



THE STATE
of **ALASKA**
GOVERNOR MICHAEL J. DUNLEAVY

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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File No. 1516.38.002

March 28, 2019

Electronic Delivery Only

Mark Ridgway
U.S.D.H.S. Coast Guard – Ketchikan
Integrated Support Command
1300 Stedman Street
Ketchikan, AK 99901-666

Re: Decision Document: USCG Point Higgins Firing Range
Cleanup Complete Determination

Dear Mr. Ridgway:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with USCG (United States Coast Guard) Point Higgins Firing Range located 12 miles northwest of Ketchikan. 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 unless new information becomes available that indicates residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the USCG Point Higgins Firing Range which is located in the ADEC office in Anchorage, Alaska. This decision letter summarizes the site history, cleanup actions and levels, and standard site closure conditions that apply.

Site Name and Location:

USCG Point Higgins Firing Range
14700 North Tongass Hwy
Ketchikan, AK 99901

Name and Mailing Address of Contact Party:

Mark Ridgway
U.S.D.H.S. Coast Guard – Ketchikan
Integrated Support Command
1300 Stedman Street
Ketchikan, AK 99901-666

ADEC Site Identifiers:

File No.: 1516.38.002
Hazard ID.: 3297

Regulatory Authority for Determination:

18 AAC 75

Site Description and Background

From the 1940s to the 1970s, the site was used as a small arms firing range within the USCG Point Higgins Radio Station Installation. The range was approximately 200 feet long by 40 feet wide. It consisted of six firing lanes and a natural hill located to the north and northwest end which served as a bullet impact berm. The former firing range

area is located in a relatively flat expanse of muskeg bog primarily composed of mosses and saturated soils with no apparent surface water drainage. The entire site is restricted property owned by the federal government. Access to public is restricted by signage and a locked gate.

Contaminant of Concern

During the site investigation, soil samples were collected and analyzed for metals. Based on these analyses, the following contaminant of concern was identified at the site:

- Lead

Cleanup Levels

Lead was detected in soil above the human health cleanup level established in 18 AAC 75.341, Method Two, Table B1 for the *Over 40 Inch Zone*. The migration to groundwater cleanup levels established for soil in Table B1 do not apply for lead.

Table 1- Approved Cleanup Levels

Contaminant	Soil (mg/kg)
Lead	400

mg/kg = milligrams per kilogram

Characterization and Cleanup Activities

Between 1995 and 2001, 58 soil samples were collected in and around the small arm firing range to determine extent of lead contaminated soil. Lead concentrations above cleanup levels were limited to within the firing range. The highest concentrations of lead contamination was detected up to 70,001 mg/kg from a soil sample collected from the impact berm at a depth of 2 to 15 inches below ground surface (bgs). Surface water and sediment samples collected adjacent to the firing range did not indicate lead was migrating offsite.

In 2013, a removal action occurred at the site. The former shooting range was divided up into 10 foot by 10 foot grids for a total of 200 grid cells. Contaminated soil was excavated from 72 out of the 200 grid cells to a minimum depth of 6 inches bgs to a maximum depth of 28 inches bgs. Approximately 275 cubic yards of lead-contaminated soil was removed and transported to Subtitle C and D landfills in Arlington, Oregon for disposal. A total of 29 analytical confirmation soil samples collected did not contain contaminant concentrations above ADEC cleanup levels. Neither sediment nor surface water was encountered during field work.

Cumulative Risk Evaluation

Pursuant to 18 AAC 75.325(g) when contamination remains on-site following a cleanup, 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 noncarcinogenic risk standard at a hazard index of one across all exposure pathways. Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations meet the human health cumulative risk criteria for residential land use.

Exposure 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 2.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De-Minimis Exposure	Remaining surface soil contamination is below the human health cleanup levels.
Sub-Surface Soil Contact	De-Minimis Exposure	Remaining surface soil contamination is below the human health cleanup levels.
Inhalation – Outdoor Air	Pathway Incomplete	Remaining soil contamination is below the human health and lead is not volatile.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	Lead is not volatile.
Groundwater Ingestion	De-Minimis Exposure	There is no migration to groundwater cleanup level for lead. Lead contaminated soil was removed from the surface to below human health cleanup levels. A significant migration of low level lead contaminated soil to groundwater is unlikely due to lead’s elemental characteristics. The nearest drinking water well is located ¼ mile away. The water table is reportedly 20 feet bgs.
Surface Water Ingestion	Pathway Incomplete	This site is not located near surface water intakes.
Wild and Farmed Foods Ingestion	De-Minimis Exposure	This site is located on USCG land and access to public is restricted by a locked gate. Permitted gathering of wild foods is prohibited. This is not in an area of farming.
Exposure to Ecological Receptors	Pathway Incomplete	Ecoscoping has been completed. No further ecological evaluation is necessary based on habitat. This site is located on USCG land and not located within a park, preserve, or wildlife refuge. The habitat does not support valued species (i.e., species that are regulated, used for subsistence, have ceremonial importance, have commercial value, or provide recreational opportunity). This area is not a critical habitat nor could an anadromous fish stream be impacted.

Notes to Table 2: “De-Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be adversely affected by the minimal volume or concentration of remaining contamination. “Pathway Incomplete” means that in ADEC’s judgment contamination has no potential to contact receptors. “Exposure Controlled” means there is an institutional control in place limiting land or groundwater use and there may be a physical barrier in place that prevents contact with residual contamination.

ADEC Decision

All remaining lead concentrations in the soil are below default cleanup levels. This site will receive a “Cleanup Complete” designation on the Contaminated Sites Database, subject to the following standard conditions.

Standard Conditions

1. Any proposal to transport soil or groundwater from a site that is subject to the site cleanup rules or for which a written determination from the department has been made under 18 AAC 75.380(d)(1) that allows

contamination to remain at the site above method two soil cleanup levels or groundwater cleanup levels listed in Table C requires DEC approval in accordance with 18 AAC 75.325(i). A “site” as defined by 18 AAC 75.990 means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership

2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
3. Groundwater throughout Alaska is protected for use as a water supply for drinking, culinary and food processing, agriculture including irrigation and stock watering, aquaculture, and industrial use. Contaminated site cleanup complete determinations are based on groundwater being considered a potential drinking water source. In the event that groundwater from this site is to be used for other purposes in the future, such as aquaculture, additional testing and treatment may be required to ensure the water is suitable for its intended use.

This determination is in accordance with 18 AAC 75.380 and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to 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, 555 Cordova Street, Anchorage, Alaska 99501-2617, 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, P.O. Box 111800, Juneau, Alaska 99811-1800, 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, please feel free to contact me at (907) 269-8685 or email at grant.lidren@alaska.gov.

Sincerely,



Grant Lidren
Project Manager