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: 100.38.235

May 15, 2017

Phil Streeter, Project Manager
Fairbanks North Star Borough, Department of Public Works
PO Box 71267
Fairbanks, AK, 99707-1267

Re: Decision Document: FNSB – Weller Road Elementary School
Cleanup Complete Determination

Dear Mr. Streeter:

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program has completed a review of the environmental records associated with the Weller Elementary School Portable Music Building located at 635 Elementary Drive. 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. No further remedial action will be required unless new information becomes available that indicates exposure residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the Weller Elementary School Portable Music Building, which is located in the ADEC office in Fairbanks, Alaska. This decision letter summarizes the site history, cleanup actions and levels, and standard site closure conditions that apply.

Site Name and Location:
Weller Elementary School
635 Elementary Drive
Fairbanks, AK 99705

Name and Mailing Address of Contact Party:
Phil Streeter
Fairbanks North Star Borough
PO Box 71267
Fairbanks, AK 99707-1267

DEC Site Identifiers:
File No.: 100.38.235
Hazard ID.: 25684

Regulatory Authority for Determination:
18 AAC 75

Site Description and Background

On July 28, 2011, a 2,500-gallon unregulated underground storage tank (UST) was removed and replaced with an aboveground storage tank (AST) at the Weller Elementary School Portable Music building. During excavation activities contaminated soil was discovered near the fill and vent pipes of the tank. Initial cleanup activities during tank removal left a small volume of contaminated soil under the building footprint. In 2013, the portable music building was removed to make room for a parking lot expansion. Soil generated during construction of the parking lot was field screened and segregated. Samples from the soil stockpiles and excavation limits were below the most stringent soil cleanup levels.

Contaminants of Concern

During tank replacement, samples were collected from soil and analyzed for diesel range organics (DRO), benzene, toluene, ethylbenzene, and xylenes (BTEX), and polycyclic aromatic hydrocarbons (PAHs). Based on these analyses the following compounds were listed as contaminants of concern at the Weller Elementary Portable Music Building site:

- Diesel Range Organics

Cleanup Levels

Applicable site cleanup levels found in 18 AAC 75.341 Table B1 and B2 for the migration to groundwater pathway as noted below in Table 1.

Table 1 – Approved Cleanup Levels

Contaminant	Soil[1] (mg/kg)
DRO	250

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
ug/L = micrograms per liter
1 – Method 2 migration to groundwater soil cleanup level

Characterization and Cleanup Activities

During tank replacement activities conducted in July 2011, Independent Contractors Associated (ICA) personnel encountered contaminated soil at the 2,500-gallon UST located at the portable music building. Field screening with a Photo-Ionization Detector (PID) was used to delineate the extent of the contamination which was determined to be limited to the soil surrounding the fill and vent pipes. Thirteen cubic yards (cy) of contaminated soil was removed and remediated at Organic Incineration Technology, Inc. Some contaminated soil remained inaccessible under the portable music building. Confirmation samples were taken from the limits of excavation and from the clean backfill stockpile. One soil sample collected from under the building foundation contained DRO contamination at 4,490-mg/kg, exceeding the migration to groundwater cleanup level. All other soil samples were below the most stringent method 2 cleanup levels promulgated in the November 6, 2016, update to 18 AAC 75.

The portable music building and AST were removed in 2013. In June 2014, Nortech was contracted to screen and excavate the remaining contaminated soil at the site. As requested by FNSB, all soil with PID readings greater than 1 ppm were excavated and placed into stockpiles.

Three laboratory samples were taken from excavation limits and three samples were taken from the 115-cy of stockpiled soil. All compounds were below the method 2 cleanup levels in the excavation limits and the stockpiles. The stockpiled soil was then used to backfill the excavation. The former location of the portable music building has since been turned into a parking lot and access road.

Cumulative Risk Evaluation

Pursuant to 18 AAC 75.325(g) 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 non-carcinogenic 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 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	Contamination does not exceed direct contact cleanup levels and the area has been paved over
Sub-Surface Soil Contact	Pathway Incomplete	Contamination does not exceed direct contact cleanup levels and the area has been paved over
Inhalation – Outdoor Air	Pathway Incomplete	Contamination is not present above inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	Contamination is not present above inhalation cleanup levels.
Groundwater Ingestion	Pathway Incomplete	Remaining soil contamination is below the Method 2 migration to groundwater soil cleanup levels and does not extend to the water table.
Surface Water Ingestion	Pathway Incomplete	The nearest surface water is more than 0.5 miles away.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bio-accumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	There are no ecological receptors in the vicinity of the site.

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

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, subject to the following standard conditions:

Standard Conditions

1. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 75.325(i). 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. (See attached site figure.)

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) 451-5174, or email at michael.hooper@alaska.gov.

Sincerely,

Michael Hooper
Project Manager

Cc (via email): Spill Prevention and Response, Cost Recovery Unit