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: 102.26.154

May 30, 2019

Mr. John Jolly
World Wide Movers, Inc.
934 Elizabeth Street
Fairbanks, AK 99709

**Re: Decision Document: World Wide Movers USTs 1 - 4**
**Cleanup Complete Determination**

Dear Mr. Jolly:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the World Wide Movers contaminated site located at 934 Elizabeth Street, 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 World Wide Movers, 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:**
World Wide Movers
934 Elizabeth Street
Fairbanks, AK 99709

**Name and Mailing Address of Contact Party:**
Mr. John Jolly
World Wide Movers, Inc.
934 Elizabeth Street
Fairbanks, AK 99709

**DEC Site Identifiers:**
File No.: 102.26.154
Hazard ID.: 24967

**Regulatory Authority for Determination:**
18 AAC 78 and 18 AAC 75

**Site Description and Background**
The World Wide Movers site is located in an industrialized part of Fairbanks where two registered gasoline (Tanks #1 & #2) and one registered diesel (Tank #3) underground storage tanks (USTs) were removed in October of 1998. Field screening by heated headspace indicated there had been a release

from the USTs. However, the extent of contamination by field screening was not fully defined due to difficulty sampling in cold weather and the soils were returned to the excavation. Soil samples were collected from the base of excavation and the temporary stockpiles for analysis of gasoline range organics (GRO), diesel range organics (DRO), benzene, toluene, ethylbenzene, and xylenes (BTEX) that were found to exceed the ADEC Method 2 soil cleanup levels. In 2006, additional excavations were carried out followed by multi-year groundwater monitoring that demonstrated a stable and decreasing groundwater contamination plume at the source area. In September of 2015, a regulated 300-gallon used oil UST (Tank #4) was removed along with potentially impacted soils. Field screening did not indicate the presence of contamination. Soil samples were obtained at the base of the excavation (down to 8 feet below ground surface, ft bgs) and at the soil water interface (9.8 to 10.4 ft bgs). Detections were below cleanup levels.

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

- GRO
- DRO
- BTEX

**Cleanup Levels**
The Method 2 migration to groundwater soil cleanup levels for the under 40 inch zone and groundwater cleanup levels apply to this site. The soil cleanup levels are established in 18 AAC 75.341(c), Table B1 and 18 AAC 75.341(d), Table B2 for the Method 2. The groundwater cleanup levels are established in 18 AAC 75.345, Table C.

**Table 1 – Approved Cleanup Levels**

| Contaminant | Soil (mg/kg) | Groundwater (µg/L) |
|---|---|---|
| GRO | 300 | 2200 |
| DRO | 250 | 1500 |
| Benzene | 0.022 | 4.6 |
| Toluene | 6.7 | 1100 |
| Ethylbenzene | 0.13 | 15 |
| Xylenes (Total) | 1.5 | 190 |

mg/kg = milligrams per kilogram
µg/L = micrograms per liter

**Characterization and Cleanup Activities**
During the 1998 removal of the three 2,500 gallon USTs, the excavations extended to 8 ft bgs, but additional excavation under one of the tanks extended to groundwater at 12 feet bgs, where sheen was

observed on the water table. Due to cold weather, the extent of contamination was not determined by field screening, and excavated soils were returned to excavation. Analytical samples collected from tank excavations exceeded ADEC's soil cleanup levels for DRO, and BTEX compounds.

In 2005, approximately 40 cubic yards of soil was removed from a test pit excavation and a temporary well was installed to obtain a groundwater sample. A 10-foot by 15-foot test pit was excavated in the location of the former diesel UST (Tank #3) to a depth of approximately 12 ft bgs and groundwater was encountered at 10.5 ft bgs. Confirmation samples taken from the excavation limits exceeded ADEC's Method 2 soil cleanup levels for DRO and benzene. The highest concentrations of DRO and benzene remaining were 3,190 mg/kg and 0.177 mg/kg, respectively. The impacted soil was stockpiled on a liner until the next field season. A temporary well point was installed at the location of the former diesel UST that indicated the maximum concentrations of DRO and benzene in the groundwater were 4,200 µg/L and 81.6 µg/L, respectively.

In 2006, approximately 175 cubic yards of the remaining impacted soils were excavated. The soils were transported off-site for thermal remediation. Confirmation samples from the excavation limits still contained benzene at a maximum concentration of 0.0255 mg/kg. The remaining contamination was at the base of the excavation under Tank #3. A single monitoring well (MW-1) was installed at the former diesel UST location and groundwater samples exceeded ADEC's Method 2 groundwater cleanup levels for DRO, GRO, and benzene (maximum concentrations of 8,590 µg/L, 1,390 µg/L and 33.8 µg/L, respectively). MW-1 was not sampled again until 2008, at which time only DRO exceeded the groundwater cleanup level at 4.64 µg/L. Six years elapsed until MW-1 was sampled again in 2014; at that time DRO was detectable, but below groundwater cleanup levels.

In 2015, a regulated 300-gallon used oil UST was removed along with approximately 35 cubic yards of potentially impacted soils. Field screening did not indicate the presence of contamination. Soil samples were obtained at the base of the excavation (down to 8 ft bgs) and at the soil water interface (9.8 to 10.4 ft bgs).

**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 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 | Pathway Incomplete | Contamination is not present in surface soils. |
| Sub-Surface Soil Contact | De Minimis Exposure | Post excavation confirmation soil samples were below ingestion cleanup levels. |
| Inhalation – Outdoor Air | De Minimis Exposure | Post excavation confirmation soil samples were below inhalation cleanup levels. |
| Inhalation – Indoor Air (vapor intrusion) | De Minimis Exposure | Minimal contamination remains in the sub-surface, and is at 15 feet below the ground surface at the former location of Tank #3. |
| Groundwater Ingestion | De Minimis Exposure | Multi-year groundwater monitoring indicates contamination is now below cleanup levels. |
| 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 | The site is in an industrialized part of Fairbanks and no suitable habitat for ecological receptors. |

**Notes to Table 3**: "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**

The remaining contamination is at a depth of 15 feet below the ground surface. Given the low concentration and length of time elapsed, it has likely undergone natural remediation to below ADEC's Method 2 soil cleanup levels. The groundwater contamination has been remediated to below ADEC's Method 2 groundwater cleanup levels. This site will receive a "Cleanup Complete" designation on the Contaminated Sites Database, subject to the following standard conditions.

**Standard Conditions**

1. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

2. 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 78.276(f) 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 20 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) 451-2131, or email at megan.roberts@alaska.gov.

Sincerely,

Megan Roberts
Project Manager

cc: Spill Prevention and Response, Cost Recovery Unit
Christopher Darrah, Shannon & Wilson, Inc.