

FRANK MURKOWSKI, GOVERNOR

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

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File: 100.38.090

January 24, 2006

Mr. Allen Lasater  
Flint Hills Resources Alaska  
1100 H&H Lane  
North Pole, AK 99705

Re: Approval of Corrective Action Plan

Dear Mr. Lasater:

Thank you for the Flint Hills Resources Alaska letter dated June 22, 2005 from Mr. Kent Freeman requesting approval of the Williams Alaska Petroleum site characterization and corrective action plan dated June 2002.

The Alaska Department of Environmental Conservation (ADEC) approves the corrective action titled *Site Characterization and Corrective Action Plan Williams Alaska Petroleum, Inc. North Pole Refinery* dated June 2002 as modified by the report titled *Report on Well Installation, Maintenance Activities, and Data Review, Flint Hills Resources Alaska, Inc., Refinery North Pole, Alaska* dated December 28, 2005 with the following conditions:

1. There are two interim cleanup goals for the refinery site:
  - A. To reduce the light nonaqueous phase liquid (LNAPL) plume and the dissolved benzene plume as much as practicable in the absence of any new spills.
  - B. To prevent the expansion of either plume beyond their 2002 extent by using additional remediation as necessary for any new spills.

The June 2002 site characterization and corrective action plan estimated the extent of the LNAPL and dissolved phase plumes. The first goal is to reduce the LNAPL plume as much as practicable and contain the dissolved plume with existing recovery systems. Any new spill or release was to be cleaned up to the satisfaction of the ADEC and assessed for its impact on the LNAPL and dissolved phase plumes. If the assessment and/or monitoring data indicated either plume would exceed its respective 2002 limits, then additional remedial efforts would be required. Please note that ADEC considers the 2002 plume boundaries to be "lines in the sand" and that further expansion of the plumes is not acceptable and must be actively addressed.

2. The source(s) of Sulfolane in the ground water at the refinery needs to be determined. The chemical Sulfolane will be considered a regulated contaminant in accordance with 18 AAC 75.325 (g) and ADEC's *Cumulative Risk* Guidance adopted by reference. ADEC has determined cleanup standards for Sulfolane and they are based on toxicological information contained in the 2001 Canadian Association of Petroleum Producers soil quality guidelines and the 2002 British Columbia Provincial Government's water quality guidelines. The cleanup standards are: soil migration to groundwater is 0.943 milligrams per kilogram (mg/Kg); soil ingestion is 983 mg/Kg; and Table C ground water is 0.35 milligrams per liter (mg/L).
3. The site characterization and corrective action plan will be reviewed by Flint Hills and ADEC every five years and updated as necessary. Flint Hills Resources may propose changes at any time and ADEC will consider the proposed changes in a timely manner. The purpose of the five year review is to mutually assess past operational practices and recent spills to determine if major changes to the plan are warranted.
4. The final cleanup levels for the refinery will be determined when the refinery ceases operation. This is estimated to be approximately 50 years. However, interim action decisions by ADEC may be made at any time, if information indicates a possible risk to human health or the environment.

It is ADEC's intention that the site characterization and corrective action plan be a "living document" that meets the operational needs of Flint Hills Resources while protecting human health and the environment, and that the plan accurately describes on-going remediation efforts and needs.

ADEC's determination was made based on a review of the following documents:

1. Shannon & Wilson, Inc. report titled *Report on Well Installation, Maintenance Activities, and Data Review, Flint Hills Resources Alaska, Inc., Refinery North Pole, Alaska* dated December 28, 2005.
2. Shannon & Wilson, Inc. report titled *Site Characterization and Corrective Action Plan Williams Alaska Petroleum, Inc. North Pole Refinery* dated June 2002.
3. Shannon & Wilson, Inc. report titled *Contaminant Characterization Study Williams Alaska Petroleum, Inc. North Pole Refinery North Pole, Alaska* dated October 2001.
4. Shannon & Wilson, Inc. report titled *Monitoring Program, Williams Petroleum, Inc., North Pole Refinery* dated April 20, 2001.
5. Shannon & Wilson, Inc. report titled *Draft Site Characterization and Corrective Action Plan Williams Alaska Petroleum, Inc. North Pole Refinery* dated December 2000.
6. ADEC's Prevention and Emergency Response (PERP) Program's analysis of the spill history at the North Pole refinery.
7. Compliance Order By Consent CO-88-3-1-1-224-1.

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 of the decision.

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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 of the decision. If a hearing is not requested within 30 days, the right to appeal is waived.

Sincerely,  
Recommend for Approval:



Douglas Bauer  
Environmental Engineer Associate

Approved:



Jim Frechione  
Environmental Program Manager

cc: Kent Freeman, Flint Hills Resources, North Pole  
Cheryl Williams, EPA Region 10, Seattle

