



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Environmental
Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated sites Program

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File No: 2322.26.005

July 8, 2015

Mokaw Family Trust
c/o William K Nelson, Trustee
35423 N. Ghost Rider
Queen Creek, AZ 85140

Re: Closure Decision Document: Crown Point Lodge
Corrective Action Complete Determination

Dear Mr. Nelson:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Crown Point Lodge site, located at 30285 Seward Highway, Moose Pass, 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 Crown Point Lodge 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:

Crown Point Lodge
30285 Seward Highway
Moose Pass, Alaska 99631

Name and Mailing Address of Contact Party:

Mokaw Family Trust
c/o William K Nelson, Trustee
35423 N. Ghost Rider St
Queen Creek, AZ 85140

DEC Site Identifiers:

File No: 2322.26.005
Hazard ID: 23463

Regulatory Authority for Determination:

18 AAC 75 and 18 AAC 78

Property Legal Description:

T 4N R 1W SEC 24 Seward Meridian SW 0820018 US SURVEY 2520 CROWN POINT SUB OF TRACT D LOT 2

Site Description and Background

This site was the location of the Crown Point Lodge, a hotel/restaurant business, which included underground fuel storage tank systems (USTs). Two 6,000-gallon underground fuel storage tanks, associated piping, and a dispenser were once present on this property. One tank contained leaded gasoline, and one contained unleaded gasoline.

In June 1990, DOWL Engineers, Inc., oversaw the excavation and removal of the UST systems. Soil and groundwater contamination was identified beneath the fuel dispenser. Groundwater was encountered at a depth of approximately 8 feet below ground surface (bgs).

The onsite water supply well is located approximately 200 feet from the location of the former fuel dispenser. This water supply well is installed into a deeper aquifer, and was never known to be contaminated from the shallower soil and groundwater contamination.

Contaminants of Concern

'Contaminants of Concern' include any hazardous substances that exceed ADEC's most stringent soil cleanup levels, 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 **Characterization and Cleanup Activities** section of this decision letter.

- Gasoline Range Organics (GRO)
- Benzene
- Ethylbenzene
- Toluene
- Xylenes

Benzene, ethylbenzene, toluene, and xylenes (BTEX) were detected in soil at concentrations exceeding the ADEC 'Migration to Groundwater' soil cleanup levels in 18 AAC 75.341, Method Two, Table B1, Under 40 Inch Zone.

GRO and BTEX were detected in groundwater exceeding the groundwater cleanup levels in 18 AAC 75.345, Table C.

Cleanup Levels

Groundwater is used for drinking water at this site. The soil cleanup levels for BTEX at this site are established in 18 AAC 75.341, Method Two, Table B1, Under 40 Inch Zone, "migration to groundwater" pathway.

The groundwater cleanup levels for BTEX and GRO at this site are established in 18 AAC 75.345, Table C.

Table 1 – Approved Soil and Groundwater Cleanup Levels

Contaminant	Soil (mg/kg)	Groundwater (mg/L)
Benzene	0.025	0.005
Ethylbenzene	6.9	0.7
Toluene	6.5	1.0
Xylenes	63	10
GRO	N/A	2.2

mg/kg = milligrams per kilogram

mg/L = milligrams per liter

ug/L = micrograms per liter

Characterization and Cleanup Activities

In June 1990, two USTs, associated piping and a dispenser were removed from the Crown Point Lodge facility. Two 6000-gallon tanks, one containing leaded gasoline and one containing unleaded gasoline, were removed by excavation. Minor fuel contamination was detected in the soils in the tank removal excavation. Excavation under the dispenser encountered strong petroleum odors down to groundwater, which was encountered at 8 feet bgs. A groundwater sample was collected from the dispenser excavation and laboratory analysis reported benzene at a concentration of 6.4 milligrams per liter (mg/L), toluene at 74 mg/L, ethylbenzene at 3.4 mg/L, and xylenes at 37 mg/L. Thirty cubic yards of contaminated soil from the dispenser excavation and temporarily stockpiled onsite. Elevated concentrations of BTEX were detected in a composite soil sample collected from the soil stockpile. This stockpile of contaminated soil was later removed from the site and thermally remediated.

Further release investigation was initiated in November of 1998. The work is documented in Dames & Moore's December, 1998 Supplemental Release Investigation report. Four soil borings were drilled at the site. Groundwater monitoring wells were constructed in each of the four soil borings, and labeled MW-1 through MW-4. Groundwater contamination exceeding ADEC groundwater cleanup levels was detected at MW-1 with GRO reported at 15 mg/L and benzene reported at 0.042 mg/L. Groundwater contamination was also detected in MW-2 with GRO reported at 5.2 mg/L and benzene reported at 0.023 mg/L.

On May 15, 2015, monitoring wells MW-1 and MW-2 were again sampled for GRO and BTEX laboratory analysis. In MW-1, GRO was reported at 2.2 mg/L, meeting the groundwater cleanup level of 2.2 mg/L, and substantially decreased from 15 mg/L in 1998. Benzene was reported at

0.011 mg/L, exceeding the benzene groundwater cleanup level of 0.005 mg/L, but also substantially decreased from 0.042 mg/L in 1998. No contamination was detected in MW-2.

On June 18, 2015, groundwater monitoring wells MW-1 and MW-2 were properly decommissioned. MW-3 and MW-4 were searched for, but never located.

Following the completion of characterization and cleanup activities at this site, only benzene remained at a concentration exceeding the ADEC groundwater cleanup level, at the location of MW-1. MW-1 is installed at the location of the former fuel dispenser. The onsite drinking water well is located approximately 200 feet from MW-1, and is installed into a deeper aquifer. The drinking water well was sampled in 2005 and no petroleum contamination was detected.

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 2.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Contaminated surface soils were excavated and removed from the site in 1990.
Sub-Surface Soil Contact	De-minimis Exposure	Residual subsurface soil contamination may remain in the vicinity of MW-1, however receptors are unlikely to be affected by the minimal mass of remaining contamination.
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	De-minimis Exposure	The affected groundwater at a depth of 8 feet bgs is not currently used for drinking water, and the remaining mass of benzene is considered de-minimis.
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 benzene contamination in groundwater at 8 feet bgs doesn’t pose an unacceptable risk to human health or the environment. Therefore, we are issuing this Corrective Action Complete determination, subject to the following condition:

1. Any proposal to excavate, transport, move, treat, and/or dispose of subsurface contaminated soil or shallow groundwater at this “site” in the immediate vicinity of former monitoring well MW-1 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 78.995 (134)] means an area that is contaminated, including areas contaminated by the migration of a contaminant 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 there are any 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: Arne Tikka, Alaska Consulting and Environmental Engineering, Soldotna, AK
Todd Peterson, Seward Real Estate, Seward, AK