



THE STATE
of **ALASKA**

GOVERNOR BILL WALKER

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

610 University Avenue
Fairbanks, AK 99709-3643
Phone: 907-451-2143
Fax: 907-451-2155
www.dec.alaska.gov

File: 100.26.214

October 16, 2017

Lisa Lewis
Director of Government Compliance & Safety
Petro Star, Inc.
3900 C St. Suite 802
Anchorage, Alaska, 99503

**Re: Decision Document: Sourdough Fuel #2518 (Former Plaza Texaco)
Cleanup Complete Determination – Institutional Controls**

Dear Ms. Lewis

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program has completed a review of the environmental records associated with the contaminated site Sourdough Fuel #2518 located at 313 Santa Claus Lane, North Pole, Alaska. 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 as long as the institutional controls are maintained and effective, and no new information becomes available that indicates residual contamination poses an unacceptable risk.

This Cleanup Complete with Institutional Controls (ICs) determination is based on the administrative record for Sourdough Fuel #2518 which is located in the offices of the ADEC in Fairbanks, Alaska. This decision letter summarizes the site history, cleanup actions, regulatory decisions, and specific conditions required to effectively manage remaining contamination at this site.

Site Name and Location:

Sourdough Fuel #2518 (Former Plaza Texaco)
313 Santa Claus Lane
North Pole, Alaska, 99705

Name and Mailing Address of Contact Party:

Lisa Lewis
Petro Star, Inc.
3900 C St. Suite 802
Anchorage, Alaska 99503

ADEC Site Identifiers:

File No.: 100.26.214
Hazard ID: 26156

Regulatory Authority for Determination:

18 AAC 78 and 18 AAC 75

Site Description and Background

Sourdough Fuel #2518, formerly known as Plaza Texaco among other names, is a small gas station located in downtown North Pole, Alaska. The site currently has three 10,000 gallon underground storage tanks (USTs), two of which store gasoline and one which stores diesel. The station has two dispensers and a total of four gas pumps located northeast of the UST system. Site investigations conducted in 1996 and 1998 found surface and subsurface soil contamination resulting from surface spills at the dispensers, over fills at the UST system and leaks from piping connections. Sampling results indicated that historic releases consisted primarily of gasoline. ADEC was notified of this contamination in 2013.

Contaminants of Concern

During the site characterization and cleanup activities at this site, samples collected from soil and groundwater were analyzed for gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), benzene, toluene, ethylbenzene, and xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAHs). Based on these analyses, the following contaminants were detected above the most stringent Method 2 cleanup levels and are considered contaminants of concern at this site:

- DRO
- GRO
- benzene
- toluene
- ethylbenzene
- xylenes

Cleanup Levels

Soil cleanup levels applicable to the site are found in 18 AAC 75.341(c), Table B1, and 18 AAC 75.341 (d), Table B2. Groundwater cleanup levels are found in 18 AAC 75.345 Table C. Contaminants detected above their respective cleanup levels in soil or groundwater are considered contaminants of concern at the site and are listed below in Table 1.

Table 1 – Approved Cleanup Levels

Contaminant	Soil ¹ (mg/kg)	Soil ² (mg/kg)	Groundwater ³ (µg/L)
GRO	300	1,400	2,200
DRO	250	12,500	1,500
Benzene	0.022	11	4.6
Toluene	6.7	200	1,100
Ethylbenzene	0.13	49	15
Xylenes	1.5	57	190

mg/L = milligrams per liter

µg/L = micrograms per liter

¹ – Migration to groundwater pathway

² – Ingestion and inhalation cleanup level (GRO), human health based cleanup levels (BTEX)

³ – Groundwater ingestion pathway

Characterization and Cleanup Activities

In 1996, a limited site investigation was performed to evaluate the presence or absence of petroleum contamination in the vicinity of the two 10,000 gallon gasoline USTs and one 10,000 gallon diesel UST. GRO, DRO, and BTEX contamination was not above the ADEC cleanup levels in soil samples collected from three soil borings.

In 1998, the UST system was upgraded. During this effort soil samples were collected and soil contamination was found near the dispensers, fill pipes, and piping elbows of the USTs. The areas around the north and south dispensers, the UST fill pipes, and the 90° piping elbows were excavated to the maximum extent practicable. Sixty cubic yards (cy) of contaminated soil was excavated and thermally remediated. Inaccessible contamination was left in place near the dispenser canopy foundation, and surrounding and between the USTs. Gasoline range organics and DRO were detected at the limits of excavation at up to 5,080 mg/kg and 4,030 mg/kg, respectively. Benzene, toluene, ethylbenzene, and xylenes were detected in the limits of excavation at up to 13.7 mg/kg, 280 mg/kg, 89.5 mg/kg, and 1,380 mg/kg, respectively. A passive aeration system consisting of perforated piping was installed in these areas to promote biological degradation and aeration of the remaining soil contamination.

In violation of the UST release reporting requirements found in 18 AAC 78.220(c)(1), ADEC was not notified of the petroleum releases and the results of the 1998 site characterization were not submitted until 2013. As required by ADEC's contaminated sites program, a release investigation was conducted in October 2016. As part of this release investigation three soil borings and three temporary well points were advanced to determine the current soil and groundwater conditions at the site. One soil boring was advanced near the USTs and two were advanced near the dispenser canopy. All borings were installed downgradient of the 1998 sampling locations. Samples were collected from the soils with highest photo-ionization detector (PID) readings at each boring location. Direct-push groundwater samples were also collected from each boring location. All soil and groundwater samples collected during the 2016 investigation were below ADEC cleanup levels.

The only building on-site is the gas station kiosk between the two dispenser islands. This building is constructed on a thick above grade slab reducing the risk of vapor intrusion. 2017 correspondence with the property owner indicates that the gas station building onsite is not occupied by employees or accessible to customers or site visitors. A vapor intrusion investigation may be necessary if the usage of this building changes.

Cumulative Risk Evaluation

Pursuant to 18 AAS 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 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 do not meet the cumulative risk criteria for unrestricted land use.

Cumulative risk at this site was calculated assuming a residential land use and using the highest detected concentrations of contaminants in all of the samples collected following the cleanup action in 1998. The results indicate a cumulative carcinogenic cancer risk of 5 in 100,000 and a non-carcinogenic hazard index of 3. The potential cumulative risk is via a combination of the inhalation and groundwater ingestion pathways. The cumulative carcinogenic risk threshold was exceeded for both the groundwater ingestion and soil vapor inhalation pathways individually. The inhalation exposure pathway is controlled by institutional controls for the management of contaminated soil should it become accessible.

Groundwater is not currently used for drinking water and institutional controls restrict future installation of drinking water wells without prior ADEC approval.

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	Exposure Controlled	Contamination remains above the direct contact cleanup levels in the sub-surface. A notice of environmental contamination filed with the Fairbanks recorder's office requires management of contaminated soils if they are to be made accessible in the future.
Inhalation – Outdoor Air	Exposure Controlled	Contamination remains above the inhalation cleanup levels in the sub-surface but is currently unlikely to impact outdoor air. A notice of environmental contamination filed with the Fairbanks recorder's office requires management of contaminated soils if they are to be made accessible in the future.
Inhalation – Indoor Air (vapor intrusion)	Exposure Controlled	The only structure on-site, the gas station kiosk, is not used by employees and is not accessible to customers or site-visitors. A notice of environmental contamination filed with the Fairbanks recorder's office requires ADEC notification and if necessary, a vapor intrusion investigation if the property usage changes.
Groundwater Ingestion	Exposure Controlled	Groundwater contamination is below all ingestion cleanup levels but carcinogenic cumulative risk was exceeded. No drinking water wells exist on this property. A notice of environmental contamination filed with the Fairbanks recorder's office requires ADEC approval before wells can be installed on the property.
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 bio-accumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	The site is located on a paved parking lot in downtown North Pole with no ecological receptors in the vicinity.

Notes to Table 2: "De Minimis Exposure" means that in ADEC's judgment receptors are unlikely to be 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

Petroleum contamination remains in sub-surface soil and groundwater above levels suitable for unrestricted future use; however ADEC has approved the use of institutional controls to limit potential future exposure and risk to human health or the environment. A Notice of Environmental Contamination and Institutional Controls (NEC-IC) has been recorded in the land records maintained by the Alaska Department of Natural Resources and a copy is attached to this letter.

Groundwater meets the applicable cleanup levels throughout the site. Therefore, ADEC has determined the residual soil contamination does not pose an unacceptable migration to groundwater concern.

Institutional controls necessary to support this closure determination include:

1. The Landowner agrees to notify ADEC prior to any sale or transfer of the property, and shall report to ADEC every 2 years to document the status of compliance with the institutional controls described in this notice. Such notice and the reports should be sent to ADEC at:

Alaska Department of Environmental Conservation
Division of Spill Prevention and Response
Contaminated Sites Program
Attention: IC Unit
P.O. Box 111800
Juneau, AK 99811-1800

or submitted electronically to CS.Submittals@alaska.gov.

2. No groundwater wells shall be installed on the subject property without prior ADEC approval.
3. ADEC must be notified prior to any excavation around the dispenser canopy or USTs (see attached figure). If excavation or demolition activities make the remaining contaminated soil accessible it must be managed with an ADEC approved soil management work plan.
4. The gas station kiosk building on site is not currently used by site employees, customers, or visitors. If the usage of this building changes or new buildings are to be constructed, please provide prior notice to ADEC so that the potential for vapor intrusion can be evaluated if necessary.

Standard site closure conditions that apply to all sites include:

1. ADEC approval is required prior to moving any soil or groundwater off any site that is, or has been, subject to the site cleanup rules in 18 AAC 78.600(h). A "site" as defined by 18 AAC 78.995(134) means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership. In the future, if soil will be excavated (or groundwater will be brought to the surface, for example to dewater in support of construction) it must be characterized and managed following regulations applicable at that time and ADEC approval must be obtained before moving the soil or water off the property.
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 characterization and treatment may be required to ensure the water is suitable for its intended use.

ADEC has determined the cleanup is complete as long as the institutional controls are properly implemented and no new information becomes available that indicates residual contamination may pose an unacceptable risk.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status to "Cleanup Complete with Institutional Controls" and will include a description of the contamination remaining at the site.

The institutional controls will be removed in the future if documentation is provided that shows concentrations of all residual hazardous substances remaining at the site are below the levels that allow for unrestricted exposure to, and use of, the contaminated media and that the site does not pose a potential unacceptable risk to human health, safety or welfare, or to the environment. Standard conditions 1-3 above will remain in effect after ICs are removed.

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 the institutional controls are determined to be ineffective or if new information indicates that contaminants at 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: 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 via email at michael.hooper@alaska.gov.

Sincerely,



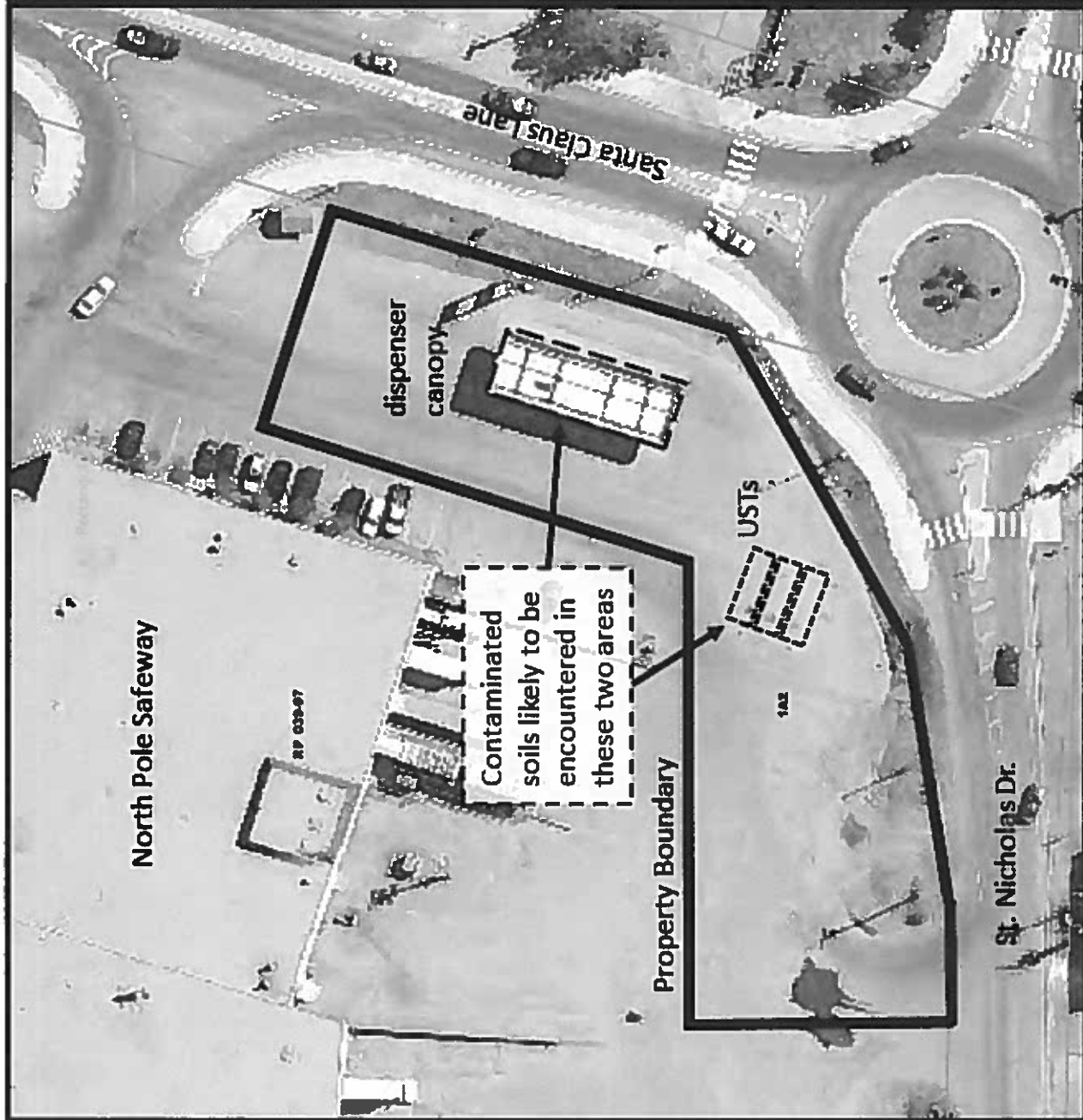
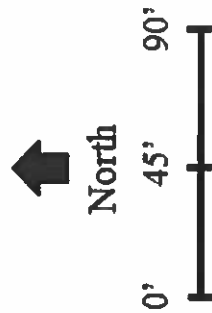
Michael Hooper
Project Manager

Enclosures: Figure 1: Site figure showing property boundaries & areas of remaining contamination covered by ICs.

Cc (via email): Spill Prevention and Response, Cost Recovery Unit
Doug Richmond, Sourdough Fuel

Figure 1. Remaining Soil Contamination and property boundaries for institutional controls at Sourdough Fuel #2518, North Pole, Alaska

Institutional controls on this property require ADEC be notified prior to any excavation in the dispenser canopy or UST area. If excavation or demolition makes the remaining soil contamination accessible it must be managed with an ADEC approved workplan.





Notice of Environmental Contamination and Institutional Controls

Grantor: CEM Leasing, Inc.
Petro Star, Inc.
Sourdough Fuel #2518 (Former Plaza Texaco)

Legal Description: , Lot 1A-2 of North Pole Plaza Plat No. 97-88. Within Section 9, Township 2S, Range 2E, Fairbanks Meridian.

Recording District: Fairbanks

Return to:
Michael Hooper
Alaska Department of Environmental Conservation
Contaminated Sites Program
610 University Avenue, Fairbanks, AK 99709

State Business- No Charge

NOTICE OF ENVIRONMENTAL CONTAMINATION AND INSTITUTIONAL CONTROLS

As required by the Alaska Department of Environmental Conservation, pursuant to 18 AAC 75.375 CEM Properties, Inc. the Landowner of the subject property, hereby provides public notice that the property located at 313 Santa Claus Lane, North Pole, Alaska, 99705, and more particularly described as follows:

Lot 1A-2 of North Pole Plaza, Plat No. 97-88, Fairbanks Recording District. Within Section 9, Township 2S, Range 2E, Fairbanks Meridian.

has been subject to a discharge or release and subsequent cleanup of oil or other hazardous substances, regulated under 18 AAC 78, Article 2. This release and cleanup are documented in the Alaska Department of Environmental Conservation (ADEC) contaminated sites database at http://www.dec.state.ak.us/spar/csp/db_search.htm under the site name Sourdough Fuel #2518 (Former Plaza Texaco) and Hazard ID number 26156.

By signing this notice, ADEC and the Landowner have agreed that the institutional controls described below are necessary and appropriate, and shall be maintained and be binding on the Landowner and its agents, successors and assigns. If the Landowner transfers, sells, assigns, leases or subleases the property or any portion of the property covered by the institutional controls, the Landowner shall incorporate a copy of this notice into the documents of transfer, sale, assignment, lease or sublease.

ADEC has reviewed and approved, subject to the institutional controls described below, the cleanup as protective of human health, safety, welfare, and the environment. No further cleanup is necessary at this site as long as the institutional controls remain in place and effective and no new information becomes available that indicates to ADEC that the site may pose an unacceptable risk to human health, safety, welfare, or the environment.

Gasoline and diesel contaminated soils were found as part of tank upgrades in 1996. Characterization and cleanup activities in accordance with the 18 AAC 75.325 – .390 site cleanup rules occurred in 1998 and 2016. ADEC has determined that cleanup has been performed to the maximum extent practicable even though residual fuel-contaminated soil exists on-site. Further cleanup was determined to be impracticable because the remaining contaminated soil is beneath the dispenser canopy foundation and underground storage tanks (USTs) and is not impacting groundwater.

The following institutional controls and standard conditions shall be maintained:

Institutional Controls

1. The Landowner agrees to notify ADEC prior to any sale or transfer of the property and shall report to ADEC every 2 years to document the status of compliance with the institutional controls described in this notice. Such notice and the reports should be sent to the ADEC at:



Alaska Department of Environmental Conservation
Division of Spill Prevention and Response
Contaminated Sites Program
Attention: IC Unit
P.O. Box 111800
Juneau, AK 99811-1800

or be submitted electronically to CS.Submittals@alaska.gov.

2. No groundwater wells shall be installed on the subject property without prior ADEC approval.
3. ADEC must be notified prior to any excavation around the dispenser canopy or USTs (see attached figure). If excavation or demolition activities make the remaining contaminated soil accessible it must be managed with an ADEC approved soil management workplan.
4. The gas station kiosk building on site is not currently used by site employees, customers, or visitors. If the usage of this building changes or new buildings are to be constructed, please provide prior notice to ADEC so that the potential for vapor intrusion can be evaluated.

Standard Conditions

1. ADEC approval is required prior to moving any soil or groundwater off any site that is, or has been, subject to the site cleanup rules in 18 AAC 78.600(h). A "site" as defined by 18 AAC 78.995(134) means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership. In the future, if soil will be excavated (or groundwater will be brought to the surface (for example to dewater in support of construction) it must be characterized and managed following regulations applicable at that time and ADEC approval must be obtained before moving the soil or water off the property.
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 characterization and treatment may be required to ensure the water is suitable for its intended use.

Attached is a site diagram drawn to scale that shows the property boundaries, locations of existing structures, and the approximate location and extent of remaining soil which is subject to the institutional controls described in this notice.



Failure to comply with the institutional controls described herein may result in ADEC reopening the site and requiring additional site characterization and cleanup.

In the event that new information becomes available which indicates that the site may pose an unacceptable risk to human health, safety, welfare or the environment, further site characterization and cleanup may be necessary under 18 AAC 78 Article 2.

This notice and the institutional controls remain in effect until a written determination from ADEC is recorded that documents contaminants remaining at the site have been shown to meet the residential use soil cleanup levels defined in 18 AAC 75.340 and groundwater cleanup levels in Table C within 18 AAC 75.345 and that off-site transportation of soil and/or groundwater are no longer a potential concern.

For more information on the contaminated site in this notice, please see ADEC Contaminated Sites Program file number 100.26.214 for the site named Sourdough Fuel #2518 (Former Plaza Texaco).

Phillip M. Tannehill
Signature of Landowner
Sec/Treas. COM Leasing Inc

10/3/17
Date

Phillip M. Tannehill
Printed Name of Landowner

Michael Hooper
Signature of Authorized ADEC Representative

10/4/2017
Date

Michael Hooper
Printed Name of Authorized ADEC Representative



Figure 1. Remaining Soil Contamination and property boundaries for institutional controls at Sourdough Fuel #2518, North Pole, Alaska

Institutional controls on this property require ADEC be notified prior to any excavation in the dispenser canopy or UST area. If excavation or demolition makes the remaining soil contamination accessible it must be managed with an ADEC approved workplan.

