

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

Date: Wednesday, April 19, 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.:	15	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 are between -5 degrees to 5 degrees F, with west winds 5 to 15 mph. Mostly cloudy with areas of patchy fog and flurries. Lows tonight expected -15 to -25 degrees F with light winds. Forecast shows continued mostly sunny to partly cloudy conditions with east winds up to 15 mph, daytime highs between -10 degrees to 15 degrees F, and lows ranging from 0 degrees to -20 degrees F.

Current Activities

RESPONSE ACTION: Incident response priorities and objectives are:

- Ensure all personnel are safe
- 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. 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. These initial actions were followed by the trimming, or grinding away, of residual oil contamination remaining on the newly-exposed frozen tundra spill area surface. The trimming operation lasted from March 19, 2006, to April 13, 2006 and was conducted primarily on land but also involved the removal of contaminated ice from the southern portion of the frozen lake impacted by the spill. On-site field screening for petroleum hydrocarbons (over 800 samples collected and screened) was used to direct trimming operations and indicate relative contamination removal success, and results attained from most of the 47 confirmation samples later submitted for laboratory analysis have shown attainment of State of Alaska cleanup levels for the majority of the spill site, with several confirmation sample results still pending. Presently the remediated spill area is undergoing backfilling with organic material and transplanted tundra to prevent permafrost damage and attain environmental restoration. This activity began April 14, 2006, and is expected to last approximately one more week.

The leaking pipeline has been repaired via a welded sleeve but is not back in service.

The cleanup operation is still occurring 24-hours. Day shift is currently staffed with up to 16 workers and 3 during night shift. Night operations primarily consist of equipment maintenance.

Planned Removal Actions

The backfilling of remediated (trimmed) land areas with organic material and transplanted tundra to

prevent permafrost damage and attain natural restoration began April 14, 2006, and is expected to last approximately 10 days. The first step, installing an underlying layer of unconsolidated, high organic-content soil, is nearly complete. Once that layer has been installed to the desired depth and compacted and contoured, a top layer of transplanted tundra will be installed. Both the organic soil and tundra were mined from a nearby "donor" site of compatible material. Tundra specialists were involved in planning this operation and are monitoring the activity as it progresses. Approximately 3,300 cubic yards of backfill material are necessary for this operation. Necessary permits for the restoration work have been obtained from applicable Borough, State, and federal agencies. No restoration work will take place in the portion of the frozen lake that underwent remediation.

The far western portion of the spill impact area still requires remediation of localized "hot spots" of oil contamination. This area was initially thought to have limited tundra damage and therefore be a candidate area for passive revegetation. Further investigation showed greater damage than initially thought, resulting in the decision to clean out remaining oil contamination and apply the same revegetation technique being followed site-wide. Cleanup confirmation samples will be collected from this zone once remediation efforts appear complete.

The melting of contaminated snow was completed on April 17, 2006. The snow stockpile pits at Pad CC-2A will be cleaned and dismantled, and the melter units will be moved from the pad, cleaned, and demobilized. Contaminated snowmelt continues to be released from a holding tank at Flow Station 2 into facility process equipment designed to handle contaminated water.

A second attempt at obtaining an accurate volume measurement of the recovered crude oil currently stored in a holding tank at Flow Station 2 is planned for April 25, 2006. The first attempt was hampered by limited tank access and inconsistent measurement data.

Next Steps

The majority of oil contamination removal activities were completed on April 13, 2006, with the exception of limited remediation (trimming) in the western zone still to occur. Backfilling the remediated spill area with organic material and transplanted tundra began on April 14, 2006, and is expected to last approximately 10 days. Following backfilling, the spill area perimeter will be lined with containment boom to serve as an erosion control measure as well as control any oil sheening. The need for securing the backfilled area from wildlife access is being evaluated.

Disposal of contaminated solids (ice and tundra from trimming activities, and contaminated gravel removed from the caribou crossing) continues at Drill Site 4's grind and inject facility. The release of snowmelt will continue periodically into facility process equipment. ADEC remains closely involved with waste disposal activities and accompanying oil volume determinations.

EPA and START have demobilized from the site. EPA continues to monitor the cleanup progress from their office in Anchorage. 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.

The cause of the spill is still under investigation by a fact-finding investigation team.

Key Issues

Cold weather conditions 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.

The GC2 oil production facility and feeder wells have resumed operation. A temporary bypass transit line has been prepared to handle the flow of oil until the damaged 34" line is operational. Gradual re-start of the GC2 facility began in late March 2006 and oil began flowing in the 24" bypass pipeline on April 2, 2006. This bypass line, once fully operational, will support approximately 80% of the pre-spill GC2 production volume.

Disposition of Wastes

Waste Stream	Quantity	#	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, with oilfield processing to follow.
Oil-contaminated snow, collected directly off the spill area or generated through the addition of clean snow as an absorbent	9,849 cubic yards		This snow was stockpiled at CC-2A pad. It has all been melted by snow melters.
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
Oil-contaminated caribou-crossing gravel and contaminated ice and tundra trimmings removed from the impacted tundra and lake.	405 cubic yards gravel; 4,751 cubic yards trimmings		Material is stockpiled at and being processed/disposed of at Drill Site 4's grind and inject facility. 4,620 cubic yards processed so far.

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