

STATE OF ALASKA

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

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File: 300.38.262

Certified Return Receipt

Article # 7007 3020 0000 1948 8780

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 Flow Station 1 VSM
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 Flow Station 1 VSM located near Deadhorse, Alaska in the Prudhoe Bay Unit. 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 decision is based on the administrative record for BPX Flow Station 1 VSM, 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 Flow Station 1 VSM
Prudhoe Bay Unit
Near Deadhorse, 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: 2007360108001

File: 300.38.262

Hazard ID: 4387

Regulatory authority under which the site is being cleaned up:

18 AAC 75

Background

During installation of a vertical support member (VSM), evidence of petroleum contamination was found after hot slag from a welding operation ignited vapors present in the borehole for the VSM. A sample collected from the cuttings contained GRO at 125 mg/kg.

Contaminants of Concern

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

- Gasoline Range Organics (GRO)

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 Activities

Following the initial incident in April 2007, nine boreholes were advanced in the area of concern to evaluate the presence of petroleum hydrocarbons. The nine boreholes were advanced to depths ranging from 11 to 21 feet below ground surface (bgs). Based on field screening results, two samples were then collected for laboratory analyses. DRO was detected up to 81.3 mg/kg, RRO up to 446 mg/kg, GRO up to 38.2 mg/kg and benzene up to 4.00 mg/kg.

Pathway Evaluation

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

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 investigations to date have served to adequately quantify the contamination at the site. Based on the information available, ADEC has determined no further assessment or cleanup action is required. There is no longer a risk to human health or the environment, and this site will be designated as closed on the Department's database.

Although a Cleanup Complete determination has been granted, ADEC approval is required for off-site soil disposal in accordance with 18 AAC 75.325(i) and 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.

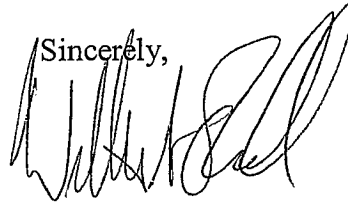
If you have questions about this closure decision, please contact the ADEC project manager, William O'Connell at (907) 269-3057.

Sincerely,



Linda Nuechterlein
Environmental Manager

Sincerely,



William O'Connell
Environmental Program Specialist

Cc: Gary Schultz, DNR