

United States Environmental Protection Agency
Region X
POLLUTION REPORT

Date: Sunday, April 2, 2006

From: Carl Lautenberger

Subject: Progress Report

BP Alaska GC1-GC2 Transmission Pipeline Discharge

BP Exploration 900 E Benson Blvd, Deadhorse, AK

Latitude: 70.3074300

Longitude: -148.8157100

POLREP No.:	13	Site #:	AKOil012006
Reporting Period:		D.O. #:	
Start Date:	3/2/2006	Response Authority:	OPA
Mob Date:	3/2/2006	Response Type:	Emergency
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:		Reimbursable Account #	
FPN#	E06005		

Site Description

As reported in previous POLREPs.

The aerial photo at left shows the status of contaminated snow removal operations on March 13.

Current weather conditions: daytime highs ranging 0 degrees to 10 degrees F, with northeast winds up to 10 mph. Chance of snow or flurries today. Lows tonight expected -10 to -15 degrees F with northeast winds up to 5 mph. Forecast shows continued light winds and chance of snow or flurries for several days, with highs between -5 degrees to 5 degrees F and lows near -10 degrees F.

Current Activities

RESPONSE ACTION: Incident response priorities and objectives are:

- Ensure all personnel are safe
- Remove contamination from the area
- Remediate and restore affected tundra
- Manage and dispose of wastes appropriately

Response tactics initially consisted of the recovery of free liquid oil by vacuum equipment, followed several days later by collection and removal of surficial contaminated snow by tracked machinery. To aid in further oil removal, clean snow from uncontaminated areas was added to the spill site to absorb more oil on the surface and was then removed. The current remediation efforts consist of contaminated ice and vegetation trimming (began on March 19, 2006), completion of contaminated gravel removal from the pipeline corridor underneath the caribou crossing, and the melting of contaminated snow nearby at CC2A pad.

Residual contamination removal through trimming, or grinding away of the top layer of contaminated ice and tundra, has now been completed over the majority of the spill area. Trimming is accomplished using machinery with 72", 40" or 18" wide trimming attachments. The trimmers grind away the frozen ice and vegetative canopy surface to a targeted depth in order to remove the oil contamination. The chipped or ground ice and vegetation material left behind is swept up by hand or by sweeper attachment on a Bobcat machine and the consolidated trimmings are taken off-site for disposal. Other residual oil removal techniques, such as warm water flushing, weed burning, and tundra removal, are options outlined in a Tundra Treatment Plan (finalized on 3/15/06) and can be applied if necessary. Localized areas of concentrated oil and contaminated lake ice still require remediation.

The caribou crossing gravel has been excavated down below the pipe elevation to allow examination of the pipeline and removal of contaminated gravel. Contaminated gravel will continue to be excavated and collected by supersucker. Some recoverable, free-product oil is still being encountered within the crossing

as excavation occurs. Respiratory protection will be used by workers as required due to VOC levels. Scaffolding, pipeline cribbing, and tenting installed at the caribou crossing remain in place, although strong winds have twice destroyed the tenting. The leaking pipeline has been repaired via a welded sleeve.

Tundra specialists are on-scene to advise the cleanup team in tundra impact minimization, vegetation restoration concerns, and cleanup attainment sampling procedures. The removal of residual contamination through trimming has caused greater adverse impact to the tundra vegetative mat than anticipated. An amendment to the Tundra Treatment Plan has been drafted to address appropriate means of restoration of the spill area's natural tundra environment.

A GC-2 Transit Line Spill Confirmation Sampling Plan, dated March 22, 2006, outlines the field screening and confirmation sampling procedures in support of cleanup attainment.

Three snow melters are presently staged and operational at pad CC2A near the spill site. One additional melter is being mobilized to the melting site for operation. These units will work simultaneously both day and night. The snowmelt is being transferred from the melters to a holding tank at nearby Flow Station 2. As of April 2, 2006, 11,898 bbls (499,716 gallons) of snowmelt has been produced and transferred to the holding tank. Some of this snowmelt has been introduced into facility process systems designed to treat oily water.

A wildlife fence has been constructed around the spill site to exclude wildlife, such as arctic fox. Some fencing has been improved with plastic sheeting to prevent potential off-site movement of finer trimming-generated particles.

The cleanup operation is still occurring 24-hours. Day shift is currently staffed with up to 63 workers and 11 during night shift. Trimming work is confined to daylight hours only. Night operations primarily consist of snow melting and equipment maintenance.

Planned Removal Actions

Residual oil removal by hand, trimmers, or excavators at localized contamination concentration areas, or "hot spots", is anticipated to last for approximately another week. This includes oil that has penetrated into ground cracks. Removal of contaminated lake ice is anticipated to begin in early April, 2006, and is expected to last 1-2 weeks. Oil has been observed on the lakeshore bottom, underneath the ice (lake is frozen). Additional oil-contaminated gravel is being encountered as workers continue to excavate underneath the pipeline in the caribou crossing. The remaining pipeline excavation work may last approximately 1-2 weeks.

Some portions of the spill area have been cleaned adequately to allow cleanup attainment confirmation sampling to take place. This activity is expected to begin in early April, 2006.

The melting of contaminated snow is anticipated to last for an additional 2-3 weeks. Some of the contaminated snowmelt has been released into facility process equipment designed to handle contaminated water. No other waste materials have undergone disposal yet. Stockpiling of each wastestream will continue until disposal methods or facilities have been finalized or activated.

Re-sodding is being planned for to restore the damaged tundra in areas of deeper tundra trimming. A nearby source of replacement/supplemental tundra has been located. An amendment to the Tundra Treatment Plan is anticipated to address the tundra restoration work. Tundra specialist subcontractors are involved in this activity. The re-sodding effort is anticipated to take place in April or May, 2006, before spring-time breakup occurs.

Next Steps

Primary cleanup activities are forecast to be completed towards the end of April, 2006. Re-sodding of damaged tundra areas is expected to begin at that time. Passive residual oil collection methods, such as using sorbent materials, are anticipated to be used once spring-time breakup begins.

The grind and inject facility at Drill Site 4 will be the disposal facility for contaminated gravel from the caribou crossing and for the trimming-generated material. These two wastestreams are currently being maintained in separate stockpiles at DS4. The G&I facility is currently inactive but is expected to become operational in early April 2006, at which point disposal of these wastestreams may occur. The release of snowmelt will continue periodically into facility process equipment. ADEC will be closely involved with eventual waste disposal activities and subsequent oil volume determinations.

EPA and START have demobilized from the site. EPA will continue to monitor the cleanup progress from their office in Anchorage, and EPA or START may return to the site to view continuing cleanup operations. One ADEC responder is expected to remain on the North Slope to monitor the spill progress.

Demobilization of response equipment no longer required will continue.

Key Issues

Extreme cold and blowing snow continue to hamper cleanup operations by posing safety hazards to site workers and by causing equipment difficulties. Additional effort is required under these conditions to assure worker safety and to perform equipment maintenance and safekeeping activities. Site workers are working outside shifts as short as 30-60 minutes between warm-up periods, depending on the wind chill. Frostbite is a major worker concern along with slick walking surfaces and dehydration.

Air monitoring for vapors such as VOCs and benzene will continue particularly during caribou crossing gravel excavation, where heavy oil contamination could still be encountered.

A BP Business Resumption team, operating separate from the cleanup operation, has been addressing necessary activities for resuming the operation of the GC2 facility and the facility's output flow of oil to the Trans Alaska Pipeline. A temporary, bypass transit line has been prepared to handle the flow of oil until the damaged 34" line is fully operational. Gradual re-start of the GC2 facility began in late March 2006 and oil began flowing in the bypass pipeline on April 2, 2006.

Disposition of Wastes

Waste Stream	Quantity	Manifest #	Disposal Facility
Recovered crude oil free-product, collected from the ground by vacuum truck or pump.	1,538 bbl		Bulked into tank #1934 at Flow Station 2. Final volume determination is pending and disposal via processing will follow.
Oil-contaminated snow, collected directly off the spill area or generated through the addition of clean snow as an absorbent	5,660 cubic yards		Stockpiled at CC-2A pad and fed into snow melters there (see snowmelt wastestream for volumes generated through the melting operation)
Oil-contaminated caribou-crossing gravel and contaminated ice and tundra trimmings removed from the impacted tundra and lake.	4,622 cubic yards		Is stockpiled at Drill Site 4's grind and inject facility and is being processed/disposed of there. 840 cubic yards processed so far.
Snowmelt created through the melting of oil-contaminated snow	11,898 bbl		Taken from melters at CC-2A to tank #1934 at FS2 (also holds recovered oil). Some water has been decanted and released into facility treatment system