



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of Environmental
Conservation

Division of Spill Prevention and Response
Contaminated Sites Program

610 University Ave.
Fairbanks, Alaska 99709-3643
Main: 907.451.2127
Fax: 907.451.5105

File: 100.26.175

January 27, 2014

John Goodhand
P.O. Box 90
Ester, AK 99725

Re: Decision Document: Cripple Creek Tire and Automotive
Corrective Action Complete Determination – Institutional Controls

Dear Mr. Goodhand:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the environmental records for the referenced site. 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:

Cripple Creek Tire and Automotive
2502 George Parks Highway
Fairbanks, Alaska 99701

Name and Mailing Address of Contact Party:

John Goodhand
P.O. Box 90
Ester, AK 99725

ADEC Site Identifiers:

File No: 100.26.175
Hazard ID: 24792

Regulatory Authority for Determination:

18 AAC 75 and 18 AAC 78

Background

Cripple Creek Tire and Automotive was listed as a contaminated site in 1998 following removal of three gasoline underground storage tanks (USTs) and the associated dispenser and piping. During the UST removal, 250 cubic yards (CY) of soil were removed and stockpiled on the site. Soil samples were collected at the limits of the excavation and analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), gasoline range organics (GRO), and lead. Results from these samples indicated that all of the samples contained BTEX or GRO above ADEC soil cleanup levels (18 AAC 75), with the highest results along the western edge of the excavation and under the dispensers. Lead was not found above cleanup levels.

Contaminants of Concern

During the investigations at this site, soil and/or groundwater samples were analyzed for the following constituents: gasoline range organics (GRO); diesel range organics (DRO); benzene, toluene, ethylbenzene, and xylene (BTEX); total lead; 1,2-dibromoethane (EDB), and polycyclic aromatic hydrocarbons (PAHs).

Based on these analyses and knowledge of the source area, the following Contaminant of Concern were identified in soil:

- Gasoline Range Organics (GRO)
- Benzene
- Toluene
- Ethylbenzene
- Total Xylenes

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B2, Migration to Groundwater Pathway for the Under 40 inch Zone.

Contaminant	Site Cleanup Level (mg/kg)
Benzene	0.025
Toluene	6.5
Ethylbenzene	6.9
Total Xylenes	63
GRO	300

mg/kg = milligrams per kilogram

Site Characterization and Cleanup Activities

Following the removal of the USTs in 1998, a release investigation found that the highest levels of gasoline contamination remained in subsurface soil south of the former tank area between 5 and 18 feet below ground surface (ft bgs). The highest concentration was found beneath the former dispensers at 5.5 ft bgs, where benzene was detected up to 104 mg/kg and GRO up to 9,240 mg/kg. Groundwater was not encountered during the release investigation and no information is available about depth of groundwater on the site; however, drinking water wells in the area typically extend through permafrost to depths of more than 100 ft. Permafrost was observed as shallow as 5 ft during the release investigation.

A portion of the original 250 CY stockpile was removed during a Department of Transportation road construction project, and the location of this soil is not known. The rest of the stockpile was sampled and determined to have met ADEC cleanup levels in 2007. The soil was then spread on site or used as fill in later excavations.

Further excavation was completed in 2007 and 2008 and removed an additional 200 CY of contaminated soil, which was landfarmed on the northeastern portion of the lot in an area separated from site visitors and nearby residents with a chain-link fence.

The 2007 and 2008 excavation focused on an area south of the former tank area and removed soil down to approximately 8 feet below ground surface and into frozen ground (see attached figure; Amundsen Environmental Service, 2008). Confirmation soil samples at the limits of the excavations indicated that BTEX and GRO remain above ADEC's most stringent cleanup levels, with GRO detected up to 761 mg/kg and benzene detected up to 39.8 mg/kg after the 2008 work. Some compounds exceeded the soil cleanup levels for outdoor inhalation; however, this contamination is located approximately 8 ft below ground surface and is not likely to affect outdoor air unless the soil is exposed.

ADEC staff inspected the building on the property in 2010 to determine the potential for vapor intrusion to occur from contaminated soil remaining beneath the building. Soil contamination was removed adjacent to the southeast corner of the building to a depth of 8 to 12 ft bgs, but it is likely that contaminated soil remains within 30 ft of the building foundation. The building is currently a repair shop. The use and condition of the building suggest that if the building continues to be used as an automotive repair garage, vapor intrusion assessment will not be necessary.

Landfarming of the contaminated soil was completed in 2012 and the remediated soils were spread in the vicinity of the landfarm on August 16, 2013.

The nearest drinking water well, approximately 700 ft to the southeast across the Parks Highway, was sampled in 2007 and 2010. No GRO, volatile organic compounds (VOCs), or 1, 2-dibromoethane (EDB) contaminants were detected in the drinking water. Based on the information discussed earlier, migration to groundwater is not expected to be a pathway of concern at this site.

Cumulative Risk Evaluation

Pursuant to 18 AAC 78.600(d), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and does not exceed a cumulative noncarcinogenic risk standard at a hazard index of one across all exposure pathways.

Based on a review of the current environmental record, ADEC has determined that residual contaminant concentrations pose a cumulative human health risk via the outdoor exposure pathway; however, ADEC has determined that actual exposure via this pathway is unlikely unless excavation occurs at the site. Because petroleum products are used in the on-site building, which is currently an automotive service shop, vapor intrusion investigation has not been completed at this site. Additional evaluation may be needed if use of this property changes.

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.

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Following cleanup in 1998, 2007, and 2008, contamination is not expected to be present in surface soil (0 to 2 ft bgs).
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination remains in the sub-surface, but is below direct contact cleanup levels.
Inhalation – Outdoor Air	Exposure Controlled	Contamination remains in the sub-surface above outdoor air inhalation cleanup levels; however, most of the contamination is believed to be deeper than 8 ft and is not likely to volatilize to outdoor air at significant concentrations unless the soil is exposed.
Inhalation – Indoor Air (vapor intrusion)	Exposure Controlled	Petroleum contaminated soil in the subsurface has not been evaluated for the vapor intrusion potential. Additional investigation may be needed if use of this facility as a repair/service shop changes.
Groundwater Ingestion	Pathway Incomplete	Contamination remains above the soil migration to groundwater cleanup levels at 7 feet below ground surface. Permafrost is present across the site and is expected to limit migration of contaminants to groundwater.
Surface Water Ingestion	Pathway Incomplete	Surface water is not contaminated and 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	Contamination is only present in the sub-surface and is not expected to impact ecological receptors 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

Petroleum contamination remains on-site in soil above approved cleanup levels; 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 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 changes, these management conditions may not be protective and ADEC may require additional remediation and revised conditions. Therefore, the current landowner shall report to ADEC every 3 years to document land use, or report as soon as he/she 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. Sub-surface soil contamination is located southeast of the shop building. When soil contamination is excavated or otherwise becomes accessible, the soil must be evaluated and contamination addressed in accordance with an ADEC approved work plan.
3. The building currently on the property is used for light industrial activities (i.e., automotive repair). If the use of the building changes, or if other buildings are constructed within 30 feet of the contaminated area, ADEC must be notified and may require a vapor intrusion evaluation to determine if building occupants could be affected by vapors.
4. Installation of groundwater wells requires ADEC approval.
5. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 78.600(h). 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).
6. 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.

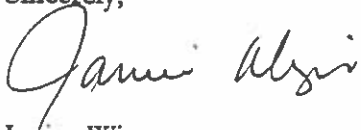
This determination is in accordance with 18 AAC 78.276(f) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

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 99801, 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 99801, 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 within 30 days of receipt of this letter. If you have questions about this closure decision, please feel free to contact me at (907) 451-2127

Sincerely,



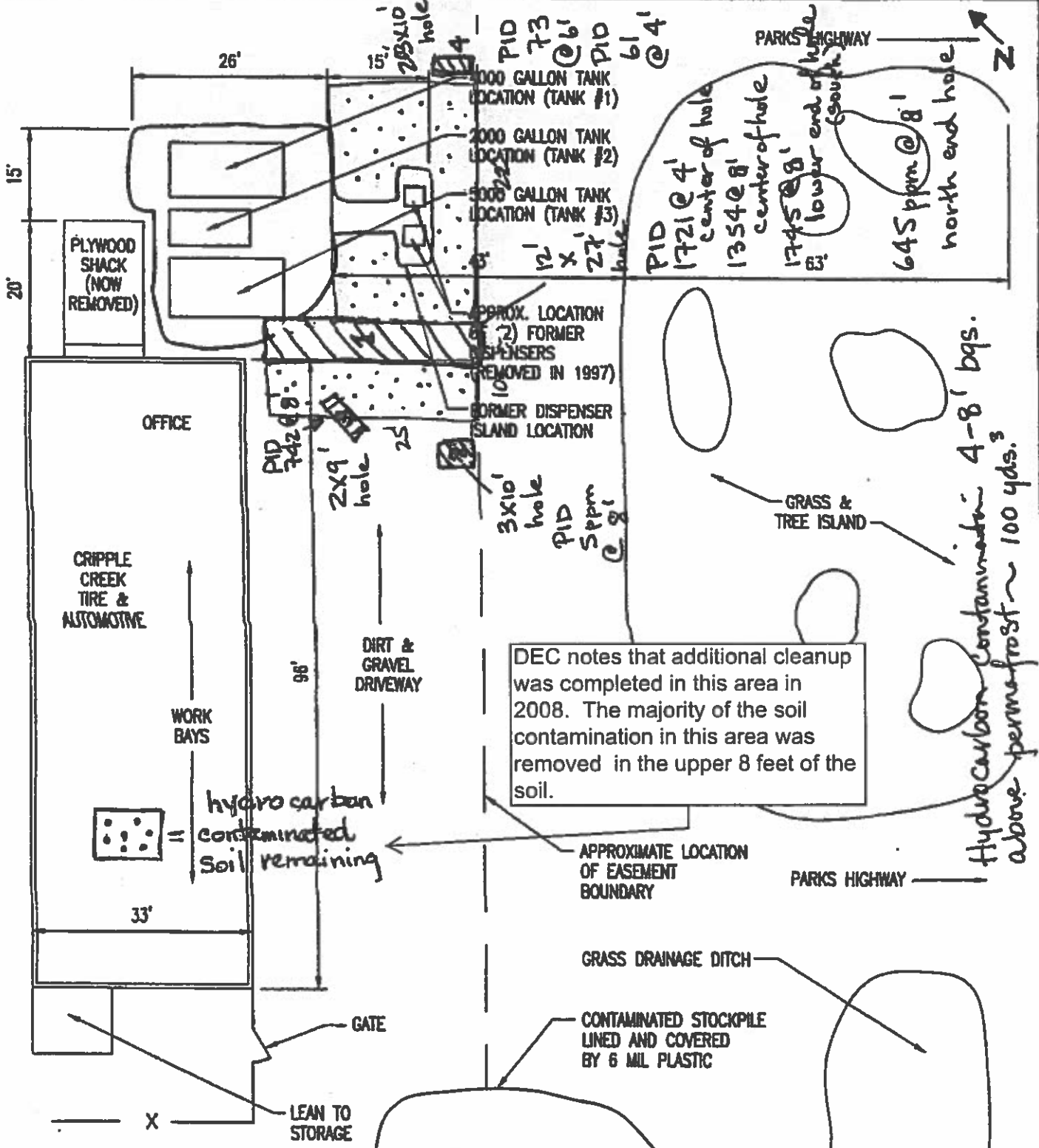
Janice Wiegers
Environmental Program Specialist

Enclosure: Attachment A – Signature Page
Site Map

ROCKWELL ENGINEERING &
CONSTRUCTION SERVICES INC.
825 WOODBINE ROAD
AIRBANKS, ALASKA 99709

S. VOGT DESIGN BY: SF DRAWN BY: GA Scale: 1"=20'-0"	5000-GALLON, 4000-GALLON AND 2000-GALLON USTs CLOSURE	Ind. Comm. Date: 7/1/98
	CRIPPLE CREEK TIRE & AUTOMOTIVE 2502 PARKS HIGHWAY-FBKS, AK	Reference None Sht. of 1 2

EFN 9806C1



DEC notes that additional cleanup was completed in this area in 2008. The majority of the soil contamination in this area was removed in the upper 8 feet of the soil.

Hydrocarbon Contamination 4-8' bgs. above permafrost ~ 100 yds.

Figure 9. Sketch Faxed to ADEC 8/10/07

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

John Goodhand agrees to the terms and conditions of this Corrective Action Complete Determination, as stated in decision letter for the Cripple Creek Tire and Automotive, dated November 6, 2013. 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 with 18 AAC 18 AAC 78.276(f).



Signature of Authorized Representative, Title
John Goodhand, Landowner

1/28/14

Date

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.

Notice of Environmental Contamination

Grantor: Alaska Department of Environmental Conservation-Contaminated Sites Program

Grantee: John Goodhand

Legal Description: Tax Lot 221, Section 2, Township 1 South, Range 2 West, Fairbanks Meridian

Recording District: Fairbanks

Return to: Janice Wiegiers
ADEC Contaminated Sites Program
610 University Avenue
Fairbanks, Alaska 99709
Fax: (907) 451-5105
Email: Janice.Wiegiers@alaska.gov

State Business- No Charge

NOTICE OF ENVIRONMENTAL CONTAMINATION

As required by the Alaska Department of Environmental Conservation, Grantor, pursuant to 18 AAC 78.625 John Goodhand, Grantee, as the owner of the subject property, hereby provides public notice that the property located at: 2502 George Parks Highway, Fairbanks, Alaska, 99709, and more particularly described as follows:

Tax Lot 221, Section 2, Township 1 South, Range 2 West, Fairbanks Meridian,

has been subject to a discharge or release and subsequent cleanup of oil or other hazardous substances, regulated under 18 AAC 78, as amended October 2006. 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 24792.

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 78.090 - 276 corrective action rules, that site cleanup has been performed to the maximum extent practicable even though residual fuel-contaminated soil exists on-site.

Attached is the ADEC cleanup complete letter with a diagram drawn to scale that shows the property boundaries, locations of existing structures, the area that has been cleaned up, the approximate location and extent of remaining soil contamination.

1. Any future change in land use may impact the exposure assumptions cited in this document. If land use changes, these management conditions may not be protective and ADEC may require additional remediation and revised conditions. Therefore, the current landowner shall report to ADEC every 3 years to document land use, or report as soon as he/she 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. Sub-surface soil contamination is located southeast of the shop building. When soil contamination is excavated or otherwise becomes accessible, the soil must be evaluated and contamination addressed in accordance with an ADEC approved work plan.
3. The building currently on the property is used for light industrial activities (i.e., automotive repair). If the use of the building changes, or if other buildings are constructed within 30 feet of the contaminated area, ADEC must be notified and may require a vapor intrusion evaluation to determine if building occupants could be affected by vapors.
4. Installation of groundwater wells requires ADEC approval.
5. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 78.600(h). 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).


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

In the event that the remaining contaminated soil becomes accessible, 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 78.220 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 78, Article 2.

In the future, if soil is removed from the site it must be characterized and managed following regulations applicable at that time. Pursuant to 18 AAC 78.274 (b), DEC approval is required prior to moving soil or groundwater that is, or has been, subject to 18 AAC 78, Article 2.

This notice 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 100.26.175 for the site named Cripple Creek Tire and Automotive.



Signature of Authorized ADEC Representative



Date