

STATE OF ALASKA

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

SEAN PARNELL, GOVERNOR

555 Cordova Street
Anchorage, AK 99501
PHONE: (907) 269-3057
FAX: (907) 269-7649
www.dec.state.ak.us

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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 Drill Site 9 Well 11
Cleanup Complete-Institutional Controls 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 Drill Site 9 Well 11 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 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 for BPX Drill Site 9 Well 11, 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 Drill Site 9 Well 11
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 #4551

ADEC Reckey # 2007360110501

CS file # 300.38.269

Regulatory authority under which the site is being cleaned up:

18 AAC 75

Background

Arctic pack well fluid consisting of diesel fuel mixed with bentonite leaked from a split well casing at this active drill site.

Contaminants of Concern

During the various investigations at this site, soil samples were analyzed for diesel range organics (DRO), gasoline range organics (GRO), and benzene, toluene, ethylbenzene and xylenes (BTEX). Based on these analyses, the following contaminant of concern was identified at the site:

- 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.

Site Characterization and Cleanup

Following discovery of the release, the well cellar was excavated to the gravel pad/tundra interface, sampled, then backfilled with clean gravel. Samples collected at this interval contained DRO up to 23,500 mg/kg. Additional excavation was unfeasible due to the active well and the threat of disturbing the thermal stability of the site.

ADEC conducted a site visit in September 2009. No evidence of contamination was present on the surface of the pad or the gravel inside the well house. The nearby reserve pit was inspected for sheen and none was found.

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 closure decision 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 well house is not an occupied structure and the structure is well ventilated. Contaminated material is located in the subsurface with clean material above it, so the migration of harmful vapors to the surface is unlikely. Additionally, the dermal contact pathway is incomplete due to the depth of the remaining contamination.

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 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. The migration to surface water pathway is not considered to be complete. As mentioned above the remaining contamination is below the surface, and there was no evidence of off pad contamination or sheening when the pad was inspected.

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 ADEC has determined there is no unacceptable risk to human health or the environment, and this site will be granted a Cleanup Complete- ICs determination subject to the following.

1. Any future change in land use may impact the exposure assumptions cited in this document. If land use and/or ownership changes, current ICs may not be protective and ADEC may require additional remediation and/or ICs. Therefore BPXA or their designate shall report to ADEC once every five years, or as soon as BPXA becomes

- aware of any change in land ownership or use, if earlier. **The report can be sent to the ADEC project manager or electronically to DEC.ICUnit@alaska.gov.**
2. When the gravel pad at Drill Site 9 is removed or if the soil becomes otherwise available, contaminated material must be removed in accordance with an ADEC-approved work plan.
 3. Any proposal to transport soil or groundwater off site requires ADEC approval in accordance with 18 AAC 75.325(i). A "site" [as defined by 18 AAC 75.990 (115)] means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership. (See attached site figure.)
 4. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status as detailed above, and will include a description of the contamination remaining at the site. Institutional Controls will be terminated when contaminant concentrations are below applicable ADEC cleanup levels, or when the site meets the requirements for a Cleanup Complete as determined by ADEC.

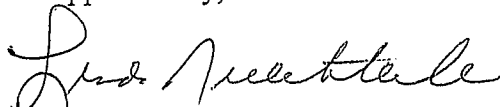
This determination is in accordance with 18 AAC 75.380(d) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

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,

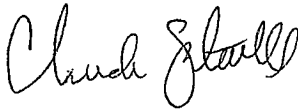


William O'Connell
Environmental Program Specialist

CC: Gary Schulz, ADNRO

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 dated October 12, 2009 for BPX Drill Site 9 Well 11. 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.

CHUCK STOWELL

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

Note to Responsible Person:

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