



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: 1529.26.011

September 18, 2015

Via Electronic and Regular Mail

Ms. Amber Al-Haddad
Director, Public Works and Projects
City and Borough of Wrangell
Post Office Box 531
Wrangell, Alaska 99929

RE: Decision Document; Former Wilcox Automotive USTs 1-3
Corrective Action Complete Determination

Dear Amber,

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has reviewed the environmental records for the referenced site. This decision letter explains the site history, cleanup activity and standard conditions for long term management. No further remedial action is required at this site, with regard to the petroleum release.

Site Name and Location

Former Wilcox Automotive USTs 1-3
309 Front Street
Wrangell, Alaska 99929

Address of Contact Party

Ms. Amber Al-Haddad
P.O. Box 531
Wrangell, Alaska 99929

DEC Site Identifiers

Hazard ID: 26204
File: 1529.26.011
Former UST Facility ID# 1395

Regulatory Authority for Determination

Title 18 Alaska Administrative Code 78

Site Description and Background

The Site location is a former commercial property on Front Street in downtown Wrangell, Alaska. The vacant property is in a retail business district located approximately four hundred feet from marine waters in Zimovia Straits.

Three regulated underground storage tanks (USTs) including two 2,000-gallon gasoline tanks and one 1,000-gallon diesel tank were formerly present at the Site. One of the 2,000-gallon gasoline USTs and a fuel dispenser were removed by the previous owner, but assessment work was not conducted at that time. The diesel tank was reportedly installed in 1981, and the two gasoline tanks were installed in 1982 and 1987.

In 2012, the City and Borough of Wrangell (CBW) contracted Shannon & Wilson to complete a site assessment of all three regulated USTs in conjunction with closure by removal of the two remaining fuel storage tanks, associated piping, and the fuel dispensers. Subsequent release investigation and corrective action included the removal and stockpiling of contaminated soil and the collection of soil samples.

Contaminants of Concern

The following contaminants of concern were analyzed during the course of the site investigations summarized in the Characterization and Cleanup Activities section of this decision letter. Release investigation sampling documented that detectable concentrations of petroleum in confirmation samples from the Site and from the soil stockpiles were all below the most stringent cleanup levels in 18 AAC 75.341, Tables B1, and B2.

- Benzene
- Toluene
- Total xylenes
- Gasoline Range Hydrocarbons (GRO)
- Diesel Range Hydrocarbons (DRO)
- Total lead
- Ethylene dibromide (EDB)
- Ethylene dichloride (EDC)

The contaminant of concern identified in concentrations above the Method Two cleanup levels is total lead. In March 2014 DEC determined that the concentrations of lead detected during the course of the release investigation, summarized in the Characterization and Cleanup Activities section of this decision letter, are too high to be associated with alkyl-lead compounds added to gasoline for use in combustion engines (i.e. tetraethyl lead).

In the 1970s and 1980s, EPA began enforcing regulations to reduce the use of alkyl lead additives in gasoline and, effective December 31, 1995, Section 220 of the Clean Air Act Amendment of 1990 banned their use completely except in off-road vehicles and in aviation gasoline. EDB and EDC are more resistant to breakdown in the environment than alkyl lead. The Final Policy of the EPA Alkyl-lead Study Group, released in the late 1980s, recommends that when characterizing post-1988 petroleum releases, analyze soil samples for lead scavengers ethylene dibromide (EDB) and ethylene dichloride (EDC) to differentiate a leaded gasoline release (i.e. organic lead) from other sources of lead (i.e. inorganic) such as lead in paint.

Volatile organic compounds EDB and EDC were not detected in soil samples at the Site. Therefore, the lead contamination of soil at the Site is not associated with the regulated UST petroleum release. DEC oversight of additional site investigation to determine a source of the lead contamination will be continued as a new Site on the Contaminated Sites Database under Hazard ID# 26212.

Release Investigation and Corrective Action Activities

Release investigation and corrective action activities conducted under the regulatory authority of the Contaminated Sites Program began in 2012. These activities are described below.

In the UST site investigation in 2012, Shannon & Wilson (S&W) observed that soil in the excavation sidewalls consisted of imported fill material with some construction debris (wood and concrete) to a depth of six feet below the ground surface (BGS) below which consisted of native beach silty sand and gravel. S&W reported that a small quantity of subsurface water slowly appeared in the northwest corner of the excavation at a depth of eight feet BGS but not in other areas of the excavation taken to similar depths BGS.

CBW began the removal excavation with the 1,000 gallon diesel UST located at the south end of the property then the 2,000 gallon gasoline UST in the middle of the property. The USTs, vent and supply piping and dispensers were completely removed along with the surrounding soil without restriction. Field screening samples of excavated soil for volatile petroleum compounds identified an estimated volume of 45 cubic yards of contaminated soil. With DEC approval, CBW transported the contaminated soil off-site for storage between plastic liners on CBW Lot 4, in Block 66 of the Wrangell Industrial Subdivision. The soil was designated Stockpile 1.

CBW advanced the UST removal excavation toward Front Street forming the north end of the pit where the 2,000 gallon gasoline UST was previously removed without site investigation sampling. The extent of removal toward Front Street, however, was limited by a storm drain line and manhole under the sidewalk. Protection of these structures required CBW to leave soil beneath them undisturbed and continue the removal excavation toward the footprint of the former UST in the center of the pit. CBW placed the 20 cubic yard volume of additionally excavated soil on the floor of the gasoline and diesel tank excavation, then collected confirmation samples from the sidewalls at a depth of eight feet BGS. For sampling purposes, the soil temporarily stored in the pit was designated Stockpile 2.

S&W collected 11 confirmation analytical samples, on average, at depths eight feet BGS beneath each UST on the floor of the excavation, beneath the UST vent and dispenser supply piping, and beneath the former dispenser island. S&W also collected two representative samples each from Stockpile 1 and 2 for analytical testing.

All confirmation samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) and gasoline range (GRO) hydrocarbons. Three samples from the base of the excavation under the diesel UST, one each under the piping run and diesel dispenser were also analyzed for diesel range (DRO) hydrocarbons. Five samples from the floor of the gasoline UST excavation, and sample duplicates, were analyzed for total lead and volatile organic compound (VOC) ethylene dibromide (EDB). Three excavation samples were analyzed for naphthalene and the dispenser samples are also analyzed for all polycyclic aromatic hydrocarbon (PAH) compounds. The four analytical samples from stockpiles 1 and 2 were analyzed for GRO and BTEX. Two samples from stockpile 1 were also analyzed for DRO, and one sample from each stockpile were tested for total lead.

The following table displays the highest levels detected in soil remaining at the site in the site investigations, the depth below the surface that each sample was taken, and the Method Two

Migration to Groundwater (M2 MTG) soil cleanup levels listed in 18 AAC 75.341 Table B1 and Table B2 that are applicable to the petroleum release at this site. Sample concentrations above soil cleanup levels are in bold print.

Table 1 highest level of petroleum analytes detected in remaining soil

Hydrocarbon range and compounds of concern	Greatest level in soil mg/kg*	Sample name and depth below the surface	M2 MTG Cleanup Levels mg/kg*
GRO	2.47	Sample ES24 at 8 feet	260
DRO	70.8	Sample ES15 at 8 feet	230
Benzene	0.0119	Sample ES2 at 8 feet	0.025
Toluene	0.0581	Sample ES2 at 8 feet	6.5
Ethylbenzene	<0.0432	Sample ES2 at 8 feet	6.9
Total Xylenes	0.113	Sample ES24 at 8 feet	63
Ethylene Dibromide	<0.00011	Sample ES24 at 8 feet	0.00016
Ethylene Dichloride	<0.0272	Sample ES24 at 8 feet	0.016
Total lead	17,200	Sample ES26 at 8 feet	400

*mg/kg= milligrams per kilogram

Confirmation soil samples from the tank and dispenser island excavation and soil stockpiles did not contain petroleum hydrocarbon concentrations greater than the soil cleanup levels. Concentrations of VOC and PAH compounds in confirmation samples were all below instrument reporting limits and cleanup levels. Groundwater not encountered and was not investigated for contamination. As previously stated, DEC oversight of additional site investigation to determine a source of the lead contamination will be continued as a new Site on the Contaminated Sites Database under Hazard ID# 26212.

DEC Decision

Remaining petroleum contamination in soil is below approved cleanup levels. This site will receive a Cleanup Complete designation of the Contaminated Sites Database, subject to the following Standard Conditions.

Standard Conditions

1. Any proposal to transport soil or groundwater off-site requires DEC approval in accordance with 18 AAC 78.600(h). 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.
2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

September 18, 2015

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 future information indicates that this site may pose an unacceptable risk to human health or 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, 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 you have questions about this closure decision, please contact me at 410 Willoughby Suite 311 in Juneau by telephone at 907-465-5210 or by email at bruce.wanstall@alaska.gov.

Sincerely,



Bruce Wanstall
Remedial Project Manager
Contaminated Sites Program

cc: Sally Schlichting, Manager, Juneau Unit, Contaminated Sites Program, via email
DEC SPAR Cost Recovery, via email at dec.spar.cr@alaska.gov