised the oil-released-to-tundra volume to 23 bbl (966 gal.), up from the last estimate of 15 bbl. This final-determination volume is based on reconciling all liquids collected from the tundra through mechanical recovery efforts as well as an estimate of the oil quantity remaining adhered to the tundra, now being remediated through burning. Over 555 bbl of liquids, mostly water, was collected from the tundra during recovery efforts. Most recovered liquids (tundra-based oil and water fluids, as well as the 176 bbl/7,397 gal. of crude oil collected directly from the leaking pipeline into folding tanks) have been processed through oilfield equipment. The remaining liquids will be processed within the coming days.

BPXA stood-down their Incident Management Team on August 12, 2006 and is working under a project mode to complete remaining incident-related tasks. Response operations switched from 24-hours to daytime work only on August 14, 2006.

The START member on-scene since August 7, 2006 demobilized from Prudhoe Bay on August 12.

Freeze protection and corrosion inhibition operations to protect oilfield infrastructure during the shutdown are mostly complete.

### **Planned Removal Actions**

Anomaly sites will continue to be monitored for any change in status.

Installation of the last of the bolt-on clamps is expected to be completed by August 17, 2006, at which point all 16 significant anomaly sites will be secured with clamps. BPXA will next de-inventory the FS2 pipeline. A plan is under development and hot tap locations have been selected. USDOT personnel are involved in reviewing this plan. De-inventorying could begin as soon as August 17, 2006.

Vegetation burning is expected to be completed on or around August 17, 2006. BPXA is currently working with ADEC to develop a plan for sampling the tundra area to determine cleanup attainment in accordance with ADEC standards. It is expected that plan finalization and implementation of cleanup confirmation sampling will follow immediately after burning activities are completed.

Assessment of the transit line to evaluate the corrosion damage remains in progress.

### **Next Steps**

BPXA will prepare and implement a tundra cleanup sampling plan under ADEC consultation.

Disposal/recycling of the remaining liquids from tundra oil recovery efforts is to be completed. Reconciliation of oil volumes in these wastestreams has been completed.

EPA will continue to monitor the incident progress from Anchorage but may return to the site as necessary. An ADEC representative will remain in Prudhoe Bay to monitor spill cleanup progress, discuss operational procedures with BPXA response planning and management personnel, and observe site cleanup operations.

Shut-down of the EOA of Prudhoe Bay has been achieved - oil production in the EOA has ceased and equipment remains de-activated or in an idle mode. The Western Operating Area remains in operation. BPXA is currently planning for the replacement of crude oil transit lines in Prudhoe Bay, including the FS2 pipeline. A time estimate of the resumption of EOA oil production is not available.

### **Key Issues**

None.

### **Disposition of Wastes**

Waste Stream	Quantity	Manifest #	Disposal Facility
Crude oil recovered directly from the FS2 transit pipeline leak	176.12 bbl (7,397		All of this material was off-loaded for recycling into oil processing system equipment at Flow Station 1 in Prudhoe Bay.

	bbl)		
Oil and water mixture recovered from the tundra surface	17.6 bbl (6,972 gallons)		Fluids were transferred to holding tanks; cumulative oil vol. determined to be 17.6 bbl. Oil & water fractions to be recycled in oilfield facilities.
Oil adhering to vegetation	est. 5 bbl (210 gallons)		To undergo remediation via vegetation burning

[response.epa.gov/BPFS2TransitLineCrudeOilDischarge](https://response.epa.gov/BPFS2TransitLineCrudeOilDischarge)