



May 1, 2019

JMD Investments
ATTN: John & Peggy McCoy
P.O. Box 73808
Fairbanks, AK, 99707

**RE: Decision Document: Pruhs Industrial
Cleanup Complete Determination – Institutional Controls**

Dear Mr. and Mrs. McCoy:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Pruhs Industrial contaminated site located at Lot 1 of the Pruhs Industrial Park 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 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 the Pruhs Industrial site 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:

Pruhs Industrial
Lot 1, Pruhs Industrial Park
Fairbanks, AK

Name and Mailing Address of Contact Party:

John and Peggy McCoy
JMD Investments
P.O. Box 73808
Fairbanks, Alaska 99707

ADEC Site Identifiers:

File No.: 100.38.189
Hazard ID.: 4133

Regulatory Authority for Determination:

18 AAC 75

Site Description and Background

In 2005, Trans American Glass hired GaiaTech to perform both a Phase I and Phase II environmental site assessment (ESA) at 2611 Pickett Place. This property is one of eight lots referred to as the Pruhs Industrial Park, where warehouses were built in the early to mid-1980s for commercial and light industrial uses. The warehouse at 2611 Pickett Place is known as Warehouse #4, and is located on Lot 1 in the Pruhs Industrial Park. Two other warehouses (Warehouse #5 and #6) are also located on Lot 1.

The Phase I ESA at Warehouse #4 indicated potential environmental concerns were present, including a 300-gallon underground heating oil tank, historical use of the site including truck and small engine repair, and the presence of floor drains and a septic system. An on-site water well was also identified in the warehouse.

The Phase II ESA consisted of collecting soil and groundwater samples from seven locations around the property and sampling the drinking water well (see Figure 1 for sampling locations). GaiaTech did not identify significant soil impacts from the heating oil tank, the septic system or areas of staining at the site; however, impacted groundwater was found in the drinking water well and near the septic drain field. The drinking water well was located near the heating oil tank and was reportedly not being used for drinking water. Analytical results indicated benzene levels of 12.5 micrograms per liter ($\mu\text{g/L}$) in the drinking water well.

Several volatile organic compounds (VOCs) and polyaromatic hydrocarbons (PAHs) were detected in the temporary well GP-6. This well was located near the septic drain field and appeared to have been impacted by chemicals that had been released through floor drains from the warehouse, including: ethylbenzene (23.7 $\mu\text{g/L}$), naphthalene (70.20 $\mu\text{g/L}$), 1,2,4-trimethylbenzene (291 $\mu\text{g/L}$), and total xylenes (288 $\mu\text{g/L}$). The floor drains were reported to have been sealed prior to 2005.

Temporary wells GP-3 and GP-4, located near the west and south ends of the heating oil tank did not have detectable levels of benzene. Temporary well GP-1, located north of the warehouse near Pickett Place had a benzene level of 1.88 $\mu\text{g/L}$.

The property was sold to JMD Investments in October 2005 and the site assessment information was sent to ADEC and transferred to the Contaminated Sites Program in November 2005.

Contaminants of Concern

During the site investigation and cleanup activities at this site, samples were collected from soil and groundwater and analyzed for diesel range organics (DRO), benzene, toluene, ethylbenzene and xylene (BTEX), PAHs, and VOCs. Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern at this site:

- Benzene
- Ethylbenzene
- Naphthalene
- Xylene
- 1,2,4-Trimethylbenzene
- DRO

Cleanup Levels

Benzene, ethylbenzene, naphthalene, total xylenes, 1,2,4-trimethylbenzene, and DRO were detected in groundwater above the approved cleanup levels established in 18 AAC 75.345 Table C. Method 2 soil cleanup levels for these compounds for the under 40-inch precipitation zone are established in 18 AAC 75.341(c), Table B1 and 18 AAC 75.341(d), Table B2. Contaminants have not been detected above soil cleanup levels at this site.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)	Groundwater (µg/L)
Benzene	0.022	4.6
Toluene	6.7	1,100
Total Xylenes	1.5	190
1,2,4-Trimethylbenzene	0.610	15
Naphthalene	0.038	1.7
DRO	250	1,500

mg/kg = milligrams per kilogram

ug/L = micrograms per liter

Characterization and Cleanup Activities

In 2006, drinking water was resampled at Warehouse #4, and additional samples were collected from drinking water wells at Warehouse #5 and #6. The drinking water samples were found to contain benzene above the cleanup level, ranging from 9.5 to 16.8 µg/L. No contaminants were detected in drinking water wells in Warehouse #7 and #8 to the east, or in the Animal House Veterinary Hospital to the southeast. In 2008, benzene was detected, but did not exceed the groundwater cleanup level in the 2740 Picket Place drinking water well which is located approximately 350 feet to the northwest of Warehouse #4. Follow-up sampling was not conducted and the well is reported as not being used. Figure 2 shows the location of the warehouses, drinking water wells, and other groundwater sampling locations.

Additional site characterization investigation was conducted in 2010. Because the local groundwater flow direction, as determined by a nearby contaminated site, is to the northwest temporary monitoring wells were placed northwest of the contaminated drinking water wells at Warehouse #4, #5, and #6. Groundwater samples collected from two locations (MW-1 and MW-2) along Picket Place did not contain contaminants above groundwater cleanup levels. A monitoring well adjacent to, and west of, the Pruhs Industrial property (MW-1; Kobuk Feed and Fuel, Hazard ID: 24434, ADEC File No. 100.26.137) has been sampled yearly for BTEX, DRO and gasoline range organics (GRO). Benzene, ethylbenzene, xylene, GRO and DRO have been detected but not above groundwater cleanup levels. Based on these results, residual groundwater contamination does not appear to extend off the property. ADEC approves MW-1 and MW-2 along Picket Place as on-site alternative points of compliance for groundwater.

The drinking water wells in Warehouse's #4, #5, and #6 were decommissioned in 2012 following installation of water holding tanks.

Warehouse #4 floor drains were reported to have been sealed prior to 1997 in so they would no longer be an ongoing source of contamination into the septic systems and groundwater aquifer.

Vapor intrusion is not expected to affect the current slab-on-grad buildings on Lot 1 because free product is not present in the groundwater table, and groundwater contamination is greater than five feet beneath the building foundations.

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 exceed the cumulative risk criteria for human health. Cumulative risk at this site was calculated assuming a residential land use and using the highest detected concentrations of contaminants in the groundwater samples. The results indicate a cumulative carcinogenic cancer risk of 5 in 10,000 and a non-carcinogenic hazard index of 14. The potential cumulative risk is primarily through the ingestion of groundwater and inhalation of volatiles from groundwater.

The groundwater exposure pathways are controlled as institutional controls are in place to prevent well installation and future groundwater use 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 was not detected in surface soil (0 to 2 feet below ground surface).
Sub-Surface Soil Contact	De Minimis Exposure	Contamination was not found in subsurface soil above Table B1 human health or Table B2 ingestion cleanup levels.
Inhalation – Outdoor Air	De Minimis Exposure	Contamination was not found in subsurface soil above Table B1 human health or Table B2 inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	Exposure Controlled	Benzene, 1,2,4-trimethylbenzene and naphthalene may be present in groundwater at concentrations exceeding ADEC vapor intrusion target levels for groundwater, however the presence of clean fill between the groundwater and building slab mitigates exposure via this pathway.

		If land use changes, additional vapor intrusion assessment may be required per the Institutional Controls noted below.
Groundwater Ingestion	Exposure Controlled	Benzene, ethylbenzene, xylene, 1,2,4-trimethylbenzene, naphthalene and DRO may be present in groundwater at concentrations exceeding groundwater cleanup levels, but drinking water wells on the property were decommissioned and replaced with holding tanks and the area is now serviced by the municipal water system. The contaminant plume does not appear to extend off the property above cleanup levels. ICs have been recorded restricting installation of water wells on the property without prior ADEC approval.
Surface Water Ingestion	Pathway Incomplete	Contamination has not been detected in surface water and is not expected to migrate to surface water in the future.
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	Contamination is only present in the sub-surface near the water table which is greater than six feet below ground surface and is not expected to migrate to surface water.

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

Dissolved petroleum contamination remains in groundwater above levels suitable for unrestricted future use; however ADEC has approved alternative points of compliance for groundwater and the use of institutional controls to limit future exposure 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.

Institutional Controls

1. The Landowner agrees to notify ADEC prior to any sale or transfer of the property and shall report to ADEC every 5 years to document the status of compliance with the institutional controls described in this notice. Such notice and the reports should be submitted electronically to CS.Submittals@alaska.gov or 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

2. No groundwater wells shall be installed in the area covered by the institutional controls without prior ADEC approval.
3. If the use of the buildings change, such as for residential use (including schools or daycares), or if construction of other buildings are proposed on the property, ADEC must be notified and may require a vapor intrusion evaluation to determine if building occupants could be affected by vapors.

Standard Conditions

4. 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 (see 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. 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.
5. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
6. 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 4-6 above will remain in effect even after ICs are removed.

This determination is in accordance with 18 AAC 75.380 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: 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, 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) 451-2752 or via email at shawn.tisdell@alaska.gov.

Sincerely,



Shawn Tisdell
Environmental Program Specialist

Note: This letter is being transmitted to you in electronic format only. If you require a paper copy, let us know and we will be happy to provide one to you. In the interest of reducing file space, the Division of SPAR/Contaminated Sites Program is transitioning to electronic transmission of project correspondence.

Enclosures: Recorded NEC-IC Agreement (Includes site figure showing boundary of ICs)

cc (via email): Spill Prevention and Response, Cost Recovery Unit
David Pruhs, dpruhs@gci.net

Notice of Environmental Contamination and Institutional Controls

Grantor: State of Alaska
Department of Environmental Conservation
Contaminated Sites Program

Grantee: JMD Investments,
Pruhs Industrial

Legal Description: Lot 1, Pruhs Industrial Park

Recording District: 401

Return to: State of Alaska DEC
ATTN: Shawn Tisdell
610 University Avenue
Fairbanks, AK, 99709

John and Peggy McCoy
JMD Investments
P.O. Box 73808
Fairbanks, AK, 99707

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, JMD Investments, the Landowner of the subject property, hereby provides public notice that the property located at 2607, 2609 and 2611 Picket Place, Fairbanks, Alaska, 99709 and more particularly described as follows:

Lot 1, Pruhs Industrial Park, SE ¼ Section 17, Township 1 South, Range 1 West, Fairbanks Meridian; Plat Number 2003-100

has been subject to a discharge or release and subsequent cleanup of oil or other hazardous substances, regulated under 18 AAC 75, Article 3. 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 Pruhs Industrial with Hazard ID number 4133.

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 and 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 and welfare, or the environment.

ADEC determined, in accordance with 18 AAC 75.325 – .390 site cleanup rules, that cleanup has been performed to the maximum extent practicable even though residual fuel-contaminated soil and groundwater exists on-site. Further cleanup was determined to be impracticable because a large area of the remaining contaminated soil is beneath buildings and the specific pathway had not been determined by site characterization.

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 5 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 in the area covered by the institutional controls without prior ADEC approval.
3. If the use of the buildings change, such as for residential use (including schools or daycares), or if construction of other buildings are proposed on the property, ADEC must be notified and may require a vapor intrusion evaluation to determine if building occupants could be affected by vapors.

Standard Conditions

4. 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 (see 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. 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.
5. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
6. 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.

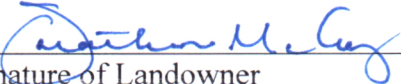
An attached diagram drawn to scale shows the property boundaries, locations of existing structures, and the approximate location and extent of remaining soil and/or groundwater contamination which is subject to the institutional controls described in this notice.

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 75.325-.390.

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 100.38.189 for the site named Pruhs Industrial.



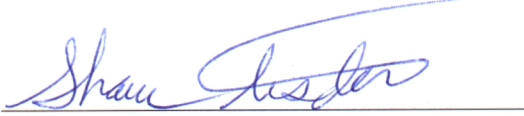
Signature of Landowner

3-5-19

Date

Jonathan McCoy

Printed Name of Landowner



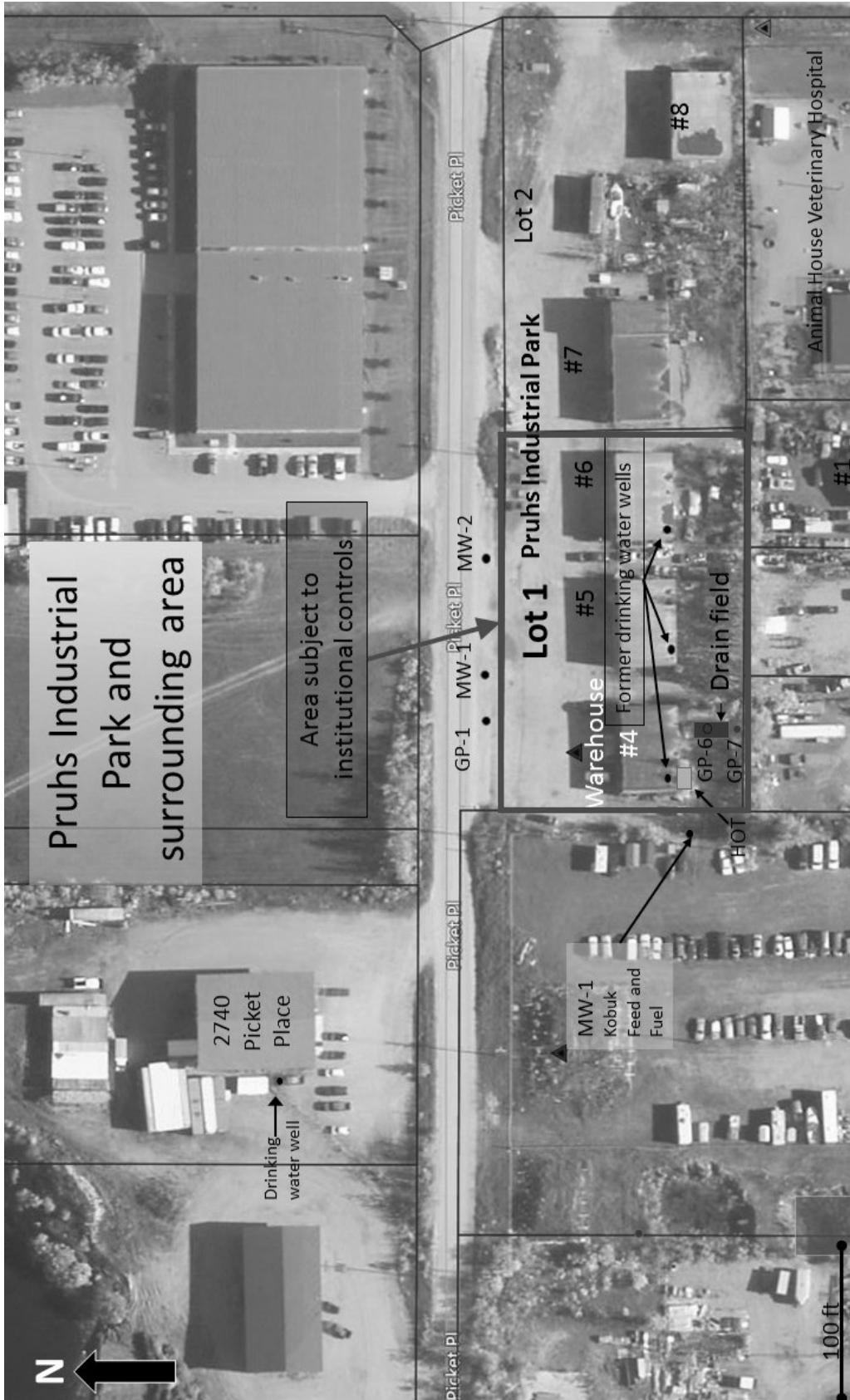
Signature of Authorized ADEC Representative

3-8-2019

Date

Shawn Tisdell

Printed Name of Authorized ADEC Representative



Site figure indicating area subject to institutional controls described in this notice