

STATE OF ALASKA

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

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October 2, 2007

Douglas G. Kinnett, Senior HES Professional
Marathon Ashland Petroleum LLC
Environmental Technical Services – M&T Eng.
1230 Meadow Lane
Hillsdale, Michigan 49242

Re: Kenai Gas Field Pad 33-1: ADEC Spill # 2000230921601
Conditional Closure Approved

Dear Mr. Kinnett:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC), reviewed the administrative file for the petroleum release, assessment, and groundwater monitoring actions conducted at the Kenai Gas Field Pad 33-1 (KGF 33-1). Based on this review, ADEC has determined that hazardous substance contamination remains in the vicinity of the abandoned dry well and adjacent production building but it does not pose an unacceptable risk to human health or the environment, subject to site specific conditions outlined in this decision document.

Therefore, it is ADEC's decision that no further remedial action is required at this site and a conditional closure determination is approved. This letter summarizes the information considered in making this decision regarding the environmental status of this site.

Introduction

Site name and location:

Kenai Gas Field Pad 33-1
Kenai, Alaska

Regulatory authority under which the site is being cleaned up:

This project was reviewed under the applicable regulatory authority in 18 AAC 75, Article 3, as amended through October 16, 2005.

Name and mailing address of current contact and/or responsible person:

Douglas G. Kinnett
Senior HES Professional
Environmental Technical Services – M&T Eng.

Marathon Ashland Petroleum LLC
1230 Meadow Lane
Hillsdale, Michigan 49242

Land Owner:

Marathon Ashland Petroleum LLC

Background

Marathon's KGF Pad 33-1 is located along the Cook Inlet bluff, southwest of Soldotna, Alaska. A dry well was discovered at Pad 33-1 during an internal audit conducted by Marathon in 1999. Marathon did not use the dry well after assuming operation of the gas field from Union Oil of California (Unocal) in 1994 and historical records do not indicate whether the dry well was ever used by Unocal.

The dry well was constructed to a depth of 12 to 15 feet below the ground surface and consisted of an open bottom 20-inch diameter, 0.5-inch thick steel casing. The actual subsurface construction details are unknown. The dry well was located within two feet of a production building and could not be removed without jeopardizing the structural integrity of the production building. In March 2000, the dry well was abandoned by filling with volclay grout from the bottom up to a depth approximately 18 inches below the ground surface (bgs). The casing was then cut at a depth of approximately 12 inches bgs and a steel cover welded over the top of the grouted casing. Following grouting and covering, the surface above the abandoned well was restored. The abandonment of the dry well was coordinated with EPA/R10 Under Ground Injection Program personnel and met the appropriate EPA regulations.

Following dry well abandonment, a soil boring was completed next to the dry well for soil sample collection. A monitoring well (MW-1) was subsequently installed in the boring for groundwater sample collection. Analytical results from March 2000 indicated DRO and total chromium were present at concentrations above ADEC Method Two, migration to groundwater under 40-inch zone soil cleanup standards specified in 18 AAC 75. In 2000, the soil impacts were greatest at a depth 8 to 10 feet above the current groundwater table elevation with results below cleanup standards at the groundwater table interface. Analytical results for groundwater samples collected from MW-1 indicated DRO, RRO, total chromium, and lead were present at concentrations above ADEC groundwater cleanup levels. Oasis noted that the ADEC cleanup levels for chromium are based on the more toxic hexavalent chromium rather than the more stable trivalent chromium. The chromium results were based on total chromium rather than the hexavalent and trivalent fractions.

MW-1 was sampled again in July 2006 to evaluate remaining dissolved-phase impacts. Only RRO was present at levels exceeding ADEC groundwater cleanup standards. Hexavalent chromium was reported non-detect at a reporting limit above its applicable ADEC groundwater cleanup level.

In May 2007 additional assessment was conducted to determine the extent of contamination remaining. Three new soil borings, which were developed into groundwater monitor wells, were installed downgradient and upgradient of the abandoned dry well. None of the three new soil borings detected petroleum contamination exceeding ADEC cleanup levels. The Total

Chromium results were consistent (upgradient and downgradient) and therefore are believed to be naturally occurring. The groundwater was flowing westerly towards Cook Inlet. No contaminants, exceeding ADEC groundwater cleanup levels were detected. There were no seeps observed coming from the bluff and flowing directly into Cook Inlet. Sample results from MW-1 continued to show low concentrations of DRO and RRO. This data indicates that the remaining site contamination is limited to the vicinity of the abandoned dry well and is not migrating.

Soil contamination remains under the production building that may exceed ADEC cleanup levels. This contamination does not pose an unacceptable risk to human health or the environment. Marathon will be required to contact ADEC if the contaminated area becomes accessible. ADEC will determine at that time the appropriate actions required to assess and/or cleanup this remaining contaminated soil.

Contaminants of Concern

The contaminants of concern remaining in soil are associated with diesel fuel and include:

- Residual Range Organics (RRO)
- Diesel range organics (DRO)

Pathway Evaluation

The human exposure pathways evaluated include: inhalation, ingestion of soil and water and dermal contact. The migration pathways considered include: migration to groundwater and/or surface water. Impacts to ecological receptors were also evaluated.

The exposure pathways to humans are currently limited because the contaminated soil is beneath a building and inaccessible. Response actions have reduced the contaminant levels so that they do not pose a hazard to human health or the environment. As long as the building remains in place and the soil is not accessible to humans, there is no unacceptable risk to human health and the environment. The groundwater has been proven to not have any petroleum contamination related to this release exceeding applicable ADEC cleanup levels. Therefore there is no completed exposure pathway to groundwater.

Cleanup Levels

The soil cleanup levels established for this site are the 18 AAC 75.341 (Tables B1 and B2) levels for Migration to Groundwater (under 40 inch zone). The groundwater cleanup levels for this site are the 18 AAC 75.345 (Table C) levels.

ADEC Decision

ADEC has determined that additional remediation of the petroleum release is not necessary at this time. The contaminated soil is not accessible to human receptors based on its location and present land use. Contamination exceeding ADEC cleanup levels is no longer detected in the groundwater at this site. There is no indication of any impacts to surface water (or ecological receptors) from this incident.

There is residual soil contamination remaining at this site. However, with appropriate controls and restrictions, it will not pose an unacceptable risk to human health or the environment.

Therefore, no further remedial action is required at this time and this site is approved for conditional closure, subject to the following condition:

1. The soil contamination located under the production building is currently inaccessible due to the buildings and structures located there. When (or if) the buildings are removed and/or the soil becomes accessible, ADEC shall be contacted for appropriate action. ADEC must approve any excavation, transport, remediation and/or disposal of soil from the site.

In accordance with 18 AAC 75.380(d)(2), ADEC may require additional site assessment, monitoring, remediation, and/or other necessary actions at this facility should new information become available that indicates contamination at this site may pose a threat to human health or the environment.

An institutional control will be established on the ADEC database to document residual soil contamination remaining on site above the most stringent 18 AAC 75.341 soil cleanup levels. Site closure (without conditions) will be considered when soil samples confirm that the soil meets the established ADEC soil cleanup levels for this site.

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 or concerns about this Conditional Closure decision, or the attached condition, please contact me at (907) 262-5210, extension #233.

Sincerely,



Don Seagren
Environmental Program Specialist

CC: Kimber Hamilton, Marathon/Anchorage