

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 8197-6NYJXP
Issue Date: April 30, 2026

GFL Environmental Services Inc.
17335 Allaire Rd Moose Creek
Cornwall, Ontario
K0C 1W0

Site Location: GFL Soil Remediation
17335 Allaire Rd Moose Creek
North Stormont Township, United Counties of Stormont, Dundas and Glengarry
K0C 1W0

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

The use and operation of a 3.1 hectare Waste Disposal Site (Transfer/Processing) within a 9.0-hectare total site area, to be used for the following:

- screening and bioremediation of excess soil limited to dry soil;
- transfer of excess soil limited to dry soil;
- solidification, including de-watering, of excess soil limited to liquid soil;
- solidification, including de-watering, of non-hazardous waste slurries and sludges;
- shredding of waste wood recovered from excess soil;
- mixing/blending/bulking and transfer of liquid industrial waste limited to oily wastes with Waste Classes 251-254 inclusive;
- mixing/blending/bulking and transfer of liquid industrial waste limited to fuel wastes with Waste Classes 221-222 inclusive;
- mixing/blending/bulking and transfer of aliphatic solvents and residues limited to glycol waste with

Waste Class 212;

- mixing/blending/bulking and transfer of liquid industrial wastes limited to aqueous wastes with Waste Classes 146, 221-222 and 251-254 inclusive;
- transfer of liquid industrial waste and hazardous liquid waste with Waste Classes 111-114 inclusive, 121-123 inclusive, 131-135 inclusive, 141-150 inclusive, 211-213 inclusive, 221, 222, 231-233 inclusive, 241, 242, 261-270 inclusive, 281, 282 and 331;
- transfer of solid non-hazardous waste and hazardous waste with Waste Classes 111-114 inclusive, 121-123 inclusive, 131-135 inclusive, 141-150 inclusive, 211-213 inclusive, 221, 222, 231-233 inclusive, 241, 242, 261-270 inclusive, 281 and 282; and
- transfer of solid non-hazardous waste limited to waste electrical and electronic equipment;

which includes the use of the site only for the processing and transfer of the above categories of waste (Note: Use of the site for additional categories of wastes requires a new application and amendments to the Environmental Compliance Approval).

For the purpose of this environmental compliance approval, the following definitions apply:

"Air Approval" means the environmental compliance approval and any Schedules attached to it, including the application and its supporting documentation for activities set out in section 9 of the EPA and carried out at the Site;

"Adverse Ecological Effects" in the context of this Approval and for the purpose of clarifying the definition of Bioaugmentation Compound, it means the ability of the micro-organism to adversely alter biotic and abiotic components of the ecosystem (e.g. loss of biodiversity, loss of habitat);

"Adverse Effect" as defined in the EPA;

"Amendment Materials" means any amendment material as described in the Owner's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval to be used in the Bioremediation to improve the structure of the Dry Soil to enhance the effectiveness of the Bioremediation;

"Approval" means this entire Environmental Compliance Approval document, issued in accordance with the EPA, and includes any schedules to it, the application and the supporting documentation listed in Schedule 1;

"Best Management Practices Plan" means a document or a set of documents which describe measures to minimize dust emissions from the Site, as defined and described in the Air Approval;

"Bioaugmentation Compound" means the exogenous, non-pathogenic, non-toxic, and not able to cause an Adverse Ecological Effect, specialized microbes used to enhance Bioremediation. In this Approval, it means the compound(s) described in the Owner's application, this Approval and in the supporting documentation submitted with the application including the Safety Data Sheets (SDSs) submitted with the application, to the extent approved by this Approval;

"Biocell" means the Bioremediation treatment cell, with dimensions of 25 metres by 25 metres, and a maximum height of 3 metres, including a concrete or asphalt pad, for Dry Soil undergoing Bioremediation, with air injection and Bioaugmentation Compound(s) and/or Biostimulation Compound(s), covered with a tarp during the treatment process as described in the Owner's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;

"Biopile" means the Bioremediation treatment cell up-to 12 metres in height, for Dry Soil undergoing Bioremediation without air injection and where the measured oxygen concentrations within the pile are no less than 15 percent (%) and with the initial Dry Soil contaminant concentrations are as described in the Owner's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;

"Bioremediation" means biodegradation conducted under controlled engineered conditions designed to reduce concentrations of organic, biodegradable contaminants (including: petroleum hydrocarbons, VOCs and SVOCs) in the Dry Soil in the Biocells and the Biopiles, as described in the Owner's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;

"Biostimulation Compound" means any chemical amendment, nutrient amendment or pH adjustment chemical, other than a Bioaugmentation Compound used in the treatment to enhance Bioremediation. In this Approval, it means the compound(s) described in the Owner's application, this Approval and in the supporting documentation submitted with the application including the Safety Data Sheets (SDSs) submitted with the application, to the extent approved by this Approval;

"Composite Samples" means samples that are made up of a number of laboratory grab samples from a single sample container that have been thoroughly mixed together;

"Compost" has the same meaning as set out in the document entitled "Ontario Compost Quality Standards" dated July 25, 2012, as amended;

"Contaminant" has the same meaning as in O. Regulation 153/04. Furthermore, within the context of this Approval, Contaminant means one or more contaminants found on, in or under a project area at a concentration that exceeds the applicable excess soil quality standards for the project area or one or more contaminants identified as potentially present on, in or under a project area in an assessment of past uses or one or more contaminants found in Liquid Soil accepted at the Site or found in the outgoing waste or wastewater, including the Liquid Soil Solids and treated process wastewater, destined for transfer from the Site;

"Director" means any Ministry employee appointed in writing by the Minister pursuant to Section 5 of the EPA as a Director for the purposes of Part V of the EPA;

"Discrete Samples" within the context of this Approval, mean individually separate grab samples collected for analysis when creation and analysis of a composite sample is not appropriate;

"District Manager" means the District Manager of the local district office of the Ministry for the geographic area in which the Site is located;

"Dry Soil" is as defined in O. Regulation 406/19 and within the context of this Approval also means a waste which contains a Contaminant and/or does not contain more than insignificant amounts of incidental debris or other non-hazardous waste, handling of which is subject to an environmental compliance approval requirements under the EPA. Dry Soil is a solid waste that is received at the Site for Bioremediation or for transfer off-Site;

"EASR" means the Environmental Activity and Sector Registry;

"EPA" means the *Environmental Protection Act*, R.S.O. 1990, c. E. 19, as amended;

"Excess Soil Criteria" means the Excess Soil Quality Standards set out in the Soil Rules required for a Reuse Site and also includes the site-specific criteria as set out in Section D of the Soil Rules;

"Excess Soil Standards" means the Excess Soil quality criteria set out in the Soil Rules required for a Reuse Site;

"Excess Soil" is as defined in O. Regulation 406/19, and within the context of this Approval is the incoming Dry Soil, Liquid Soil and Dry Soil/Rock mixture accepted at the Site to be managed in accordance with this Approval and the Processed Soil and Solidified Liquid Soil transferred from the Site in compliance with the requirements set out in O. Regulation 406/19. If destined for transfer without any screening, Excess Soil also means the incoming Dry Soil which does not contain more Rock than allowed for a particular Reuse Site;

"Fire Safety Plan" means a Fire Safety Plan for the Site that is deemed to have been found acceptable by the local fire service authority;

"Grab Samples" within the context of this Approval, means independent sets of representative samples taken from different locations within the volume being sampled, using a systematic method of selecting random, unbiased locations and based on scientific and statistical principles applicable to sampling;

"Hazardous Waste" as defined in Regulation 347;

"IC&I" means industrial, commercial and institutional;

"Inert Fill" as defined in Regulation 347;

"Liquid Soil" is as defined in O. Regulation 406/19 and within the context of this Approval also means a waste that contains Contaminants and which has a slump of more than 150 millimetres determined using the Slump Test and which does not contain more Rock than allowed in the Excess Soil and/or which does not contain more than insignificant amounts of debris or other non-hazardous waste a handling of which is subject to the

Environmental Compliance Approval requirements under the EPA. Liquid Soil does not include Waste Slurries and Sludges;

"**Liquid Waste**" means a waste that has a slump of more than 150 millimetres determined using the Slump Test;

"**m³**" means cubic metres;

"**Ministry**" means the ministry of the government of Ontario responsible for the EPA and includes all officials, employees, or other persons acting on its behalf;

"**Mix**" means the mixture of the Dry Soil and the required Biostimulation Compound(s), the Bioaugmentation Compound(s) and the Amendment Materials approved in this Approval intended for Bioremediation at the Site;

"**NMA**" means the *Nutrient Management Act*, 2002, S.O. 2002, c. 4, as amended;

"**O. Regulation 153/04**" means Ontario Regulation 153/04: Records of Site Condition - Part XV.1 of the EPA, as amended;

"**O. Regulation 406/19**" means Ontario Regulation 406/19, entitled "On-Site and Excess Soil Management" made under the EPA, as amended;

"**Owner**" means GFL Environmental Inc., and includes its officers, employees, agents and contractors and includes any successors and assigns in accordance with section 19 of the EPA;

"**OWRA**" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;

"**PA**" means the *Pesticides Act*, R.S.O. 1990, c. P-11, as amended;

"**Pathogenicity**" in the context of this Approval and for the purpose of clarifying the definition of Bioaugmentation Compound, it means the ability of an organism to cause harm or disease to the host. This ability is a property of the pathogen and the extent of damage done to the host depends on host-pathogen interactions;

"**Petroleum Hydrocarbon Fractions**" within the context of this Approval, mean organic Contaminants limited to petroleum hydrocarbon fractions: F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and F4 (>C34);

"**Potentially Contaminating Activity**" is any activity, excluding Item referred to as "Importation of Fill Material of Unknown Quality", listed in Table 2 to Schedule D of O. Regulation 153/04;

"**Phase I ESA**" means Phase I Environmental Site Assessment, as defined in O. Regulation 153/04, as amended;

"**Phase II ESA**" means Phase II Environmental Site Assessment, as defined in O. Regulation 153/04, as amended;

"**Processed Soil**" means the Dry Soil processed at the Site, where processing is limited to screening and Bioremediation of the incoming Dry Soil and bulking, mixing or blending of Similar Soils as set out in this Approval;

"**Processing Area**" means the area of the Site where all waste management activities approved under this Approval and described in the attached supporting documentation listed in Schedule 1 are proposed to be carried out;

"**Provincial Officer**" means any person designated in writing by the Minister as a provincial officer pursuant to Section 5 of the OWRA or Section 5 of the EPA or Section 17 of the PA or Section 4 of the NMA or Section 8 of the SDWA;

"**Putrescible Waste**" means organic waste that decomposes rapidly, such as food waste;

"**Qualified Person**" means a person who meets the qualifications to be a qualified person for conducting a Phase I ESA and a Phase II ESA and for completing certifications in a record of site condition, as set out in Section 5 of O. Regulation 153/04 made under the EPA;

"**Regulation 347**" means Regulation 347 - General - Waste Management, R.R.O. 1990, made under the EPA, as amended;

"**Rejected Waste**" means the incoming load inadvertently received at the Site and deemed by the Owner to be a waste that does not meet the incoming Waste quality criteria set out in this Approval or that cannot be processed in accordance with this Approval;

"**Residual Waste**" means waste remaining after processing at the Site and that is destined for final disposal or further processing at another approved waste disposal site;

"**Reuse Site**" as defined in O. Regulation 406/19. Furthermore, within the context of this Approval, a Reuse Site means a site where Excess Soil is finally placed for a beneficial purpose as identified in a particular site development proposal governed by either an eligible site-specific instrument (such as a permit issued under a municipal site alteration by-law) or when the Excess Soil placement is compliant with O. Regulation 406/19 provisions for a Reuse Site not governed by an instrument. Reuse Site is not a site primarily used to dispose of Excess Soil without any specific identified beneficial purpose for the said disposal;

"**Rock**" as defined in O. Regulation 406/19;

"**SAR**" means sodium adsorption ratio;

"**SDWA**" means the *Safe Drinking Water Act*, 2002, S.O. 2002, c. 32, as amended;

"**Similar Soils**" within context of this Approval mean the incoming Dry Soil and/or the Processed Soil and/or

Solidified Liquid Soil tested to show that their characteristics comply with the Excess Soil Criteria required for transfer from the Site to the same Reuse Site or the same waste disposal site or into the Bioremediation at the Site;

"**Site**" means the 9.0-hectare waste disposal site to undertake Soil transfer and processing authorized under this Approval, located at 17335 Allaire Road, Moose Creek, Ontario;

"**Slump Test**" means the Test Method for the Determination of Liquid Waste set out in Schedule 9 of Regulation 347;

"**Soil Rules**" have the same meaning as in O. Regulation 406/19 and means the document entitled "*Part I: Rules for Soil Management*", published by the Ministry and as amended from time to time, available on a website of the Government of Ontario as Part I of the document entitled "Rules for Soil Management and Excess Soil Quality Standards";

"**Soil Rules**" have the same meaning as in O. Regulation 406/19 and means the document entitled "Part I: Rules for Soil Management", published by the Ministry and as amended from time to time, available on the Government of Ontario website as Part I of the document entitled "Rules for Soil Management and Excess Soil Quality Standards"; (new)

"**Soil Standards**" means the concentrations of the contaminants in the Standards Document;

"**Soil**" as defined in O. Regulation 406/19;

"**Solidification**" within the context of this Approval, means de-watering and/or mixing with the approved Solidification Materials;

"**Solidified Liquid Soil**" within the context of this Approval, means a solid created by de-watering of Liquid Soil and/or mixing of Liquid Soil with Solidification Materials approved in this Approval;

"**solid non-hazardous waste**" means a waste that is not a liquid waste and not a hazardous waste as defined in Regulation 347;

"**Source Site**" means the source of the incoming Excess Soil;

"**Spill**" as defined in the EPA;

"**SVOCs**" means semi-volatile organic compounds;

"**Table 2.1 Excess Soil Standards**" means the Excess Soil Standards from Table 2.1 set out in the Ministry's document titled "Soil Rules" for Residential/Parkland/ Institutional/ Industrial/ Commercial/ Community Property Use;

"**TCLP**" means the Toxicity Characteristic Leaching Procedure set out in Regulation 347;

"Tested Soil" means the Dry Soil or the Solidified Liquid Soil that has been tested in accordance with this Approval to demonstrate compliance with the appropriate Excess Soil Criteria defined in this Approval and including the following:

- a. if mixed and Bioremediated, the Bioremediated Dry Soil intended for mixing, bulking and blending with Similar Soils, that was tested by the Owner and destined for transfer for deposition at a Reuse Site or transfer to a disposal site or any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction;
- b. if not mixed but Bioremediated, the Bioremediated Dry Soil that was tested by the Owner and destined for transfer for deposition at a Reuse Site or transfer to a waste disposal site or to any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction;
- c. if mixed and destined for transfer, the incoming Dry Soil characterized by the generator or by the Owner, intended for mixing, bulking and blending with Similar Soils, that was tested and destined for transfer for deposition at a Reuse Site or transfer to a waste disposal site or to any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction;
- d. if not mixed and destined for transfer, the incoming Dry Soil characterized by the generator or by the Owner, received at the Site and destined for transfer for deposition at a Reuse Site or transfer to a waste disposal site to any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction;
- e. if not mixed, the solidified Liquid Soil characterized by the generator or by the Owner and destined for transfer for deposition at a Reuse Site or transfer to a waste disposal site to any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction; or
- f. if mixed, the solidified Liquid Soil characterized by the Owner and destined for transfer for deposition at a Reuse Site or transfer to a waste disposal site to any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction;

"TDGA" means the *Transportation of Dangerous Goods Act*, 1992 (1992, c. 34);

"Toxicity" in the context of this Approval and for the purpose of clarifying the definition of Bioaugmentation Compound, it means the degree to which a substance (toxin) or an organism can cause harm to living organism as a whole, its tissues or its cells. Live microorganisms need not necessarily be present for a toxic effect to occur (e.g., in toxin-mediated food poisoning or for toxic products of micro-organisms used in industrial applications);

"Trained Person" means an employee trained in accordance with the requirements of Condition 11.2 and is knowledgeable through instruction and/or practice and able to carry out any necessary duties;

"Transfer" means the receipt and temporary storage and subsequent transport off-Site to a waste disposal site or to any other site approved to accept such waste by an appropriate government agency of equivalent

jurisdiction;

"**VOCs**" means volatile organic compounds. VOC means any organic compound having, at 20 degrees Celsius (°C), a vapour pressure of 0.01 kilopascal or more or having a corresponding volatility under the particular conditions of use, which is released into the atmosphere;

"**Waste**" within the context of this Approval, means any material defined as a waste or designated to be a waste under any provincial Act or regulation or any other discarded, unwanted, unsuitable for its original use or purpose (for example off-specification or expired) post-consumer goods, items, materials and including Waste Slurries and Sludges, Excess Soil and Rock destined for receipt at the Site. Waste outputs from processing/treatment of waste continue to be considered waste;

"**Waste Class**" means the waste classes defined in the Ministry's document entitled "Ontario Waste Classes", dated February 2013, as amended; and

"**Waste Slurries and Sludges**" means non-hazardous liquid industrial waste and non-hazardous liquid waste, including clean-out waste from catch basins or other storage facilities.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1.0 GENERAL

1.1 Compliance

- (1) The Owner shall ensure compliance with all the conditions of this Approval and shall ensure that any person authorized to carry out work on or operate any aspect of the Site is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) Any person authorized to carry out work on or operate any aspect of the Site shall comply with the conditions of this Approval.

1.2 Build, etc. in Accordance

- (1) Except as otherwise provided by this Approval, the Site shall be designed, developed, built, operated and maintained in accordance with the application for this Approval, dated October 24, 2013, signed by Patrick Dovigi, CEO/President, GFL Environmental Inc., plans, specifications and the supporting documentation listed in the attached Schedule 1.
- (2) The currently proposed equipment and processes described in the Application for an Environmental Compliance Approval dated April 17, 2025, and signed by Nadeem Soufian, and its supporting

documentation included in Item #16 of the attached Schedule 1 and approved in this Approval, shall be constructed and installed and must commence operation within five (5) years of issuance of this Approval, after which time the Approval ceases to apply in respect of any portions of the current proposal not in operation. In the event that the construction, installation and/or operation of any portion of the current proposed is anticipated to be delayed beyond the time period stipulated, the Owner shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).

1.3 As-built Drawings

- (1) A set of as-built drawings, certified by a professional engineer and showing the design of the Site, shall be kept at the Site at all times.

1.4 Interpretation

- (1) Where there is a conflict between a provision of any document, including the application referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.
- (2) Where there is a conflict between the application and a provision in any documents listed in Schedule 1, the application shall take precedence, unless it is clear that the purpose of the document was to amend the application and that the Ministry approved the amendment.
- (3) Where there is a conflict between any two documents listed in Schedule 1, other than the application, the document bearing the most recent date shall take precedence.
- (4) The requirements of this Approval are severable. If any requirement of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this Approval shall not be affected thereby.

1.5 Other Legal Obligations

- (1) The issuance of, and compliance with the conditions of, this Approval does not,
 - a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement including, but not limited to:
 - i. obtaining site plan approval from the local municipal authority;
 - ii. obtaining all necessary building permits from the local municipal authority Building Services Division;
 - iii. obtaining approval from the Chief Fire Prevention Officer, local municipal authority; or
 - b. limit in any way the authority of the Ministry to require certain steps be taken or to require the

Owner to furnish any further information related to compliance with this Approval.

1.6 Adverse Effects

- (1) The Site shall be constructed, operated and maintained in an environmentally safe manner which ensures the health and safety of all persons and minimizes adverse effects on the natural environment.
- (2) The Owner shall take steps to minimize and ameliorate any adverse effect on the natural environment or impairment of water quality resulting from the Site, including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.
- (3) Despite an Owner or any other person fulfilling any obligations imposed by this Approval the person remains responsible for any contravention of any other condition of this Approval or any applicable statute, regulation, or other legal requirement resulting from any act or omission that caused the adverse effect to the natural environment or impairment of water quality.

1.7 Other Approvals

- (1) The Owner shall ensure that any discharge of a contaminant into any part of the natural environment other than water from the Site is managed and/or discharged in accordance with the Air Approval and any applicable municipal by-laws.
- (2) The Owner shall ensure that any sewage, as defined in the OWRA, including stormwater that has come in contact with Waste, generated and managed and/or discharged from the Site is managed and/or discharged in accordance with the Environmental Compliance Approval issued for activities listed in section 53 of the OWRA and any applicable municipal sewer use by-law(s).

1.8 Change of Owner

- (1) The Owner shall notify the Director in writing, and forward a copy of the notification to the District Manager, within thirty (30) days of the occurrence of any changes:
 - a. the ownership of the Site;
 - b. the operator of the Site;
 - c. the address of the Owner;
 - d. the partners, where the Owner is or at any time becomes a partnership and a copy of the most recent declaration filed under the *Business Names Act*, R.S.O. 1990, c. B.17, as amended, shall be included in the notification;
 - e. the name of the corporation where the Owner is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the *Corporations Information Act*, R.S.O. 1990, c. C.39, as amended, shall be included in the notification.
- (2) No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless

the Director is notified in advance and sufficient financial assurance is deposited with the Ministry to ensure that these conditions will be carried out. In the event of any change in ownership of the Site, other than change to a successor municipality, the Owner shall notify the successor of and provide the successor with a copy of this Approval, and the Owner shall provide a copy of the notification to the District Manager and the Director.

1.9 Certificate of Requirement

- (1) Prior to dealing with the property in any way, the Owner shall provide a copy of this Approval and any amendments, to any person who will acquire an interest in the property as a result of the dealing.
- (2) Within thirty (30) calendar days from the date of issuance of this Approval, the Owner shall submit to the Director a completed Certificate of Requirement which shall include:
 - a. a plan of survey prepared, signed and sealed by an Ontario Land Surveyor, which shows the area of the Site where waste has been or is to be deposited at the Site;
 - b. proof of ownership of the Site;
 - c. a letter signed by a member of the Law Society of Upper Canada or other qualified legal practitioner acceptable to the Director, verifying the legal description provided in the Certificate of Requirement;
 - d. the legal abstract of the property; and
 - e. any supporting documents including a registerable description of the Site.
- (3) Within fifteen (15) calendar days of receiving a Certificate of Requirement authorized by the Director, the Owner shall:
 - a. register the Certificate of Requirement in the appropriate Land Registry Office on the title to the property; and
 - b. submit to the Director written verification that the Certificate of Requirement has been registered on title.

1.10 Inspections by the Ministry

- (1) No person shall hinder or obstruct a Provincial Officer from carrying out any and all inspections authorized by the OWRA, the EPA, the PA, the SDWA or the NMA of any place to which this Approval relates, and without limiting the foregoing:
 - a. to enter upon the premises where the approved processing is undertaken, or the location where the records required by the conditions of this Approval are kept;
 - b. to have access to, inspect, and copy any records required to be kept by the conditions of this Approval;
 - c. to inspect the Site, related equipment and appurtenances;
 - d. to inspect the practices, procedures, or operations required by the conditions of this Approval; and
 - e. to sample and monitor for the purposes of assessing compliance with the terms and conditions of

this Approval or the EPA, the OWRA, the PA, the SDWA or the NMA.

1.11 Information and Record Retention

- (1) Any information requested by the Ministry, concerning the operation of the Site and its operation under this Approval, including but not limited to any records required to be kept by this Approval shall be provided to the Ministry, upon request. Records shall be retained for five (5) years except as otherwise authorized in writing by the Director.
- (2) The receipt of any information by the Ministry or the failure of the Ministry to prosecute any person or to require any person to take any action, under this Approval or under any statute, regulation or other legal requirement, in relation to the information, shall not be construed as:
 - a. an approval, waiver, or justification by the Ministry of any act or omission of any person that contravenes any term or condition of this Approval or any statute, regulation or other legal requirement; or
 - b. acceptance by the Ministry of the information's completeness or accuracy.

1.12 Financial Assurance

- (1) The Owner shall maintain, the Financial Assurance, for the amount of CAD\$1,466,982.00. The additional Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the analysis, transportation, Site clean-up, long-term monitoring and maintenance of the Site.
- (2) Commencing on January 31, 2030 and at intervals of five (5) years thereafter, the Owner shall submit to the Director, a re-evaluation of the amount of Financial Assurance to implement the actions required under Condition 1.12(1). The re-evaluation shall include an assessment based on any new information relating to the environmental conditions of the Site and shall include the costs of additional monitoring and/or implementation of contingency plans required by the Director upon review of the closure plan and annual reports. The Financial Assurance must be submitted to the Director within ten (10) days of written acceptance of the re-evaluation by the Director.
- (3) The amount of Financial Assurance is subject to review at any time by the Director and may be amended at his/her discretion. If any Financial Assurance is scheduled to expire or notice is received, indicating Financial Assurance will not be renewed, and satisfactory methods have not been made to replace the Financial Assurance at least sixty (60) days before the Financial Assurance terminates, the Financial Assurance shall forthwith be replaced by cash.

2.0 SIGNS and SITE SECURITY

2.1 Signs

- (1) The Owner shall ensure that a sign readable twenty four (24) hours per day is posted at the entrance

to the Site stating the following information:

- a. name of the Owner;
 - b. this Approval number;
 - c. normal hours of operation;
 - d. telephone number to which complaints may be directed;
 - e. twenty-four hour emergency telephone number (if different from above);
 - f. a warning against unauthorized access; and
 - g. a warning against dumping at the Site.
- (2) The Owner shall ensure that a sign visible from the main road leading to the Site includes the name of the Owner and the Site address.
- (3) The Owner shall ensure that appropriate and visible signs are posted at the Site clearly identifying the Waste, including the incoming characterized or uncharacterized Dry Soil or Liquid Soil, the Processed Soil, the Solidified Liquid Soil, and whether it was already tested or not, and the processing materials and stating warnings about the nature and any possible hazards of the wastes and the materials.
- (4) The Owner shall ensure that appropriate and visible signs are posted at the Site to prohibit smoking, open flames or sources of ignition from being allowed near any flammable materials storage areas.
- (5) The Owner shall install and maintain appropriate and visible signs at the Site to direct vehicles to the Waste receiving and Waste removal areas and to the processing materials unloading areas.

2.2 Site Security

- (1) The Site must be maintained in a secure manner, such that unauthorized persons cannot enter the Site.
- (2) The Owner shall ensure that the Site is secured and that all entrances are secured by lockable gates to prevent unauthorized access when the Site is not open.
- (3) The Owner shall ensure that the Site is operated in a safe and secure manner, and that all Waste and the processing materials are properly handled, contained, stored and labelled so as not to pose any threat to the general public and the Site personnel.
- (4) The Owner shall ensure that all Waste management activities, including Waste and processing materials unloading and loading, processing, mixing, bulking and blending, and transfer to or from vehicles or containers at the Site are supervised at all times by Trained Personnel.

3.0 SERVICE AREA, APPROVED WASTE TYPES and RATES

3.1 Service Area

- (1) The Site may receive Waste generated in the Province of Ontario, the Province of Quebec and the State of New York.

3.2 Approved Waste Types, Bioremediation Materials and Solidification Materials

- (1) The approved Waste types are limited to the following:
- a. Dry Soil for Bioremediation at the Site or transfer;
 - b. Liquid Soil for solidification at the Site;
 - c. liquid industrial Waste and liquid Waste, limited to non-hazardous Waste Slurries and Sludges, for solidification at the Site;
 - d. liquid industrial waste for mixing/blending/bulking and transfer, as follows:
 - i. liquid industrial Waste with Waste Classes 251-254 inclusive;
 - ii. liquid industrial waste limited to fuel wastes with Waste Classes 221-222 inclusive;
 - iii. aliphatic solvents and residues limited to glycol waste with Waste Class 212; and
 - iv. liquid industrial wastes limited to aqueous wastes with Waste Classes 146, 221-222 and 251-254 inclusive;
 - e. hazardous and liquid industrial waste for bulking and transfer, as follows:
 - i. liquid industrial waste, limited to aqueous waste with Waste Classes 146, 221-222 and 251-254 inclusive; and
 - ii. hazardous Waste with Waste Classes 111-114 inclusive, 121-123 inclusive, 131-135 inclusive, 141-150 inclusive, 211-213 inclusive, 221, 222, 231-233 inclusive, 241, 242, 261-270 inclusive, 281, 282 and 331; and
 - f. waste electrical and electronic equipment for transfer.
- (2) Notwithstanding provisions of Condition 3.2(1)a., the Site may only receive Dry Soil for Bioremediation that,
- a. is a solid;
 - b. contains biodegradable Contaminants in concentrations that can be Bioremediated in accordance with the Bioremediation process parameters approved in this Approval; and
 - c. does not contain non-biodegradable Contaminants at concentrations exceeding the applicable

Excess Soil Criteria for re-use at the Reuse Site and non-biodegradable Contaminants are limited to metals.

- (3) No free-phase liquid (non-aqueous phase liquid), excluding water, shall be present in the Dry Soil or the Liquid Soil.
- (4) The Owner shall ensure that the only hazardous Waste accepted at Site is the Waste approved under this Approval.
- (5) The following Bioremediation Materials are approved for receipt, temporary storage and use at the Site:
 - a. Biostimulation Compounds;
 - b. Bioaugmentation Compounds; and
 - c. Amendment Materials, limited to the following: Compost, straw, wood chips, peat moss and natural wood products as listed in the supporting documentation listed in Schedule 1 as required to achieve desired porosity of the Mix.
- (6) The following Solidification Materials are approved for receipt and use at the Site:
 - a. sawdust
 - b. peat moss; and
 - c. other suitable non-hazardous solidification materials acceptable to the District Manager.

3.3 Prohibited Waste Types

- (1) The Waste that is prohibited from being accepted for processing or transfer at the Site includes the following Waste types:
 - a. Waste that has been generated or has been previously transferred to any facility in the Province of Ontario from outside of the Province Ontario, the Province of Quebec or the New York State; and
 - b. Excess Soil that is classified as a hazardous waste, as defined in Regulation 347.

3.4 Waste Receipt Rates

- (1) The maximum daily amounts of Waste that is approved to be received at the Site are as follows:
 - a. a maximum of 3,000 tonnes of Dry Soil per day;
 - b. a maximum of 1,000 tonnes of solid non-hazardous Waste other than Dry Soil per day;
 - c. a maximum of 40 tonnes of solid hazardous Waste per day;
 - d. a maximum of 1,000 m³ of Liquid Soil per day; and
 - e. a maximum of 300 m³ of liquid hazardous or liquid industrial or other liquid Waste per day.

- (2) The maximum annual amounts of Waste that is approved to be received at the Site are as follows:
- a. a maximum of 748,800 tonnes of Dry Soil per year;
 - b. a maximum of 20,000 tonnes of solid non-hazardous Waste other than Dry Soil per year;
 - c. a maximum of 10,000 tonnes of solid hazardous Waste per year;
 - d. a maximum of 10,000 m³ of Liquid Soil per year; and
 - e. a maximum of 24,000 m³ of liquid hazardous or liquid industrial or other liquid Waste per year.
- (3) Notwithstanding the approved Dry Soil daily receipt rate set out in Condition 3.4(1)a., the Site shall not exceed an annualized average receiving rate of 2,400 tonnes per day.

4.0 SITE OPERATIONS

4.1 Hours of Operation

- (1) Receipt of Waste and processing materials at the Site, shipping of wastes from the Site and the Site operations may be undertaken twenty four (24) hours per day, three hundred sixty five (365) days a year, unless otherwise limited by municipal by-laws.

4.2 Documentation for Incoming Dry Soil and Liquid Soil Receiving

Dry Soil

- (1) Prior to accepting any Dry Soil at the Site, the Owner shall acquire from the Source Site owner/generator, the documentation that contains information on the Source Site and the characterization information of the incoming Dry Soil, unless the Dry Soil is received in accordance with the following sub-conditions:

Dry Soil with Incomplete Documentation or without Documentation

- a. provided that the Dry Soil is a solid non-hazardous waste, any Dry Soil received at the Site with incomplete Dry Soil characterization documentation or without the required Dry Soil characterization documentation, shall remain segregated from all other Dry Soils, wastes and materials and be covered, until complete documentation promptly provided by the Source Site owner/generator, received by the Owner and deemed acceptable by Trained Personnel or the Dry Soil is characterized at the Site in accordance with this Approval;

Dry Soil from Spills

- b. provided that the Dry Soil is generated from emergency spill response activities, any Dry Soil received at the Site shall remain segregated from all other Dry Soils, wastes and materials and be covered, until the Dry Soil is characterized at the Site in accordance with this Approval.

Dry Soil - Small Amounts for Bioremediation

- c. For Dry Soil from small-scale residential Source Site projects and destined for the Bioremediation at the Site, Dry Soil may be received at the Site without accompanying characterization results subject to the following:
 - i. the amount of Dry Soil received from any one Source Site shall not exceed 80 cubic metres or 150 tonnes;
 - ii. the total amount of Dry Soil stockpiled further to this sub-condition shall not exceed 800 cubic metres or 1,440 tonnes;
 - iii. all Dry Soils shall be inspected visually and olfactorily prior to receipt to ensure the Dry Soil quality matches the Dry Soil description provided and the requirements of this Approval;
 - iv. the Dry Soils may be stockpiled separately or in the same pile prior to sampling and testing; and
 - v. the Dry Soil stockpiles may be mixed prior to testing for the purposes of homogenization, provided that an Air Approval required under Section 9 of the EPA for the equipment used is obtained prior to mixing and this activity is approved in the Air Approval.

- d. For Dry Soil from small-scale excavation IC&I Source Site projects and destined for the Bioremediation at the Site, Dry Soil may be received at the Site without accompanying test results subject to the following:
 - i. the amount of Dry Soil received from any one Source Site shall not exceed 10 tonnes or 18 cubic metres and this amount shall not be exceeded in any one (1) year from the last excavation at the Source Site;
 - ii. the Dry Soil shall be inspected visually and olfactorily prior to receipt to ensure the Dry Soil quality matches the Dry Soil description provided and the requirements of this Approval;
 - iii. Dry Soils shall be stockpiled separately prior to testing; and
 - iv. if the Contaminants involve only fuels (diesel, gasoline, oil), or mineral oils, or SAR, then a minimum of one (1) sample may be taken for testing.

- (2) The documentation from Condition 4.2(1) shall be reviewed and deemed acceptable by Trained Personnel.

Excess Soil General Documentation

- (3) Regardless whether the Excess Soil is characterized by the Source Site owner/generator or the Owner, the documentation required in Condition 4.2(1) shall include the following Source Site information:
 - a. the generator's name and/or company name, address and contact information;
 - b. the Source Site location;
 - c. current Source Site/generator activities and land use, including identifying any certain or likely

- Potentially Contaminating Activity;
- d. past Source Site/generator activities and land use, including identifying any certain or likely Potentially Contaminating Activity; and
- e. estimated quantity of the Excess Soil to be received at the Site.

For Each Source Site

- (4) The documentation required in Condition 4.2(1) shall be for the Excess Soil from each Source Site.

Characterization Documentation

- (5) All applicable analytical results shall be from a laboratory service provider accredited by a Canadian Association for Laboratory Accreditation or equivalent.

Incoming Dry Soil - Transfer to a Reuse Site

- (6) The documentation required in Condition 4.2(1) for the incoming Dry Soil for transfer and destined for a Reuse Site, shall include sampling and testing protocols and characterization results done in accordance with the requirements in O. Regulation 406/19 and the Soil Rules.

Incoming Dry Soil - Transfer to a Waste Disposal Site

To demonstrate that the excavating Source Site/Generator location does not have a history of spills or below grade leaks and have not been or are not being used for any Potentially Contaminating Activity and that the Soil from the Source Site/Generator location is likely to be the type of waste approved for receipt at the Site, the characterization documentation shall include the following:

- (7) The documentation required in Condition 4.2(1) for the incoming Dry Soil destined for transfer to an approved non-hazardous waste disposal site as set out in Condition 8.0, shall also include sampling and testing protocols, methods and analytical results to demonstrate that the Dry Soil is a solid non-hazardous waste. As a minimum, the characterization documentation shall include the following information:
 - a. results of any Phase I ESA and Phase II ESA undertaken for the Source Site in accordance with the Ministry's requirements under O. Regulation 153/04; or
 - b. the following characterization results:
 - i. slump from the Slump Test, if the Excess Soil has a high moisture content;
 - ii. characterization to demonstrate that the Dry Soil is a non-hazardous waste which was done in accordance with the following:

- A. sampling and testing results to demonstrate that the Dry Soil does not trigger any criteria from the hazardous waste definition from Regulation 347, including TCLP analysis results, from samples,
 - 1. collected in accordance with the procedures set out in the Ministry's document entitled "*Principles of Sampling and Analysis of Waste for TCLP under Reg. 347*", as amended; and
 - 2. tested for Contaminants determined from the information contained in the general documentation required in Condition 4.2(3) and analyzed with methods in accordance with the Ministry-published methods and as recommended by the accredited laboratory service provider; and

- B. sampling and testing results to demonstrate that the Dry Soil is suitable for acceptance at the receiving waste disposal site, as required by the waste disposal site Environmental Compliance Approval **or** sampling and testing results to demonstrate that the Dry Soil is suitable for acceptance at the receiving waste disposal site, as instructed by the owner of the waste disposal site.

Incoming Dry Soil - Bioremediation

- (8) The required incoming Dry Soil characterization documentation required in Condition 4.2(1) for Dry Soil destined for Bioremediation at the Site, shall include characterization information, sampling and testing protocols/methods done in accordance with the following:
- a. results of any Phase I ESA and Phase II ESA undertaken for the Source Site in accordance with the Ministry's requirements under O. Regulation 153/04; **or**
 - b. the following characterization results:
 - i. slump from the Slump Test, if the Excess Soil has a high moisture content;
 - ii. any applicable analytical results demonstrating that the Dry Soil does not trigger any criteria from the hazardous waste definition from Regulation 347, including TCLP analysis results;
 - iii. bulk concentrations of the following:
 - A. Petroleum Hydrocarbon Fractions;
 - B. heavy metals;
 - C. Benzene, Toluene, Ethyl Benzene and Xylene; and
 - iv. bulk concentrations of the other applicable potential Contaminants listed in Section B of

Part I of the Soil Rules, including any other VOCs and SVOCs or inorganics determined from the information contained in the general documentation required in Condition 4.2(3);

c. the following sampling and testing information:

i. sampling protocols, including the number of samples taken and their locations collected in accordance with one of the following:

A. for an in-situ and ex-situ characterization of the Dry Soil from residential Source Sites:

1. a minimum of one (1) sample shall be collected for each 500 m³ of the Dry Soil to be excavated/excavated for testing of VOCs and SVOCs, excluding Petroleum Hydrocarbon Fractions; and
2. a minimum of one (1) sample shall be collected for each 300 m³ of the Dry Soil to be excavated/excavated for testing for Petroleum Hydrocarbon Fractions and for all other testing;

B. for an in-situ characterization of the Dry Soil from IC&I Source Sites:

1. a minimum of three (3) samples shall be collected if less than 600 m³ of the Dry Soil is to be excavated;
2. a minimum of one (1) sample shall be collected for each 200 m³ of the Soil for the first 10,000 m³ of the Dry Soil to be excavated;
3. a minimum of one (1) sample shall be collected for each additional 450 m³ of the Dry Soil after the first 10,000 m³ of the Dry Soil to be excavated; and
4. at least one (1) sample shall be collected for each additional 2,000 cubic metres after the first 40,000 cubic metres of the Dry Soil to be excavated;

C. when carrying out an ex-situ characterization of the Dry Soil from IC&I Source Sites, the sampling frequency requirements are as follows:

1. for stockpile volume of less than 220 m³, a minimum of 2 samples shall be collected;
2. for stockpile volume between 221 m³ and 430 m³, a minimum of 3 samples shall be collected;
3. for stockpile volume between 431 m³ and 670 m³, a minimum of 4 samples shall be collected;
4. for stockpile volume between 671 m³ and 950 m³, a minimum of 5 samples shall be collected;
5. for stockpile volume between 951 m³ and 1,250 m³, a minimum of 6 samples shall be collected;
6. for stockpile volume between 1,251 m³ and 1,550 m³, a minimum of 7 samples

- shall be collected;
7. for stockpile volume between 1,551 m³ and 1,850 m³, a minimum of 8 samples shall be collected;
 8. for stockpile volume between 1,851 m³ and 2,200 m³, a minimum of 9 samples shall be collected;
 9. for stockpile volume between 2,201 m³ and 2,500 m³, a minimum of 10 samples shall be collected;
 10. for stockpile volume between 2,501 m³ and 2,900 m³, a minimum of 11 samples shall be collected;
 11. for stockpile volume between 2,901 m³ and 3,300 m³, a minimum of 12 samples shall be collected;
 12. for stockpile volume between 3,301 m³ and 3,700 m³, a minimum of 13 samples shall be collected;
 13. for stockpile volume between 3,701 m³ and 4,100 m³, a minimum of 14 samples shall be collected;
 14. for stockpile volume between 4,101 m³ and 4,500 m³, a minimum of 15 samples shall be collected;
 15. for stockpile volume between 4,501 m³ and 5,000 m³, a minimum of 16 samples shall be collected; and
 16. for stockpile volume of greater than 5,000 m³, a minimum number of samples to be collected shall be calculated in accordance with the following formula: $N = [32 + (\text{volume} - 5000 / 300)]/2$ where "volume" is the actual stockpile volume;
- ii. sampling methods used and procedures for handling of the samples in accordance with the requirements set out in the Section B of Part I of the Soil Rules **or** in accordance with the instructions of the accredited laboratory service provider carrying out the analytical testing;
 - iii. sampling of the Dry Soil for determination of the leachate concentrations of Contaminants listed in Schedule 4 of Regulation 347, in accordance with the Ministry's document entitled "*Principles of Sampling and Analysis of Waste for TCLP under Reg. 347* ", as amended;
 - iv. analytical methods for determining bulk concentrations of contaminants in the Dry Soil in accordance with the Ministry's document entitled "*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act* " dated March 9, 2004, amended July 1, 2011, and as further amended at any time **or** in accordance with Section B of Part I of the Soil Rules; and
 - v. leachate characterization in accordance with the TCLP.

Incoming Liquid Soil with Incomplete Documentation or without Documentation

- (9) Prior to receipt of any liquid Waste generated from a drilling activity or any Waste Slurries and Sludges, the Owner shall acquire characterization documentation from the Source Site owner/generator to show whether the Waste is a Liquid Soil or a liquid industrial waste or a

hazardous waste as determined in accordance with the regulatory framework under Regulation 347 and O. Regulation 406/19.

- (10) For Waste that meets the requirements of a Liquid Soil, the Owner shall acquire documentation from the Source Site owner/generator showing the origin of the Liquid Soil, including the description of the current and past Source Site activities and land uses and characterizing its contaminating constituents, as required in O. Regulation 406/19 and the Soil Rules.
- (11) If the required Liquid Soil characterization documentation from Condition 4.2(10) is not available, the Owner may accept the Waste as a liquid industrial waste and characterize it at the Site or solidify it separately from all other waste or Liquid Soil, separate solidified output from all other unprocessed Dry Soil and Solidified Liquid Soil and characterize solidified output at the Site in compliance with O. Regulation 406/19 and the Soil Rules.

Waste Slurries and Sludges - for Solidification

- (12) Before accepting any Waste limited to Waste Slurries and Sludges, for solidification, mixing, bulking or blending at the Site,
 - a. the Owner shall acquire documentation from the generator showing the origin of the Waste and to determine whether it is a non-hazardous or a hazardous waste and characterizing its contaminating constituents as in accordance with the regulatory framework under Regulation 347; and
 - b. if the required Waste characterization documentation from Condition 4.2(12)a. is not available, the Owner, may,
 - i. accept the Waste as a liquid industrial waste, separate it from all other Waste and characterize it at the Site; or
 - ii. accept the Waste as a liquid industrial waste, solidify it separately from all other waste or Liquid Soil, separate solidified output from all other Dry Soil and Solidified Liquid Soil and characterize solidified output to demonstrate compliance with the quality criteria from the Environmental Compliance Approval for a waste disposal site, if intended for transfer to a waste disposal site.

Other Liquid Industrial and Hazardous Waste - for Mixing/Blending and Transfer or Bulking and Transfer

- (13) Prior to accepting any hazardous or liquid industrial Waste, other than the Liquid Soil or the Waste referred to in Condition 4.2(12), at the Site, the Owner shall acquire from the generator the documentation that contains the characterization information of the incoming Waste as proposed in the supporting documentation listed in the attached Schedule 1.
- (14) No Waste for mixing, bulking or blending and transfer shall be accepted at the Site unless the

required characterization documentation is received by the Owner and deemed acceptable by Trained Personnel.

- (15) Trained Personnel shall inspect the characterization documentation and all incoming Waste loads at the weigh scale, as proposed in the supporting documentation listed in the attached Schedule 1.

4.3 Receipt of Waste at the Site

- (1) All Waste receipt and unloading shall be undertaken within the dedicated receiving area of the Site as set out in the supporting documentation listed in the attached Schedule 1.
- (2) The Trained Personnel shall visually inspect the incoming Waste at the scale and again as it is being unloaded.
- (3) Any Waste that exhibits characteristics suggesting that it is not an approved Waste shall be deemed a Rejected Waste and disposed of in accordance with this Approval, the EPA and Regulation 347.
- (4) The Owner shall only accept Waste that was transported to the Site by haulers approved by the Ministry, or registered on the EASR, as required.
- (5) The Excess Soil, including Dry Soil from emergency spill clean-up operations or insufficiently characterized or uncharacterized Dry Soil, upon arrival at the Site, shall be transferred forthwith from the receiving vehicle onto the designated outdoor paved storage pad and shall be covered with a tarp.
- (6) Upon receiving the Dry Soil at the Site with a concentration of Benzene (Chemical Abstracts Service Number 71-43-2) higher than 0.117 microgram per gram as measured at the Source Site, the Owner shall immediately apply an initial dose of Biostimulation and/or Bioaugmentation Compound(s) to such Dry Soil and immediately treat it within a Biocell thereafter.
- (7) The Owner shall carry out spill prevention measures during transfer of liquid industrial Waste to and from its storage tanks.

4.4 Unacceptable/Rejected Waste

- (1) Any Dry Soil characterized at the Site that is found to be unacceptable for Bioremediation but is acceptable for receipt and transfer, shall be transferred from the Site in accordance with the requirements of this Approval.
- (2) Waste shall be deemed to be a Rejected Waste if,
 - a. waste not approved under this Approval is inadvertently accepted at the Site; or
 - b. any Dry Soil or Liquid Soil or other Waste characterized at the Site that is found to be unacceptable for receipt at the Site.
- (3) All Rejected Waste shall be stored indoors or outdoors if covered in the way that ensures isolation

from other Wastes and processing materials and from the natural environment.

- (4) The Rejected Waste shall be removed from the Site within (4) business days of its receipt or receipt of the laboratory report from the analysis of the Excess Soil deemed as the Rejected Waste, as applicable, or as acceptable to the District Manager.
- (5) In the event that the Rejected Waste is inadvertently accepted at the Site, the Owner shall keep a record in accordance with the requirements set out in Condition 14.9, below, and notify the District Manager in accordance with the requirements set out in Condition 15.0, below.
- (6) Notwithstanding provisions of Conditions 4.4(1) through 4.4(5) above, the Owner shall ensure that all Rejected Waste at the Site is managed and disposed of in accordance with the EPA and Regulation 347.

4.5 Residual Waste Handling and Disposal

- (1) The Owner shall ensure that the solid Residual Waste:
 - a. is stored in a designated area of the Site; and
 - b. is segregated from all other Waste.
- (2) The maximum storage duration of the Residual Waste destined for final disposal off-Site shall not exceed sixty (60) days from the time of its generation.
- (3) The Owner shall ensure that all Residual Waste generated at the Site are managed and disposed of in accordance with the EPA and Regulation 347.

4.6 Storage

Waste Storage Capacity

- (1) The maximum amounts of Waste to be stored at the Site, at any one time, are as follows:
 - a. a maximum of the Dry Soil, including the Mix in-process, shall not exceed 35,000 tonnes;
 - b. the maximum amount of the Processed Soil, including the Tested Soil, shall not exceed 27,500 tonnes;
 - c. the maximum amount of fuel waste, glycol waste, oily waste and aqueous waste stored in bulk shall not exceed 200,000 litres, provided bulk volume of fuel waste with Waste classes 221, 222, does not exceed 65,000 litres stored in four (4)-65,000 litre, each, tanks;
 - d. the following Wastes contained in three (3) dry van or bulk liquid trailers:
 - i. the maximum amount of liquid industrial and hazardous waste with Waste classes 111-114

inclusive, 121-123 inclusive, 131-135 inclusive, 141-150 inclusive, 211-213 inclusive, 221, 222, 231-233 inclusive, 241, 242, 261-270 inclusive, 281, 282 and 331, stored in totes, containers and lab packs shall not exceed 80,000 L; and

- ii. solid non-hazardous Waste limited to waste electrical and electronic equipment;
- e. the maximum amount of the Solidified Liquid Soil, including the Liquid Soil in-process, on the soil solidification pad shall not exceed 1,000 cubic metres; and
- f. the maximum amount of the solidified Waste Slurries and Sludges, including Waste in-process, on the waste solidification pad shall not exceed 50 cubic metres.

Storage Facility

- (2) All storage of the Dry Soil, the Rejected Waste, the Residual Waste, the Processed Soil, the Amendment Materials and/or reagents shall be carried out within the designated areas of the Site as set out in supporting documentation included in the attached Schedule 1 and as required below:
 - a. Dry Soil storage stockpiles shall be contained within the dedicated areas referred to as Processing and Storage shown on the "Site Plan" listed in the attached Schedule 1 and shall not exceed 12 metres in height;
 - b. all processing materials for Bioremediation shall be stored at the Site in compliance with the requirements set out in the Ministry's document entitled "*Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities*" dated May 2007, as amended;
 - c. the liquid Bioaugmentation Compound storage tanks shall be located within the confines of the Environmental Control Building in a spill containment area designed in accordance with the requirements of this Approval; and
 - d. the Amendment Materials required for the Bioremediation at the Site shall be stored outdoors on the dedicated area referred to as Storage and Preparation Area shown on the "Site Plan" in attachment 8 of the Section 27 and Section 9 Approval Application, in the attached Schedule 1 under an impermeable cover.
- (3) Notwithstanding provisions of Condition 4.6(2)a., the Owner shall ensure that Dry Soils are kept segregated from all other waste and Dry Soils from different Source Sites until the testing at the Site is completed and the Dry Soil is ready for transfer into the Bioremediation, mixing, blending or bulking at the Site or transfer off-Site.

- (4) No storage of the Solidification Materials at the Site is approved under this Approval.
- (5) The Owner shall ensure that all subject Waste received at the Site is managed, stored and shipped from the Site in a manner that prevents the release of contaminants to the natural environment and minimizes the risk of fires, explosions and other hazards, and shall otherwise be carried out in accordance with any restrictions as described in applicable building permits or as imposed by the local fire service authority.
- (6) All subject Waste storage containers at the Site shall have a label or sign identifying the waste class(es), waste characteristic, and, when applicable, the WHMIS and TDGA classification of the contents contained within. The label or sign shall be clearly visible for inspection and record keeping.
- (7) Wastes shall be segregated from other incompatible wastes and materials.
- (8) The Owner shall ensure that all Waste, including Waste within four (4) fixed liquid industrial waste storage tanks and three (3) storage trailers, is stored within the spill containment designed in accordance with the design proposed in the supporting documentation listed in the attached Schedule 1 and in compliance with the requirements set out in the Ministry's document entitled "*Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities*" dated May 2007, as amended.
- (9) The four (4) fixed liquid industrial Waste storage tanks shall be equipped with a liquid level monitoring and control provisions.

4.7 Approved Waste Management Activities

- (1) The Owner is approved to carry out the following Waste processing activities:
 - a. weighing all incoming and outgoing truck loads and recording the results;
 - b. receipt, temporary storage, screening and processing of the Dry Soil that can be Bioremediated as follows:
 - i. mixing of Similar Soils destined for Bioremediation at the Site;
 - ii. mixing of the Dry Soil or mixed Similar Soils with the Bioaugmentation Compound(s) solution, the Biostimulation Compound(s) and the Amendment Materials into the Mix, as required; and
 - iii. Bioremediation of the Mix in Biocells or Biopiles, including subsequent mechanical aeration and addition of the Bioaugmentation Compound(s) solution, the Biostimulation Compound(s) and/or the Amendment Materials, as required;

- c. sorting of the Residual Waste to remove Rock(s) and decontamination of Rock(s);
- d. shredding of waste wood recovered from the Dry Soils received at the Site; and
- e. solidification of the Liquid Soil and solidification of Waste Slurries and Sludges, where solidification is limited to de-watering and mixing with the approved Solidification Materials.

(2) The Owner is approved to carry out the following transfer activities:

- a. bulking and transfer of the Dry Soil;
- b. bulking and transfer of liquid industrial waste and hazardous liquid waste with Waste Classes 111-114 inclusive, 121-123 inclusive, 131-135 inclusive, 141-150 inclusive, 211-213 inclusive, 221, 222, 231-233 inclusive, 241, 242, 261-270 inclusive, 281, 282 and 331;
- c. bulking and transfer of solid non-hazardous and hazardous waste with Waste Classes 111-114 inclusive, 121-123 inclusive, 131-135 inclusive, 141-150 inclusive, 211-213 inclusive, 221, 222, 231-233 inclusive, 241, 242, 261-270 inclusive, 281 and 282; and
- d. bulking and transfer of solid non-hazardous limited to waste electrical and electronic equipment.

(3) The Owner is approved to carry out the following blending, bulking and mixing activities in four (4) dedicated storage tanks and transfer from the Site:

- a. mixing/blending/bulking and transfer of liquid industrial waste, limited to oily wastes, with Waste Classes 251-254 inclusive;
- b. mixing/blending/bulking and transfer of liquid industrial waste, limited to fuel waste, with Waste Classes 221-222;
- c. mixing/blending/bulking and transfer of aliphatic solvents and residues, limited to glycol waste, with Waste Class 212; and
- d. bulking/blending/transfer of aqueous waste with Waste Classes 146, 221-222 and 251-254 inclusive.

4.8 Bioremediation

- (1) Unless the Mix handling or Biocell construction activities are being carried out, the Biocells shall be covered at all times.
- (2) All Biocells, Biopiles and the Dry Soil and the Processed Soil storage stockpiles shall be located on a liner or asphalt surface.
- (3) The maximum height for all Bioremediation Biopiles and the Processed Soil storage piles shall not

exceed 12 metres.

- (4) The maximum height for the Bioremediation Biocells shall not exceed 3 metres.
- (5) The Biocells shall be constructed with 2:1 (H:V) slopes, and shall be located in the areas referred to as "Process & Storage", on the drawing entitled "Site Plan", included in the attached Schedule 1.
- (6) The Owner shall ensure that no Dry Soil handling activities, including screening, Biopile/Biocell formation activities or transfer to storage locations or into vehicles are undertaken during high wind events.
- (7) All Biopiles and storage stockpiles shall be managed in a manner that minimizes dust emissions and in accordance with the procedures stipulated in the Best Management Practices Plan.
- (8) The Owner shall segregate the Processed Soil stockpiles of different quality and destined for different types of Reuse Sites to ensure that the outbound Processed Soil is sent to appropriate Reuse Sites as restricted in this Approval.
- (9) All emergency spill clean-up Excess Soil shall be segregated from other Dry Soil and the Processed Soil until the required characterization is completed, at which point the said Dry Soil may be commingled with the Dry Soil destined to undergo comparable processing or transfer off-Site.
- (10) The Owner shall ensure that only Similar Soils are to be used for blending and mixing with Dry Soil prior to processing at the Site.
- (11) No Bioremediation Materials can be added to the Dry Soil other than those approved in this Approval.
- (12) The Owner shall ensure that the Processed Soil piles that meet different quality criteria from Condition 8.0 are segregated to avoid mixing of Processed Soils of different quality.
- (13) The following Amendment Materials are approved for use in the Bioremediation process at the Site, as listed in the supporting documentation listed in Schedule 1 and required to achieve desired porosity of the Mix:
 - a. straw;
 - b. wood and woodwaste chips and other wood and woodwaste products, **excluding** painted wood, chipped treated wood or chipped laminated wood or painted woodwaste, chipped treated woodwaste or chipped laminated woodwaste;
 - c. peat moss; and
 - d. Compost.
- (14) The Dry Soil shall be Bioremediated in the Biocells when,
 - a. it contains biodegradable Contaminants in concentrations that can be Bioremediated in

- accordance with the Bioremediation process parameters approved in this Approval; and
- b. concentrations of Contaminants exceed Table 2.1 Soil Standards for Petroleum Hydrocarbon Fractions.

- (15) All Dry Soil destined for beneficial re-use but containing Contaminant(s) concentrations that exceed Table 2.1 Excess Soil Standards shall be Bioremediated prior to transfer off-Site, unless the Owner has secured a Reuse Site that will accept the untreated Dry Soil prior to its acceptance at the Site.

4.9 Liquid Soil and Waste Slurries and Sludges Solidification

- (1) Solidification of Liquid Soil and of Waste Slurries and Sludges shall be done as described in the supporting documentation listed in the attached Schedule 1.
- (2) No hazardous Waste shall be solidified at the Site.
- (3) Solidification pads shall be cleaned, as required, to prevent cross contamination between batches when the required quality criteria of final destinations differ.
- (4) Washwater from solidification pad cleaning shall be collected and tested to confirm disposal requirements as described in the supporting documentation listed in the attached Schedule 1.

4.10 Mixing, Bulking or Blending of Dry Soils and Solidified Liquid Soils

- (1) At no time, shall any Dry Soil, Processed Soil or Solidified Liquid Soil intended for re-use at a Reuse Site, be mixed or blended with any waste that is subject to the requirements under section 20.2 of Part II.1 of the EPA.
- (2) At no time, shall any Dry Soil, Processed Soil or Solidified Liquid Soil intended for re-use at a Reuse Site be mixed, bulked or blended with any other Dry Soil, Processed Soil or Solidified Liquid Soil, Rock or any other material if the principal purpose of the mixing, bulking or blending is to reduce the Contaminant of Concern concentrations in the Dry Soil or Solidified Liquid Soil.
- (3) Dry Soils that are destined for the same Reuse Site and that meet the same applicable Excess Soil Standards may be mixed, bulked or blended together.
- (4) Dry Soil or Solidified Liquid Soil intended for re-use at a Reuse Site may be mixed, bulked or blended if done in accordance with O. Regulation 406/19.
- (5) Dry Soil or Solidified Liquid Soil may be mixed, bulked or blended with Rock to meet the customer's specifications if done in accordance with O. Regulation 406/19 including compliance with the definition of Excess Soil.

Dry Soil from Residential Use Source Sites

- (6) When the Dry Soil originates from Residential Use Source Sites that do not have a history of spills or below grade leaks and have not been or are not being used for any Potentially Contaminating Activity, the Owner shall,
- a. keep this Dry Soil separate from all other Soil, wastes and materials; and
 - b. bulk, mix and blend this Dry Soil into a Dry Soil mixture to comply with the applicable quality criteria and restrictions required for a proposed final destination.

4.11 Bulking, Blending, Mixing and Transfer of Other Waste

- (1) The Owner shall ensure that all bulking, blending, mixing of liquid industrial Wastes approved for bulking, blending, mixing at the Site does not result in uncontrollable reactions that could result in a fire or release of contaminants to the natural environment.
- (2) The following liquid industrial Wastes may be bulked, mixed and blended from totes or smaller containers into their designated fixed storage tanks:
 - a. fuel wastes with Waste Classes 221 and 222;
 - b. oily wastes with Waste Classes 251-254;
 - c. aliphatic solvents and residues limited to glycol waste with Waste Class 212; and
 - d. aqueous wastes with Waste Classes 146, 221-222 and 251-254, inclusive.
- (3) Other than Liquid Soil, Waste Slurries and Sludges and waste types listed in Condition 4.11(2), above, no other liquid, liquid industrial or hazardous waste is approved to be bulked, mixed and blended at the Site.
- (4) The Owner shall ensure that only similar and compatible Wastes listed in Condition 4.11(2), as demonstrated through the Waste characterization documentation required in this Approval, are bulked, mixed and blended at the Site.
- (5) Other approved liquid industrial and hazardous wastes may be collected in plastic and metal containers, temporarily stored in the three (3) trailers and transferred from the Site.
- (6) No processing of waste electric and electronic equipment is approved under this Approval.
- (7) Waste electric and electronic equipment shall be stored on pallets or suitable containers inside a dry-van trailer on a pad with spill containment.
- (8) All loads of liquid industrial waste and hazardous waste shipped from the Site shall be inspected by Trained Personnel prior to their transfer off-Site.

4.12 Transfer of Dry Soil

- (1) The Dry Soil transfer encompasses the following waste management activities:
 - a. weighing all incoming and outgoing truck loads and recording the results;
 - b. receipt;
 - c. temporary storage;
 - d. screening, as required;
 - e. mixing with Similar Soils;
 - f. mixing with Solidified Liquid Soil; and
 - g. transfer of the Dry Soil intended for transfer to a Reuse Site or a waste disposal site.
- (2) The maximum storage duration of the Dry Soil destined for transfer from the Site shall not exceed ninety (90) days from its receipt.
- (3) Dry Soil intended for transfer shall be segregated within the asphalted receiving/storage and processing area.
- (4) The Dry Soil intended for transfer off-Site shall be shipped from the Site only to a Reuse Site, a Ministry approved waste disposal site or other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction.
- (5) The Dry Soil intended for transfer to a waste disposal site shall not exceed the criteria set out in the Environmental Compliance Approval issued by the Ministry for the receiving waste disposal site or any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction.
- (6) Transfer of the Dry Soil to a Reuse Site shall be done in accordance with this Approval and O. Regulation 406/19.

4.13 Control of Discharges to the Atmosphere - Noise

- (1) The Owner shall ensure that the noise emissions from the Site comply with the requirements set out in the Air Approval, at all times.

4.14 Control of Discharges to the Atmosphere - Contaminants

- (1) The Owner shall ensure that the emissions to the atmosphere including fugitive dust and odour emissions from the Site comply with the requirements set out in the Air Approval, at all times.

4.15 Wastewater Management

- (1) Wastewater drained during de-watering of the approved Wastes shall be collected and tested as proposed in the supporting documentation listed in the attached Schedule 1.

5.0 OPERATIONS/MAINTENANCE and INSPECTIONS

5.1 Operation and Maintenance Manuals

- (1) The Owner shall prepare and update as necessary, an Operation and Maintenance Manuals for all the equipment associated with managing of the Waste and with the control of environmental impacts from the Site. The Manuals shall be prepared in accordance with the written manufacturer's and/or supplier's specifications and good engineering practice.
- (2) As a minimum, the Operation and Maintenance Manuals shall specify:
 - a. operation procedures of the equipment used to handle/manage Wastes at the Site and any other equipment associated with the control of environmental impacts from the Site, in accordance with manufacturers' recommendations and good engineering practices to achieve compliance with this Approval, the EPA, the OWRA and their regulations;
 - b. calibration procedures for any monitoring systems as required by this Approval;
 - c. procedures for start-up and shutdown, including controlled shutdown and emergency shutdown;
 - d. Waste receiving and screening procedures;
 - e. Waste, Rejected Waste and Residual Waste handling procedures;
 - f. maintenance and preventative maintenance procedures as required by this Approval;
 - g. all measures deemed necessary to prevent an occurrence of an adverse effect from the emergency storage of the Waste.
- (3) The Owner shall implement the operation, maintenance, preventative maintenance and calibration procedures set out in the Operations and Maintenance Manuals required by this Approval.

5.2 Inspections

- (1) The Owner shall shall prepare and update as necessary, a comprehensive written Inspection Program which includes procedures for inspections of all aspects of the Site's operations including the following:
 - a. Dry Soil, Liquid Soil, Processed Soil, Tested Soil and any other Waste loading/unloading/storage/handling areas;
 - b. condition of all major pieces of the equipment;
 - c. condition of all instruments for monitoring required under this Approval;

- d. security fence and property line;
 - e. presence of fugitive odour emissions from the operation of the Site;
 - f. presence of fugitive dust emissions from the operation of the Site; and
 - g. presence of the on and off-Site litter or run-off.
- (2) The inspections required in Condition 5.2(1) shall be undertaken daily by Trained Personnel in accordance with the inspection program to ensure that all equipment and facilities at the Site are maintained in good working order at all times and that no off Site impacts are occurring. Any deficiencies detected during these regular inspections must be promptly corrected.
- (3) The Inspection Program shall be kept updated, as required, shall be retained at the Site and be made available for inspection by a Provincial Officer, upon request.

5.3 Critical Spare Parts

- (1) The Owner shall prepare a list of critical spare parts, update this list annually or more frequently, if necessary, to ensure that this list is maintained up-to-date and shall be available for inspection by a Provincial Officer upon request.
- (2) The Owner shall ensure that the critical spare parts are available at the Site at all times or are immediately available from an off-Site supplier.

6.0 BIOREMEDIATION MONITORING

- (1) During the normal operating hours, the Owner shall monitor the following Bioremediation process parameters in Biocells and in Biopiles in accordance with the protocol set out in the supporting documentation listed in the attached Schedule 1 and the following requirements:
- a. temperature;
 - b. oxygen level;
 - c. moisture level;
 - d. pH;
 - e. carbon dioxide level; and
 - f. total residual Petroleum Hydrocarbons.
- (2) The readings shall be taken, as a minimum, at five (5) representative locations, one (1) metre from the surface of the Biocell.
- (3) The readings shall be taken, as a minimum, at five (5) locations representing the full depth profile of the Biopile, starting at the location one (1) metre from the surface of the Biopile.
- (4) The monitoring shall be carried out on a weekly basis, unless Trained Personnel determines an

alternative monitoring frequency and retains written justification for the change as part of the monitoring records required by Condition 14.0.

- (5) Should any measured oxygen concentration within the Biopile fall below 15%, the Biopile shall be de-constructed and the Dry Soil be moved into an active aeration Biocell.

7.0 REQUIREMENT to CHARACTERIZE at the SITE

- (1) The Owner shall maintain a Quality Assurance/Quality Control (QA/QC) program for sampling and analysis of wastes, as required by this Approval, and shall make the results of the QA/QC program, including all analyses carried out by an accredited laboratory service provider, available for inspection upon request by the District Manager, the Director and any Provincial Officer.

7.1 Characterization of Excess Soil

- (1) Unless the incoming Excess Soil has been already adequately characterized at the Source Site or at the spill site as required by this Approval, the Owner shall sample and characterize the incoming Excess Soil at the Site in accordance with this Approval.
- (2) The Owner shall sample and characterize the outgoing Excess Soil, including the Processed Soil and the Solidified Liquid Soil at the Site, in accordance with the requirements of O. Regulation 406/19 and the Soil Rules.
- (3) Notwithstanding provisions of Conditions 7.1(1) and 7.1(2), the Owner also shall comply with the general requirements set out in Condition 7.2.

7.2 General Requirements for Characterization

- (1) Unless the incoming Dry Soil or the Liquid Soil have been already adequately characterized at the Source Site or at the spill site as required by this Approval, the Owner shall upon receipt at the Site characterize the Dry Soil or the Liquid Soil at the Site to determine its nature, constituents and characteristics and carry out sampling of the incoming Dry Soil or the incoming Liquid Soil, within twenty four (24) hours from its receipt, or on the next business day, whichever comes first.
- (2) For the Processed Soil or the Solidified Liquid Soil, sampling shall be carried out within twenty four (24) hours from completion of processing or Solidification or on the next business day, whichever comes first.
- (3) Discrete Samples shall be taken when analysing for:
 - a. Petroleum Hydrocarbon Fractions;
 - b. VOCs including Benzene, Toluene, Ethyl Benzene and Xylene;
 - c. SVOCs, which include the SVOCs with the Henry's Law constant greater than 1×10^{-5} atmosphere m^3/mol and/or vapour pressure greater than 0.05 mm Hg and which, for example, are Acenaphthene, Acenaphthylene, Anthracene, Benz(a)anthracene, Fluorene, Methylnaphthalene

- (2-(1-)), Naphthalene, and Phenanthrene;
d. polycyclic aromatic hydrocarbons / acid/base/neutral compounds (PAHs/ABNs).

(4) Composite Samples shall be taken when analysing for:

- a. metals, including barium, beryllium, boron, cadmium, chromium, cobalt, copper, lead, molybdenum, nickel, silver, thallium, uranium, vanadium, zinc, antimony, arsenic and selenium;
- b. SVOCs with the Henry's Law constant less than 1×10^{-5} atmosphere m^3/mol and/or vapour pressure less than 0.05 mm Hg.

(5) For sampling of the Dry Soil, the Liquid Soil or the Processed Soil or the Solidified Liquid Soil, the Owner shall,

- a. use sampling procedures, including methods, equipment and techniques, for collection of representative samples and for handling of the samples as set out in the Section B of Part I of the Soil Rules or as recommended by the accredited laboratory service provider carrying out the analytical testing.

Analytical methods

(6) For testing of the Dry Soil, the Liquid Soil or the Processed Soil or the Solidified Liquid Soil or the solidified Waste Slurries and Sludges, the Owner shall,

- a. for determining bulk concentrations of contaminants, use the analytical methods as set out in the Ministry's document entitled "*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act* " dated March 9, 2004, amended July 1, 2011, and as further amended at any time **or** in Section B of Part I of the Soil Rules;
- b. for determination of the leachate concentrations of Contaminants listed in Schedule 4 of Regulation 347, sample the Dry Soil or the Liquid Soil in accordance with the Ministry's document entitled "*Principles of Sampling and Analysis of Waste for TCLP under Reg. 347* ", as amended;
- c. for determination if Waste is a solid or a liquid, use the Slump Test;
- d. to demonstrate that the Dry Soil or the Liquid Soil or the Waste Slurries and Sludges do not trigger any criteria from the hazardous waste definition from Regulation 347, including TCLP analysis, use the Ministry-published methods and if unavailable, use methods recommended by the accredited laboratory service provider; and
- e. submit samples to an accredited laboratory service provider no later as instructed, for the required analysis.

7.3 Testing of Waste to be Transferred to Waste Disposal Site

- (1) The testing requirements of Condition 7.3(2) apply to the following Wastes destined for transfer to an approved non-hazardous waste disposal site;
 - a. incoming Dry Soil;
 - b. Solidified Liquid Soil; or
 - c. solidified Waste Slurries and Sludges.

- (2) For solid Waste destined for transfer to an approved non-hazardous waste disposal site as set out in Condition 8.0, the required Waste characterization sampling and testing protocols/methods shall be in accordance with the following:
 - a. if the Waste has a high moisture content, determine the slump; and
 - b. sample and test the Waste in accordance with one of the following:
 - A. sampling and testing results to demonstrate that the Waste does not trigger any criteria from the hazardous waste definition from Regulation 347, including TCLP analysis results, from samples,
 1. collected in accordance with the procedures set out in the Ministry's document entitled "*Principles of Sampling and Analysis of Waste for TCLP under Reg. 347* ", as amended; and
 2. tested for Contaminants determined from the information contained in the general documentation required in Condition 4.2(3) and analyzed with methods in accordance with the Ministry-published methods and as recommended by the accredited laboratory service provider; and
 - B. sampling and testing results to demonstrate that the Waste is suitable for acceptance at the receiving waste disposal site, as required by the waste disposal site Environmental Compliance Approval **or** sampling and testing results to demonstrate that the Waste is suitable for acceptance at the receiving waste disposal site, as instructed by the owner of the waste disposal site.

7.4 Testing of Incoming Dry Soil for Bioremediation

- (1) For Dry Soil destined for the Bioremediation at the Site, the required on-Site characterization sampling and testing protocols/methods shall be in accordance with the following:
 - a. for characterization of the Dry Soil from residential Source Sites received at the Site, sampling and testing requirements, including the number of samples taken and their locations shall be as follows:

- i. a minimum of one (1) sample shall be collected for each 500 m³ of the Dry Soil to be excavated/excavated for testing of VOCs and SVOCs, excluding Petroleum Hydrocarbon Fractions; and
 - ii. a minimum of one (1) sample shall be collected for each 300 m³ of the Dry Soil to be excavated/excavated for testing for Petroleum Hydrocarbon Fractions and for all other testing;
- b. for characterization of the Dry Soil from IC&I Source Sites received at the Site, sampling and testing requirements, including the number of samples taken and their locations shall be as follows:
- A. for stockpile volume of less than 220 m³, a minimum of 2 samples shall be collected;
 - B. for stockpile volume between 221 m³ and 430 m³, a minimum of 3 samples shall be collected;
 - C. for stockpile volume between 431 m³ and 670 m³, a minimum of 4 samples shall be collected;
 - D. for stockpile volume between 671 m³ and 950 m³, a minimum of 5 samples shall be collected;
 - E. for stockpile volume between 951 m³ and 1,250 m³, a minimum of 6 samples shall be collected;
 - F. for stockpile volume between 1,251 m³ and 1,550 m³, a minimum of 7 samples shall be collected;
 - G. for stockpile volume between 1,551 m³ and 1,850 m³, a minimum of 8 samples shall be collected;
 - H. for stockpile volume between 1,851 m³ and 2,200 m³, a minimum of 9 samples shall be collected;
 - I. for stockpile volume between 2,201 m³ and 2,500 m³, a minimum of 10 samples shall be collected;
 - J. for stockpile volume between 2,501 m³ and 2,900 m³, a minimum of 11 samples shall be collected;
 - K. for stockpile volume between 2,901 m³ and 3,300 m³, a minimum of 12 samples shall be collected;
 - L. for stockpile volume between 3,301 m³ and 3,700 m³, a minimum of 13 samples shall be collected;
 - M. for stockpile volume between 3,701 m³ and 4,100 m³, a minimum of 14 samples shall be collected;
 - N. for stockpile volume between 4,101 m³ and 4,500 m³, a minimum of 15 samples shall be collected;
 - O. for stockpile volume between 4,501 m³ and 5,000 m³, a minimum of 16 samples shall be collected;
 - P. for stockpile volume of greater than 5,000 m³, a minimum number of samples to be collected shall be calculated in accordance with the following formula: $N = [32 + (\text{volume} - 5000 /$

300)]/2 where “volume” is the actual stockpile volume;

- c. sampling methods used and procedures for handling of the samples shall be in accordance with the requirements set out in the Section B of Part I of the Soil Rules or in accordance with the instructions of the accredited laboratory service provider carrying out the analytical testing;
- d. sampling of the Dry Soil for determination of the leachate concentrations of Contaminants listed in Schedule 4 of Regulation 347, shall be in accordance with the Ministry’s document entitled "*Principles of Sampling and Analysis of Waste for TCLP under Reg. 347* ", as amended;
- e. if the Excess Soil has a high moisture content, slump shall be determined to confirm the Excess Soil is a solid;
- f. applicable criteria from the hazardous waste definition from Regulation 347, including leachate concentrations for the Contaminants listed in Schedule 4 of Regulation 347, shall be determined from the information contained in the general documentation required in Condition 4.2(3) and tested for;
- g. bulk concentrations of the following:
 - i. Petroleum Hydrocarbon Fractions;
 - ii. heavy metals;
 - iii. Benzene, Toluene, Ethyl Benzene and Xylene; and
 - iv. other applicable potential Contaminants listed in Section B of Part I of the Soil Rules, including any other VOCs and SVOCs or inorganics, determined from the information contained in the general documentation required in Condition 4.2(3); and
- h. analytical methods listed in Condition 7.2 shall be used.

7.5 Characterization of Incoming Liquid Soil

- (1) If the incoming Liquid Soil is being characterized at the Site as a liquid Waste, the Owner shall carry out the required characterization in accordance with the following:
 - a. sampling shall be carried out in accordance with the Ministry-published protocols for sampling of liquid waste, including as set out in Ministry’s document entitled "*Principles of Sampling and Analysis of Waste for TCLP under Reg. 347* ", as amended;
 - b. applicable criteria from the hazardous waste definition from Regulation 347, including leachate concentrations for the Contaminants listed in Schedule 4 of Regulation 347, shall be determined from the information contained in the general documentation required in Condition 4.2(3) and tested for;

- c. bulk concentrations of the following shall be determined:
 - i. Petroleum Hydrocarbon Fractions;
 - ii. heavy metals;
 - iii. Benzene, Toluene, Ethyl Benzene and Xylene; and
 - iv. other applicable potential Contaminants listed in Section B of Part I of the Soil Rules, including any other VOCs and SVOCs or inorganics, shall determined from the information contained in the general documentation required in Condition 4.2(3) and tested for; and

- d. analytical methods listed in Condition 7.2 shall be used.

7.6 Testing of Processed Soil or Solidified Non-Mixed Liquid Soil

- (1) The requirements of Condition 7.6(2) apply to Processed Soil or Solidified Liquid Soil from a single Source Site processed at the Site separately from any other Liquid Soil received at the Site.

- (2) Prior to its shipment from the Site to a Re-use Site, the Owner shall characterize the Processed Soil or the Solidified Liquid Soil in accordance with the following:
 - a. sampling frequency shall be as set out in the Section B of Part I of the Soil Rules **or** as follows:
 - i. for stockpile volume of less than 220 m³, a minimum of 2 samples shall be collected;
 - ii. for stockpile volume between 221 m³ and 430 m³, a minimum of 3 samples shall be collected;
 - iii. for stockpile volume between 431 m³ and 670 m³, a minimum of 4 samples shall be collected;
 - iv. for stockpile volume between 671 m³ and 950 m³, a minimum of 5 samples shall be collected;
 - v. for stockpile volume between 951 m³ and 1,250 m³, a minimum of 6 samples shall be collected;
 - vi. for stockpile volume between 1,251 m³ and 1,550 m³, a minimum of 7 samples shall be collected;
 - vii. for stockpile volume between 1,551 m³ and 1,850 m³, a minimum of 8 samples shall be collected;
 - viii. for stockpile volume between 1,851 m³ and 2,200 m³, a minimum of 9 samples shall be collected;
 - ix. for stockpile volume between 2,201 m³ and 2,500 m³, a minimum of 10 samples shall be collected;
 - x. for stockpile volume between 2,501 m³ and 2,900 m³, a minimum of 11 samples shall be collected;
 - xi. for stockpile volume between 2,901 m³ and 3,300 m³, a minimum of 12 samples shall be collected;

- xii. for stockpile volume between 3,301 m³ and 3,700 m³, a minimum of 13 samples shall be collected;
 - xiii. for stockpile volume between 3,701 m³ and 4,100 m³, a minimum of 14 samples shall be collected;
 - xiv. for stockpile volume between 4,101 m³ and 4,500 m³, a minimum of 15 samples shall be collected;
 - xv. for stockpile volume between 4,501 m³ and 5,000 m³, a minimum of 16 samples shall be collected;
 - xvi. for stockpile volume of greater than 5,000 m³, a minimum number of samples to be collected shall be calculated in accordance with the following formula: $N = [32 + (\text{volume} - 5000 / 300)]/2$ where "volume" is the actual stockpile volume;
- b. sampling of the Processed Soil or the Solidified Liquid Soil for determination of the leachate concentrations of Contaminants listed in Schedule 4 of Regulation 347, shall be in accordance with the Ministry's document entitled "*Principles of Sampling and Analysis of Waste for TCLP under Reg. 347*", as amended or in accordance with Condition 7.6(2)a., whichever generates more samples;
 - c. sampling methods used and procedures for handling of the samples shall be in accordance with the requirements set out in the Section B of Part I of the Soil Rules and in accordance with the instructions of the accredited laboratory service provider carrying out the analytical testing;
 - d. slump shall be determined to confirm that the Processed Soil or the Solidified Liquid Soil is a solid;
 - e. applicable criteria from the hazardous waste definition from Regulation 347, including leachate concentrations for the Contaminants listed in Schedule 4 of Regulation 347, shall be determined from the information contained in the general documentation required in Condition 4.2(3) and tested for;
 - f. bulk concentrations of the following shall be determined:
 - i. Petroleum Hydrocarbon Fractions;
 - ii. heavy metals;
 - iii. Benzene, Toluene, Ethyl Benzene and Xylene; and
 - iv. other applicable potential Contaminants listed in Section B of Part I of the Soil Rules, including any other VOCs and SVOCs or inorganics, determined from the information contained in the general documentation required in Condition 4.2(3) and tested for;
 - g. analytical methods listed in Condition 7.2 shall be used.

7.7 Testing of Solidified Mixed Liquid Soil for Transfer

- (1) The requirements of Condition 7.7(2) apply to Solidified Liquid Soil containing Liquid Soils which

were:

- a. from various Source Sites;
- b. were not characterized by the Source Site owner/generator;
- c. were not characterized as a liquid waste at the Site; and
- d. which were mixed and solidified together or separated during processing and mixed, bulked or blended after solidification.

(2) Prior to the outgoing Solidified Liquid Soil leaving the Site for re-use in accordance with Condition 8.0, the Owner shall ensure that the Solidified Liquid Soil is characterized in accordance with the following:

- a. for characterization of the Solidified Liquid Soil from residential Source Sites received at the Site for solidification, sampling and testing requirements for Solidified Liquid Soil, including the number of samples taken and their locations shall be as follows:
 - i. a minimum of one (1) sample shall be collected for each 500 m³ of the Solidified Liquid Soil for testing of VOCs and SVOCs, excluding Petroleum Hydrocarbon Fractions; and
 - ii. a minimum of one (1) sample shall be collected for each 300 m³ of the Solidified Liquid Soil for testing for Petroleum Hydrocarbon Fractions and for all other testing,
- b. for characterization of the Solidified Liquid Soil from IC&I Source Sites received at the Site, sampling and testing requirements, including the number of samples taken and their locations shall be as follows:
 - i. for stockpile volume of less than 220 m³, a minimum of 2 samples shall be collected;
 - ii. for stockpile volume between 221 m³ and 430 m³, a minimum of 3 samples shall be collected;
 - iii. for stockpile volume between 431 m³ and 670 m³, a minimum of 4 samples shall be collected;
 - iv. for stockpile volume between 671 m³ and 950 m³, a minimum of 5 samples shall be collected;
 - v. for stockpile volume between 951 m³ and 1,250 m³, a minimum of 6 samples shall be collected;
 - vi. for stockpile volume between 1,251 m³ and 1,550 m³, a minimum of 7 samples shall be collected;
 - vii. for stockpile volume between 1,551 m³ and 1,850 m³, a minimum of 8 samples shall be collected;
 - viii. for stockpile volume between 1,851 m³ and 2,200 m³, a minimum of 9 samples shall be collected;
 - ix. for stockpile volume between 2,201 m³ and 2,500 m³, a minimum of 10 samples shall be collected;
 - x. for stockpile volume between 2,501 m³ and 2,900 m³, a minimum of 11 samples shall be

- collected;
- xi. for stockpile volume between 2,901 m³ and 3,300 m³, a minimum of 12 samples shall be collected;
 - xii. for stockpile volume between 3,301 m³ and 3,700 m³, a minimum of 13 samples shall be collected;
 - xiii. for stockpile volume between 3,701 m³ and 4,100 m³, a minimum of 14 samples shall be collected;
 - xiv. for stockpile volume between 4,101 m³ and 4,500 m³, a minimum of 15 samples shall be collected;
 - xv. for stockpile volume between 4,501 m³ and 5,000 m³, a minimum of 16 samples shall be collected;
 - xvi. for stockpile volume of greater than 5,000 m³, a minimum number of samples to be collected shall be calculated in accordance with the following formula: $N = [32 + (\text{volume} - 5000 / 300)]/2$ where “volume” is the actual stockpile volume;
- c. applicable criteria from the hazardous waste definition from Regulation 347, including leachate concentrations for the Contaminants listed in Schedule 4 of Regulation 347, shall be determined from the information contained in the general documentation required in Condition 4.2(3) and tested for;
- d. Discrete Samples shall be taken and analysed for bulk concentrations of the following:
- i. metals, including barium, beryllium, boron, cadmium, chromium, cobalt, copper, lead, molybdenum, nickel, silver, thallium, uranium, vanadium, zinc, antimony, arsenic and selenium;
 - ii. Petroleum Hydrocarbon Fractions;
 - iii. VOCs including Benzene, Toluene, Ethyl Benzene and Xylene;
 - iv. SVOCs, which include the SVOCs with the Henry’s Law constant greater than 1×10^{-5} atmosphere m³/mol and/or vapour pressure greater than 0.05 mm Hg and which, for example, are Acenaphthene, Acenaphthylene, Anthracene, Benz(a)anthracene, Cresol (m&p-), Cresol(o-), Fluoranthene, Fluorene, Methlynaphthalene (2-(1-)), Naphthalene, and Phenanthrene;
 - v. polycyclic aromatic hydrocarbons / acid/base/neutral compounds (PAHs/ABNs);
- e. Composite Samples may be collected for SVOCs with the Henry’s Law constant less than 1×10^{-5} atmosphere m³/mol and/or vapour pressure less than 0.05 mm Hg;
- f. each Solidified Liquid Soil load leaving the Site shall be tested in accordance with the Slump Test to ensure that the Solidified Liquid Soil is a solid; and
- g. analytical methods listed in Condition 7.2 shall be used.

8.0 TESTED SOIL QUALITY CRITERIA, SOIL DISPOSAL and RE-USE REQUIREMENTS

8.1 Tested Soil Quality Criteria

- (1) The Tested Soil shall meet the applicable Excess Soil Criteria for the Reuse Site.
- (2) The Tested Soil destined for a waste disposal site or any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction, shall not exceed the criteria set out in the Environmental Compliance Approval issued by the Ministry for the waste disposal site or the other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction.

8.2 Dry Soil as Excess Soil Destined for a Reuse Site

- (1) The Tested Soil may leave the Site as Excess Soil to a Reuse Site only if tested in accordance with the requirements set out in O. Regulation 406/19 and the Soil Rules to show compliance with the Excess Soil Criteria.

8.3 Dry Soil and Solidified Liquid Soil Destined to a Waste Disposal Site or a Site in Another Jurisdiction

- (1) The Tested Soil may be transferred to a waste disposal site or any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction subject to compliance with the applicable quality criteria and restrictions in O. Regulation 406/19.

8.4 Disposal of Non-Reusable Soil-like Waste

- (1) Except for the Processed Soil or the Solidified Liquid Soil intended for deposition at a Reuse Site, the Owner shall ensure that,
 - a. all Rock that does not meet the definition of an Inert Fill;
 - b. all Excess Soil that contains more Rock than allowed in Excess Soil and which does not meet the definition of an Inert Fill;
 - c. all Excess Soil that contains more than an insignificant amount of incidental construction and/or demolition waste or other non-hazardous waste debris; and
 - d. all Excess Soil that contains foundry sands, slag, emission control dusts or treatment residues;are only transferred to:
 - i. a waste disposal site approved to accept that type of waste to be further processed, used or disposed of in accordance with the Environmental Compliance Approval for that site; or
 - ii. a location not required to obtain an Environmental Compliance Approval but having an appropriate jurisdictional approval or a license, if required.

8.5 Other Wastes – Transfer or Disposal

- (1) The Owner shall ensure that other Wastes received and managed at the Site or wastes generated at

the Site are transferred to an approved waste disposal site in accordance with the requirements in the EPA and Regulation 347 or to a location with the appropriate jurisdictional approval or a license, if required or a site exempted from the Environmental Compliance Approval in accordance with Regulation 347.

- (2) The Owner shall ensure that any waste that triggers any of the criteria from the definition of "hazardous waste" set out in Regulation 347, is handled and disposed of in accordance with the Land Disposal Restrictions requirements set out in the EPA and Regulation 347.

9.0 NUISANCE IMPACT CONTROL and HOUSEKEEPING

9.1 Vehicles and Traffic

- (1) The Owner shall ensure that all vehicles leaving the Site are not leaking or dripping wastes or wastewater when leaving the Site.
- (2) The Owner shall ensure that the exterior of all vehicles delivering the Waste to the Site or hauling waste from the Site is cleaned prior to their departure from the Site, as appropriate.
- (3) Should the Owner become aware that a vehicle delivering Waste to the Site has leaked waste and/or wastewater on the municipal roadways, the Owner shall immediately report the violation to the owner of the vehicle(s) and to the District Manager.
- (4) The Owner shall ensure that vehicles leaving the Site do not drag mud or waste onto the public roadways.
- (5) The Owner shall,
 - a. ensure that the wheels of all vehicles departing from the Site are inspected and cleaned, as required, prior to the vehicles' departure from the Site; and
 - b. submit a plan to carry out the wheel cleaning for District Manager's concurrence a minimum of sixty (60) days prior to construction, installation and commencement of operation of the currently proposed equipment and processes described in the Application for an Environmental Compliance Approval dated February 23, 2019, and signed by Damian Rodriguez, GFL, and its supporting documentation included in Items #9 through #15 listed in the attached Schedule 1.
- (6) The Owner shall ensure that there is no queuing or parking of vehicles that are waiting to enter the Site on any roadway that is not a distinct part of the Site.
- (7) The Owner shall ensure that the vehicles transporting any wastes from the Site are appropriately covered as they depart from the Site, so that fugitive dust or odour emissions are minimized during the transit to their destination.
- (8) Only haulers approved by the Ministry or registered on the EASR, as required, shall be used to

transport any waste from the Site.

- (9) The Owner shall dust emissions are minimized during loading of vehicles for transportation off the Site.
- (10) The Owner shall ensure that all new drivers of vehicles transporting waste to and from the Site are instructed/trained on the acceptable on Site procedures.

9.2 Litter

- (1) The Owner shall,
 - a. prevent the escape of litter from the Site;
 - b. pick up litter around the Site on a daily basis, if necessary; and
 - c. erect litter fences around the areas causing a litter problem, if necessary.

9.3 Fugitive Dust

- (1) The Owner shall carry out the necessary measure to minimize fugitive dust emissions in accordance with the Best Management Practices Plan, as approved in the Air Approval.
- (2) Notwithstanding the provisions on Condition 9.3(1), the Owner shall ensure that all on-Site roads and operations/yard areas are regularly swept/washed to prevent dust impacts off-Site.
- (3) Only clean water shall be used to wet the Processed Soil stockpiles following the Processed Soil testing required in this Approval.

9.4 Fugitive Odour

- (1) The Owner shall carry out the necessary measure to minimize fugitive odour emissions from the Site.

9.5 Vermin and Vectors

- (1) The Owner shall,
 - a. implement necessary housekeeping procedures to eliminate sources and potential sources of attraction for vermin and vectors; and
 - b. if deemed necessary by Trained Personnel, hire a qualified, licensed pest control professional to design and implement a pest control plan for the Site. The pest control plan shall remain in place, and be updated from time to time as necessary, until all Waste is removed from the Site and the Site has been closed.

10.0 COMPLAINT MANAGEMENT

- (1) A designated representative of the Owner shall be available to receive public complaints caused by the operations at the Site twenty-four (24) hours per day, seven (7) days per week.
- (2) If at any time, the Owner receives any environmental complaints from the public regarding the operation of the Site, the Owner shall respond to these complaints according to the following procedures:
 - a. Step 1: Receipt of Complaint - The Owner shall record each complaint in a computerized tracking system. The information recorded shall include the following:
 - i. the name, address and the telephone number (or contact information) of the complainant, if known;
 - ii. the date and time of the complaint; and
 - iii. details of the complaint, including the description and duration of the incident.
 - b. Step 2: Notification of Complaint - After the complaint has been received by the Owner and recorded in the tracking system, the Owner shall, immediately notify, either the District Manager by phone during office hours or the Ministry's Spills Action Centre at 1-800-268-6060 after office hours.
 - c. Step 3: Investigation of Complaint - The Owner shall immediately initiate investigation of the complaint. The investigation shall include, as a minimum, the following:
 - i. determination of the activities undertaken in the Site at the time of the complaint;
 - ii. general meteorological conditions including, but not limited to the ambient temperature, approximate wind speed and its direction, sunny versus cloudy, inversion versus clear and windy, etc. at the time of the complaint;
 - iii. location of the person who submitted the complaint, if known, at the time of the incident; and
 - iv. determination if the complaint is attributed to activities being undertaken at the Site and if so, determination of all the possible cause(s) of the complaint;
 - d. Step 4: Corrective Action - The Owner shall determine the remedial action(s) to address the cause(s) of the complaint and implement the remedial action(s) to eliminate the cause(s) of the complaint, as soon as practicably possible, and to prevent a similar occurrence in the future;
 - e. Step 5: Written Response - The Owner shall forward a formal reply to the complainant, if known, and to the District Manager within one (1) week after the receipt of the complaint. The response shall include the results of the investigation of the complaint, the action(s) taken or planned to be taken to address the cause(s) of the complaint, and if follow-up response would be provided.
 - f. Step 6: Recording - All of the information collected and actions taken must be recorded in the tracking system.

11.0 OPERATIONS MANUAL and PERSONNEL TRAINING

11.1 Operations Manual

- (1) The Owner shall maintain an Operations Manual for the Site. As a minimum, the Operations Manual must contain the following:
- a. outline of the responsibilities of the Site personnel;
 - b. personnel training protocols;
 - c. Site operating procedures including but not limited to,
 - i. the Waste and the reagents and amendments receiving, unloading/loading, screening, handling and storage procedures and the Bioremediation processing procedures;
 - ii. Waste solidification procedures; and
 - iii. Waste mixing, bulking and blending procedures;
 - d. sampling, testing, monitoring and recording procedures as required by this Approval;
 - e. required data recording procedures;
 - f. emergency response procedures including an outline of the responsibilities of Site personnel including roles and responsibilities during emergency situations, exit locations and evacuation routing, and locations of relevant equipment available for handling of the emergency situations;
 - g. the contingency plans for the Site;
 - h. equipment and Site inspection procedures, as required by this Approval;
 - i. nuisance impact control and housekeeping procedures, as required by this Approval; and
 - j. the procedures for handling and recording complaints as described in this Approval.
- (2) A copy of this Operations Manual shall be kept at the Owner's office, must be accessible to Site personnel at all times and must be updated, as required.

11.2 Personnel Training

- (1) All operators of the Site shall be trained with respect to the following as per the specific job requirements of each individual operator:
- a. relevant air, noise, wastewater and waste management legislation, regulations and guidelines;

- b. major environmental concerns pertaining to the wastes to be handled at the Site;
- c. occupational health and safety concerns pertaining to the processes and wastes to be handled at the Site;
- d. management procedures including the use and operation of equipment for the processes and wastes to be handled at the Site;
- e. dust management procedures in accordance with the Best Management Practices Plan for the Site;
- f. odour management procedures;
- g. records keeping procedures;
- h. contingency plan and emergency response procedures;
- i. specific written procedures for the control of adverse effects from the Site;
- j. specific written procedures for refusal of unacceptable incoming Waste loads; and
- k. the requirements of this Approval.

(2) The training of the operators of the Site shall also include the procedures contained in the Operations Manual.

(3) The training of the operators of the Site shall be undertaken:

- a. upon commencing employment at the Site in a particular position;
- b. whenever procedures are updated or during the planned three (3)-year refresher training.

12.0 CONTINGENCY MEASURES and EMERGENCY SITUATION RESPONSE PLAN

12.1 Emergency Response and Contingency Plan

(1) The Owner shall maintain an up-to date Emergency Response and Contingency Plan for the Site. The Emergency Response and Contingency Plan shall be revised, as required, in consultation with the District Manager. The Owner shall also invite the local municipality and the local fire service authority to provide input and/or comments into revisions of the Emergency Response and Contingency Plan. The Emergency Response and Contingency Plan, as a minimum must include the following:

- a. emergency response procedures to be undertaken in the event of a spill, process upset, power failure, fire or any other emergency situation, including specific clean up methods for wastes expected to be generated from the emergency situation;
- b. a list of equipment and clean up materials available for dealing with the emergency situations and their locations on the Site plan;
- c. notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the Site, the Ministry's District Office and Spills Action Centre, the local fire service authority, the local Municipality, the local Medical Officer of Health, and the Ministry of Labour, and the names and telephone numbers of waste management companies

available for emergency response;

- d. procedures and actions to be taken should the incoming Waste not meet the quality criteria set out in this Approval;
- e. procedures and actions to be taken should the outgoing Residual Waste or the Tested Soil not meet the required quality criteria;
- f. procedures and actions to be taken should the temporary storage of the Waste at the Site result in occurrence of complaints;
- g. procedures and actions to be taken should the occurrence of complaints require the Owner to implement additional environmental impact control measures; and
- h. procedures and actions to be taken should the occurrence of complaints require the Owner to suspend the Waste handling activities at the Site.

- (2) An up-to-date version of the Emergency Response and Contingency Plan shall be kept at the Owner's office, in a central location known and available to all Site personnel. A copy shall be made available to Ministry staff upon request and to the local municipality and the local fire service authority, if requested.
- (3) The Emergency Response and Contingency Plan shall be reviewed on an annual basis and updated, if necessary. The revised version of the Emergency Response and Contingency Plan shall be provided to the District Manager and to the local municipality and the local fire service authority, if requested.

12.2 Fire Safety Plan

- (1) In addition to the requirements under Condition 12.1, no later than three (3) months from the date of issuance of this Approval, the Owner shall prepare and submit a Fire Safety Plan to the local fire service authority. In addition to any other information required by the local fire service authority, this Fire Safety Plan shall include a plan to deal with contaminated water generated as the result of fire suppression.
- (2) No later than ten (10) days after receiving written concurrence/approval for the Fire Safety Plan from the local fire service authority, the Owner shall submit a copy to the District Manager.

13.0 EMERGENCY SITUATIONS RESPONSE and REPORTING

- (1) The Owner shall immediately take all necessary measures, as set out in the Emergency Response and Contingency Plan, to handle the emergency situations occurring at the Site.
- (2) The Owner shall ensure that the equipment and materials outlined in the Emergency Response and Contingency Plan are immediately available at the Site at all times and are in a good state of repair

and fully operational.

- (3) The Owner shall ensure that all Site employees are fully trained in the use of the equipment and materials outlined in the Emergency Response and Contingency Plan, and in the procedures to be employed in the event of an emergency.
- (4) All Spills shall be immediately reported to the **Ministry's Spills Action Centre at 1-800-268-6060** and to the local municipality and shall be recorded in the log book as to the nature and cause of the Spill, and the action taken for clean-up, correction and prevention of similar future occurrences.
- (5) Should a Spill occur at the Site, in addition to fulfilling the requirements from the EPA, the Owner shall submit to the District Manager a written report within three (3) calendar days outlining the nature of the Spill, remedial measure taken and the measures taken to prevent future occurrences at the Site.

14.0 RECORDS KEEPING and RETENTION

- (1) The Owner shall retain all records required by this Approval for a minimum of five (5) years.
- (2) All records generated as required by this Approval shall include a date of record and the name and signature of the person completing the report.
- (3) All measurements shall be recorded in consistent metric units of measurement.

14.1 Daily Activities

- (1) The Owner shall maintain a written or digital record of daily activities undertaken at the Site. All measurements shall be recorded in consistent metric units of measurement. The record shall include, as a minimum, the following information:
 - a. date of receipt and the name of the Dry Soil or the Liquid Soil generator, Source Site location, land/use of the Source Site, and the quantity (tonnage and number of trucks) of the Dry Soil or the Liquid Soil received;
 - b. date of receipt and the name of the Waste, other than the Dry Soil or the Liquid Soil, generator, and the quantity (tonnage and number of trucks);
 - c. results of the required characterization of the incoming Waste;
 - d. the Dry Soil processing activities undertaken at the Site, including the amounts of reagents, amendments and Biostimulation and Bioaugmentation Compound(s) used in the Bioremediation process and the details of the source(s) of the Dry Soil combined to formulate each Bioremediation Biocell and Biopile;
 - e. date, quantity, type, quality (including the analytical data from any compliance testing) and the

- destination of the Tested Soil;
- f. date, quantity, type, quality (including the analytical data from any compliance testing) of the Tested Soil that was transferred back to the Bioremediation process for re-processing;
 - g. Waste solidification, mixing, bulking or blending activities undertaken at the Site;
 - h. date, quantity, type, quality (including the analytical data from any compliance testing) and the destination of the Waste destined for transfer off-Site;
 - i. date, quantity, type, and the destination of the total Residual Waste, transferred from the Site for final disposal;
 - j. date, quantity, type, quality (including the analytical data from any compliance testing, if applicable) and the destination of the Rejected Waste transferred off-Site and the reason for rejection;
 - k. housekeeping activities, including wetting of the Biopiles and/or storage stockpiles for dust control and the type of material used;
 - l. the running total of the Dry Soil temporarily stored prior to Bioremediation, the Dry Soil undergoing Bioremediation in Biocells and in Biopiles (counted separately), and of the Dry Soil intended for transfer off-Site, all temporarily stored in their approved storage locations; and
 - m. the running total of the Processed Soil and its characterization results, if characterization has been completed.

14.2 Emergency Situations

- (1) The Owner shall maintain a written or digital record of the emergency situations. The record shall include, as a minimum, the following:
 - a. the type of an emergency situation;
 - b. description of how the emergency situation was handled;
 - c. the type and amount of material spilled, if applicable;
 - d. a description of how the spilled material was cleaned up and waste stored, if generated; and
 - e. the location and time of final disposal, if applicable.

14.3 Inspections and Maintenance

- (1) The Owner shall maintain a written or digital record of inspections and maintenance as required

under this Approval. The record shall include, as a minimum, the following:

- a. the name and signature of person that conducted the inspection;
- b. the date and time of the inspection;
- c. the list of any deficiencies discovered;
- d. the recommendations for remedial action;
- e. the date, time and description of actions taken; and
- f. all records on the maintenance, repair and inspection of the equipment.

14.4 Personnel Training

- (1) The Owner shall maintain a written or digital record of training as required as required under this Approval. The record shall include, as a minimum, the following:
 - a. date of training;
 - b. name and signature of person who has been trained; and
 - c. description of the training provided.

14.5 Sampling and Testing Records

- (1) The Owner shall establish and maintain a written or digital record of all sampling and testing activities at the Site as required under this Approval. This record shall include, as a minimum, the following information:
 - a. Waste type sampled, number of samples, sample collection locations and volume collected;
 - b. day and time of collection;
 - c. sample handling procedures;
 - d. name of the person undertaking the sampling;
 - e. parameters tested for and the results;
 - f. name of the laboratory facility conducting the testing, if applicable; and
 - g. conclusions drawn with respect to the results of the testing.

14.6 Monitoring Records

- (1) The Owner shall establish and maintain a written or digital record of all monitoring activities at the Site as required under this Approval.

14.7 Complaints Response Records

- (1) The Owner shall establish and maintain a written or digital record of all complaints and the responses as required under this Approval.

14.8 Rejected Waste Records

- (1) The Owner shall establish and maintain a written or digital record of the Rejected Waste handling activities at the Site as required under this Approval. This record shall include, as a minimum, the following information:
 - a. the reason for rejection; and
 - b. the origin of the Rejected Waste, if known.

14.9 Annual Report

- (1) By March 31st following the end of each operating year, the Owner shall prepare and submit to the District Manager, an Annual Report, in an electronic format, summarizing the operation of the Site covering the previous calendar year. This Annual Report shall include, as a minimum, the following information:
 - a. annual amount and quality of the Dry Soil intended for Bioremediation;
 - b. annual amount and quality of the Dry Soil intended for transfer off-Site;
 - c. annual amount and quality of the Liquid Soil intended for solidification at the Site;
 - d. annual amount and quality of the Tested Soil transferred from the Site and its final destination(s);
 - e. annual amount and quality of the solidified Waste Slurries and Sludges transferred from the Site and its final destinations;
 - f. annual amount and quality of Waste other than the Waste referred to in Conditions 14.9(1)a., 14.9(1)b. 14.9(1)c., 14.9(1)d. and 14.9(1)e., tracked by waste class number, transferred from the Site and its final destinations;
 - g. a summary describing any Rejected Waste including quantity, type, reasons for rejection, its origin and its final destination;
 - h. annual amount of the Residual Waste transferred from the Site for final disposal and its

destination;

- i. number of Bioremediation Biocells and Biopiles and the status of processing at the end of the operating year;
- j. amount of unprocessed the Dry Soil or Liquid Soil temporarily stored at the Site at the end of the operating year;
- k. amount of the Dry Soil intended for transfer off-Site temporarily stored at the Site at the end of the operating year;
- l. any environmental and operational problems, that could negatively impact the environment, encountered during the operation of the Site or identified during the Site inspections and any mitigative actions taken;
- m. any changes to the Emergency Response and Contingency Plan, the Operations Manual or the Closure Plan that have been approved by the Director or the District Manager since the last Annual Report;
- n. any recommendations to minimize environmental impacts from the operation of the Site and to improve Site operations and monitoring programs in this regard;
- o. a summary of any complaints received and the responses made, as required by this Approval;
- p. a summary of the monitoring results and analyses required by this Approval;
- q. a descriptive summary of any spills, incidents or other emergency situations which have occurred at this Site, any remedial measures taken, and the measures taken to prevent future occurrences;
- r. an annual summary of any deficiencies, items of non-compliance or process aberrations that occurred at this Site and any remedial/mitigative action taken to correct them; and
- s. an up-to-date estimate of the Financial Assurance required for the Site.

(2) The Owner shall keep a copy of the latest Annual Report at the Owner's office, at all times.

15.0 DISTRICT OFFICE NOTIFICATION

15.1 Rejected Waste Notification

(1) The District Manager shall be notified in writing of the receipt of the Rejected Waste within four (4) business days of its receipt. The following information shall be included in the notification to the District Manager:

- a. quantity and type of the Rejected Waste;
- b. source of the Rejected Waste, if known;
- c. reason for the rejection;
- d. final destination of the Rejected Waste; and
- e. date of receipt and time and date of removal from the Site.

16.0 SITE CLOSURE

- (1) The Owner shall submit, for approval by the Director, a written Closure Plan for the Site at least nine (9) months prior to closure of the Site. This Closure Plan shall include, as a minimum, a description of the work that will be done to facilitate closure of the Site and a schedule for completion of that work.
- (2) Within ten (10) days after closure of the Site, the Owner shall notify the Director, in writing, that the Site is closed and that the Closure Plan has been implemented.

Schedule 1

This Schedule 1 forms part of this Environmental Compliance Approval:

1. Application for an Environmental Compliance Approval dated 2013/10/24 and signed by Patrick Dovigi, and attached appendices.
2. Attachment no. 6, Design and Operation report, Lafleche Leblanc Soil Recycling Inc., dated October 2013, revision no. 5.
3. E-mail from Damian Rodriguez, GFL, to Lynda Mulcahy, Ministry of the Environment and Climate Change, sent April 15, 2015, 10:58 a.m., subject: RE: Moose Creek Questions.
4. E-mails from Damian Rodriguez, GFL, to Lynda Mulcahy, Ministry of the Environment and Climate Change, sent April 17, 2015, 10:31 a.m. and 11:12 a.m., subject: RE: Moose Creek.
5. E-mail from John Tidball, Miller Thompson, to Lynda Mulcahy, Ministry of the Environment and Climate Change, sent September 14, 2015, 10:32 a.m., subject: follow up [MTDMS-Legal.FID5101984].
6. E-mail from Damian Rodriguez, GFL, to Lynda Mulcahy, Ministry of the Environment and Climate Change, sent November 25, 2015, 10:01 a.m., subject: Microbe Products, with attached files.
7. E-mail from Damian Rodriguez, GFL, to Lynda Mulcahy, Ministry of the Environment and Climate Change, sent November 25, 2015, 10:03 a.m., subject: Microbe Products, with attached file.
8. E-mail from Grimaud Montignon, GFL, to Margaret Wojcik, Ministry of the Environment, Conservation and Parks, sent August 28, 2018, 9:18 a.m., subject: GFL (Moose Creek site) IDS Ref #3363-AS9RGQ - amendment to ECA #8197-6NYJXP, with attached files entitled: "SOP111-Nitron XRF Analyzer Operation & Calibration.docx" and "Nitron xL3T GOLDD+ Environmental LODs AA44828 2010 Jul13.pdf".
9. Application for the Environmental Compliance Approval dated February 23, 2019, and signed by Damian Rodriguez, GFL and including the following attachments:
 - a. Drawing entitled "Proposed Site Plan" with sheet No. SK1;
 - b. Report entitled "GFL Moose Creek Liquid Waste Transfer Station, Design and Operations Plan", dated February 8, 2019, prepared by WSP Canada Inc.
 - c. letter dated January 31, 2019 from Willy de Wit, WSP Canada Inc. with the estimate for financial assurance.
10. E-mail dated March 14, 2019 (7:18 p.m.) from Willy de Wit, WSP Canada Inc. to Ricki Allum, Ontario Ministry of the Environment, Conservation and Parks providing additional information on

the proposal including the attachments entitled "SMoosecreek19030816250.pdf" and "7807-B9SM23.pdf".

11. E-mail dated October 11, 2019 (3:10 p.m.) from Willy de Wit, WSP Canada Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, including an attachment entitled "181-13137-00 GFL Moose Creek Liquid Waste FA Estimate 2019 Rev1.pdf".
12. E-mail dated October 27, 2020 (1:29 p.m.) from Damian Rodriguez, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks providing additional information on the proposal.
13. E-mail dated December 23, 2020 (5:56 p.m.) from Damian Rodriguez, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks providing additional information on the proposal.
14. E-mail dated January 4, 2021 (4:54 p.m.) from Damian Rodriguez, GFL Environmental Inc., to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks providing additional information on the proposal.
15. E-mail dated January 19, 2021 (1:56 p.m.) from Damian Rodriguez, GFL Environmental Inc., to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks providing additional information on the proposal.
16. Application to amend Environmental Compliance Approval dated April 17, 2025, and signed by Nadeem Soufian, Environmental Supervisor, GFL Environmental Services and included supporting documentation.

The reasons for the imposition of these terms and conditions are as follows:

GENERAL

Conditions 1.1, 1.4, 1.5, 1.6, 1.10 and 1.11 are included to clarify the legal rights and responsibilities of the Owner.

Condition 1.2 and 1.3 are included to ensure that the Site is build and operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider.

Condition 1.7 is included to ensure that the appropriate Ministry staff has ready access to the operations of the Site which are approved under this Approval. The condition is supplementary to the powers of entry afforded a Provincial Officer pursuant to the EPA, the OWRA, the PA, the NMA and the SDWA.

Condition 1.8(1) is included to ensure that the Site is operated under the corporate name which appears on the application form submitted for this approval and to ensure that the Director is informed of any changes. Condition 1.8(2) is included to restrict potential transfer or encumbrance of the Site without the approval of the Director and to ensure that any transfer of encumbrance can be made only on the basis that it will not endanger compliance with this Approval.

Condition 1.9 is included, pursuant to subsection 197(1) of the EPA, to provide that any persons having an interest in the Site are aware that the land has been approved and used for the purposes of waste disposal.

Condition 1.12 is included to ensure that sufficient funds are available to the Ministry to clean up the Site in the event that the Owner is unable or unwilling to do so.

SIGNS and SITE SECURITY

Condition 2.0 is included to ensure that the Site's users, operators and the public are fully aware of important information and restrictions related to the operation of the Site. Condition 2.0 is also included to ensure that the Site is sufficiently secured, supervised and operated by properly Trained Personnel and to ensure controlled access and integrity of the Site by preventing unauthorized access when the Site is closed and no Site personnel is on duty.

SERVICE AREA, APPROVED WASTE TYPES and RATES

Condition 3.0 is included to specify the approved Waste receipt rate, the approved and prohibited Waste types and the service area from which the Waste may be accepted at the Site based on the Owner's application and supporting documentation.

SITE OPERATIONS

Condition 4.1 is included to specify the hours of operation for the Site to ensure that the hours of Site's operation

do not result in an Adverse Effect or a hazard to the natural environment or any person.

Conditions 4.2 through 4.15 are included to ensure that all Waste, including Dry Soil and Liquid Soil, management including receipt, storage, processing, treatment and transfer, management of run-off and the discharges to the atmosphere are undertaken in done in a way which does not result in an Adverse Effect or a hazard to the environment or any person and are in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider.

Conditions 4.2 and 4.3 are also included to ensure that only the approved the Waste types are accepted at the Site.

Condition 4.6 is also included to identify the amounts of Waste approved to be present at the Site at any one time for the purpose of calculating the Financial Assurance requirements for the Site.

OPERATIONS/MAINTENANCE and INSPECTIONS

Condition 5.0 is included to require the equipment used for waste management and pollution control to be inspected and maintained thoroughly and on a regular basis to ensure that the operations at the Site are undertaken in a manner which does not result in an Adverse Effect or a hazard to the health and safety of the environment or any person.

BIOREMEDIATION MONITORING

Condition 6.0 is included to set out the Bioremediation monitoring requirements to monitor the progression and the effectiveness of the Bioremediation at the Site.

REQUIREMENT to CHARACTERIZE at the SITE

Condition 7.0 is included to set out the testing requirements when the Owner is required to carry out testing at the Site to characterize the incoming or outgoing Waste for its compatibility with the proposed off-Site destination.

TESTED SOIL QUALITY CRITERIA, SOIL DISPOSAL and RE-USE REQUIREMENTS

Condition 8.0 is included to ensure that all Tested Soil is properly managed, processed and disposed of in accordance with the Ministry's regulatory requirements and in a manner that protects the health and safety of the public and the environment.

NUISANCE IMPACT CONTROL and HOUSEKEEPING

Condition 9.0 is included to ensure that the Site is operated and maintained in an environmentally acceptable manner which does not result in a negative impact on the natural environment or any person.

COMPLAINT MANAGEMENT

Condition 10.0 is included to require the Owner to respond to any environmental complaints resulting from the operations at the Site appropriately and in a timely manner and that appropriate actions are taken to prevent any further incidents that may cause complaints in the future.

OPERATIONS MANUAL and PERSONNEL TRAINING

Condition 11.0 is included to ensure that personnel employed at the Site are fully aware and properly trained on the requirements and restrictions related to Site operations under this Approval.

CONTINGENCY MEASURES and EMERGENCY SITUATION RESPONSE PLAN

Condition 12.0 is included to ensure that the Owner is prepared and properly equipped to take action in the event of an emergency situation.

EMERGENCY SITUATIONS RESPONSE and REPORTING

Condition 13.0 is included to require further spill notification to the Ministry, in addition to the requirements already listed in Part X of the EPA.

RECORDS KEEPING and RETENTION

Condition 14.0 is included to ensure that detailed records of Site activities, inspections, monitoring and upsets are recorded and maintained for inspection and information purposes.

DISTRICT OFFICE NOTIFICATION

Condition 15.0 is included to ensure that the District Manager is notified of acceptance and management of Rejected Waste.

SITE CLOSURE

Condition 16.0 is included to ensure that final closure of the Site is completed in accordance with Ministry's standards.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 8197-6NYJXP issued on February 24, 2021, as amended.

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me, the Ontario Land Tribunal and in accordance with Section 47 of the *Environmental Bill of Rights*, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the notice requiring the hearing ("the Notice") shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance

- approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the *Environmental Protection Act*, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

and

The Minister of the Environment,
Conservation and Parks
777 Bay Street, 5th Floor
Toronto, Ontario
M7A 2J3

and

The Director appointed for the purposes of
Part II.1 of the *Environmental Protection Act*
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

* Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca

This instrument is subject to Section 38 of the *Environmental Bill of Rights*, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at <https://ero.ontario.ca/>, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the *Environmental Protection Act*.

DATED AT TORONTO this 30th day of April, 2026



Mohsen Keyvani, P.Eng.

Director

appointed for the purposes of Part II.1 of the
Environmental Protection Act

CF/

c: Area Manager, MECP Cornwall

c: District Manager, MECP Ottawa

James Power, (BlueFrog Environmental Consulting Inc)