

STATE OF ALASKA

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

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File: # 300.38.187

November 6, 2008

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

Re: Record of Decision; BPX Endicott SM 605 Spill
Cleanup Complete Determination- Institutional Controls

Dear Mr. Stilwell:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the BPX Endicott Skid Module (SM) 605 Spill located at Endicott Island, 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 no further remedial action will be required as long as the site is in compliance with established institutional controls.

This decision is based on the administrative record 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 with ICs determination.

Introduction

Site Name and Location

BPX Endicott SM 605 Spill
Endicott Island, AK

Name and Mailing Address of Contact Party:

Chuck Stilwell
BP Exploration (Alaska) Inc. (BPX)
P.O. Box 196612
Anchorage, AK 99519-6612

Database Record Key and CS file number:

Hazard ID #3262
ADEC Reckey # 1999730115701
CS file # 300.38.187

Regulatory authority under which the site is being cleaned up:

18 AAC 75 and 18 AAC 70

Background

A diesel spill of approximately 200 gallons at a day tank in 1999 created sheen on impounded surface water and impacted soil in the area of the spill. During the course of the response and investigation, soil samples were analyzed for diesel range organics (DRO) and benzene, ethylbenzene, toluene, and xylenes (BTEX)

Site Characterization

Spill response included using sorbent pads to remove product from impounded water in the vicinity of the spill. Following initial response actions, approximately 75 cubic yards of impacted soil were excavated from the site. The excavated material was thermally treated.

Five confirmation samples were collected from the excavation. DRO was not detected in four of the five samples collected and one sample contained DRO at 3,141 mg/kg. After receipt of the confirmation sample data, an additional 5 cubic yards of impacted soil were excavated and thermally treated. Additional confirmation samples were not collected however field screening indicated contaminated soil remained beneath the skid module. Additional excavation was not feasible without compromising the structural integrity of the module.

Contaminants of Concern

Diesel Range Organics

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.

Pathway Evaluation

The human health exposure pathways that were evaluated for this decision document included: inhalation of outdoor air; ingestion of soil; dermal contact with soil; and ingestion of surface water and groundwater. The inhalation and ingestion pathways may be complete but contaminant concentrations do not exceed 18 AAC 75.341 Table B2, Method Two, Arctic Zone Petroleum Hydrocarbon Soil Cleanup Levels for either ingestion or inhalation. Therefore, the human health exposure risk is considered acceptable. The dermal contact may be complete, but contaminated soil is located below the surface of the pad and is not available to receptors.

In the Arctic Zone, the migration to surface water pathway is evaluated for a possible risk to human health as a drinking water source. The surface water adjacent to this pad 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 (because of the tundra wetland ecosystem that exists throughout the Arctic region,) and for compliance with Alaska Water Quality standards (18 AAC 70). The migration to surface water pathway is not considered to be complete due to the distance from the spill to the nearest surface water body, which is the Beaufort Sea and is not connected to the tundra ecosystem. Furthermore, the amount of contaminated soil remaining does not pose a risk to ecological receptors via this pathway.

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

There is contamination remaining above established cleanup levels at BPX Endicott SM 605 Spill, but ADEC has determined there is no unacceptable risk to human health or the environment, and this site will be granted a Cleanup Complete with Institutional Controls. A Notice of Environmental Contamination will be recorded on the ADEC database to document that there is residual contamination remaining on site above the most stringent ADEC cleanup levels.

This decision is subject to the following conditions:

1. Any proposal to transport soil off site requires ADEC approval in accordance with 18 AAC 75.325(i). A "site," as defined by 18 AAC 75.990 (115), is an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership.
2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is unlawful.
3. When the pad is abandoned or decommissioned, contaminated gravel must be removed and disposed of in accordance with 18 AAC 75- Article 3 and ADEC guidance.
4. Periodic reporting every three years to ADEC on site status is required as described below in the "Reporting Requirements" section.

Reporting Requirements

Contaminated material that remains below the skid module could pose a risk to receptors if it is not handled appropriately. Therefore a review of site conditions must be conducted and reported to ADEC once every three years, or at the time land use and/or ownership changes (if sooner than three years.) The report must include a visual observation of the site and any information pertaining to land use/ownership changes during the reporting period.

If land use and/or ownership changes, current IC's may not be protective and ADEC may require additional cleanup action or IC's. This reporting requirement will remain in place until the contaminated soil is removed. **The report can be sent to the local ADEC office or electronically to DEC.ICUnit@alaska.gov.**


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.

Sincerely,



Linda Nuechterlein
Environmental Manager

Attachment A: Cleanup Complete-ICs Agreement Signature Page
Attachment B: Site Figure

cc. Gary Schultz, ADNRR Fairbanks

Attachment A: Cleanup Complete-ICs Agreement and Signature Page

BP Exploration (Alaska) Inc. agrees to the terms of this Cleanup Complete-ICs determination as stated in this Record of Decision (ROD) document. Failure to comply with the terms of this agreement may result in ADEC reopening this site and requiring further remedial action in accordance with 18 AAC 75.380(d)(2).

Signature of Authorized Representative
BP Exploration (Alaska) Inc., (BPX)

Printed Name of Authorized Representative
BP Exploration (Alaska) Inc., (BPX)

Note to Responsible Person:

After making a copy for your records, please return a signed copy of this form to the ADEC project manager, Bill O'Connell, at the address on this correspondence within 30 days of receipt of this letter.

Attachment B: Site Figure

