

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM

SARAH PALIN. GOVERNOR

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

File: #300.38.252 Return Receipt Requested

Article No: 7007 3020 0000 1948 7530

June 10, 2009

Sarah Kenshalo ConocoPhillips Alaska, Inc. P.O. Box 100360 Anchorage, AK 99510-0360

Re:

Record of Decision; ConocoPhillips Kavik Unit 3

Cleanup Complete Determination-Institutional Controls

Dear Ms. Kenshalo:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with ConocoPhillips Kavik Unit 3 located approximately 60 miles southeast of Deadhorse, Alaska in the Brooks Range Foothills 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 ConocoPhillips Kavik Unit 3 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 ConocoPhillips Kavik Unit 3 60 Miles Southeast of Deadhorse, AK

Name and Mailing Address of Contact Party: Sarah Kenshalo ConocoPhillips Alaska, Inc. P.O. Box 100360 Anchorage, AK 99510-0360

Database Record Key and CS file number:

Hazard ID #4260 ADEC Reckey # 2005360922101 CS file # 300.38.252

Regulatory authority under which the site is being cleaned up:

18 AAC 75 and 18 AAC 70

Background

This exploration site was established in 1973. One well was drilled at the site in February, 1973 then suspended in May, 1974. The gravel pad is approximately three to four feet thick. Contamination at the site is from historical releases associated with petroleum exploration activities.

Contaminants of Concern

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

• 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.

Site Characterization

The initial gravel pad sampling event occurred at this site in 2000, when eight soil borings were sampled and DRO was detected up to 3,620 mg/kg. Additional characterization occurred in 2005 when six soil borings were sampled and DRO was detected up to 8,000 mg/kg. Surface water sampling was conducted on a regular basis after samples collected from water ponded on the capped reserve pit which showed exceedances of Alaska Water Quality Standards. Recent sampling events have indicated that the reserve pit cap has stabilized, and there are no longer water quality exceedances. The reserve pit was closed by the ADEC's Solid Waste Program in 2008

The gravel pad at Kavik Unit 3 is relatively thin and has become significantly re-vegetated since the pad was abandoned. Surface water monitoring which has been conducted at the site on several occasions indicates that DRO contamination on the pad has not migrated to the surrounding tundra. Due to these circumstances and the site's remote location, gravel pad removal is not anticipated for this site. However the site will be inspected for rehabilitation purposes in the future.

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. The inhalation, ingestion, and dermal contact pathways may be complete but the site is remote and the remaining contamination is subsurface and 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. The migration to surface water pathway is also 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). Surface water sampling conducted at the site indicates contamination has not migrated from the gravel pad to the tundra, so this pathway is considered incomplete

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 ConocoPhillips shall report to ADEC concurrent with the reporting schedule for rehabilitation outlined in the Rehabilitation Plan or as soon as ConocoPhillips becomes aware of any change in land ownership and/or use, if earlier. The report should include any changes in land use and visual observations of sheen, thermokarsting, or other disturbances. The report may be sent to the ADEC project manager or electronically to DEC.ICUnit@alaska.gov.
- 2. 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.)

3. 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 the Final Rehabilitation Report is approved indicating the cap is stable and the site has been adequately re-vegetated.

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 Specialist

Attachments: Attachment A: Cleanup Complete-ICs Agreement Signature Page

Attachment B: Site Figure

Cc. Gary Schultz, ADNR Fairbanks

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Attachment A: Cleanup Complete-ICs Agreement and Signature Page

ConocoPhillips Alaska Inc. agrees to the terms of this Cleanup Complete-ICs determination as stated in this Record of Decision (ROD) document for Kavik Unit 3 dated <u>June 10, 2009</u>. 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

ConocoPhillips Alaska Inc.

Printed Name of Authorized Representative

ConocoPhillips Alaska Inc.

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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.

Attachment B: Site Figure

