STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM

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File: #300.38.190
Return Receipt Requested
Article No: 7009 2820 0001 7169 6835

May 10, 2011

Brien Reep
ExxonMobil Development Company
P.O. Box 241449
Anchorage, AK 99524-1449

Re: Decision Document; ExxonMobil Bullen Point Support Pad
Cleanup Complete with Institutional Controls Determination

Dear Mr. Reep:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the ExxonMobil Bullen Point Support Pad located near Bullen Point, approximately 40 East of Deadhorse , 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 the ExxonMobil Bullen Point Support Pad 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
ExxonMobil Bullen Point Support Pad
Near Bullen Point, Alaska

Name and Mailing Address of Contact Party:
Brien Reep
ExxonMobil Development Company
P.O. Box 241449
Anchorage, AK 99524-1449

ADEC Site Identifiers:
Hazard ID #4660
CS file # 300.38.190

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

Background
Bullen Point Support Pad is an inactive storage pad located on the coast of the Beaufort Sea approximately 40 air miles and an estimated 74 road miles east of Prudhoe Bay. Investigations conducted in 1998 found diesel contaminated gravel along the west side of the pad in an area previously used to store fuel. Prior to corrective action, the pad consisted of an approximately 7.0 acre pad, with the northwestern 1.6 acre portion listed as a contaminated site in the Contaminated Sites Program (CSP) database. This gravel pad provided materials and equipment storage and operational support for various oil and gas exploration operations in the area. Contamination at the site is likely associated with spills and releases during fuel storage and transfer activities.

Contaminants of Concern
During the various investigations at this site, soil and surface water samples were analyzed for diesel range organics (DRO), residual range organics (RRO), gasoline range organics (GRO), benzene, toluene, ethylbenzene, and xylenes (BTEX), and polynuclear aromatic hydrocarbons PAHs. Based on the results of these investigations, the following contaminants of concern were identified in soil:

- DRO
- 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.

Site Characterization and Cleanup

A Phase II Site Investigation was conducted at this site in 1999. Thirty-three boreholes were advanced across the gravel pad to evaluate the presence of contaminated gravel. DRO concentrations up to 4,300 mg/kg were detected in a sample from 4.5 to 5 feet bgs. Contaminated gravel was identified primarily along the eastern and northern areas of the pad.

Corrective action was conducted in 2009. Areas identified as contaminated during Phase II sampling were designated as "direct haul" areas. Material from these areas was excavated, placed into dump trucks, and hauled to the Drill Site 4 (DS4) grind and inject facility for down hole disposal. As excavation neared the edges of the contaminated areas, field screening and laboratory sampling were conducted to identify and excavate areas of remaining contamination. Excavation vertically was conducted in the same manner, except where massive ice was encountered. Massive ice was left in place and no further excavation or confirmation sampling was conducted in these areas. Excavation was limited along the northern edge of the site by the Beaufort Sea, and was halted after proceeding to within 3 feet of the shoreline. A total of 19,283 cubic yards (cy) of contaminated gravel were hauled from the site and disposed of down hole at the DS4 facility

Confirmation sampling was conducted along the floor and sidewalls of the excavation. Confirmation samples indicated contaminated gravel remained along the northern edge of the excavation with DRO concentrations up to 1,820 mg/kg and GRO up to 310 mg/kg. The remaining contaminated material is present in a layer approximately 6 inches thick found beneath approximately 3 feet of sand and gravel.

The excavated areas were backfilled with clean gravel that was removed from the eastern portion of the former pad. Site rehabilitation efforts will focus on the eastern side of the pad because salt water spray and coastal erosion make rehabilitation impractical in other areas.

Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using ADEC's Exposure Tracking Model (ETM). Exposure pathways are the conduits by which contamination may reach human or ecological receptors. ETM results show all pathways to be one of the following: De Minimis Exposure, Exposure Controlled, or Pathway Incomplete. A summary of this pathway evaluation is included in Table 1.

Table 1 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Direct Contact with Surface Soil	Pathway Incomplete	Hydrocarbon contaminated soil is not located at the surface
Direct Contact with Sub-Surface Soil	De Minimis Exposure	The remaining hydrocarbon contamination is in the subsurface, is unlikely to be excavated in the future, and is not currently available to receptors.
Inhalation-Outdoor Air	De Minimis Exposure	The remaining hydrocarbon contamination is in the subsurface, is covered with clean material, frozen for much of the year, and located in an area that is not frequented by receptors
Inhalation-Indoor Air	Pathway Incomplete	Remaining contamination is in the subsurface; covered with clean material; and frozen for much of the year. Buildings are not located at the site and there are no plans for future development in this area.
Groundwater Ingestion	Pathway Incomplete	Groundwater is not utilized as a drinking water source in the Arctic Zone due to permafrost.
Surface Water Ingestion	Pathway Incomplete	Surface water is not utilized as a drinking water source in this area.
Wild Foods Ingestion	Pathway Incomplete	Wild foods are not collected in this area.

Exposure to Ecological Receptors	De Minimis Exposure	The remaining hydrocarbon contamination in subsurface soil is covered with clean fill and is not currently available to receptors.

Notes to Table 1: "De minimis exposure" means that in ADEC's judgment receptors are unlikely to be affected by the minimal volume of remaining contamination. "Pathway incomplete" means that in ADEC's judgment contamination has no potential to contact receptors. "Exposure controlled" means there is an administrative mechanism in place limiting land or groundwater use, or a physical barrier in place that deters contact with residual contamination.

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 ExxonMobil shall report to ADEC once every five years, or as soon as ExxonMobil 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. If shoreline erosion or other processes expose contaminated material that has been left in place, and results in increased exposure to human or ecological receptors, additional excavation or site assessment may be required by ADEC.

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. ADEC approval to transport impacted surface water during dewatering activities is hereby granted contingent upon BPXA's agreeing to these ICs as noted in Attachment A.

4. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

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.

Please sign and return *Attachment A* to ADEC within 30 days of receipt of this letter. If you have questions about this closure decision, please contact the ADEC project manager, Bill O'Connell at (907) 269-3057

Approved By,

Linda Nuechterlein
Environmental Manager
Specialist

Recommended By,

William O'Connell
Environmental Program

CC: Melissa Head, ADNR Fairbanks

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

Attachment A: Cleanup Complete-ICs Agreement and Signature Page*

ExxonMobil agrees to the terms of this Cleanup Complete with Institutional Controls determination as stated in this Decision Document dated **May 10, 2011** for ExxonMobil Bullen Point Support Pad. 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).

Signature of Authorized Representative, Title

Dale Pittman, Alaska Production Manager

Printed Name of Authorized Representative, Title

For Internal Use Only

Project Manager: Bill O'Connell
Hazard ID: 4660
CS File No.: 300.38.190

***Attention ADEC Administration Staff:** Please follow the procedure below after Attachment A is signed/returned to ADEC.

1. Log-in and Date Stamp *Attachment A*
2. Scan *and* Save to the appropriate electronic folder on the network Drive
3. File the hard copy in the appropriate project/site file Correspondence Folder (blue in Anchorage).
4. Provide the Correspondence folder (with the filed *Attachment A* hard copy) to the ADEC Project Manager so that the PM can update the CS database.

Attachment B: Site Figure