THE STATE of ALASKA
GOVERNOR SEAN PARNELL

Department of Environmental Conservation
DIVISION OF SPILL PREVENTION & RESPONSE
Contaminated Sites Program
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File No: 2314.26.035

May 29, 2014

Paul & Francine Sayer
P.O. Box 10
Homer, Alaska 99603

Re: Closure Decision Document: Bay Crest Fuel & C Store
Corrective Action Complete Determination

Dear Mr. and Mrs. Sayer:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Bay Crest Fuel & C Store site, located at 3375 Sterling Highway, Homer, 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 at this time.

This decision is based on the administrative record for the Bay Crest Fuel & C Store site which is located in the offices of the ADEC in Soldotna, 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 this Corrective Action Complete Determination.

Site Name and Location:
Bay Crest Fuel & C Store
3375 Sterling Highway
Homer, Alaska 99603

DEC Site Identifiers:
File No: 2314.26.035
Hazard ID: 26143

Name and Mailing Address of Contact Party:
Paul & Francine Sayer
P.O. Box 10
Homer, Alaska 99603

Regulatory Authority for Determination:
18 AAC 75 and 18 AAC 78

Property Legal Description:
Tract B-1A, according to the plat of Tice – Hendrikson No. 2, being a replat of Tract B-1, Tice-Bowman-Henrikson, filed under plat No. 2005-56, Records of the Homer Recording District, Third Judicial District, State of Alaska.

Site Description, Background, and Assessment
This site is the location of the Bay Crest Fuel & C Store retail fuel and convenience store, in Homer, Alaska. The retail fuel and convenience store was constructed in 1998. Facility improvements include two multi-chamber, 26,000-gallon and 20,000-gallon underground fuel storage tanks (USTs), fuel dispenser islands and associated piping, a 500-gallon heating oil UST, propane tank, a minimart, two sheds, including a potable water storage shed and a general purpose storage shed, and a cooler building.

On September 19, 2013 during an environmental site assessment funded by Tesoro Refining and Marketing Company, benzene soil contamination was encountered south/southwest of the two underground fuel storage tanks. Additional site assessment conducted in February and March of 2014 confirmed diesel soil contamination and benzene soil contamination, but at concentrations less than the applicable ADEC soil cleanup levels. During site assessment and cleanup response measures, soil and groundwater samples collected at this site were tested for these potential contaminants of concern: gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), benzene, toluene, ethylbenzene, and xylenes (BTEX), and volatile organic compounds (VOCs),.

The onsite water supply well was located more than 100 feet from the USTs, and was decommissioned in May of 2014. This site is currently serviced with potable water obtained from the City of Homer public water system, which is delivered by truck and stored in a 1,000-gallon aboveground water storage tank.

Contaminants of Concern
'Contaminants of Concern' include any hazardous substances that exceed ADEC's most stringent soil or groundwater cleanup levels. These cleanup levels are designed to be protective of human health exposure pathways in residential settings, where groundwater may be used as a source of drinking water. The following contaminants of concern were identified during the course of the site investigations summarized in the **Site Characterization Activities** section of this decision letter.

- Diesel Range Organics (DRO)
- Benzene

DRO and benzene were detected in soil at concentrations exceeding the ADEC 'Migration to Groundwater' soil cleanup levels in 18 AAC 75.341.

Applicable Soil Cleanup Levels

The soil cleanup levels for DRO and benzene at this site are established in 18 AAC 75.341, Method Two, Table B1 and Table B2, Under 40 inch Zone. The cleanup level for benzene in Table B1 is based on 'Direct Contact'. The cleanup level for DRO in Table B2 is based on 'Ingestion'.

- Diesel Range Organics (DRO) 10,250 mg/kg
- Benzene 150 mg/kg

The Table B1 and Table B2 'Migration to Groundwater' soil cleanup levels are not applicable because the 'Migration to Groundwater' soil cleanup level is established to protect groundwater for use as drinking water. Groundwater in the shallow aquifer at this site is not considered to be a source of drinking water.

Applicable Groundwater Cleanup Levels

ADEC 18 AAC 75.345, Table C groundwater cleanup levels apply at a site if the current use, or the reasonably expected potential future use, of the groundwater is drinking water. The shallow aquifer affected at this site is not considered to be a current or potential future source of drinking water; therefore the ADEC Table C groundwater levels are not applicable.

Site Characterization Activities

An environmental site assessment was initiated on September 19, 2013 by Tesoro Refining and Marketing Company. Soil borings detected benzene soil contamination south of the two underground storage tanks (one 26,000 and one 20,000-gallon) at 0.326, 0.136, and 0.178 mg/kg at depths of 10 to 17.5 feet below ground surface (bgs). The on-site water well was sampled and analyzed using EPA test method 524.2, Alaska test methods AK 101 and AK 102, EPA Solid Waste Method (SW) 846 300.0, and by EPA Standard Method (SM) 9223B. Laboratory analyses detected petroleum hydrocarbons, but at concentrations less than the ADEC drinking water standards for public water supply systems.

An additional release investigation was initiated in February and March of 2014 to determine the magnitude and extent of the petroleum contamination. Soil borings detected DRO at 356 mg/kg and benzene at 0.0386 and 0.198 mg/kg at depths of 25 to 27 feet bgs, south/southwest of the USTs. Groundwater collected from one soil boring at a depth of 25 feet resulted in the detection of benzene at 0.0573 mg/L. A 24-hour pumping test was conducted to evaluate the water chemistry of the facility's water well. After 200-gallons of water was purged from the well, GRO was detected at 0.0529 mg/L. After 2,000-gallons of water was purged all analytes were non-detect.

On May 16th through May 19th of 2014, the onsite water supply well was decommissioned. The drinking water system for this facility consists of a 1,000-gallon aboveground potable water storage tank. Water obtained from the City of Homer public water system is delivered by a water hauling truck.

Cumulative Risk Evaluation

Pursuant to 18 AAC 78.600(d), when detectable contamination remains on-site, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways, and does not exceed a cumulative non-carcinogenic risk standard at a hazard index of one across all exposure pathways.

Based on a review of the environmental data, ADEC has determined that residual contaminant concentrations do not pose an unacceptable cumulative human health risk.

Exposure Pathway Evaluation

Following site characterization and release investigation work 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 or Pathway Incomplete. A summary of this pathway evaluation is included in Table 1.

Table 1 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De-minimis Exposure	Residual soil contamination does not exceed the ADEC 'direct contact' and 'ingestion' soil cleanup levels.
Sub-Surface Soil Contact	De-minimis Exposure	Residual soil contamination does not exceed the ADEC 'direct contact' and 'ingestion' soil cleanup levels.
Inhalation – Outdoor Air	De-minimis Exposure	Residual soil contamination does not exceed ADEC 'outdoor inhalation' soil cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-minimis Exposure	Based on the limited mass of residual soil contamination, indoor air quality is unlikely to be affected.
Groundwater Ingestion	Pathway Incomplete	The affected groundwater is not used for drinking water. This facility obtains drinking water from the City of Homer. Water is trucked in and stored in a 1,000-gallon aboveground water storage tank.
Surface Water Ingestion	Pathway Incomplete	There is no potential to contact surface water.
Wild Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	The residual sub-surface contamination has no potential to contact ecological 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.

ADEC Decision

Based on the environmental characterization work completed at this site, ADEC has determined that the residual contamination doesn't pose an unacceptable risk to human health or the environment. Therefore, we are issuing this Cleanup Complete determination, subject to the following condition:

1. The most current soil sample analytical data from this site reported DRO and benzene contamination exceeding the ADEC 'Migration to Groundwater' soil cleanup levels at depths of 10 to 27 feet below ground surface south/southwest of the two underground fuel storage tanks. Any proposal to excavate, transport, move, treat, and/or dispose of contaminated soil at this "site" requires prior ADEC approval. This is consistent with the requirements of 18 AAC 78.274(b) and 18 AAC 78.600(h). 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.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status as *'Cleanup Complete'*, and will include a description of the contamination remaining at the site.

This determination is in accordance with 18 AAC 78.276(f) 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.

It should be noted that movement or use of potentially contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

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 Document, you may contact me at (907) 262-3422, or via e-mail at paul.horwath@alaska.gov

Sincerely,

Paul Horwath
Engineer I, DEC

Cc: Geoff Coble, M.S., PG, Coble Geophysical Services