



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: 102.38.079

September 14, 2017

Friendship Baptist Mission
In Care Of Chris Whisenant
1501 Lacey Street
Fairbanks, AK, 99701-6209

**Re: Decision Document: Friendship Baptist Mission
Cleanup Complete Determination**

Dear Mr. and Mrs. Bernardino:

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program has completed a review of the environmental records associated with the Friendship Baptist Mission located at 1501 Lacey Street in Fairbanks. 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 Fairbanks Baptist Mission, 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:
Friendship Baptist Mission
1501 Lacey Street
Fairbanks, AK 99701

Name and Mailing Address of Contact Party:
Michael and Evie Bernardino
2126 Rickert St
Fairbanks, AK 99701-6556

DEC Site Identifiers:
File No.: 102.38.079
Hazard ID: 711

Regulatory Authority for Determination:
18 AAC 75

Site Description and Background

A leak from the heating oil tank and contaminated soil were discovered near the north side of the residence at 1501 Lacey Street in 1988 and 1989, following complaints of fuel odors in the residence. Shannon & Wilson, Inc. installed two exploratory borings in February 1989, to investigate the source of petroleum odors in the residence. Soil contamination was identified near the buried tank located outside the north wall of the residence, close to 15th Avenue. The heating oil tank was removed sometime in 1988, and approximately 50 to 7 cubic yards (cy) of contaminated soil were removed in June 1989. The excavation extended to the groundwater table, but some residual contamination was inaccessible and left beneath the building footer. Groundwater is approximately 12.5 to 14.5 feet below ground surface (ft bgs).

Contaminants of Concern

During the site investigation and cleanup activities at this site, samples were collected from soil and groundwater and analyzed for total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and total xylenes (BTEX). TPH analysis is an outdated method no longer accepted by DEC, however for the purposes of this heating oil release, TPH values are compared against the cleanup level for diesel range organics (DRO). Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern at this site:

- Diesel Range Organics (DRO)

Cleanup Levels

Total Petroleum Hydrocarbons were detected in soil above the approved Method 2 migration to groundwater cleanup levels for the under 40-inch precipitation zone, established in 18 AAC 75.341 (d), Table B2 for DRO. The DRO cleanup level can be applied to TPH results as noted above.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)	Groundwater (mg/L)
DRO	250 ¹	1.5

mg/kg = milligrams per kilogram

mg/L = micrograms per liter

¹ Migration to groundwater pathway, Method 2

Characterization and Cleanup Activities

Characterization and cleanup activities conducted under the regulatory authority of the Contaminated Sites Program began in 1989. Site characterization was conducted in March 1989, and included installation of two soil borings. Total petroleum hydrocarbons were detected in soil samples from the soil boring closest to the former tank (Boring B-1, up to 1,000 mg/kg).

In June 1989, approximately 50 to 70 cubic yards of heating oil impacted soil were excavated from the area. Confirmation samples collected from the excavation area indicated that contaminated soils were mostly removed. A soil sample collected from the base of the excavation at 12.4 ft. bgs contained TPH at 30 mg/kg. Some soil contamination remained beneath the building footer at approximately 10ft bgs which contained a TPH concentration of 420 mg/kg.

While the excavation was open, the building foundation wall was steam-cleaned and a passive vapor extraction system installed in the excavation prior to backfilling. On June 23rd, Shannon & Wilson drilled a hole through the building slab approximately 12 ft inside the north wall. Headspace screening and analytical results indicate petroleum had not spread significantly under the house.

Groundwater has been investigated on and directly downgradient of the site during investigation and cleanup of the contaminated site Texaco Property – 1501 S. Cushman (Hazard ID 24169, ADEC file number 102.26.015). Based on this data, any groundwater contamination from the Friendship Baptist Mission site is contained within the property boundaries and the plume is stable.

ADEC conducted a site visit on August 2016, to investigate the potential for residual vapors inside the residence. A photoionization detector (PID) capable of reaching parts per billion (ppb) levels was used to evaluate vapors in the basement, and did not detect any unacceptable risk to human health or the environment. It was also confirmed that the passive ventilation piping was still in place.

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 cumulative risk criteria for human health.

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	Pathway Incomplete	Contamination is not present in surface soil (0 to 2 feet below ground surface).
Sub-Surface Soil Contact	De Minimis Exposure	Contamination remains in the sub-surface, but is below direct contact cleanup levels.
Inhalation – Outdoor Air	De Minimis Exposure	Contamination remains in the sub-surface, but is below inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De Minimis Exposure	DEC inspection inside the building with a PID did not identify significant vapor concerns. Residual soil contamination is unlikely to cause vapor intrusion in the future.
Groundwater Ingestion	Pathway Incomplete	Soil sampled at the base of the excavation indicated groundwater was not contaminated.
Surface Water Ingestion	Pathway Incomplete	Surface water not located near the site and not expected to be contaminated.

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	Ecological receptors are not present at 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.

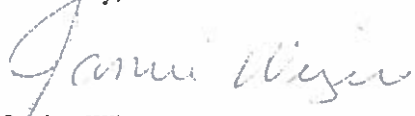
This determination is in accordance with 18 AAC 75.380 and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to the environment.

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) 451-2127, or email at Janice.Wiegers@alaska.gov.

Sincerely,



Janice Wiegiers
Project Manager

Enclosure: Figure 1 – Friendship Baptist Mission

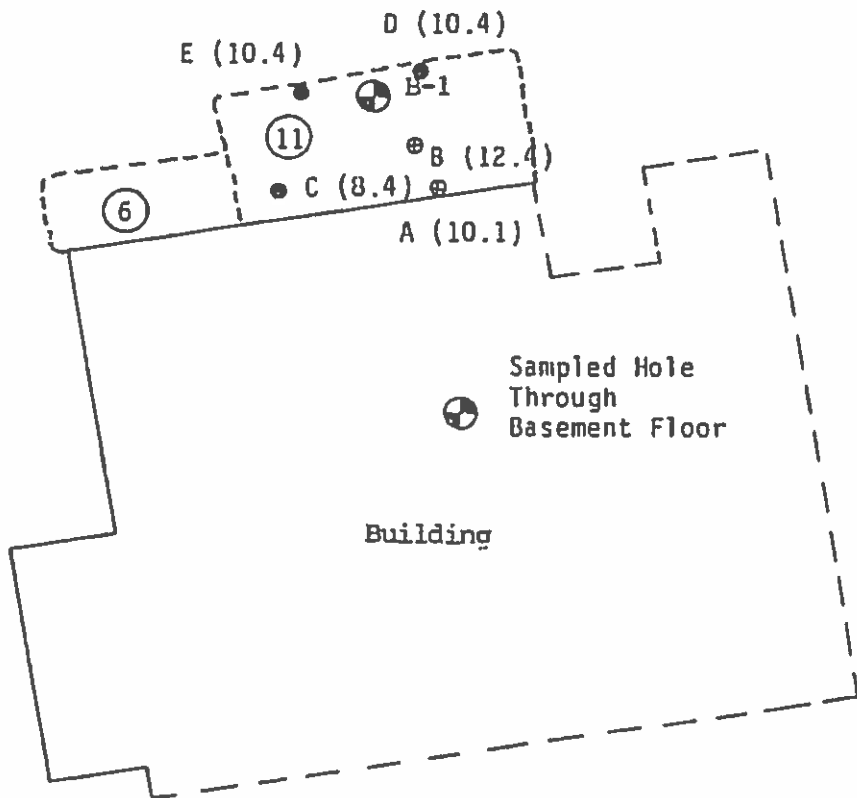
Cc (via email): Spill Prevention and Response, Cost Recovery Unit
Michael and Evie Bernardino

North



15th Avenue

Lacey Street



KEY

Sample Numbers

- A = 1702-622-01
- B = 1702-622-02
- C = 1702-622-03
- D = 1702-622-04
- E = 1702-622-05

⊕ Analytical/Headspace Sample

● Headspace Sample

(5) Sample Depth

(15) Maximum Excavation Depth

Scale: 1 inch = 10 feet

Friendship Baptist Mission
Soil Quality - 15th St. and Lacey St
Fairbanks, Alaska

BORING LOCATION PLAN

February 1989

X-170

SHANNON & WILSON, INC.
Geotechnical Consultants

FIG. 1

