THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

410 Willoughby Avenue, Suite 303
P.O. Box 111800
Juneau, AK 99811-1800
Phone: 907-465-5390
Fax: 907-465-5218
www.dec.alaska.gov

File: 1513.38.086

September 22, 2016

Mr. Daniel Hickok
DeHarts Store
11735 Glacier Highway
Auke Bay, AK 99821

Re: Decision Document: DeHarts Store – 11735 Glacier Highway
Cleanup Complete Determination – Institutional Controls

Dear Mr. Hickok,

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the DeHarts Store – 17735 Glacier Highway. 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 DeHarts Store – 17735 Glacier Highway which is located in the offices of the DEC in Juneau, 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:
DeHarts Store – 17735 Glacier Highway
11735 Glacier Highway
Auke Bay, AK 99821
Lot 2A USS 2664 and CBJ parcel 4B2801010021

Name and Mailing Address of Contact Party:
Daniel Hickok
11735 Glacier Highway
Auke Bay, AK 99821

DEC Site Identifiers:
File No.: 1513.38.086
Hazard ID.: 25791

Regulatory Authority for Determination:
18 AAC 75

Site Description and Background

The DeHarts Store is located at the road entrance to Auke Bay's Statter Harbor, at latitude 58.386011° north and longitude 134.644674° west. The store currently operates a diesel and gasoline fueling station, as well as a ground floor retail store and fry shop, and second story apartments. Properties in the vicinity are mixed light commercial and residential. Statter Harbor is about 175 feet southeast of the Site. The store is constructed on pilings, with an enclosed crawlspace under the northern portion of the building measuring approximately 860 square feet. The crawlspace height varies from six feet to two and a half feet, resulting in an interior volume of roughly 3500 cubic feet. The soil in the crawlspace is pit run with organics and groundwater is one to two feet below ground surface (BGS).

Nortech Environmental Inc. (Nortech) performed the initial characterization at the referenced site during the spill response activity on March 23, 2009, after a vehicle had collided with an aboveground heating oil storage tank (AST) positioned on the north side of the building. The collision severed the boiler supply line and drained an estimated volume of between 600 and 700 gallons of fuel. DEC spill responders at the scene observed that fuel had flowed downhill from the AST into the building crawlspace and, to a lesser degree, onto the driveway beside the tank. Fuel flowing through the crawlspace entered the building foundation's drain system that collects and re-directs excess water to a subsurface piping system that daylights at the shoreline of Auke Bay. Assisted by DEC oil spill responders, Nortech installed two oil-water separators in the drainage system to capture as much fuel as feasible from reaching marine waters. One was placed near the corner of the building and a second was placed at the end of the pipe just above the beach. The effort resulted in recovering approximately 75 gallons of fuel.

On April 28, 2009, Nortech used field screening methods to direct the excavation of an estimated volume of 80 cubic yards of heating oil contaminated soil from around the outside of the building foundation. With DEC approval the contaminated soil was transported to Bicknell's asphalt batch plant for remediation via asphalt incorporation. Nortech chose analytical confirmation samples of remaining soil from among soil screening samples to verify removal effectiveness and waste characterization samples from soil transported off-site for remedial treatment. Soil confirmation samples CL01-CL09 collected at the limits of the removal excavation all had diesel range (DRO) hydrocarbon concentrations below the laboratory reporting limit and the Method Two migration to groundwater cleanup level. Waste characterization samples CZ01 and CZ02 had DRO concentrations of 11,400 mg/kg and 4,640 mg/kg.

Site Photographs: Nortech 2009 Spill Response Report

Excavation area on east side of building.

In September, 2010, Nortech collected three soil samples and a field duplicate from soil in the building crawlspace at depths near the interface with groundwater ranging between one and two feet BGS. Samples CZ01 and the field duplicate collected at the north end of the crawlspace had DRO concentrations of 18,300 and 18,500 mg/kg respectively. Sample CZ02 and CZ03 collected at the south end and center of the crawlspace had DRO concentrations of 3,770 and 41 mg/kg respectively. Nortech estimated that 30 cubic yards of contaminated soil remained in the building crawlspace.

In August 2011 Nortech collected three soil samples and a duplicate from crawlspace soil for laboratory analysis. The highest result with silica gel treatment was sample CR03 with a DRO concentration of 38,900 mg/kg. The silica gel pre-treatment of the sample reduced the DRO concentration by an estimated 35%, when compared to the baseline DRO analysis. The result indicated biogenic interference. CR03 was collected from the area in the crawlspace closest to the former AST, but from a depth six inches shallower than the 2010 sample, which was collected at two feet BGS.

In a letter to the facility owner in December 2011, DEC provided notification of the transfer of cleanup oversight from the Preparedness and Emergency Response Program to the Contaminated Sites Program.

Contaminants of Concern
During the site investigation and cleanup activities at this site, samples were collected from soil and analyzed for gasoline (GRO) and diesel (DRO) range hydrocarbons and benzene, toluene, ethylbenzene, and total xylenes (BTEX) hydrocarbon compounds. Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern at this site:

- Diesel Range Hydrocarbons (DRO)
- Benzene

Cleanup Levels
Title 18 Alaska Administrative Code (AAC) 75.340 authorizes DEC to set soil cleanup levels for this site. The facility is a commercial enterprise with residential land use and shallow, intermittent groundwater. The most stringent levels of all applicable pathways under Method Two soil cleanup levels for the over 40-inch precipitation zone, established in 18 AAC 75.341(c), Table B1, and 18 AAC 75.341 (d), Table B2 apply to the Site. Groundwater criteria list in Table C at 18 AAC 75.345(b)(1) also apply, and surface water as referenced in 18 AAC 75.345(f) must meet the Water Quality Standards found in 18 AAC 70 for TAqH and TAH (volatile and semi-volatile hydrocarbons). Although groundwater is intermittent and shallow, it was not investigated for contamination. Soil cleanup levels protective of migration to groundwater and surface water still apply.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)	Groundwater (mg/L)	Surface Water (ug/L)	Indoor Air (ug/m^3)
DRO	230	N/A	N/A	N/A
Benzene	0.025	N/A	N/A	3.1
TAqH	N/A	N/A	15.0	N/A
TAH	N/A	N/A	10.0	N/A

mg/kg = milligrams per kilogram

mg/L = milligrams per liter
ug/L = micrograms per liter
ug/m³ = micrograms per cubic meter

Characterization and Cleanup Activities

Characterization and cleanup activities conducted under the regulatory authority of the Contaminated Sites Program began in 2012. These activities are described below.

In September, 2012, and in June 2013, Nortech collected soil samples and a field duplicate from the building crawlspace soil at depths near the interface with groundwater between one and two feet BGS. Soil samples D-3, collected in 2012, and D001 collected in 2013, had DRO concentrations of 8,940 and 3,680 mg/kg respectively. Nortech estimated that between 20 and 40 cubic yards of contaminated material remains in the crawlspace of the building and recommended mixing fertilizer with the crawlspace soil.

In February, 2014, DEC approved a Corrective Action Plan (CAP) submitted by Nortech to characterize contamination in the building crawlspace soil for BTEX and DRO. The CAP included the mixing of a proprietary chemical oxidant RegenOx and a slow release oxygen release compound Regenesis ORC-A with soil in the crawlspace to aid in remediating hydrocarbons in the soil. During the addition mixing session in June 2014, Nortech installed exhaust fans to produce sufficient negative pressure to remove any vapors generated by the mixing from the crawlspace.

By letter in December, 2015, DEC approved a sampling report in which Nortech had collected four samples from the crawlspace soil at a depth of four feet. The highest concentration of DRO was 473 mg/kg in sample CL0815-11 which, as a duplicate to sample CL-3A, exceeded the cleanup level, and sample CL0815-7 collected in the center of the crawlspace had the highest concentration of benzene at 0.186mg/kg which also exceeded the cleanup level. Locations are shown in the attached figure below.

In April, 2016, Nortech collected six soil screening samples at previous boring locations in the crawlspace at depths of 1.5 feet BGS to direct the collection of confirmation soil samples analyzed for BTEX compounds. Samples taken during the 2016 sampling had results with benzene levels below DEC cleanup levels, except at location CL-7A where a benzene concentration of 0.0768 mg/kg was detected, slightly above the cleanup level.

Indoor air samples were collected over a 24 hour time span using six liter summa canisters. One canister was placed in the convenience store section and two canisters (sample and duplicate) were placed in the upstairs lobby area between the apartments. The canisters were shipped to ALS Laboratories under appropriate chain of custody and were analyzed for TO-15 volatile organic compounds.

The DEC Vapor Intrusion Guidance for Contaminated Sites, October 2012, Appendix D, target levels for residential indoor air were used to evaluate the data. The residential criteria was chosen as there are tenants at the location, as well as these criteria are more restrictive. BTEX compounds are found at levels below the DEC target levels for indoor air listed above. Benzene results were 2.17 µg/m3 and 2.20 µg/m3 for samples DHA-1 and DHA-2 respectively. Ethylbenzene was not detected for all samples. Other compounds present are consistent with laboratory solvents, such as acetone and chloromethane, and cleaning solutions (2-propanol).

Table 1 displays the highest levels detected in soil remaining at the site, the sample depth, and the Method Two (M2) Migration to Groundwater (MTG) cleanup levels. Levels shown in bold are above the applicable cleanup levels and represent the contaminant(s) of concern.

Table 2 the greatest levels of analytes detected in remaining soil at the site.

Hydrocarbon range and compounds of concern	Greatest level in soil mg/kg and date	Sample name and depth below the surface	M2 MTG Cleanup Levels mg/kg
DRO	**473 (8/14/15)**	CL-11 at 4 feet	230
Benzene	**0.0768 (4/13/16)**	CL07 at 4 feet	0.025

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, DEC 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	De-minimis exposure	Final characterization/confirmation sample results indicate surface soil meets the direct contact cleanup levels.
Sub-Surface Soil Contact	De-minimis exposure	Final characterization/confirmation sample results contained a maximum DRO concentration of 478 mg/kg and benzene of 0.0768 mg/kg which are below the direct contact cleanup level. Furthermore, this soil is in a crawlspace and is not be accessible.
Inhalation – Outdoor Air	Pathway Incomplete	Contamination is below inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	Occupied buildings are present and data for volatile petroleum constituents are below the inhalation screening levels.

Groundwater Ingestion	Exposure controlled	Groundwater is not a potential drinking water source and institutional controls restrict the installation of wells preventing contact with residual contamination.
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 flora or fauna.
Exposure to Ecological Receptors	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.

Notes to Table 2: "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.

DEC Decision

Petroleum contamination remains in sub-surface soil and the use of institutional controls limits potential future exposure and risk to human health or the environment. A Notice of Environmental Contamination has been 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. DEC 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. A restriction on installing groundwater wells or using groundwater from the site without prior DEC approval.

Standard site closure conditions that apply to all sites include:

1. Any proposal to transport soil or groundwater off-site requires DEC approval in accordance with 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.
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 testing 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 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 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.

Please sign and return *Attachment 1* to DEC within 30 days of receipt of this letter. If you have questions about this closure decision, please contact the DEC project manager, Bruce Wanstall at (907) 465-5210.

Sincerely,

Bruce Wanstall

Bruce Wanstall
Remedial Project Manager
Contaminated Sites Program

Enclosures: Signature page
Site Figure
Copy of recorded NEC-IC Agreement

cc: Sally Schlichting, DEC Unit Manager, CS Program, via email
DEC SPAR Cost Recovery, via email

Mr. Daniel Hickok
DeHarts Store – 11735 Glacier Highway

September 22, 2016

Attachment 1: Corrective Action Complete-ICs Agreement and Signature Page*

The owner/operator agrees to the terms and conditions of this Corrective Action Complete Determination, as stated in decision letter for the DeHarts Store – 11735 Glacier Highway, dated September 23, 2016. Failure to comply with the terms and conditions of the determination may result in DEC reopening this site and requiring further remedial action in accordance with 18 AAC 75.380(d).

_____ _____

Signature of Authorized Representative, Title
Responsible Party/Company Representative

Date

_____

Printed Name of Authorized Representative, Title
Responsible Party/Company Name

Institutional controls necessary to support this closure determination include:

1. A restriction on installing groundwater wells or using groundwater from the site without prior DEC approval.

Standard site closure conditions that apply to all sites include:

2. Any proposal to transport soil or groundwater off-site requires DEC approval in accordance with 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.
3. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
4. 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.

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.

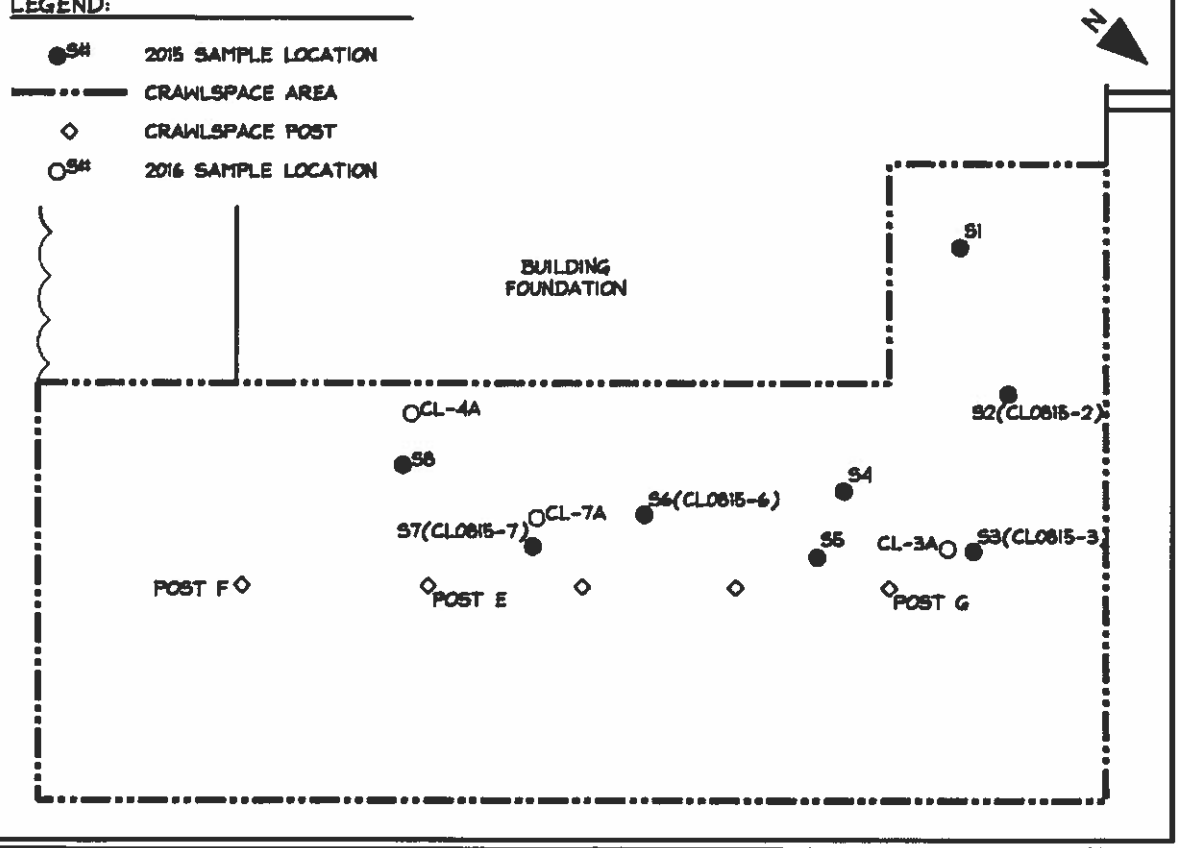
Note to Responsible Person (RP):
After making a copy for your records, please return a signed copy of this form to the ADEC project manager at the address on this correspondence within 30 days of receipt of this letter.

Attachment 2. Site Figure

Comparison of 2015 and 2106 Sample Locations

Sample ID	ADEC	CL-3		CL-4A	CL-7		CL-11	
Sample Collection Date		8/14/15	4/13/16	4/13/16	8/14/15	4/13/16	8/14/15	4/13/16
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Petroleum Fractions								
DRO	230	183			25.4U		473	
RRO	8300	24.4U			25.4U		28.8	
GRO	260	8.26			5.71U		14.1	
BTEX								
Benzene	0.025	0.0695	0.0209 J	0.0225 U	0.186	0.0788	0.0518	0.0117 J
Ethylbenzene	6.9	0.1190	0.0222 J	0.0450 U	0.0588	0.283	0.0972	0.0181 J
Total Xylenes	63	0.6595	0.089	0.2955 J	0.88	1.2853	0.5205	0.0932 J
Toluene	6.5	0.0872	0.018 J	0.0288 J	0.0571U	0.0217 J	0.0536	0.0183 U

Bold	Analyte detected in concentration above the ADEC Cleanup level
Shade	Analyte detected in concentration below the ADEC Cleanup level
# U	Analyte not detected at the listed limit of quantitation (LOQ)
# J	Analyte detected below the laboratory limit of quantitation (LOQ)
CL-11	Duplicate pair to CL-3



NORTECH
SUSTAINABLE ENVIRONMENT, ENERGY, HEALTH & SAFETY

2016 Sample Locations and Results
2016 Remediation Assessment Sampling
11735 Glacier Highway
Juneau, Alaska

SCALE: 1" = 7' | FIGURE: 3
DESIGN: AB
DRAWN: BPCATER
PROJECT NO: [illegible]
DWG: [illegible]
DATE: 6/20/2016

CC

ALASKA

2016-004671-0

Recording District 101 Juneau

09/22/2016 11:29 AM Page 1 of 4

Notice of Environmental Contamination

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

Grantee: DeHart's Store – 11735 Glacier Highway
Daniel Hickok

Legal Description: Lot 2A USS 2664 and CBJ parcel 4B2801010021

Recording District: Juneau Recorders Office

Return to: Bruce Wanstall
410 Willoughby Suite 302
PO Box 111800
Juneau AK 99811

State Business- No Charge

NOTICE OF ENVIRONMENTAL CONTAMINATION

As required by the Alaska Department of Environmental Conservation, Grantor, pursuant to 18 AAC 75.375, Daniel Hickok Grantee(s), as the owner and operator of the subject property, hereby provides public notice that the property located at: 11735 Glacier Highway, Auke Bay, Alaska, 99821 and more particularly described as follows:

Lot 2A USS 2664 and CBJ parcel 4B2801010021

has been subject to a discharge or release and subsequent cleanup of oil or other hazardous substances, regulated under 18 AAC 75, Article 3, revised as of April 8, 2012. 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 Hazard ID number 2579.

ADEC reviewed and approved, subject to this and other institutional controls, the cleanup as protective of human health, safety, welfare, and the environment. No further cleanup is necessary at this site unless new information becomes available that indicates to ADEC that the site may pose an unacceptable risk to human health, safety, 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 soil contamination exists on-site in the building crawlspace. Additional cleanup was determined to be impracticable.

Attached is a site survey or diagram drawn to scale that shows the approximate location and extent of remaining soil contamination and the locations where confirmation soil samples were collected.

Institutional controls necessary to support this closure determination include:

1. A restriction on installing groundwater wells or using groundwater from the site without prior DEC approval.

Standard site closure conditions that apply to all sites include:

1. Any proposal to transport soil or groundwater off-site requires DEC approval in accordance with 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.
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 testing and treatment may be required to ensure the water is suitable for its intended use.

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.

In the event that the remaining contaminated soil becomes accessible, by the building or other structure being removed or through some other action that fits the site circumstances, or other information becomes available which indicates that the site may pose an unacceptable risk to human health, safety, welfare or the environment, the land owner and/or operator are required under 18 AAC 75.300 to notify ADEC and evaluate the environmental status of the contamination in accordance with applicable laws and regulations; further site characterizations and cleanup may be necessary under 18 AAC 75.325-.390.

Pursuant to 18 AAC 75.325(i)(1) and (2), DEC approval is required prior to moving soil or groundwater that is, or has been, subject to the cleanup rules found at 18 AAC 75.325-.370. At this site, in the future, if soil is removed from the site it must be characterized and managed following regulations applicable at that time.

This NEC remains in effect until a written determination from ADEC is recorded that states that soil at the site has been shown to meet the most stringent soil cleanup levels in method two of 18 AAC 75.340 and that off-site transportation of soil is not a concern.

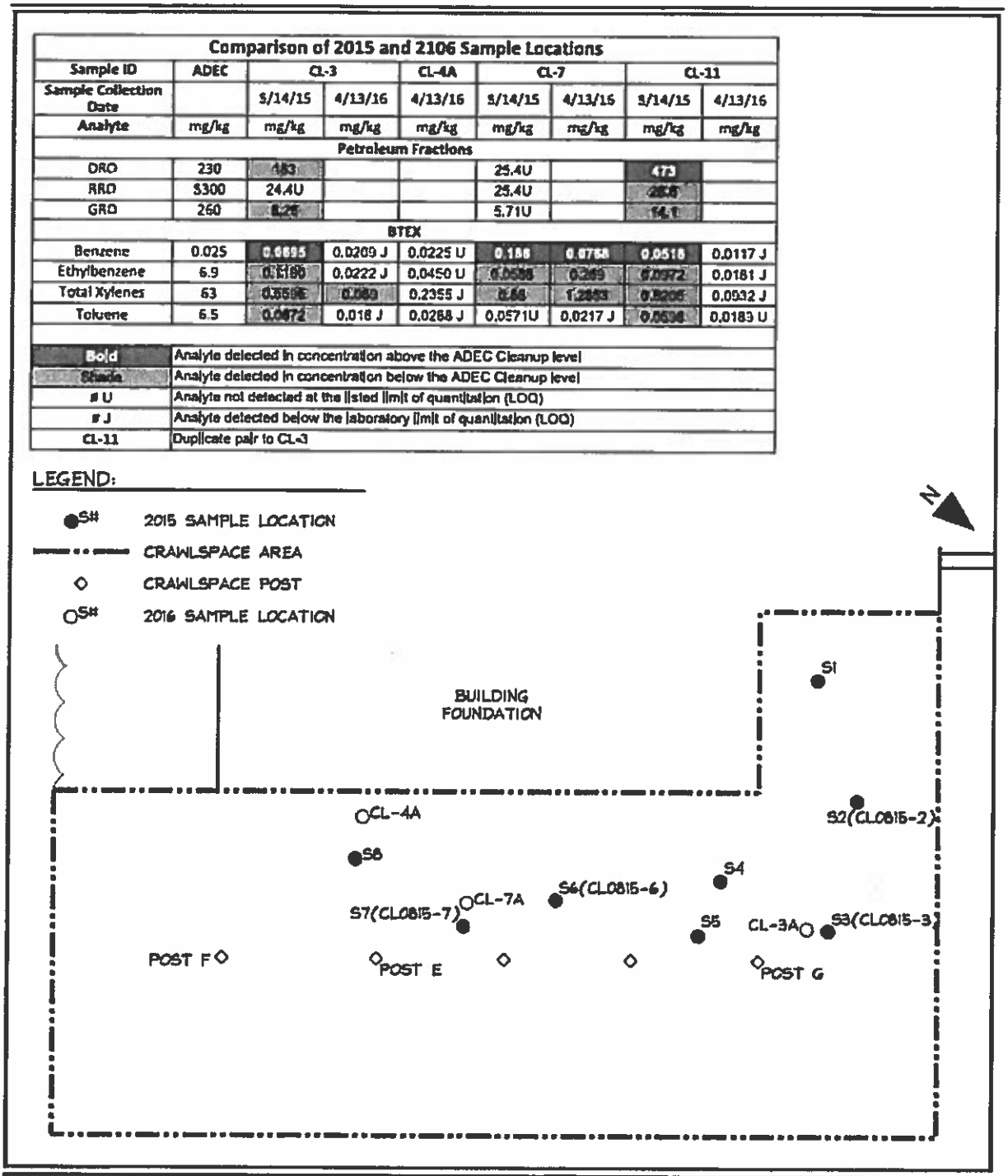
For more information on the contaminated site in this Notice of Environmental Contamination, please see ADEC Contaminated Sites Program file number 1513.38.086 for the site named DeHart's Store – 11735 Glacier Highway.

Bruce Vanstall — 9/22/2016

Signature of Authorized ADEC Representative — Date

Site Figure 1

Comparison of 2015 and 2106 Sample Locations								
Sample ID	ADEC	CL-3		CL-4A	CL-7		CL-11	
Sample Collection Date		5/14/15	4/13/16	4/13/16	5/14/15	4/13/16	5/14/15	4/13/16
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Petroleum Fractions								
DRO	230	183			25.4U		473	
RRO	9300	24.4U			25.4U		2805	
GRO	260	8.26			5.71U		14.1	
BTEX								
Benzene	0.025	0.0695	0.0269 J	0.0225 U	0.188	0.0758	0.0518	0.0117 J
Ethylbenzene	6.9	0.2190	0.0222 J	0.0450 U	0.0588	0.269	0.0972	0.0181 J
Total Xylenes	63	0.3598	0.080	0.2355 J	0.68	1.2853	0.5206	0.0932 J
Toluene	6.5	0.0872	0.018 J	0.0288 J	0.0571U	0.0217 J	0.0534	0.0183 U
Bold	Analyte detected in concentration above the ADEC Cleanup level							
Shade	Analyte detected in concentration below the ADEC Cleanup level							
# U	Analyte not detected at the listed limit of quantitation (LOQ)							
# J	Analyte detected below the laboratory limit of quantitation (LOQ)							
CL-11	Duplicate pair to CL-3							



NORTECH
SUSTAINABLE ENVIRONMENT, ENERGY, HEALTH & SAFETY
3400 College Road, Fairbanks, AK. 99709, 907-452-5688
3105 Lakeshore Dr. Ste.A106, Anchorage, AK. 99517 907-222-0445
5429 Shaune Dr. Ste.B, Juneau, AK. 99801 907-586-6813

2016 Sample Locations and Results
2016 Remediation Assessment Sampling
11735 Glacier Highway
Juneau, Alaska

SCALE: 1" = 7'	FIGURE: 3
DESIGN: AB	
DRAWN: BPC/CTR	
PROJECT NO: 13-102	
DWG: 13102(09)	
DATE: 5/20/2016	