



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

**Department of Environmental
Conservation**

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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DEC File No: 2616.26.002

February 1, 2024

Michael Peters
Public Works Department
Bristol Bay Borough
P. O. Box 189
Naknek, AK 99633
publicworks@bbbak.us

Re: Decision Document: Bristol Bay Borough – Camai Clinic
Cleanup Complete Determination

Dear Mr. Peters:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has completed a review of the environmental records associated with the Bristol Bay Borough – Camai Clinic located at 2 School Road in Naknek. 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 information becomes available that indicates residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the Bristol Bay Borough – Camai Clinic maintained by DEC. This decision letter summarizes the site history, cleanup actions and levels, and site closure conditions that apply.

Site Name and Location:

Bristol Bay Borough – Camai Clinic
2 School Road
Naknek, AK 99633

Name and Mailing Address of Contact Party:

Michael Peters
Bristol Bay Borough – Public Works Department
P.O. Box 189
Naknek, AK 99633

DEC Site Identifiers:

File No.: 2616.26.002

Hazard ID.: 24590

Regulatory Authority for Determination:

18 Alaska Administrative Code (AAC) 75 and 18 AAC 78

Site Description and Background

In 1996, a 1,000-gallon diesel underground storage tank (UST) that provided fuel to the backup generator supporting the Camai Clinic ambulance garage was closed by removal (Figure 1). All associated piping and equipment running approximately 9 feet to the nearby generator building was also removed. During the removal, site assessment confirmation samples identified petroleum contamination in the area where the fill piping met the fuel pump in soils less than two feet deep. One sample collected 2 feet below the former fill pipe indicated that diesel range organics (DRO; 1,760 mg/kg) and gasoline range organics (GRO; 609 mg/kg) were present at concentrations above cleanup levels. The excavation was backfilled with the contaminated soil after potassium nitrate and potassium phosphate were added to promote biodegradation.

Contaminants of Concern

During the site investigation and cleanup activities at this site, samples were collected from soil and groundwater and analyzed for diesel range organics (DRO), gasoline range organics (GRO), volatile organic compounds (VOCs), and polyaromatic hydrocarbons (PAHs). Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern (COCs) at this site:

- DRO
- GRO

Cleanup Levels

Soil cleanup levels applicable to the site are the most stringent Method 2 cleanup levels for the under 40-inches of precipitation climate zone found in 18 AAC 75.341(c), Table B1 and 18 AAC 75.341(d), Table B2. Groundwater cleanup levels applicable to this site are found in 18 AAC 75.345, Table C.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)	Groundwater (µg/L)
DRO	250	1,500
GRO	300	1,100

Notes:

1. mg/kg = milligrams per kilogram
2. µg/L = micrograms per liter

Characterization and Cleanup Activities

Site characterization under 18 AAC 75.335 was conducted in 2008 and included the excavation of two test pits. Test Pit 1 was excavated at the northeast side and Test Pit 2 was excavated along the northwest end of the former tank excavation, both to a depth of 12 feet below ground surface (bgs). Field screening results using the heated headspace screening method with a photoionization detector (PID) did not indicate contamination. Two primary analytical soil samples and one duplicate sample were collected at 12 feet bgs and analyzed for GRO, DRO, and benzene, toluene, ethylbenzene, and xylenes (BTEX). DRO was detected

in the sample collected from Test Pit 1 at a concentration of 972 mg/kg. The remaining analytes were not detected in the samples. The soil was placed back into the excavation pit.

In 2022, four soil borings (B1-B2) were advanced at the site and converted to monitoring wells (MW1-MW4; Figure 1). B1 was located in the vicinity of the former UST and B2, B3, and B4 were located at the southeast, northeast, and northwest sides of the Camai Clinic Ambulance garage. Two analytical soil samples were collected from each soil boring: one at the groundwater interface and one from the highest PID field screening result. Five groundwater samples, including one field duplicate were collected. The samples were analyzed for GRO, DRO, PAHs, and VOCs. Contaminants were not detected in the soil or groundwater samples above DEC cleanup levels.

In May 2023, groundwater samples were collected from wells (MW1, MW2, and MW4) and analyzed for GRO, DRO, PAHs, and VOCs. MW3 was destroyed during construction activities the previous year. Contaminants were not detected in the samples above DEC cleanup levels. With DEC approval, the remaining monitoring wells on-site were decommissioned on November 15, 2023.

Remaining Contamination

The maximum concentrations of contaminants remaining in soil at the site are shown in Tables 2a.

Groundwater contamination was not detected. These concentrations are all below their respective approved cleanup levels. Sample locations referred to in Tables 2a are shown in the attached site figure.

Table 2a – Maximum Contaminant Concentrations Remaining in Soil

Contaminant	Soil (mg/kg)	Sample Location	Date Sampled
DRO	1,760	TP-1-1996	1996
GRO	609	TP-1-1996	1996

Table 2b – Maximum Contaminant Concentrations Remaining in Groundwater

Cumulative Risk Evaluation

Pursuant to 18 AAC 78.600(d), when detectable 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 (HI) of 1 across all exposure pathways.

Based on a review of the environmental record, DEC 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 DEC'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 3.

Table 3 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De Minimis Exposure	Contamination remains in surface soil below human health and ingestion levels in 18 AAC 75.341, Tables B1 and B2.
Subsurface Soil Contact	De Minimis Exposure	Contamination remains in the subsurface soils below human health and ingestion levels in 18 AAC 75.341, Tables B1 and B2.
Inhalation – Outdoor Air	Pathway Incomplete	Contaminants in soil are not volatile enough to reach outdoor air.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	Groundwater contaminant data did not contain concentrations above vapor intrusion screening levels.
Groundwater Ingestion	Pathway Incomplete	Groundwater sample results show contaminant concentration below 18 AAC 75.345, Table C values.
Surface Water Ingestion	Pathway Incomplete	Surface water is not used as a drinking water source in the vicinity of the site.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	There are no concerns about other ecological pathways.

Notes:

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

DEC Decision

Soil and groundwater contamination at the site have been cleaned up to concentrations below the approved cleanup levels suitable for residential land use. This site will receive a “Cleanup Complete” designation on the Contaminated Sites Database.

DEC approval is required for movement and disposal of soil and/or groundwater subject to the Site Cleanup Rules, in accordance with 18 AAC 78.600(h). Please contact DEC for information about applicable regulations and requirements. A “site”, as defined by 18 AAC 78.995, means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership.

Movement or use of contaminated material in an ecologically sensitive area or in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited. Furthermore, 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. If, in the

future, groundwater from this site is to be used for other purposes, 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 78.276(f) and does not preclude DEC from requiring additional assessment and/or cleanup action if information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to the environment.

Informal Reviews and Adjudicatory Hearings

A person authorized under a provision of 18 AAC 15 may request an informal review of a contested decision by the Division Director in accordance with 18 AAC 15.185 and/or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. See DEC's "Appeal a DEC Decision" web page <https://dec.alaska.gov/commish/review-guidance/> for access to the required forms and guidance on the appeal process. Please provide a courtesy copy of the adjudicatory hearing request in an electronic format to the parties required to be served under 18 AAC 15.200. Requests must be submitted no later than the deadline specified in 18 AAC 15.

If you have questions about this closure decision, please feel free to contact me at (907) 262-8200, or email at dawn.wilburn@alaska.gov.

Sincerely,



Dawn Wilburn
Environmental Program Specialist

cc: DEC, Division of Spill Prevention and Response, Cost Recovery Unit
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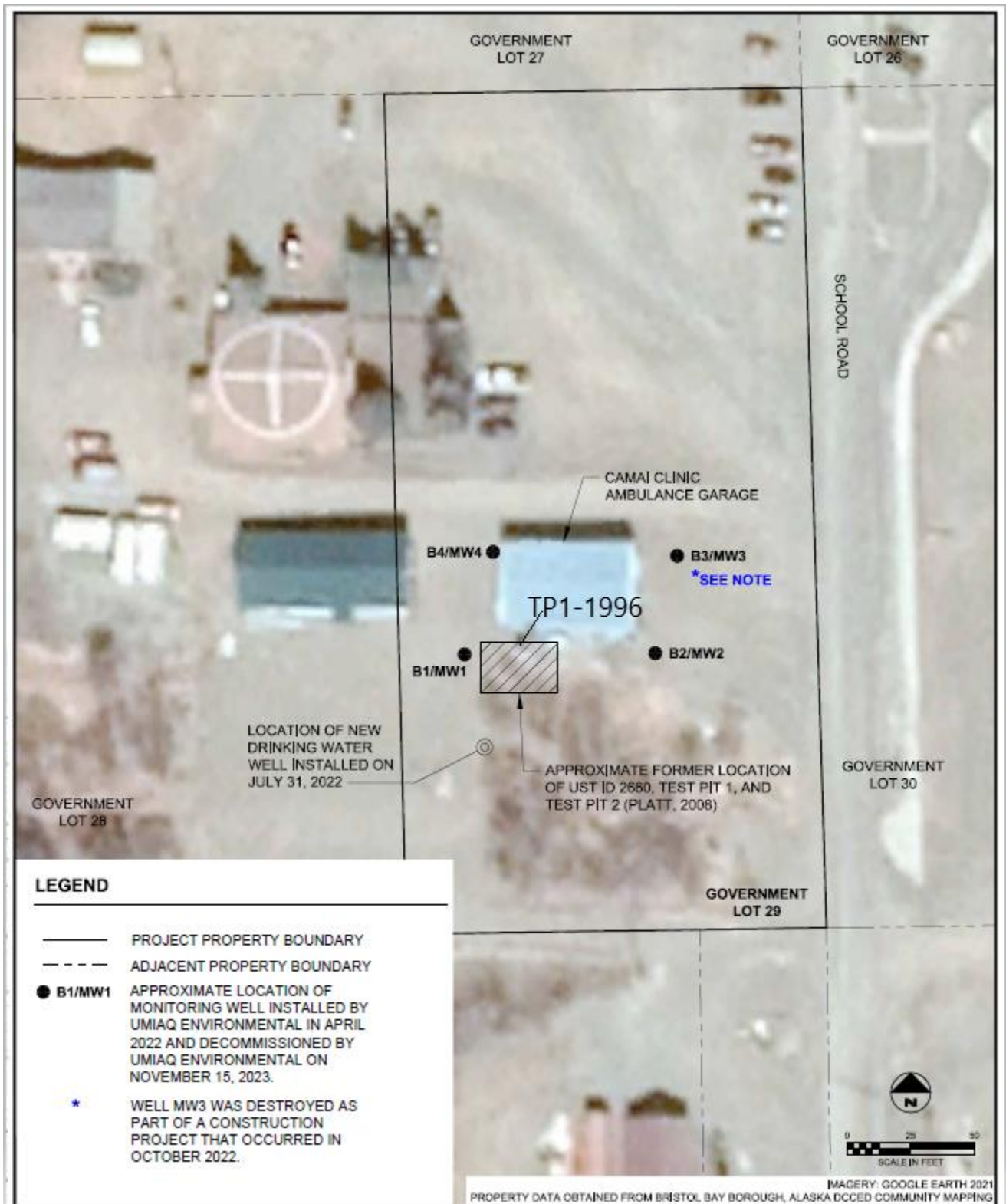


Figure 1.- Site map the showing location of the former UST, the approximate 1996 sample location, and the 2022 soil boring and monitoring well placements.