

STATE OF ALASKA

SARAH PALIN, GOVERNOR

**DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM**

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File: 300.38.251

March 27, 2009

Chuck Stilwell
BP Exploration (Alaska) Inc
P.O. Box 196612
900 East Benson Blvd
Anchorage, AK 99519-6612

Re: Record of Decision (ROD); BPX Lake State 1
Cleanup Complete Determination

Dear Mr. Stilwell:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with BPX Lake State 1 located near Prudhoe Bay, Alaska. Based on the information provided to date, the ADEC has determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment, and this site will be closed. This site is included on the Existing (Contaminated) Sites Charter for the Development of the Alaska North Slope (Paragraph II.A.3; Exhibit D.2) D-2 list. Since this site no longer poses an environmental risk, it will be removed from the D-2 list on the Existing BP Charter for Development of the Alaska North Slope Program.

This decision is based on the administrative record for BPX Lake State 1, which is located in the offices of the Alaska Department of Environmental Conservation (ADEC) in Anchorage, Alaska. This letter summarizes the decision process used to determine the environmental status of this site and provides a summary of the regulatory issues considered in the Cleanup Complete Determination.

Introduction

Site Name and Location:

BPX Lake State 1
Prudhoe Bay, Alaska

Name and Mailing Address of Contact Party:

Chuck Stilwell
BP Exploration (Alaska) Inc
P.O. Box 196612
900 East Benson Blvd
Anchorage, AK 99519-6612

Database Record Key and File Number:

ADEC Reckey: 2000360921201

File: 300.38.251

Hazard ID: 4259

Regulatory authority under which the site is being cleaned up:

18 AAC 75 and 18 AAC 70

Background

The Lake State 1 exploration site is located approximately 1,000 feet southeast of Drill Site 16 and was comprised of two separate pads: a 350 foot by 200 foot Main Pad and the 250 foot by 100 foot Camp Pad. A flare pit, suspected former sewage lagoon, submerged metal debris, and partially submerged reserve pit were also present at the site. The pads were constructed around 1969 and one well was drilled in March of that year, then plugged and abandoned in 1981.

A Phase II assessment conducted in 2006 found diesel contamination in the Main Pad, the nearby Camp Pad, and in the tundra adjacent to the site. Contamination at the site is attributed to historical spills and leaks from oil exploration activities.

Contaminants of Concern

During the course of investigation and cleanup at this site, soil samples were analyzed for: diesel range organics (DRO); gasoline range organics (GRO); residual range organics (RRO); benzene, toluene, ethylbenzene and xylenes (BTEX); and polynuclear aromatic hydrocarbons (PAHs). Based on these analyses and knowledge of the contaminant source, the following Contaminant of Concern was identified:

- Diesel Range Organics (DRO)

Cleanup Levels

The cleanup levels for petroleum hydrocarbon-contaminated soil on manmade gravel pads and roads in the Arctic Zone are established in 18 AAC 75.341 Method One, Table A2 and 18 AAC 75.341 Method Two Tables B1 and B2.

A number of factors are considered by ADEC when evaluating site specific cleanup levels in the Arctic Zone including:

- human health (ingestion/inhalation);
- ecological impacts (contamination impacting ecological species other than humans);
- groundwater and surface water quality;
- presence of free phase product; and
- any other factors that might cause a deleterious impact to the environment.

In the Arctic Zone, the migration to surface water pathway is evaluated as the primary migration pathway because the migration to groundwater pathway is not considered applicable due to the presence of continuous permafrost. Impacted surface water can adversely affect both human and ecological receptors, depending on the location of the contaminant source, its proximity to surface waters, and water usage in the impacted area. Therefore the migration to surface water pathway is evaluated as a possible risk to human health (drinking water source) and/or for compliance with Alaska Water Quality standards (18 AAC 70). In addition, the migration to surface water is evaluated as a possible exposure pathway for ecological receptors because of the tundra wetland

ecosystem that exists throughout the Arctic region. Potential future use of the property must also be taken into account when determining closure status. Differentiating between a "Cleanup Complete" and a "Cleanup Complete with Institutional Controls" determination will be based on site specific conditions and exposure pathways as determined by ADEC.

Investigation and Cleanup Activities

A Phase II investigation in 2006 found DRO up to 28,900 mg/kg in samples from the Main Pad, 13,100 mg/kg at the Camp Pad and up to 12,500 mg/kg in samples collected from the tundra east of the Main Pad.

Corrective action was implemented in 2008 with the removal of the Main Pad, Camp Pad and impacted tundra areas and excavation of drilling waste and backfilling of the reserve pit. Approximately 16,000 cubic yards (cy) of clean gravel was removed from the pads and used to backfill the reserve pit along with 395 cy of conditional use gravel (DRO < 500 mg/kg and > 200 mg/kg) and other clean fill from offsite. Approximately 9,683 cy of contaminated gravel and tundra were removed and transported to the East Dock Land Farm for treatment. Excavation below the gravel pads and at impacted tundra areas was generally limited to a maximum depth of 1.5 feet below ground surface (bgs), as deeper excavation would threaten the thermal stability of the site.

Following excavation work, confirmation soil samples were collected at the former Main Pad and Camp Pad and from areas of tundra that had been removed. Confirmation samples from the former Main Pad contained DRO up to 1,550 mg/kg. Confirmation samples from the former Camp Pad contained DRO up to 842 mg/kg and confirmation samples from the impacted tundra areas contained DRO up to 354 mg/kg.

Submerged metal debris was removed from ponds at the site and disposed of at the Oxbow landfill. Excavated areas including the reserve pit were backfilled to tundra grade with clean gravel, topped with tundra overburden, and the site will be re-vegetated in accordance with the Site Rehabilitation Plan

Pathway Evaluation

The exposure pathways for human health that were evaluated include the following: migration to surface water that is used as a drinking water source, indoor and outdoor inhalation of vapors, and direct contact with soil. The inhalation pathways are considered incomplete as the remaining contaminant concentrations are below inhalation cleanup levels. The migration to surface water and direct contact pathways are considered incomplete as the remaining contamination is below the surface and not available to receptors and the site is remote.

The exposure pathway analysis above was supported by the most recent ADEC Exposure Tracking Model (ETM) ranking. The ETM results showed all pathways to be De Minimis Exposure, Exposure Controlled, or Pathway Incomplete.

ADEC Decision

The cleanup actions to date have served to remove contaminated soil from the site. Based on the information available, ADEC has determined no further assessment or cleanup action is required. There is no longer an unacceptable risk to human health or the environment, and this site will be designated as Cleanup Complete on the Department's database.

The nature and extent of remaining contamination is not anticipated to pose a future risk but contaminant concentrations remaining at the site are above the most conservative cleanup levels. Therefore approval for future off-site movement and disposal of soil associated with this release is required. It should be noted that movement or use of potentially contaminated soil in a manner that results in a violation of 18 AAC 70 water quality standards is unlawful.

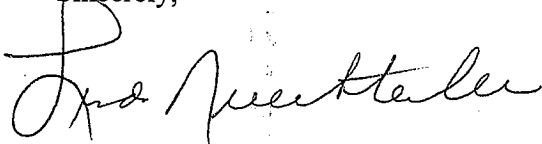
This determination is in accordance with 18 AAC 75.380(d) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

Appeal

Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195 -18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Division Director, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, within 15 days after receiving the department's decision reviewable under this section. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, within 30 days after the date of issuance of this letter, or within 30 days after the department issues a final decision under 18 AAC 15.185. If a hearing is not requested within 30 days, the right to appeal is waived.

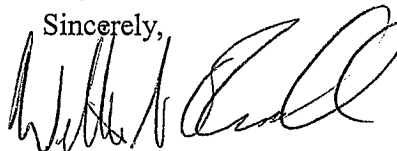
If you have questions about this closure decision, please contact the ADEC project manager, William O'Connell at (907) 269-3057.

Sincerely,



Linda Nuechterlein
Environmental Manager

Sincerely,



William O'Connell
Environmental Program Specialist

CC: Gary Schultz, ADNR Fairbanks