STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM

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October 12, 2009

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

Re: Record of Decision; BPX Vehicle Collision F&G Pad Roads Intersection

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 Vehicle Collision F&G Pad Roads Intersection located near Prudhoe Bay, Alaska. Based on the information provided to date, it has been 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 Vehicle Collision F&G Pad Roads Intersection, which is located in the offices of the 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 Vehicle Collision F&G Pad Roads Intersection 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

ADEC Site Identifiers: Hazard ID #4335 ADEC Reckey # 2006360101001 CS file # 300.38.259

Regulatory authority under which the site is being cleaned up: 18 AAC 75

Background

A collision between a pickup truck and a tractor trailer in January 2006 resulted in a release of approximately 150 gallons of diesel fuel spilled to the tundra.

Contaminants of Concern

During the various investigations at this site, soil samples were analyzed for diesel range organics (DRO), which was identified as the only contaminant of concern at the site.

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.

Site Characterization and Cleanup

Spill response activities at the site included the collection of fuel soaked snow and the removal of the uppermost layer of organic matter. Soil samples collected following the initial response activities found DRO up to 163,000 mg/kg.

The area was flushed with warm water on several occasions to entrain any residual product, which was then collected and disposed of. The most recent sampling even in July 2007 found DRO levels had decreased to a maximum concentration of 4,780 mg/kg.

A site visit was conducted by ADEC personnel in September 2009. Shovel sheen testing was conducted throughout the impacted area, which was submerged by up to one foot of standing water. No sheen was produced in any of the areas tested and no evidence of staining, odor, or stressed vegetation was apparent.

Pathway Evaluation

Following investigation and cleanup at the site, human health exposure to the remaining contaminants in soil and groundwater was evaluated using ADEC's Exposure Tracking Model. The human health exposure pathways that were evaluated for this decision document included: inhalation of indoor and outdoor air; ingestion of soil; dermal contact with soil; and ingestion of surface water.

The inhalation and ingestion pathways may be complete, but the remaining contaminant concentrations are below inhalation and ingestion cleanup levels. The dermal contact pathway may be complete, but the area is submerged and is located off the edge of a road across several flow lines, and not frequently visited.

In the Arctic Zone, the ingestion of surface water pathway is evaluated for a possible risk to human health as a drinking water source. The surface water adjacent to this site is not a drinking water source; therefore, the human exposure pathway is not considered complete. In addition, the migration to surface water is evaluated as a possible exposure pathway for ecological receptors and for compliance with Alaska Water Quality standards. As mentioned above, during the most recent site inspection, the area was tested for sheen and none was produced. Furthermore there was no evidence of stressed vegetation, staining or odor.

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 one of the following: De Minimis Exposure, Exposure Controlled, or Pathway Incomplete.

ADEC Decision

The cleanup actions to date have served to excavate and adequately 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 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). 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 ADEC Project Manager William O'Connell at (907) 269-3057.

Approved By,

Linda Nuechterlein

Environmental Manager

Recommended By,

William O'Connell

Environmental Program Specialist

CC: Gary Schulz, ADNR NRO