

ORDER OF AN EXECUTIVE OFFICER

To: 1510837 Alberta Ltd.
c/o Registered Office
2500, 10175 – 101 Street NW
Edmonton, Alberta T5J 0H3

John Dill
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Cherokee Canada INC.
c/o Primary Attorney Heinrich (Rick) H. Pabst
Field LLP
2500, 10175-101 Street
Edmonton, Alberta T5J 0H3

“the Owner”

RE: The Site located in Edmonton, Alberta and municipally described as:
**DESCRIPTIVE PLAN 1321679 LOT 1 BLOCK 1 EXCEPTING THEREOUT ALL
MINES AND MINERALS**

commonly referred to as Parcel Y (hereafter referred to as the “Site”)

WHEREAS I, an **Executive Officer** of **Alberta Health Services**, have inspected and received information regarding the above noted Site pursuant to the provisions of the Public Health Act, RSA 2000, c. P-37, as amended; including:

- A report titled Site Contamination Delineation and Characterization Parcel Y, Former Domtar Site, Edmonton, Alberta, authored by Golder Associates, dated January 2018;

- A letter from Alberta Health dated March 8th, 2018 with a technical memorandum attachment titled Initial Identification of Health Concerns: Former Domtar Inc. Wood Treatment Site Technical Memorandum authored by Environmental Health Science Health Protection Branch.

AND WHEREAS such inspection and information disclosed that the following conditions exist in and about the above noted Site which are or may become injurious or dangerous to the public health or which might hinder in any manner the prevention or suppression of disease, namely:

- Results reported from soil and groundwater sampling completed on the Site between August 2017 to November 2017 observed exceedances of human health-based guidelines included in the Alberta Environment and Parks, Tier 2 Soil and Groundwater Remediation Guideline, including but not limited to: carcinogens, including Benzene, Naphthalene, Polycyclic Aromatic Hydrocarbons (PAHs) (mixtures); and carcinogens/teratogens including Dioxin and Furans (Toxic Equivalency (TEQ)), as outlined in the table below:

	Human Health-based Contaminants of Concern					
Area – Site Parcel Y	Benzene	Naphthalene	Pyrene	PAH Mixtures	Dioxin and Furans (TEQ)	Lead
Result range	2.2-15 mg/kg	56-10000 mg/kg	2100 mg/kg	2-435 mg/kg	55.9835-1702.206 ng/kg	190 mg/kg
Guideline level	1.6 mg/kg	51 mg/kg	2100 mg/kg	1.77 mg/kg	4 ng/kg	140 mg/kg

- The information indicates that contaminants have been identified on the Site.
- Some of the exceedances of contaminants have been noted at or near the ground surface on the Site.
- Free product, including non-aqueous phase liquid hydrocarbons, have been identified on the Site.
- Results of soil samples taken at the Site exceeded the Alberta Environment and Parks, Tier 2 Soil and Groundwater Remediation Guideline.
- Contaminants on the Site are in proximity to a residential neighbourhood, which may result in human exposure to identified contaminants through ingestion of soil through hand to mouth action, or ingestion of foods produced in contaminated soils, direct contact with contaminated soils, inhalation of dust from contaminated soils, or inhalation of migrating soil vapours.
- Subsurface migration of contaminants on the Site may occur into or onto adjacent properties which may result in human exposure to identified contaminants resulting in ingestion of soil through hand to mouth action, or ingestion of foods produced in contaminated soils, direct contact with contaminated soils, inhalation of dust from contaminated soils, or inhalation of migrating soil vapours.

AND WHEREAS such inspection and information disclosed that the following breaches of the Public Health Act and the Nuisance and General Sanitation Regulation, Alberta Regulation 243/2003 exist in and about the above noted Site, namely:

- a. Results from soil and groundwater sampling completed on the Site between August 2017 to November 2017 observed exceedances of human health-based guidelines included in the Alberta Environment and Parks, Tier 2 Soil and Groundwater Remediation Guideline, including but not limited to: carcinogens, including Benzene, Naphthalene, Polycyclic Aromatic Hydrocarbons (PAHs) (mixtures); and carcinogens/teratogens including Dioxin and Furans (Toxic Equivalency (TEQ)), as outlined in the table below. This is in contravention of the Nuisance and General Sanitation Regulation, Alberta Regulation 243/2003, section 2(2): “Without limiting the generality of subsection (1), a person who creates, commits or maintains (e) any accumulation or deposit of offensive matter, waste or manure wherever situated, that is or might become injurious or dangerous to the public health or that might hinder in any manner the prevention or suppression of disease is deemed to have created, committed or maintained a nuisance.”

	Human Health-based Contaminants of Concern					
Area –Site Parcel Y	Benzene	Naphthalene	Pyrene	PAH Mixtures	Dioxin and Furans (TEQ)	Lead
Result range	2.2-15 mg/kg	56-10000 mg/kg	2100 mg/kg	2-435 mg/kg	55.9835-1702.206 ng/kg	190 mg/kg
Guideline level	1.6 mg/kg	51 mg/kg	2100 mg/kg	1.77 mg/kg	4 ng/kg	140 mg/kg

- b. The information indicates that contaminants have been identified on the Site. This is in contravention of the Nuisance and General Sanitation Regulation, Alberta Regulation 243/2003, section 2(2): “Without limiting the generality of subsection (1), a person who creates, commits or maintains (e) any accumulation or deposit of offensive matter, waste or manure wherever situated, that is or might become injurious or dangerous to the public health or that might hinder in any manner the prevention or suppression of disease is deemed to have created, committed or maintained a nuisance.”
- c. Some of the exceedances of contaminants have been noted at or near the ground surface on the Site. This is in contravention of the Nuisance and General Sanitation Regulation, Alberta Regulation 243/2003, section 2(2): “Without limiting the generality of subsection (1), a person who creates, commits or maintains (e) any accumulation or deposit of offensive matter, waste or manure wherever situated, that is or might become injurious or dangerous to the public health or that might hinder in any manner the prevention or suppression of disease is deemed to have created, committed or maintained a nuisance.”
- d. Free product, including non-aqueous phase liquid hydrocarbons, have been identified on the Site. This is in contravention of the Nuisance and General Sanitation Regulation, Alberta Regulation 243/2003, section 2(2): “Without limiting the generality of subsection (1), a person who creates, commits or maintains (e) any accumulation or deposit of offensive matter, waste or manure wherever situated, that is or might become injurious or dangerous

to the public health or that might hinder in any manner the prevention or suppression of disease is deemed to have created, committed or maintained a nuisance.”

- e. Results of soil samples taken at the Site exceeded the Alberta Environment and Parks, Tier 2 Soil and Groundwater Remediation Guideline. This is in contravention of the Nuisance and General Sanitation Regulation, Alberta Regulation 243/2003, section 2(2): “Without limiting the generality of subsection (1), a person who creates, commits or maintains (e) any accumulation or deposit of offensive matter, waste or manure wherever situated, that is or might become injurious or dangerous to the public health or that might hinder in any manner the prevention or suppression of disease is deemed to have created, committed or maintained a nuisance.”

AND WHEREAS such nuisance conditions, in breach of the Public Health Act and the Nuisance and General Sanitation Regulation, Alberta Regulation 243/2003, are in proximity to a residential neighbourhood, where the following exposure pathways are or may be operable, which may result in human exposure to identified contaminants on the Site through:

- f. Ingestion of soil through hand to mouth action, or ingestion of foods produced in contaminated soils, direct contact with contaminated soils, inhalation of dust from contaminated soils, or inhalation of migrating soil vapours. This is in contravention of the Nuisance and General Sanitation Regulation, Alberta Regulation 243/2003, section 2(2): “Without limiting the generality of subsection (1), a person who creates, commits or maintains (e) any accumulation or deposit of offensive matter, waste or manure wherever situated, that is or might become injurious or dangerous to the public health or that might hinder in any manner the prevention or suppression of disease is deemed to have created, committed or maintained a nuisance.”
- g. Subsurface migration of contaminants on the Site into or onto adjacent properties resulting in ingestion of soil through hand to mouth action, or ingestion of foods produced in contaminated soils, direct contact with contaminated soils, inhalation of dust from contaminated soils, or inhalation of migrating soil vapours. This is in contravention of the Nuisance and General Sanitation Regulation, Alberta Regulation 243/2003, section 2(2): “Without limiting the generality of subsection (1), a person who creates, commits or maintains (e) any accumulation or deposit of offensive matter, waste or manure wherever situated, that is or might become injurious or dangerous to the public health or that might hinder in any manner the prevention or suppression of disease is deemed to have created, committed or maintained a nuisance.”

NOW THEREFORE, I hereby **ORDER** and **DIRECT**:

1. That the Owner immediately undertake and diligently pursue the completion of the following work in and about the Site for items (a) to (g) noted above, namely:
 - a. Secure the entire perimeter of the Site from any unauthorized access or egress, **and secure the perimeter on the east, west, south perimeters and along the northern existing fence line.**
 - b. Ensure soils, dirt, and dust are contained within the Site and will not migrate beyond the Site at any time, unless an approved remedial action plan is in place to address dust, dirt, and soil movement activities.
 - c. Erect signage at **25 meter intervals subject to ongoing monitoring and possible further adjustments as determined by an Executive Officer.** Signs along all perimeters and along outside edge of treed areas along the perimeter of the Site advising **“Keep out – testing and remediation of contaminated soil underway - No unauthorized entry or access permitted.”**
2. The work referred to and ordered in paragraph 1 (above) shall be completed as soon as possible, and no later than **April 20, 2018.**
3. The work referred to and ordered in paragraph 1 (above) shall be maintained until such time as the Site is either fully remediated or acceptable measures are in place according to the Alberta Tier 2 Soil and Groundwater Remediation Guideline as assessed by a third party environmental consultant, evaluated and accepted by Alberta Health Services, which includes as a pre-condition approval by Alberta Environment and Parks.

The above conditions were noted at the time of inspection and upon review of information, and may not necessarily reflect all deficiencies. You are advised that further work may be required to ensure full compliance with the Public Health Act and Regulations, or to prevent a public health nuisance.

DATED at Edmonton, Alberta, March 14, 2018.

AMENDED at Edmonton, Alberta, April 13, 2018 to extend timelines for compliance, alter signage wording, and change signage spacing requirements.

_____(Original Signed)_____

Dr. Christopher Sikora
Medical Officer of Health,
Executive Officer, Edmonton Zone
Alberta Health Services

_____(Original Signed)_____

Darcy Garchinski
Director, Environmental Public Health
Executive Officer, Edmonton Zone
Alberta Health Services

You have the right to appeal

A person who a) is directly affected by a decision of a Regional Health Authority, and
 b) feels himself aggrieved by the decision

may appeal the decision by submitting a Notice of Appeal form within ten (10) days after receiving the order to:

Public Health Appeal Board
c/o Central Reception
Main Floor, Telus Plaza North Tower
10025 Jasper Avenue NW
Edmonton, Alberta, T5J 1S6
Phone: 780-222-5186
Fax: 780-422-0914
Email: HealthAppealBoard@gov.ab.ca
WebSite: <http://www.health.alberta.ca/about/PHAB.html>

A Notice of Appeal form may be obtained by contacting Alberta Health Services at 780-342-0122 or by contacting the Public Health Appeal Board.

Health Legislation, Regulations and Standards

Electronic versions of the Public Health Act and Regulations are available at the Alberta Queen's Printer Bookstore 10611 - 98 Avenue, Main Floor, Park Plaza, Edmonton, Alberta, T5K 2P7 or www.qp.gov.ab.ca.

Health Legislation and regulations are available for purchase. Please contact Alberta Queen's Printer Bookstore 10611 - 98 Avenue, Main Floor, Park Plaza, Edmonton, Alberta, T5K 2P7 or www.qp.gov.ab.ca.

Copies of standards are available by contacting the Health Protection Branch of Alberta Health at 780-427-4518 or by visiting: www.health.alberta.ca/about/health-legislation.html

Template revised December 13, 2016