AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL
NUMBER A210742
Issue Date: September 18, 2022

GFL Environmental Inc.
39 Fenmar Dr
Toronto, Ontario
M9L 1L9

Site Location: 38 Fenmar Drive and 39 Fenmar Drive
Toronto, Ontario
M9L 1L9

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:

use and operation of a 2.40-hectare Waste Disposal Site (Processing/Transfer) and Class 1 Soil Management Site for management of excess soil limited to dry soil and encompassing the following activities:

receipt and temporary storage of the dry soil, destined for bioremediation at the site, within the confines of two buildings; and

processing, including treatment, of the dry soil and consisting of the following processes and support units:

- processing of the dry soil with a shaking/screening unit equipped with a bioaugmentation compound(s) injection system at the exit of the unit;
- addition of biostimulation compound(s) and amendment material(s) to the dry soil;
- transfer of the dry soil from the preparation areas to the biopile areas;
- perforated pipe-aerated bioremediation of the dry soil in up-to 10 biocells, or mechanically-aerated bioremediation of the dry soil in up-to 10 biopiles, located within the confines of 2 buildings; and
- washing of contaminated rocks removed from the dry soil;
- transfer of the processed soil off-site; and/or

receipt and temporary storage of the dry soil, destined for transfer off-site; and

transfer of the dry soil off-site or screening and transfer of the dry soil off-site.

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;

"**BMPP**" means the document titled "Best Management Practices Plan: Fugitive Dust Emissions & Odour Control (Revision 7)", dated January 2022 and prepared by GFL Environmental Inc., which describes measures to minimize dust and odour emissions from the Facility and/or Equipment, including fugitive emissions. This is an update to the document which was as approved in the Air Approval and as subsequently revised subject to concurrence from the District Manager;

"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, with a perforated pipe air injection and additions of Bioaugmentation Compound(s) and/or Biostimulation Compound(s) and/or Amendment Material(s), covered with a tarp during the treatment process, as described in the supporting documentation listed in the attached Schedule 1, and where

measured oxygen concentration within the Biocell is not less than 15%;

"**Biopile**" means the Dry Soil treatment cell up-to 8 metres in height, without air injection but mechanically aerated, with additions of Bioaugmentation Compound(s) and/or Biostimulation Compound(s) and/or Amendment Material(s), as described in the supporting documentation listed in the attached Schedule 1, and where measured oxygen concentration within the Biopile is not less than 15%;

"**Bioremediation**" means Biodegradation conducted under controlled engineered conditions designed to reduce petroleum hydrocarbons concentrations in the Dry Soil in the Biopiles and the Bicells, as described in the supporting documentation listed in the attached Schedule 1, to the extent approved by this Approval;

"**Bioremediation Materials**" means the materials listed in Condition 3.2;

"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 supporting documentation listed in the attached Schedule 1 including the Safety Data Sheets (SDSs) submitted with the application, to the extent approved by this Approval;

"**Class 1 Soil Management Site**" has the same meaning as in O. Regulation 406/19;

"**Composite Sample**s" 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;

"Contaminants of Concern" have the same meaning as in O. Regulation 153/04;

"Demonstration Study" means the proposed Bioremediation of the Dry Soils with Higher Petroleum Hydrocarbons Concentrations in Biopiles with mechanical aeration;

"**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 Contaminants of Concern and/or does not contain more than insignificant amounts of incidental debris or other non-hazardous waste, handling of which is subject to the Environmental Compliance Approval requirements under the EPA. Dry Soil is a solid non-hazardous waste that is received at the Site for Bioremediation or transfer off-Site with no processing;

"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 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 standards 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 and Dry Soil/Rock mixture accepted at the Site to be managed in accordance with this Approval and the Processed 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;

"**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;

"**Higher Petroleum Hydrocarbons Concentrations**" means the concentrations of Contaminants of Concern exceeding Table 2.1 Soil Standards for petroleum hydrocarbon fractions F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and F4 (>C34);

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

"**Inert Fill**" as defined in Regulation 347;

"**m**" means metre;

"**m^3**" means cubic metre;

"**Ministry**" means the ministry of the government of Ontario responsible for the EPA and OWRA 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 Bioaugmantation 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;

"**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 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 t 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;

"**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 tested to show that their characteristics comply with the Excess Soil Criteria required for transfer from the Site to the same deposition location or further processing destination or into the Bioremediation at the Site;

"**Site**" or **"Facility"** means the site located at 38 Fenmar Drive and 39 Fenmar Drive in the City of Toronto;

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

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

"**Soil Buildings**" means the two (2) buildings at the Site and shown on the Site layout plans listed in the attached Schedule 1;

"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";

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

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

"**Standards Document**" means the Ministry document entitled "*Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*", revised version April 15, 2011, as amended;

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

"**Table 2.1 Soil Standards**" means the full depth generic site condition standards industrial/commercial/community property use listed in Table 2.1 of the Standards Document;

"**TCLP**" means Toxicity Characteristic Leaching Procedure as described in Regulation 347;

"**Tested Soil**" means the Dry Soil and/or the Processed Soil that has been tested in accordance with this Approval to demonstrate compliance with the appropriate Excess Soil Criteria set out in this Approval and including the following:

a. if mixed and Bioremediated, the Processed 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 Processed 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;

" **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 Reuse 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; and

"**Waste**" and **"waste**" within the context of this Approval, it 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 Excess Soil and Rock destined for receipt at the Site. Outputs from processing/treatment of waste at a waste disposal site continue to be considered waste.

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

TERMS AND CONDITIONS

1.1 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 July 6, 2016, signed by Damian Rodrigues, GFL Environmental Inc., and the supporting documentation listed in the attached Schedule 1 and the Site shall be constructed and the approved equipment shall be 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 Site not in operation. In the event that the construction, installation and/or operation of any portion of the Site 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; 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.

(2) 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 or impairment of water quality.

1.6 Adverse Effect

(1) The Site shall be constructed, operated and maintained in a manner which ensures the health and safety of all persons and prevents generation of negative environmental impacts including but not limited to dust, odours, vectors, pests, birds, litter, vibration, noise and any other negative environmental effects that may cause an Adverse Effect.

(2) If at any time dust, odours, vectors, pests, birds, litter, vibration, noise or other such negative environmental effects are generated at the Site and cause an Adverse Effect, the Owner shall take immediate and appropriate remedial action(s) that is/are necessary to alleviate the Adverse Effect, including suspension of all waste management activities and removal of waste from the Site, if necessary.

(3) The Owner shall take steps to minimize and ameliorate any Adverse Effect on the natural environment or impairment of water quality resulting from the approved operations at the Site, including such steps as accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.

1.7 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 change in:

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; or

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. 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.

1.8 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;

e. to conduct interviews with staff, contractors, agents and assignees of the Owner; and

f. 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.

1.9 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, upon request, be provided to the Ministry in a timely manner and in a format specified by the Ministry**.** All records shall be retained for two (2) 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.

(3) The Owner shall ensure that a copy of this Approval, in its entirety and including all its Notices of Amendment, and the documentation listed in Schedule 1, are retained at the Owner's office at all times.

1.10 Financial Assurance

(1) By October 11, 2022, the Owner shall submit to the Director, the Financial Assurance, as defined in Section 131 of the EPA in the amount of CAN$1,473,737.00. This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the transportation, Site clean-up and disposal of all quantities of waste on the Site at any one time.

(2) Commencing on October 31, 2027 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 1.10.(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 thirty (30) calendar days of written acceptance of the re-evaluation by the Director.

(3) Commencing on October 31, 2023, the Owner shall prepare and maintain at the Site an updated re-evaluation of the amount of Financial Assurance required to implement the actions required under Condition 1.10.(1) for each of the intervening years in which a re-evaluation is not required to be submitted to the Director under Condition 1.10.(2). The re-evaluation shall be made available to the Ministry staff, upon

request**.**

(4) 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.

1.11 Other Approvals

(1) The Owner shall ensure that the Site is not operated unless all approvals for the activities set out in Section 9 of the EPA, where applicable, have been obtained.

(2) The Owner shall ensure that the Site is not operated unless all approvals the activities set out in Section 53 of the OWRA, where applicable, have been obtained.

1.12 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.

2.0 SIGN and SITE SECURITY

2.1 Sign

(1) The Owner shall maintain a sign at the entrance to the Site. The sign shall be visible and readable from the main road leading to the Site. The following information shall be included on the sign:

a. name of the Owner and the Site's address;
b. this Approval number;
c. hours during which the Site is open;
d. waste types that are approved to be accepted at the Site;
e. Owner's telephone number to which complaints may be directed;
f. Owner's twenty-four hour emergency telephone number (if different from above);
g. a warning against unauthorized access; and
h. a warning against dumping at the Site.

2.2 Security

(1) 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.

(2) The Owner shall ensure that the Site is operated in a safe and secure manner, and that all waste is properly handled, contained, stored and labelled so as not to pose any threat to the general public and the Site personnel.

3.0 SERVICE AREA, APPROVED WASTE TYPES and RATES

3.1 Service Area

(1) The service area approved under this Approval is the Province of Ontario.

3.2 Approved Waste Types and Bioremediation Materials

(1) The Site is approved to receive Excess Soil limited to Dry Soil.

(2) Notwithstanding provisions of Condition 3.2(1), the Site may only receive Dry Soil for Bioremediation that,

a. contains biodegradable Contaminants of Concern, limited to petroleum hydrocarbons, in concentrations that can be Bioremediated in accordance with the Bioremediation process parameters approved in this Approval and in the Air Approval; and

b. does not contain non-biodegradable Contaminants of Concern at concentrations exceeding the applicable Excess Soil Criteria for deposition at the Reuse Site.

(3) 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.

(4) The following Biostimulation Compounds are approved for receipt, temporary storage and use at the Site:

a. processed organic waste limited to Compost;

b. nutrients as described in the Owner's application; and

c. pH adjustments as described in the Owner's application.

(5) The following Bioaugumentation Compound(s) are approved for receipt, temporary storage and use at the Site:

a. products as listed in the supporting documentation listed in Schedule 1 as required to achieve desired Bioremediation treatment of the Mix.

(6) The following Amendment Materials are approved for receipt, temporary storage and use at the Site:

a. straw;

b. wood chips; and

c. peat and natural wood products as listed in the supporting documentation listed in Schedule 1 as required to achieve desired porosity of the Mix.

3.3 Prohibited Waste Types

(1) The Site is not approved to receive any subject waste as defined under Regulation 347.

(2) The following waste types are prohibited from being accepted for processing or transfer at the Site:

a. Dry Soil that has been generated or has been previously transferred to any facility in the Province of Ontario from outside of the Province Ontario; and
b. liquid soil as defined in O. Regulation 406/19.

(3) The Site is not approved to receive any putrescible waste with the exception of incidental amount of putrescible waste that may not be separated out of the incoming Dry Soil. If a load of incoming Dry Soil containing more than an incidental amount of putrescible waste is received at the Site, it shall be removed from the Site as soon as possible but not later than twenty-four (24) hours from the time of its receipt.

(4) No free-phase liquid (non-aqueous phase liquid), excluding water, shall be present in the Dry Soil.

3.4 Dry Soil Receipt Rates

(1) The Site is approved to receive the Dry Soil as follows:

a. a maximum of 4,000 tonnes per day; and
b. a maximum of 950,000 tonnes per year.

4.0 SITE OPERATIONS

4.1 Operating hours:

(1) Receiving and shipping of Soil and other waste may be carried out 24 hours per day, 7 days per week, 365 days per year, unless otherwise limited by municipal by-laws.

4.2 Documentation for Incoming Dry Soil Receiving

Documentation

(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 is a solid non-hazardous waste, 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.

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 of Concern involve only fuels (diesel, gasoline, oil), or mineral oils, or SAR, then a minimum of one (1) sample may be taken for testing.

General Source Site Documentation

(2) Regardless whether the Dry 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's activities and land use;
d. past Source Site's activities and land use, if known; and
e. estimated quantity of the Dry Soil to be received at the Site.

For Each Source Site and Reviewed by Trained Personnel

(3) The documentation required in Conditions 4.2(1) and 4.2(2) shall be for the Dry Soil from each Source Site.

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

Laboratory Service Provider Credentials

(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 Documentation - 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 Documentation - Transfer to a Waste Disposal Site

(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, 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 of Concern 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 Documentation - 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: F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and F4 (>C34);

B. heavy metals;

C. Benzene, Toluene, Ethyl Benzene and Xylene; and

iv. bulk concentrations of the other applicable potential Contaminants of Concern 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(2);

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 m^3 of the Dry Soil to be excavated/excavated for testing of VOCs and SVOCs, excluding petroleum hydrocarbon fractions F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and F4 (>C34); and
   2. a minimum of one (1) sample shall be collected for each 300 m^3 of the Dry Soil to be excavated/excavated for testing for petroleum hydrocarbon fractions F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and F4 (>C34) 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 m^3 of the Dry Soil is to be excavated;
   2. a minimum of one (1) sample shall be collected for each 200 m^3 of the Dry Soil for the first 10,000 m^3 of the Dry Soil to be excavated;
   3. a minimum of one (1) sample shall be collected for each additional 450 m^3 of the Dry Soil after the first 10,000 m^3 of the Dry Soil to be excavated; and
   4. at least one (1) sample shall be collected for each additional 2,000 m^3 after the first 40,000 m^3 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 m^3, a minimum of 2 samples shall be collected;
2. for stockpile volume between 221 m^3 and 430 m^3, a minimum of 3 samples shall be collected;
3. for stockpile volume between 431 m^3 and 670 m^3, a minimum of 4 samples shall be collected;
4. for stockpile volume between 671 m^3 and 950 m^3, a minimum of 5 samples shall be collected;
5. for stockpile volume between 951 m^3 and 1,250 m^3, a minimum of 6 samples shall be collected;
6. for stockpile volume between 1,251 m^3 and 1,550 m^3, a minimum of 7 samples shall be collected;
7. for stockpile volume between 1,551 m^3 and 1,850 m^3, a minimum of 8 samples shall be collected;
8. for stockpile volume between 1,851 m^3 and 2,200 m^3, a minimum of 9 samples shall be collected;
9. for stockpile volume between 2,201 m^3 and 2,500 m^3, a minimum of 10 samples shall be collected;
10. for stockpile volume between 2,501 m^3 and 2,900 m^3, a minimum of 11 samples shall be collected;

11. for stockpile volume between 2,901 m^3 and 3,300 m^3, a minimum of 12 samples shall be collected;
12. for stockpile volume between 3,301 m^3 and 3,700 m^3, a minimum of 13 samples shall be collected;
13. for stockpile volume between 3,701 m^3 and 4,100 m^3, a minimum of 14 samples shall be collected;
14. for stockpile volume between 4,101 m^3 and 4,500 m^3, a minimum of 15 samples shall be collected;
15. for stockpile volume between 4,501 m^3 and 5,000 m^3, a minimum of 16 samples shall be collected; and
16. for stockpile volume of greater than 5,000 m^3, a minimum number of samples to be collected shall be calculated in accordance with the following formula: N = [32 + (volume – 5000 / 300)]/2 where “volume” is the actual stockpile volume in m^3;

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 of Concern 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.

4.3 Receipt of Dry Soil at the Site

(1) The Trained Personnel shall visually inspect the required characterization documentation for the incoming Dry Soil at the scale house and if the documentation is incomplete or not available, the Trained Personnel shall direct the truck to the designated unloading area.

(2) The Trained Personnel shall visually inspect the incoming Dry Soil at the scale, if possible, and again as it is being unloaded.

(3) All Dry Soil and the Bioremediation Materials unloading shall be undertaken within the confines of the Soil Buildings.

(4) Any Dry Soil that exhibits characteristics suggesting that it is not an approved waste type shall be deemed a Rejected Waste and disposed of in accordance with this Approval, the EPA and Regulation 347.

(5) The Dry 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 vehicle into a designated storage area separated from other Soil at the Site.

(6) No Dry Soil shall not to be stored within vehicles at the Site, unless the vehicles are parked within the confines of the Soil Storage Buildings and the storage duration does not exceed twenty four (24) hours from the time of the vehicle's arrival at the Site.

(7) The Owner shall only accept the Dry Soil that was transported to the Site by haulers approved by the Ministry, or registered on the EASR, as required.

4.4 Storage

Storage Amounts

(1) The maximum storage amount of the Dry Soil in storage and of the Mix in Bioremediation and of the Processed Soil, the Tested Soil and the Rejected Waste, approved to be stored at the Site shall not exceed 40,000 tonnes, at any one time.

(2) Except for the Biopiles or the Biocells, all other Soil stockpiles height shall not exceed 12 m, as set out in the supporting documentation listed in the attached Schedule 1.

(3) The maximum storage amount of Residual Waste approved to be stored at the Site shall not exceed 40 tonnes, at any one time.

(4) The maximum storage amount of Compost, straw or wood chips approved to be stored at the Site shall not exceed 8 m^3, at any one time.

(5) The maximum storage amount of the liquid Bioaugmentation Compound(s) solution shall not exceed 2,000 litres, at any one time.

(6) In the event that the Dry Soil cannot be processed or transferred from the Site or the Processed Soil cannot be removed from the Site in accordance with this Approval and the Site is at its approved storage capacity, the Owner shall cease accepting additional Dry Soil until additional receipt results in compliance with the waste storage limitations set out in this Approval.

Storage Duration - Dry Soil Destined for Transfer

(7) The maximum storage duration of the Dry Soil destined for transfer from the Site shall not exceed ninety (90) days from its receipt.

Storage Duration - Residual Waste

(8) 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.

Storage Duration - Rejected Waste

(9) 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 Dry Soil deemed as the Rejected Waste, as applicable, or as acceptable to the District Manager.

Storage Facility

(10) All storage of the Dry Soil, the Rejected Waste, the Processed Soil, the Tested Soil, the Bioremediation Materials shall be carried out within the confines of the Soil Buildings 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 Staging/Processing/Storage areas of the Soil Buildings and shall not exceed 12 m in height as set out in the supporting documentation listed in the attached Schedule 1.

b. The incoming the Dry Soil destined for transfer off-Site and received at the Site in accordance with Conditions 4.2(3), 4.2(4) and 4.2(5) shall be segregated and stored within the confines of the Soil Buildings, until it is removed from the storage location for transfer off-Site or to the processing areas of the Site.

c. For Dry Soil that requires characterization at the Site, 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.

d. All wastes and chemicals 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.

e. The liquid Bioaugmentation Compound(s) solution storage tanks shall be located within the confines of the Soil Buildings in a spill containment area designed in accordance with the requirements of this Approval.

f. Compost and the Amendment Materials required for the Bioremediation of the Dry Soil at the Site shall be stored within the confines of the Soil Buildings as shown in the supporting documentation listed in the attached Schedule 1.

g. Residual Waste shall be stored in roll-off bins and it may be stored outdoors in a designated area as shown in the supporting documentation listed in the attached Schedule 1.

4.5 Approved Waste Management Activities

(1) The following Dry Soil processing activities are approved in this Approval:

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. optional mixing of the Similar Soils destined for Bioremediation at the Site;
    ii. mixing of the Dry Soil or the mixed Similar Soils with the Bioaugmentation Compound(s) solution, the Biostimulation Compound(s) and the Amendment Materials into the Mix, as required;
    iii. Bioremediation of the Mix in Biopiles, including subsequent addition of the Bioaugmentation Compound(s) solution, the Biostimulation Compound(s)

and/or the Amendment Materials, as required, and installation of the process monitoring piping;

iv. Bioremediation of the Mix in Biopiles, including subsequent mechanical aeration and addition of the Bioaugmentation Compound(s) solution, the Biostimulation Compound(s) and/or the Amendment Materials, as required, and installation and re-installation of the process monitoring piping; and

v. Bioremediation of the Mix in Biocells, with perforated pipe aeration and including subsequent 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) as proposed in the supporting documentation listed in the attached Schedule 1;

d. mixing, bulking or blending of the Tested Soil intended for transfer off-Site to the same destination; and

e. transfer of the Tested Soil to a Reuse Site or a waste disposal site or any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction.

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

a. weighing all incoming and outgoing truck loads and recording the results;

b. receipt and temporary storage of the Dry Soil;

c. optional screening of the Dry Soil;

d. mixing, bulking or blending of the Similar Soils intended for transfer off-Site to the same destination; and

e. transfer of the Dry Soil and/or the mixed Similar Soils and/or the Tested Soil to a Reuse Site or a waste disposal site or any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction.

(3) The Owner shall ensure that all Dry Soil, the Residual Waste, the Rejected Waste and the Processed Soil management activities at the Site are carried within the confines of the Soil Buildings, at all times.

(4) All activities approved under this Approval shall only be carried out by the Trained Personnel appropriately trained as set out in Condition 11.2.

(5) All Biopiles and the Dry Soil and the Processed Soil and the Tested Soil storage stockpiles shall be located within the confines of the Soil Buildings at all times.

(6) The Owner shall segregate the Soil stockpiles of different quality and destined for

different destinations to ensure that the outbound Soil is sent to appropriate destinations.
(7) 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 to the same waste disposal site or a Reuse Site.

(8) The Owner shall ensure that only Similar Soils are to be used for blending and mixing with the Dry Soil prior to processing at the Site.

(9) Unless otherwise specified in this Approval, the approved activities shall be carried out as set out in the documents in the attached Schedule 1.

4.6 Bioremediation and the Demonstration Study

(1) Within twenty four (24) hours of receipt of characterized Dry Soil or on the next operating business day or within twenty four (24) hours of receipt of characterization results for Dry Soil tested at the Site, the Owner shall process the Dry Soil into the Mix and place in the designated Bioremediations bays.

(2) The Mix undergoing Bioremediation shall be wetted to maintain the optimal moisture range of 10-25 percent by weight or 20-70 percent moisture holding capacity of the Mix, unless Trained Personnel determines an alternative optimal moisture range required to Bioremediate the Mix and retains written justification for the change from the range required in this Condition, in accordance with the records keeping requirements in Condition 14.0.

(3) Biopile height shall not exceed 8 m as set out in the supporting documentation listed in the attached Schedule 1.

(4) Biocell height shall not exceed 3 m as set out in the supporting documentation listed in the attached Schedule 1.

(5) Unless the Dry Soil handling or Biocell construction activities are being carried out, the Biocells shall be covered at all times as proposed in the supporting documentation listed in the attached Schedule 1.

(6) Only clean water shall be used to add moisture to the Mix undergoing Bioremediation.

(7) The Mix undergoing Bioremediation in the Biopiles and the Biocells shall be aerated as required to maintain a target oxygen level of 15% to ensure aerobic conditions within the Mix.

(8) The Mix undergoing Bioremediation shall be maintained at the optimal pH level range of 6-8, unless Trained Personnel determines an alternative optimal pH level required to Bioremediate the Mix and retains written justification for the change from the range required in this Condition, in accordance with the records keeping requirements in Condition 14.0.

(9) The Owner may continue and finish the mechanically-aerated Biopile Bioremediation of the Dry Soil containing Higher Petroleum Hydrocarbons Concentrations in-progress at the time of the issuance of this Approval.

(10) Any new Dry Soil, that contains,

a. biodegradable Contaminants of Concern in concentrations that can be Bioremediated in accordance with the Bioremediation process parameters approved in this Approval; and
b. Higher Petroleum Hydrocarbons Concentrations,

received at the Site from August 11, 2022 and until sixty (60) days from August 11, 2022 shall be a part of the Demonstration Study.

(11) The Demonstration Study shall be designed to evaluate the effectiveness of mechanical aeration in achieving Table 2.1 Soil Standards within the sixty (60)-day period in the Dry Soil containing Higher Petroleum Hydrocarbons Concentrations Bioremediated in mechanically-aerated Biopiles and shall include a sufficient amount of the Dry Soil under study and use the methods and techniques considered scientifically reliable and valid.

(12) Upon the first receipt of the Dry Soil suitable for the Demonstration Study, the Owner shall commence the Demonstration Study to Bioremediate the Dry Soil containing Higher Petroleum Hydrocarbons Concentrations in the mechanically-aerated Biopiles.

(13) Upon the commencement of the Demonstration Study, the Owner shall notify, in writing, the Director and the District Manager.

(14) The Demonstration Study shall be conducted for duration required to Bioremedate the Dry Soil received within sixty (60) calendar days and it shall include construction, monitoring and testing of the mechanically-aerated Biopiles.

(15) The Dry Soils to be treated as a part of the Demonstration Study shall be segregated from all other Dry Soil at the Site and shall be clearly labelled.

(16) The incoming Dry Soil shall be characterized as required in Conditions 4.2 or 7.0.

(17) The Processed Soil in the Biopiles that are a part of the Demonstration Study shall be characterized as follows:

a. except for the sampling frequency set out in Condition 7.0, the Processed Soil be sampled and tested in accordance with the requirements set out in Condition 7.0;
b. the Owner shall sample the Processed Soil at an enhanced sampling frequency that results in the double number of samples that are required under Condition 7.0.

(18) If during the Demonstration Study, the Bioremediation of any batch of the Dry Soil in the mechanically-aerated Biopiles is deemed to be ineffective in achieving the Table 2.1 Soil Standards within the sixty (60)-day period, the Owner shall

a. stop using mechanical aeration;
b. move the Dry Soil to the Biocell to continue Bioremediation or transfer the Dry Soil off-Site in accordance with the provisions set out in this Approval;
c. investigate the cause of the batch failure; and
d. if applicable, determine the corrections to the process to prevent future failures.

(19) Within thirty (30) calendar days of the completion of the Demonstration Study, the Owner shall submit to the Director a report with the findings and conclusions of the Study. The report shall include:

a. incoming Dry Soil characterization results;
b. Biopile(s) construction methods including additions of the Bioaugmentation Compound(s) solution, the Biostimulation Compound(s) and any Amendment Materials;
c. Bioremediation process methods, including the frequency of the mechanical aeration;
d. Bioremediation process monitoring parameters, methods, and the results;
e. Bioremediation process duration;
f. Processed Soil characterization results;
g. reasons for a failed batch of the Dry Soil in achieving the Table 2.1 Soil Standards within the sixty (60)-day period, if failure occurred; and
h. corrections to the mechanically-aerated Bioremediation to correct the causes of the failed batch;

i. conclusions with respect to the success of the Demonstration Study and effectiveness of mechanically-aerated Bioremediation in treating the Dry Soil containing Higher Petroleum Hydrocarbons Concentrations.

(20) Following the completion of the Demonstration Study and until the results of the Demonstration Study are approved by the Director, the Dry Soil containing Higher Petroleum Hydrocarbons Concentrations received at the Site may be,

a. Bioremediated in the mechanically-aerated Biopiles subject to the Processed Soil testing requirements set out in Condition 4.6(17);
b. treated in the Biocells subject to testing requirements set out in Condition 7.0; or
c. transferred from the Site in accordance with this Approval.

(22) If the results of the Demonstration Study indicate that mechanical aeration is ineffective in achieving the Table 2.1 Soil Standards within the sixty (60)-day period, upon completion of the Demonstration Study, the Owner shall stop using mechanically-aerated Biopiles and only use Biocells to treat all Dry Soils containing Higher Petroleum Hydrocarbons Concentrations going forward.

(23) If the results of the Demonstration Study indicate that mechanical aeration effectively aerates the Biopiles containing Higher Petroleum Hydrocarbons Concentrations, the Owner may continue to use the mechanically-aerated Biopiles for Bioremediation of these types of Dry Soils, until otherwise prohibited by the Director.

4.7 Mixing, Bulking or Blending

(1) The Dry Soils that have been confirmed to meet the same applicable requirements for Bioremediation as set out in this Approval, may be mixed, bulked or blended together and treated together.

(2) The Dry Soils and/or the Processed Soil that are destined for the same Reuse Site and that have been confirmed to meet the same applicable Excess Soil Criteria may be mixed, bulked or blended together and transferred together to the same Reuse Site.

(3) Notwithstanding Condition 4.7(2), the Dry Soils and/or the Processed Soil intended for deposition at a Reuse Site may be mixed, bulked or blended if this activity is done in accordance with O. Regulation 406/19.

(4) The Dry Soil and/or the Processed 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.

(5) At no time, shall any Dry Soil or the Processed Soil intended for deposition 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.

(6) At no time, shall any Dry Soil or the Processed Soil intended for deposition at a Reuse Site be mixed, bulked or blended with any other Dry Soil, Processed Soil or 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 Soil.

4.8 Transfer of Dry Soil

(1) The Dry Soil transfer encompasses the following waste management activities:

a. weighing all Dry Soil intended for transfer to a Reuse Site or a waste disposal site or any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction;
b. incoming and outgoing truck loads and recording the results;
c. receipt;
d. temporary storage;
e. screening, as required;
f. mixing with Similar Soils; and
g. transfer off-Site.

(2) The Dry Soil intended for transfer off-Site shall be stored in a segregated area within the confines of the Soil Buildings.

(3) Dry Soil intended for transfer shall be segregated from the Dry Soil destined for Bioremediation at the Site.

(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.

4.9 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) Any waste, including Excess Soil, not approved under this Approval that is inadvertently accepted at the Site or any Dry Soil characterized at the Site that is found to be unacceptable for receipt at the Site shall be deemed to be a Rejected Waste.

(3) In the event that a Rejected Waste is inadvertently accepted at the Site, the Owner shall ensure that the Rejected Waste is stored indoors in the way that ensures isolation from other wastes and materials.

(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.

4.10 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 Owner shall ensure that all Residual Waste generated at the Site are managed and disposed of in accordance with the EPA and Regulation 347.

4.11 Prohibitions

(1) Burning of any wastes is prohibited at the Site.

(2) Scavenging of any wastes is prohibited at the Site.

(3) No outdoor storage of any wastes or materials is permitted at any time, except as approved in this Approval.

4.12 Cross-Contamination Prevention

(1) The Owner shall ensure that the incoming Dry Soil and the equipment used in handling of the incoming Dry Soil are kept separate and do not come in contact with the Processed Soil unless the equipment has been cleaned first, as required, to prevent cross-contamination.

(2) The Soil handling equipment cleaning shall be as proposed in the supporting documentation in the attached Schedule 1.

4.13 Wastewater Management

(1) The Owner shall ensure that all wastewater resulting from the waste handling activities at the Site is contained within the wastewater collection system and is managed in accordance with the requirements set out in any Environmental Compliance Approvals issued for the activities mentioned in Section 53 of the OWRA and any other applicable legislation.

(2) Run-off from the waste management activities, the housekeeping activities and wheel washing shall be contained in the Soil Buildings and drained into and collected in the sumps as proposed in the supporting documentation in the attached Schedule 1.

(3) The sumps shall be cleaned out on a regular basis as proposed in the supporting documentation in the attached Schedule 1.

(4) Wastewater from the sumps shall be hauled off-Site for disposal at a waste disposal site approved to accept this type of wastewater.

(5) The sumps will not be connected to a municipal sewer system as proposed in the supporting documentation in the attached Schedule 1.

4.14 Ventilation in the Soil Buildings

(1) As proposed in the supporting documentation in the attached Schedule 1, the Trained Personnel shall control the opening and closing of all doors within the Soil Buildings and adjust the operation of the ventilation fans to maintain the Soil Buildings under adequate negative pressure as compared to the ambient atmospheric pressure at a magnitude sufficient enough to prevent:

a. a migration of the fugitive odour emissions from the Soil Buildings to any off-Site

location; or

b. an occurrence of an Adverse Effect and/or complaints from the public being affected by the said migration of the fugitive odour emissions from the Soil Buildings.

(2) Should there be, confirmed by the District Manager, public complaints resulting from the fugitive odour emissions from the Soil Buildings, the Owner shall develop and submit a plan, prepared by a Professional Engineer, as directed or agreed by the District Manager, to the District Manager for performing negative pressure assessment for the Soil Buildings to identify ideal methodology for achieving and monitoring negative pressure. The plan shall include, as a minimum the following:

a. drawings showing:
    i. layout of the Soil Buildings;
    ii. identification of enclosures, if required; and
    iii. proposed locations for the pressure monitoring sensors for each enclosure;
b. accuracy of the proposed monitoring instruments;
c. identification of target negative pressure and negative air balance inside the enclosure(s) and/or Soil Buildings;
d. instrument calibration schedule;
e. data collection and reporting frequency;
f. alarm levels and triggers;
g. consideration of remedial actions if an alarm is triggered;
h. an evaluation of the negative pressure and air balance inside the Soil Buildings;
i. the monitoring period duration;
j. the proposal for interlocking of the bay doors within the Soil Buildings with the respective fans and the negative pressure control system; and
k. reporting, including an analysis of the results and recommendations.

(3) The Owner shall finalize the plan from Condition 4.14(2) in consultation with the District Manager and the Director.
(4) The Owner shall:

a. conduct negative pressure assessment for the Soil Buildings as directed or agreed by the District Manager as per the plan prepared in accordance with Condition 4.14(2);
b.

c. prepare and submit a report prepared by a Professional Engineer on the negative pressure assessment for the Soil Buildings to the Director and the District Manager within two (2) months after completing the negative pressure assessment;

d.

e. implement the recommendations identified in the negative pressure assessment report within two (2) months after completing the negative pressure assessment or as directed or agreed by the District Manager.

(5) As proposed in the supporting documentation in the attached Schedule 1, the Owner shall maintain 3.5 air changes per hour in the Soil Buildings.

5.0 EQUIPMENT MAINTENANCE and SITE INSPECTIONS

5.1 Inspections

(1) The Owner shall maintain at the Site a comprehensive written inspection program which includes procedures for inspections of all aspects of the Site's operations including the following:

a. Dry Soil, Processed Soil and any other waste or materials loading/unloading/storage/handling areas;

b. condition of all major pieces of the Site’s equipment;

c. condition of all instruments for monitoring required under this Approval;

d. security fence and property line;

e. presence of excessive fugitive dust emissions from the operation of the Site;

f. presence of the on and off-Site litter; and

g. presence of off-Site odours.

(2) The inspection program shall be up-dated, as required, shall be retained at the Site and be made available for inspection by a Provincial Officer, upon request.

(3) The inspections required in Condition 5.(1) shall be undertaken daily by Trained Personnel in accordance with the inspection program to ensure that all Site’s 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.

5.2 Spare Parts

(1) The Owner shall prepare a list of critical spare parts and update this list annually or

more frequently, if necessary, to ensure that this list is maintained up-to-date. The list shall be retained at the Site and be made 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 be immediately available from an off-Site supplier.

5.3 Maintenance

(1) The Owner shall ensure that the Site's equipment is properly operated and maintained at all times.

(2) The Owner shall prepare, not later than three (3) months after the date of this Approval, and update, as necessary, a written or electronic document outlining the operating procedures and a maintenance program for the equipment, including routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the equipment suppliers.

(3) The Owner shall implement the recommendations of the document referred to in Condition 5.3(2), above.

(4) The Owner shall develop and implement a preventative maintenance program for all on-Site equipment associated with the processing and managing of wastes and control of fugitive odour and dust emissions.

(5) The preventative maintenance program shall be maintained up-to-date, be retained at the Site and be available for inspection by a Provincial Officer, upon request.

6.0 PROCESS MONITORING

6.1 Bioremediation Monitoring

(1) During the normal operating hours, the Owner shall monitor the following Bioremediation process parameters in the Biopiles and the Biocells in accordance with the protocol set out in the supporting documentation listed in the attached Schedule 1:

a. temperature;
b. oxygen level;
c. moisture level;
d. pH;
e. carbon dioxide level; and

f. total residual petroleum hydrocarbons.

(2) The readings or the samples shall be taken, as a minimum, at five (5) locations representing the full depth profile of the Biopile or the Biocell, starting at the location one (1) metre from the surface and including locations in the middle and bottom of the Biopile or the Biocell.

(3) The monitoring shall be carried out on a daily 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, below.

(4) Should any measured oxygen concentration within the Biopile fall below 15%, the Biopile shall be re-constructed to aerate the Mix or the Dry Soil shall be moved into a perforated pipe-aerated Biocell.

(5) Process monitoring shall be carried out in accordance with the protocol set out in the supporting documentation listed in the attached Schedule 1 and as set out in Conditions 6.1(1) thorough 6.1(4).

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 the Dry Soil and of the Processed Soil

(1) Unless the incoming Dry 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 Dry Soil at the Site in accordance with this Approval.

(2) The Owner shall characterize the incoming Dry Soil from each Source Site and in accordance with the requirements of O. Regulation 406/19 and the Soil Rules.

(3) The Owner shall sample and characterize the Processed Soil for each Reuse Site and in accordance with the requirements of O. Regulation 406/19 and the Soil Rules.

(4) Notwithstanding provisions of Conditions 7.1(1) through 7.1(3), 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 have been already adequately characterized at the Source Site or at the spill site as required by this Approval, upon its receipt at the Site, the Owner shall characterize the Dry Soil to determine its nature, constituents and characteristics.

(2) The Owner shall sample the incoming Dry Soil,

i. within twenty four (24) hours from its receipt, or on the next business day, whichever comes first; or
ii. when receiving Dry Soil from the same Source Site over several days, within twenty four (24) hours from last load receipt, or on the next business day, whichever comes first.

(3) The Owner shall sample the Processed Soil from the same Source Site within twenty four (24) hours from completion of processing or on the next business day, whichever comes first.

(4) Discrete 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. petroleum hydrocarbon fractions F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34) and F4 (>C34);
c. VOCs including Benzene, Toluene, Ethyl Benzene and Xylene;
d. SVOCs, which include the SVOCs with the Henry's Law constant greater than 1x10-5 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, Cresol (m&p-), Cresol(o-), Fluoranthene, Fluorene, Methlynapththalene (2-(1-)), Naphthalene, and Phenanthrenre; and
e. polycyclic aromatic hydrocarbons / acid/base/neutral compounds (PAHs/ABNs).

(5) Composite Samples shall be taken when analysing for SVOCs with the Henry's Law constant less than 1x10-5 atmosphere m^3 /mol and/or vapour pressure less than 0.05 mm Hg.

(6) For sampling of the Dry Soil or the Processed 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

(7) For determination if the Excess Soil is a solid or a liquid, the Owner shall use the Slump Test.

(8) For testing of the Dry Soil or the Processed Soil, 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 of Concern 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. to demonstrate that the Dry Soil 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

(9) The Owner shall submit samples to an accredited laboratory service provider no later as instructed, for the required analysis.

7.3 Testing of Dry Soil to be Transferred to a Waste Disposal Site

(1) The testing requirements from Conditions 7.3(2) and 7.3(3) apply to the incoming Dry Soil destined for transfer to an approved non-hazardous waste disposal site.

(2) If the incoming Excess Soil has a high moisture content, the Owner shall determine the Slump.

(3) For Dry Soil destined for transfer to an approved non-hazardous waste disposal site as set out in Condition 8.0, the required characterization sampling and testing protocols/methods shall be in accordance with one of 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,

i. 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

ii. tested for Contaminants of Concern 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;

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 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 m^3 of the Dry Soil to be excavated/excavated for testing of VOCs and SVOCs, excluding petroleum hydrocarbon fractions F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and F4 (>C34); and
   ii. a minimum of one (1) sample shall be collected for each 300 m^3 of the Dry Soil to be excavated/excavated for testing for petroleum hydrocarbon fractions F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and F4 (>C34) 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:
   i. for stockpile volume of less than 220 m^3, a minimum of 2 samples shall be collected;
   ii. for stockpile volume between 221 m^3 and 430 m^3, a minimum of 3 samples

shall be collected;

iii. for stockpile volume between 431 m^3 and 670 m^3, a minimum of 4 samples shall be collected;

iv. for stockpile volume between 671 m^3 and 950 m^3, a minimum of 5 samples shall be collected;

v. for stockpile volume between 951 m^3 and 1,250 m^3, a minimum of 6 samples shall be collected;

vi. for stockpile volume between 1,251 m^3 and 1,550 m^3, a minimum of 7 samples shall be collected;

vii. for stockpile volume between 1,551 m^3 and 1,850 m^3, a minimum of 8 samples shall be collected;

viii. for stockpile volume between 1,851 m^3 and 2,200 m^3, a minimum of 9 samples shall be collected;

ix. for stockpile volume between 2,201 m^3 and 2,500 m^3, a minimum of 10 samples shall be collected;

x. for stockpile volume between 2,501 m^3 and 2,900 m^3, a minimum of 11 samples shall be collected;

xi. for stockpile volume between 2,901 m^3 and 3,300 m^3, a minimum of 12 samples shall be collected;

xii. for stockpile volume between 3,301 m^3 and 3,700 m^3, a minimum of 13 samples shall be collected;

xiii. for stockpile volume between 3,701 m^3 and 4,100 m^3, a minimum of 14 samples shall be collected;

xiv. for stockpile volume between 4,101 m^3 and 4,500 m^3, a minimum of 15 samples shall be collected;

xv. for stockpile volume between 4,501 m^3 and 5,000 m^3, a minimum of 16 samples shall be collected;

xvi. for stockpile volume of greater than 5,000 m^3, a minimum number of samples to be collected shall be calculated in accordance with the following formula: N = [32 + (volume – 5000 / 300)]/2 where “volume” is the actual stockpile volume in m^3;

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 of Concern 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 of Concern 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 shall be determined:

    i. petroleum hydrocarbon fractions: F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and F4 (>C34);

    ii. heavy metals;

    iii. Benzene, Toluene, Ethyl Benzene and Xylene; and

    iv. other applicable potential Contaminants of Concern 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.

7.6 Testing of the Processed Soil

(1) The requirements of Condition 7.6(2) apply to Processed Soil from a single Source Site or from a mixture of Similar Soils processed at the Site.

(2) Prior to its shipment from the Site to a Reuse Site, the Owner shall characterize the Processed Soil as follows:

a. sampling frequency shall be as set out in the Section B of Part I of the Soil Rules;

b. 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;

c. Slump shall be determined to confirm that the Processed Soil is a solid;

d. applicable criteria from the hazardous waste definition from Regulation 347, including leachate concentrations for the Contaminants of Concern 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;

i. bulk concentrations of the following shall be determined:

A. petroleum hydrocarbon fractions: F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and F4 (>C34);

B. heavy metals;

C. Benzene, Toluene, Ethyl Benzene and Xylene; and

D. other applicable potential Contaminants of Concern 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;

e. 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 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 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.

9.0 HOUSEKEEPING and NUISANCE IMPACT CONTROL

9.1 Dust

(1) The Owner shall implement the Site's dust control measures as proposed in the BMPP, and its subsequent versions, subject to the District Manager's instructions and/or concurrence.

(2) Only clean water shall be used to control dust at the Site.

(3) The Owner shall ensure dust emissions are minimized during Soil handling activities in the Soil Buildings, including during unloading and loading of vehicles for transportation off the Site.

(4) All dust prevention and mitigation practices employed at the Site shall be included in the Annual Report as required by Condition 14.9.

9.2 Trucks - Mud Track-Out

(1) The Owner shall implement the mud track-out measures as proposed in the BMPP, and its subsequent versions, subject to the District Manager's instructions and/or concurrence.

(2) Notwithstanding the requirements in Condition 9.2(1), the Owner shall ensure that, at all times of all seasons, the wheels of all trucks hauling Soil and/or any waste from the Site are cleaned prior to their departure from either of the Soil Buildings at the Site so that the outbound driveways on the Site are free of mud or dust and that the vehicles leaving the Site and/or travelling in between 39 Fenmar Drive and 38 Fenmar Drive locations do not drag mud, soil or any waste onto the municipal roadways.

(3) If at any time, the Ministry staff verifies mud track-out on the municipal roads leading to the Site and fugitive dust emissions, from the Dry Soil trucks arriving at and departing from the Site, the Owner shall take immediate additional steps to eliminate the mud track and the fugitive dust emissions, including but not limited to installation of a truck wheels washing station or another equipment equivalent in terms of cleaning effectiveness and efficiency, at each: 38 Fenmar Drive and at 39 Fenmar Drive locations.

(4) If at any time, the District Manager deems the existing mud track-out measures insufficient or ineffective, within thirty (30) days from the written notice from the District Manager, the Owner shall prepare and submit to the District Manager a plan to revise the truck wheel cleaning procedures and the installation plan of the new equipment.

(5) The Owner shall implement the revised wheel cleaning procedures within thirty (30) days from the District Manager's concurrence, or as acceptable to the District Manager.

(6) All mud track-out prevention and mitigation practices employed at the Site shall be included in the Annual Report as required by Condition 14.9.

9.3 Road Dust

(1) During the operating hours, the Owner shall ensure that regular municipal roads cleaning in the areas affected by mud track-out and the the fugitive dust related to the activities at the Site, including the mud/dust from the incoming Dry Soil trucks, is carried out as proposed in the BMPP, and its subsequent versions, subject to the District Manager's instructions and/or concurrence.

(2) Notwithstanding the requirements in Condition 9.3(1), the Owner shall ensure that the municipal roads cleaning is done with only a wet sweeping equipment that is designed to ensure that no dust is emitted from the equipment to the atmosphere and that no Adverse Effect is caused by the operation of the equipment on the receptors in

the vicinity of the Site.

(3) The Owner shall track the water usage in the road sweeping equipment on a daily basis.

(4) Should the Owner become aware that a vehicle delivering Dry Soil to the Site has leaked waste and/or wastewater and/or deposited mud on the municipal roadways, the Owner shall immediately report the violation to the owner of the vehicle(s) and keep records to be provided to the District Manager, upon request.

(5) All municipal roads cleaning practices employed at the Site and the water usage amounts shall be included in the Annual Report as required by Condition 14.9.

9.4 Vehicles - Covers

(1) The Owner shall ensure that all vehicles entering, leaving and travelling in between the Soil Buildings are properly covered to eliminate the dust emissions in the vicinity of the Site. As a minimum, the vehicles shall be equipped with a properly functional tarp.

(2) All Dry Soil vehicles arriving and departing from the Site shall be equipped with appropriate means of minimizing dust emissions from the Dry Soil transport. As a minimum, the vehicles shall be covered with a properly functional tarp.

(3) The Owner shall inform all vehicle drivers using the Site of the vehicle covering requirements.

(4) The Owner shall ensure that the Trained Personnel inspects the incoming and outgoing vehicles for compliance with the vehicle covering requirements.

(5) Vehicle drivers violating the Site's covering requirements will receive a warning and will be suspended from using the Site for all subsequent violations, as proposed in the BMPP.

(6) The Owner shall keep records of the violations, warnings and suspensions issued to the drivers and suspensions.

9.5 Vehicles - Freeboard

(1) All Dry Soil vehicles arriving at the Site should be filled to have an appropriate freeboard to minimize the risk of Soil spilling during transport.

(2) The Owner shall inform all vehicle drivers arriving at the Site of the freeboard requirement.

(3) Vehicle drivers violating the Site's freeboard requirements will receive a warning regarding the freeboard requirements and the Owner shall provide the vehicle filling instructions to the personnel responsible for vehicle loading at the Source Site.

(4) The Owner shall keep records of the freeboard violations and warnings issued to the drivers.

(5) All Dry Soil vehicles departing from the Site shall be filled to have an appropriate freeboard to minimize the risk of Soil spilling during transport.

9.6 Traffic

(1) The Owner shall ensure that there is no queuing or parking of the Dry Soil trucks that are waiting to enter the Site on any roadway that is not a distinct part of the Site.

(2) The Owner shall ensure that a Trained Personnel is directing traffic on the municipal roadway in front of the Site during the operating hours to ensure that there is no Dry Soil trucks queuing on the municipal roadway and that the Dry Soil trucks that cannot enter the Site immediately upon arrival in front of the Site are directed away to prevent queuing on the municipal roadway.

(3) If at any time, the Ministry staff verifies the Dry Soil trucks queuing on the municipal roads leading to the Site and notifies the Owner in writing, the Owner shall take immediate steps to eliminate the Dry Soil truck traffic, including but not limited to the following:

a. diverting the Dry Soil trucks away from the Site;
b. immediately start reducing the daily receipt rate until no queuing can be ensured;
c. track daily truck traffic numbers and correlate with the total daily receipt rate; and
d. by the end of the day of the change, notify the District Manager of the changes.

(4) The Owner shall direct the Dry Soil intended for Bioremediation and the Dry Soil intended for transfer to the appropriate Soil Building in order to minimize the number of times the trucks have to cross Fenmar Drive to be weighed in and out at 39 Fenmar Drive.

(5) Only haulers approved by the Ministry or registered on the EASR, as required, shall be used to transport any Soil or waste from the Site.

9.7 Odour

(1) The Owner shall implement the Site's odour control measures as proposed in the

BMPP, and its subsequent versions, subject to the District Manager's instructions and/or concurrence.

(2) Notwithstanding the requirements in Condition 9.3(1), the Owner shall maintain the negative pressure in the Soil Buildings to minimize emissions of the fugitive odour emissions, as proposed in the supporting documentation listed in the attached Schedule 1.

9.8 Litter

(1) The Owner shall pick up the litter at the Site, as required to prevent its escape from the Site.

9.9 Vermin and Vectors

(1) The Owner shall implement necessary housekeeping procedures to eliminate potential sources of attraction for vermin and vectors.

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 Excess Soil and the reagents and amendments receiving, unloading/loading, screening, handling and storage procedures and the Bioremediation processing procedures; and
    ii. the Dry Soil and the Processed Soil 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 BMPP 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 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 Dry Soil not meet the quality criteria set out in this Approval;

e. procedures and actions to be taken should the outgoing Dry Soil or the Processed Soil not meet the quality criteria set out in this Approval;

f. procedures and actions to be taken should the outgoing Residual Waste or the Tested Soil not meet the required quality criteria;

g. procedures and actions to be taken should the waste management activities at the Site result in occurrence of complaints;

h. procedures and actions to be taken should the occurrence of complaints require the Owner to implement additional environmental impact control measures; and

i. 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.

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 Excess Soil generator, Source Site location, land/use of the Source Site, and the quantity (tonnage and number of trucks) of the Excess Soil received;
b. results of the required characterization of the incoming Excess Soil;
c. date, quantity, type, quality (including the analytical data from any compliance testing) and the destination of the Dry Soil destined for transfer off-Site;
d. date, quantity, type, quality (including the analytical data from any compliance testing) and the destination of the Dry Soil destined for Bioremediation;
e. 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 Biopile;
f. date, quantity, type, quality (including the analytical data from any compliance testing) and the destination of the Tested Soil;
g. 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;
h. date, quantity, type, and the destination of the total Residual Waste, transferred from the Site for final disposal;

i. 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;

j. housekeeping activities, including wetting of the Biopiles and/or storage stockpiles for dust control and the type of material used and road cleaning activities and other dust mitigation measures;

k. daily water usage in the Owner's sweeper/flusher(s) and/or the contracted vehicles used for municipal roads cleaning in the areas affected by mud track-out and the the fugitive dust related to the activities at the Site;

l. the running total of the Dry Soil temporarily stored prior to Bioremediation, the Dry Soil undergoing Bioremediation in Biopiles, 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 received at the Site;
b. annual amount and quality of the Dry Soil intended for transfer off-Site received at the Site;
c. annual amount and quality of the Tested Soil transferred from the Site and its final destination(s);
d. monthly numbers of the Dry Soil trucks that have arrived at the Site and have been accepted to unload their loads;
e. a summary describing any Rejected Waste including quantity, type, reasons for rejection, its origin and its final destination;
f. annual amount of the Residual Waste transferred from the Site for final disposal and its destination;
g. number of Bioremediation Biopiles and the status of processing at the end of the operating year;
h. amount of unprocessed the Dry Soil temporarily stored at the Site at the end of the operating year;
i. amount of the Dry Soil intended for transfer off-Site temporarily stored at the Site at the end of the operating year;
j. summary of the mud track-out prevention measures used at the Site;
k. summary of the municipal roads cleaning protocols and monthly summary of the water usage by the Owner's sweeper/flusher and/or the contracted vehicles;
l. summary of the Site's dust and odour control measures used at the Site;
m. 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;
n. 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;

o. any recommendations to minimize environmental impacts from the operation of the Site and to improve Site operations and monitoring programs in this regard;

p. a summary of any complaints received and the responses made, as required by this Approval;

q. a summary of the monitoring results and analyses required by this Approval;

r. 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;

s. 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

t. 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.

1. Application for an Environmental Compliance Approval dated July 6, 2016 and signed by Damian Rodriguez, GFL Environmental Inc. and including the following supporting documentation:

a. Attachment 1: Proof of Legal Name
b. Attachment 2: Detailed Project & Process Description
c. Attachment 3: Site Plan
d. Attachment 4: Process Schematic
e. Attachment 5: Public Consultation Letter
f. Attachment 6: Financial Assurance Estimate
g. Attachment 7: Zoning Map
h. Attachment 8: Design and Operations Report dated June 2016 and prepared by GFL Environmental Inc.

2. E-mail dated Jan 12, 2017 (11:07 a.m.) from Francisco Gomez, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change, with additional information on the proposal including the following documents entitled:

a. D&O Rev 2 Jan 2017.pdf
b. Attachment 1 – Ventilation System Design.pdf
c. Attachment 2 – Flow Diagram Layout.pdf
d. Attachment 3 – 38 Fenmar Site Layout Plan V.2.pdf
e. Attachment 4 – 39 Fenmar Site Layout Plan V.2.pdf
f. Attachment 5 – BPO Corp HC.pdf
g. Attachment 6 – Certificate of Analysis (Compost) YW CQA Nov 2016.pdf
h. Attachment 7 – Soil Sampling Locations – Biocell 1000-3000 mT.pdf
i. Attachment 8 – SOP132 Sampling Procedure (pH, Nitrogen, Phosphorus, Moisture).pdf
j. Attachment 9 – MPP Revision 3, November 2016 Fenmar.pdf
k. Attachment 10 – Clean Soils FA Letter.pdf
l. Attachment 11 – Residual Waste Invoice.pdf

3. E-mail dated Feb 7, 2018 (7:55 a.m.) from Grimaud Montignon, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change, with

additional information on the proposal including the following documents entitled:

a. GFL – 38 Fenmar.pdf
b. GFL – 39 Fenmar.pdf
c. GFL – Brooks Rd Landfill-signed.pdf
d. GFL Quote – Residual Waste.pdf
e. Sampling Map – Stockpile 150m3 to 500m3.pdf
f. Sampling Map – Stockpile 500m3 to 1500m3.pdf
g. Sampling Map – Stockpile Greater than 1500m3.pdf
h. 38 39 Fenmar Site Layout Plan.pdf

4. E-mail dated Mar 13, 2018 (11:31 a.m.) from Grimaud Montignon, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change, with additional information on the proposal including the following documents entitled:

a. Sampling Map – Stockpile 150m3 to 500m3.pdf
b. Sampling Map – Stockpile 500m3 to 1500m3.pdf
c. Sampling Map – Stockpile Greater than 1500m3.pdf
d. 38 39 Fenmar Site Layout Plan.pdf
e. RKI Eagle 2.pdf
f. SOP 190.2 - RKI Eagle 2 GAS MONITORING OPERATION CALIBRATION. docx
g. Dr. Meter S20.docx
h. McKenzie Moisture Meter instruction (M1827 Moisture Meter Digital Plus).pdf
i. DOP 130 – SAMPLING PROCEDURES – pH Nitrogen Phosphorus Moisture.docx
j. Bioremediation Monitoring – Form.pdf
k. Bioremediation Monitoring – Form 2.pdf

5. E-mail dated Mar 29, 2018 (1:29 p.m.) from Grimaud Montignon, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change, with additional information on the proposal.

6. E-mail dated March 24, 2021 (2:14 p.m.) from Tennille Pegg, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, requesting proposal revisions to coordinate with excess soils requirements under O. Regulation 406/19.

7. E-mail dated May 2, 2018 (4:44 p.m.) from Damian Rodriguez, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change, with additional information on the proposal including the following documents entitled:

a. 38 Fenmar – Process Area Space Pressure.pdf
b. 39 Fenmar – Process Area Space Pressure.pdf

8. E-mail dated June 8, 2018 (10:55 p.m.) from Damian Rodriguez, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment and Climate Change, with additional information on the proposal.

9. E-mail dated February 19, 2022 (10:01 a.m.) from Tennille Pegg, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, with additional information on the proposal, including the attachments entitled:

a. "Attachment 8 - D&O Revision 5 - July 2021.pdf"; and
b. "Attachment 9 - Fenmar - BMPP Rev 7 - August 2021.pdf"

10. E-mail dated March 31, 2022 (11:04 a.m.) from Tennille Pegg , GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, with additional information on the proposal.

11. E-mail dated April 13, 2022 (9:45 a.m.) from Stephen Forster, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, with additional information on the proposal including the attachments entitled:

a. "GFL - Fenmar Dr Site - Amendment to ECA #A21074 (MECP Ref #9335-AAZH3V) Response.docx"; and
b. "Fenmar - BMPP Rev 7 - January 2022.pdf"

12. E-mail dated April 13, 2022 (12:16 a.m.) from Stephen Forster, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, with additional information on the proposal including the attachments entitled:

a. "38 Fenmar - Process Area Space Pressure.pdf";

b. "39 Fenmar - Process Area Space Pressure.pdf"; and

c. "Fenmar - BMPP Rev 7 - January 2022.pdf"

13. E-mail dated June 7, 2022 (3:59 p.m.) from Tennille Pegg, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, with additional information on the proposal including the following attachments entitled:

a. "1. GFL - Bioremediation Technical Report.pdf"

b. "2. Technical Letter & Supporting Document - May 30, 2022.pdf"

c. "3. GFL Fenmar - Conditions and Terminology.pdf"

d. "4. GFL Biocell Analysis Example".pdf

14. E-mail dated June 7, 2022 (3:59 p.m.) from Tennille Pegg , GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, with additional information on the proposal including the attachments entitled "4. GFL Biocell Analysis Example with TOC (with tracking)".pdf

15. E-mail dated June 14, 2022 (2:30 p.m.) from Tennille Pegg, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, with additional information on the proposal including the attachment entitled "SOP H-117 - Biocell Construction and Monitoring - Mechanical Aeration.pdf".

16. E-mail dated June 15, 2022 (3:20 p.m.) from Tennille Pegg, GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, with addition of biocell bioremediation treatment to the site's operations and the revised SOP H-117 and the proposal for the demonstration study, including the attachments entitled:

a. "GFL Fenmar ECA Amendment - Demonstration Study Conditions.docx";

b. "SOP H-117 - Biocell Construction and Monitoring - Mechanical Aeration.pdf".

17. E-mail dated June 22, 2022 (8:16 a.m.) from Tennille Pegg , GFL Environmental Inc. to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, with clarification on biocell treatment and the proposed demonstration study duration.

18. Application for an Environmental Compliance Approval submitted by Damian Rodriguez, GFL Environmental Inc., including the following attachments entitled:

a. Attachment 1 – Proof of Legal Name

b. Attachment 2 – Detailed Project & Process Description

c. Attachment 3 – Site Plan
d. Attachment 4 – Process Schematic
e. Attachment 5a – Notification Letter to Neighbours – Fenmar
f. Attachment 5b – Fenmar – Neigbhours List
g. Attachment 6a – Zoning Map
h. Attachment 6b – Zoning Map 2
i. Attachment 7 – Financial Assurance
j. Attachment 8 – D&O Revision 5 – July 2021
k. Attachment 9 – Fenmar – BMPP Rev 7 – August 2021
l. Fenmar ECA Amendment Application - 2021

19. E-mail dated October 5, 2021 (2:56 p.m.) from Tennille Pegg , GFL Environmental Inc. to Sara Sideris, Ontario Ministry of the Environment, Conservation and Parks, with signed signature pages of the Application for an Environmental Compliance Approval, including an attachment entitled "Fenmar ECA Amendment Application - 2021 - Signatures Only.pdf".

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

Conditions 1.1, 1.4, 1.5, 1.6, 1.9 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(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 1.7(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 1.8 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 1.10 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.

Condition 1.12 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.

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 4.14 are included to ensure that all 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 4.4 is also included to identify the amounts of the Dry Soil, the Bioremediation Materials and any waste approved to be present at the Site at any one time for the purpose of calculating the Financial Assurance requirements for the Site.

Condition 4.6 is also included to approve and set out the framework for a study to evaluate the effectiveness of the Bioremediation in Biopiles with mechanical aeration

when treating the Dry Soil containing Higher Petroleum Hydrocarbons Concentrations.

EQUIPMENT MAINTENANCE and SITE 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.

PROCESS 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 Dry Soil or outgoing Tested Soil or waste for its compatibility with the proposed off-Site destinations.

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.

HOUSEKEEPING and NUISANCE IMPACT CONTROL

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). A210742 issued on August 11, 2022, 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 18th day of September, 2022

Mohsen Keyvani, P.Eng.
Director
appointed for the purposes of Part II.1 of the

MW/
c: District Manager, MECP Toronto - District
Tennille Pegg, GFL Environmental Inc.