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: 100.26.595

January 13, 2016

Mr. Jeff Judd
Cook Inlet Housing Authority
3510 Spenard Rd. Suite 100
Anchorage, AK 99503

Re: Decision Document: Commercial Property 3608 Spenard Rd
Cleanup Complete Determination – Institutional Controls

Dear Mr. Judd:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the environmental records for the site Commercial Property - 3608 Spenard Rd. located in Anchorage, AK. This decision letter memorializes the site history, cleanup actions, and specific conditions required to effectively manage remaining contamination. No further remedial action will be required as long as compliance with these conditions is maintained.

Site Name and Location:
Commercial Property- 3608 Spenard Road
3608 Spenard Rd
Anchorage, AK, 99503

Name and Mailing Address of Contact Party:
Mr. Jeff Judd
Cook Inlet Housing Authority
3510 Spenard Road, Suite 100
Anchorage, AK, 99503

DEC Site Identifiers:
File No: 2100.26.595
Hazard ID: 26484

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

Site Description and Background
Groundwater contamination is present at 3608 Spenard Road as a result of releases from the neighboring property at 3607 Spenard Road. In September 1995 Tesoro- Olson Gas Services Store #1 located at 3607 Spenard Road removed nine underground fuel storage tanks (USTs) ranging in volume from 500 to 12,000 gallons. The USTs reportedly contained diesel fuel, unleaded premium and regular gasoline, and used oil. The investigation following the removal of the tanks indicated that the tanks had leaked and that petroleum contamination had migrated through groundwater to 3608 Spenard Road. For a complete environmental history of this source area, please see ADEC file number 2100.26.072.

Contaminants of Concern
During the course of the investigations associated with the original source area, soil and groundwater samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), and volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on these analyses, the following contaminants of concern were identified in groundwater.

- GRO
- DRO
- Benzene
- Toluene
- Ethylbenzene
- Xylenes

Cleanup Levels
Benzene was detected in groundwater above the approved groundwater cleanup levels established in 18 AAC 75.345, Table C.

Table 1 – Approved Cleanup Levels

Contaminant	Groundwater (mg/L)
GRO	2.2
DRO	1.5
Benzene	0.005
Toluene	1.0
Ethylbenzene	0.7
Xylenes	10

mg/L = milligrams per liter

Characterization and Cleanup Activities
Characterization and cleanup activities conducted under the regulatory authority of the Contaminated Sites Program began in 1995 during the UST removal effort, when approximately 100 tons of petroleum impacted soil was removed from 3607 Spenard Road for thermal treatment at an offsite facility. Sixteen groundwater monitoring wells were then installed and sampled between 1996 and 2013 to investigate the extent of the contaminant plume in groundwater. Monitoring wells MW-5, MW-9, MW-13, MW-14 and MW-16 were all located on the 3608 Spenard Rd property however only MW-5, MW-9, MW-13, and MW-14 remain. (Attachment B).

Over the course of the groundwater monitoring effort at 3608 Spenard road, GRO was detected up to 130 mg/L, DRO up to 2.21 mg/l, benzene up to 7.07 mg/l, toluene up to 33.6 mg/l, ethylbenzene up to 6.62 mg/l and total xylenes up to 28.49 mg/l. Recent data indicates the contaminant plume has attenuated and benzene is the only contaminant that currently exceeds cleanup levels at 0.0674 mg/l in MW-5 in 2013. Another sampling event conducted in 2015 found benzene at .00948 mg/l in MW-14, located on the downgradient edge of the plume at 3608 Spenard Rd. Soil samples collected during the most recent round of monitoring well installation did not contain detectable concentrations of contaminants.

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 the cumulative cancer risk is exceeded at this site if benzene-contaminated groundwater were to be used as a drinking water source. Groundwater is not currently used at the property for drinking water, the public water supply is readily available and an institutional control will be placed on the property stating that groundwater may not be used as a drinking water source in the future.

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	Pathway Incomplete	Contamination is not present in sub-surface soil (2 to 15 feet below ground surface)
Inhalation – Outdoor Air	Pathway Incomplete	Clean soil between the surface and the water table indicate this pathway is incomplete.
Inhalation – Indoor Air (vapor intrusion)	Exposure Controlled	Contamination remains in groundwater above the residential vapor intrusion screening level however there are currently no structures present at the site and any future development at the site must account for the vapor intrusion pathway.
Groundwater Ingestion	Exposure Controlled	Benzene contamination remains above the groundwater cleanup level however groundwater is not currently used as a drinking water source and an institutional control will be placed on the property stating that groundwater may not be used as a drinking water source without approval from ADEC. New wells may not be installed without ADEC approval.

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	Ecological receptors are not likely to come into contact with groundwater contamination remaining at the site.

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 administrative mechanism in place limiting land or groundwater use, or a physical barrier in place that deters contact with residual contamination.

ADEC Decision

Benzene contamination remains in groundwater above the approved cleanup level; however ADEC has determined there is no unacceptable risk to human health or the environment as long as the contamination is properly managed.

A Notice of Environmental Contamination (deed notice) shall be recorded in the State Recorder's Office as an institutional control (IC) that identifies the nature and extent of contamination at the property and the conditions that the owners and operators are subject to in accordance with this decision document. These conditions are as follows:

1. Any future change in land use may impact the exposure assumptions cited in this document. If land use and/or ownership changes, these management conditions may not be protective and ADEC may require additional remediation and revised conditions. Therefore Cook Inlet Housing Authority shall report to ADEC every 5 years to document land use, or report as soon as Cook Inlet Housing Authority becomes aware of any change in land ownership and/or use, if earlier. **The report can be sent to the local ADEC office or electronically to DEC.ICUnit@alaska.gov.**

2. Groundwater wells may not be installed without the prior approval of the ADEC Contaminated Sites Program.

3. Future development at the site must account for the vapor intrusion pathway either by documenting that the pathway is incomplete or installing engineering controls, such as a vapor barrier to eliminate potential exposure.

4. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 75.325. 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.)

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

The ADEC Contaminated Sites Database will be updated to reflect the change in site status as detailed above, and will include a description of the contamination remaining at the site. Institutional controls will be removed in the future if documentation can be provided that shows cleanup levels have been met. Management conditions 5-7 remain in effect 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 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 99811-1800, 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 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.

Please sign and return *Attachment A* to ADEC <u>within 30 days of receipt of this letter</u>. If you have questions about this closure decision, please feel free to contact me at (907) 269-7522.

Sincerely,

for

Chelsy Passmore
Project Manager

Attachment A: Cleanup Complete Agreement and ICs Signature Page
Attachment B: Site Figure

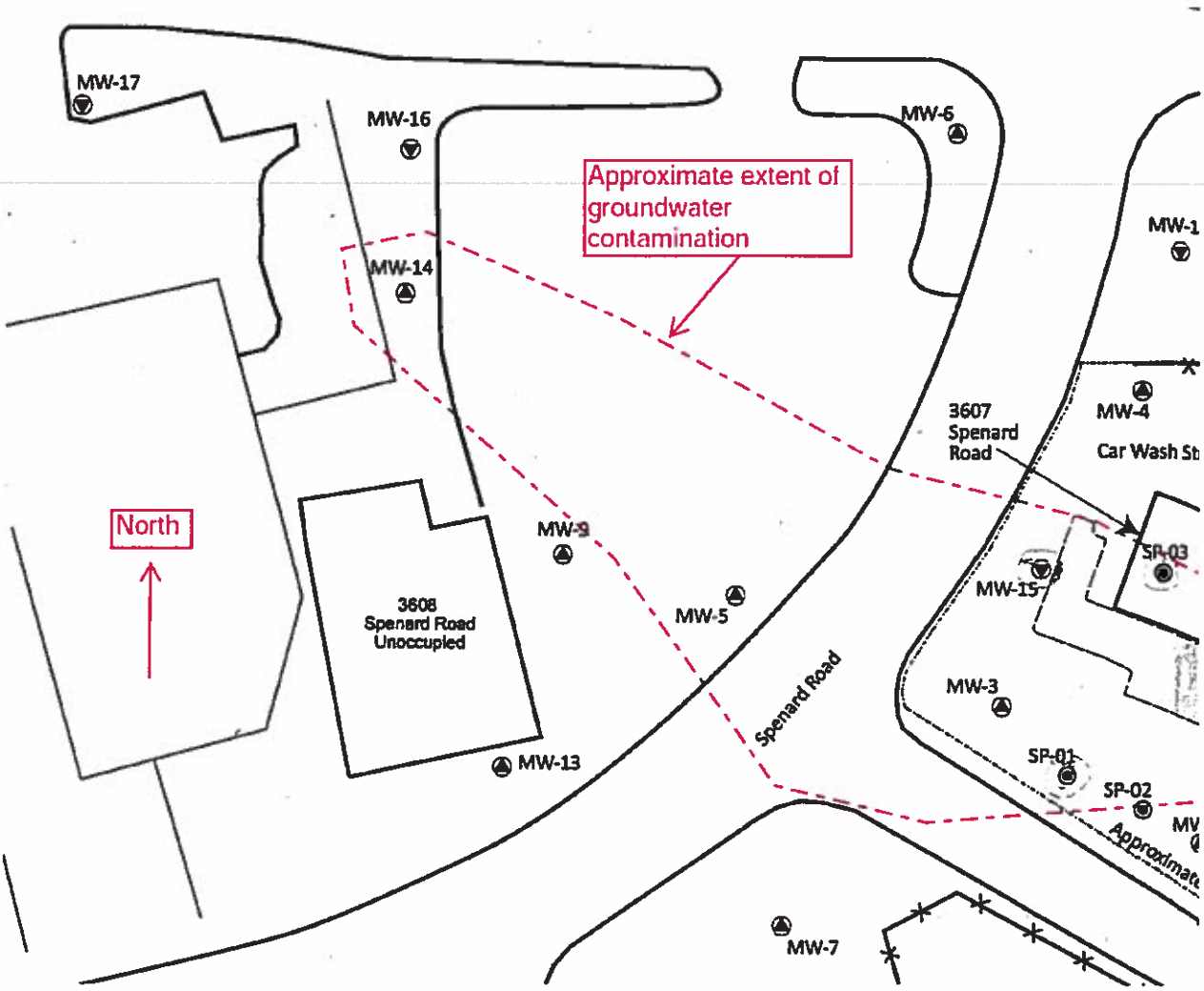
Attachment A: Cleanup Complete-ICs Agreement and Signature Page*

Cook Inlet Housing Authority agrees to the terms and conditions of this Corrective Action Complete Determination, as stated in decision letter for the Commercial Property- 3608 Spenard Road, dated January 13, 2016. Failure to comply with the terms and conditions of the determination may result in ADEC reopening this site and requiring further remedial action in accordance with18 AAC 18 AAC 78.276(f).

Signature of Authorized Representative, Title
CIHA

1-14-2016
Date

CAROL GORE, PRESIDENT/CEO
Printed Name of Authorized Representative, Title
CIHA

Note to Responsible Person (RP):
After making a copy for your records, please return a signed copy of this form to the ADEC project manager at the address on this correspondence within 30 days of receipt of this letter.

Attachment B- Site Figure