

Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A-500-5133138590 Version: 1.0

Issue Date: June 12, 2022

Pursuant to section 20.3 of the Environmental Protection Act, Revised Statutes of Ontario (R.S.O.) 1990, c. E. 19 and subject to all other applicable Acts or regulations this Environmental Compliance Approval is issued to:

GFL ENVIRONMENTAL INC.

100 NEW PARK PLACE (PL) ,SUITE 500 VAUGHAN ONTARIO L4K 0H9

For the following site:

84 Smelter Road, Coniston, GREATER SUDBURY, ONTARIO, CANADA, POM 1M0

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s) 8754-BRWJJ6, issued on August 17, 2020.

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

The use and operation of a 5 hectare Waste Disposal Site (Transfer/Processing), to be used for the following:

- The receipt, Bioremediation and transfer of Dry Soil;
- The receipt and de-watering of Liquid Soil;
- transfer and processing of Non-Hazardous, Liquid Industrial and Hazardous Wastes limited to the following Waste Classes: 111, 112, 113, 114, 121, 122, 123, 131, 132, 133, 134, 135, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 211, 212, 213, 221, 222, 231, 232, 233, 241, 242, 251, 252, 253, 254, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 281, 282, 311 and 331

DEFINITIONS

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

- 1. "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;
- 2. "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);
- 3. "Adverse Effect" as defined in the EPA;
- 4. "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;

- 5. "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;
- 6. "Best Management Practices Plan" means a document or a set of documents which describe measures to minimize dust emissions from the Site, as defined and described in the Air Approval;
- 7. "Biopile" means the Bioremediation treatment cell up to 10 metres in height, for Dry Soil undergoing Bioremediation through mechanical aeration to maintain oxygen concentrations no less than 15%;
- 8. "Bioremediation" means biodegradation conducted under controlled engineered conditions designed to reduce petroleum hydrocarbon concentrations in the Dry Soil in the Biopiles, as described in the Owner's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
- 9. "Biostimulation Compound" means any chemical amendment, nutrient amendment or pH adjustment chemical, other than a Bioaugmentation Compound used in the treatment to enhance Bioremediation. In this Approval, it means the compound(s) described in the Owner's application, this Approval and in the supporting documentation submitted with the application including the Safety Data Sheets (SDSs) submitted with the application, to the extent approved by this Approval;
- 10. "Composite Samples" means samples that are made up of a number of laboratory grab samples from a single sample container that have been thoroughly mixed together;
- 11. "Compost" has the same meaning as set out in the document entitled "Ontario Compost Quality Standards" dated July 25, 2012, as amended;
- 12. "Contaminants of Concern" have the same meaning as in O. Regulation 153/04;
- 13. "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;
- 14. "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;
- 15. "District Manager" means the District Manager of the local district office of the Ministry for the geographic area in which the Site is located;
- 16. "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 waste that is received at the Site for Bioremediation or for transfer off-Site;
- 17. "EASR" means the Environmental Activity and Sector Registry;
- 18. "EPA" means the Environmental Protection Act, R.S.O. 1990, c. E. 19, as amended;
- 19. "Excess Soil Criteria" means the Excess Soil Quality Standards set out in the Soil Rules required for a Reuse Site and also includes the site-specific criteria as set out in Section D of the Soil Rules;
- 20. "Excess Soil Standards" means the Excess Soil quality criteria set out in the Soil Rules required for a Reuse Site;
- 21. "Excess Soil" is as defined in O. Regulation 406/19, and within the context of this Approval is the incoming Dry Soil, Liquid Soil and Dry Soil/Rock mixture accepted at the Site to be managed in accordance with this Approval and the Processed Soil and Solidified Liquid Soil transferred from the Site in compliance with the requirements set out in O. Regulation 406/19. If destined for transfer without any screening, Excess Soil also means the incoming Dry Soil which does not contain more Rock than allowed for a particular Reuse Site;
- 22. "Fire Safety Plan" means a Fire Safety Plan for the Site that is deemed to have been found acceptable by the local fire service authority;
- 23. "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;

- 24. "Hazardous Waste" as defined in Regulation 347;
- 25. "IC&I" means industrial, commercial and institutional;
- 26. "Inert Fill" as defined in Regulation 347;
- 27. "Liquid Soil" is as defined in O. Regulation 406/19 and within the context of this Approval also means a waste that contains Contaminants of Concern and which has a slump of more than 150 millimetres determined using the Slump Test and which does not contain more Rock than allowed in the Excess Soil and/or which does not contain more than insignificant amounts of debris or other non-hazardous waste a handling of which is subject to the Environmental Compliance Approval requirements under the EPA. Liquid Soil does not include Waste Slurries and Sludges;
- 28. "Liquid Waste" means a waste that has a slump of more than 150 millimetres determined using the Slump Test;
- 29. "m3" means cubic metres;
- 30. "Ministry" means the ministry of the government of Ontario responsible for the EPA and includes all officials, employees, or other persons acting on its behalf;
- 31. "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;
- 32. "NMA" means the Nutrient Management Act, 2002, S.O. 2002, c. 4, as amended;
- 33. "O. Regulation 153/04" means Ontario Regulation 153/04: Records of Site Condition Part XV.1 of the EPA, as amended;
- 34. "O. Regulation 406/19" means Ontario Regulation 406/19, entitled "On-Site and Excess Soil Management" made under the EPA, as amended;
- 35. "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;
- 36. "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;
- 37. "PA" means the Pesticides Act, R.S.O. 1990, c. P-11, as amended;
- 38. "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;
- 39. "Phase I ESA" means Phase I Environmental Site Assessment, as defined in O. Regulation 153/04, as amended;
- 40. "Phase II ESA" means Phase II Environmental Site Assessment, as defined in O. Regulation 153/04, as amended;
- 41. "Polymer Mix" means the polymers described in Items 5 and 6 in Schedule 1 prepared in accordance with manufacturer's recommendations to be used for the solidification of Liquid Soil;
- 42. "Processed Soil" means the Dry Soil processed at the Site, where processing is limited to screening and Bioremediation of the incoming Dry Soil and bulking, mixing or blending of Similar Soils as set out in this Approval;
- 43. "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;
- 44. "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;
- 45. "Putrescible Waste" means organic waste that decomposes rapidly, such as food waste;
- 46. "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;
- 47. "Regulation 347" means Regulation 347 General Waste Management, R.R.O. 1990, made under the EPA, as amended;

- 48. "Rejected Waste" means the incoming load inadvertently received at the Site and deemed by the Owner to be a waste that does not meet the incoming Waste quality criteria set out in this Approval or that cannot be processed in accordance with this Approval;
- 49. "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;
- 50. "Reuse Site" as defined in O. Regulation 406/19;
- 51. "Rock" as defined in O. Regulation 406/19;
- 52. "SAR" means sodium adsorption ratio;
- 53. "SDWA" means the Safe Drinking Water Act, 2002, S.O. 2002, c. 32, as amended;
- 54. "Similar Soils" within context of this Approval mean the incoming Dry Soil and/or the Processed Soil and/or Solidified Liquid Soil tested to show that their characteristics comply with the Excess Soil Criteria required for transfer from the Site to the same Reuse Site or the same waste disposal site or into the Bioremediation at the Site;
- 55. "Site" means the waste disposal site located at 84 Smelter Road, Lot 3, Concession 3, Neelon, City of Greater Sudbury, District of Sudbury;
- 56. "Slump Test" means the Test Method for the Determination of Liquid Waste set out in Schedule 9 of Regulation 347;
- 57. "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";
- 58. "Soil" as defined in O. Regulation 406/19;
- 59. "Solidification" within the context of this Approval, means de-watering and/or mixing with the approved Solidification Materials;
- 60. "solid non-hazardous waste" means a waste that is not a liquid waste and not a hazardous waste as defined in Regulation 347;
- 61. "Source Site" means the source of the incoming Excess Soil;
- 62. "Spill" as defined in the EPA;
- 63. "Standards Document" means the Ministry's 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;
- 64. "SVOCs" means semi-volatile organic compounds;
- 65. "Table 2 Soil Standards" means the full depth generic site condition standards for non-potable ground water site conditions for industrial/commercial/community property use listed in Table 2 of the Standards Document;
- 66. "TCLP" means the Toxicity Characteristic Leaching Procedure set out in Regulation 347;
- 67. "Tested Soil" means the Dry Soil that has been tested in accordance with this Approval to demonstrate compliance with the appropriate Excess Soil Criteria defined in this Approval and including the following:
 - 1. if mixed and Bioremediated, the Bioremediated Dry Soil intended for mixing, bulking and blending with Similar Soils, that was tested by the Owner and destined for transfer for deposition at a Reuse Site or transfer to a disposal site or any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction;
 - 2. if not mixed but Bioremediated, the Bioremediated Dry Soil that was tested by the Owner and destined for transfer for deposition at a Reuse Site or transfer to a waste disposal site or to any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction;

- 3. 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; or
- 4. 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;
- 68. "TDGA" means the Transportation of Dangerous Goods Act, 1992 (1992, c. 34);
- 69. "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);
- 70. "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;
- 71. "Transfer" means the receipt and temporary storage and subsequent transport off-Site to a waste disposal site or to any other site approved to accept such waste by an appropriate government agency of equivalent jurisdiction;
- 72. "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;
- 73. "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 Waste Slurries and Sludges, Excess Soil and Rock destined for receipt at the Site. Waste outputs from processing/treatment of waste continue to be considered waste;
- 74. "Waste Class" means the waste classes defined in the Ministry's document entitled "Ontario Waste Classes", dated February 2013, as amended; and
- 75. "Waste Slurries and Sludges" means non-hazardous liquid industrial waste, other than Liquid Soil;

TERMS AND CONDITIONS

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

1. GENERAL

1.1 Compliance

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

1.2 Build, etc. in Accordance

1. Except as otherwise provided by this Approval, the Site shall be designed, developed, built, operated and maintained in accordance with the application for this Approval, dated October 24, 2013, signed by Patrick Dovigi,

CEO/President, GFL Environmental Inc., plans, specifications and the supporting documentation listed in the attached Schedule 1.

2. The equipment and processes described in the Application for an Environmental Compliance Approval dated June 11, 2021, and signed by Damian Rodriguez, GFL Environmental Inc., and its supporting documentation included in Items 5 and 6 listed in the attached Schedule 1 and approved in this Approval must be constructed and installed and commence operation within five (5) years of issuance of this Approval, after which time the Approval ceases to apply in respect of any portions of the current proposal not in operation. In the event that the construction, installation and/or operation of any portion of the current proposed is anticipated to be delayed beyond the time period stipulated, the Owner shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).

1.3 As-built Drawings

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

The issuance of, and compliance with the conditions of, this Approval does not,

- 1. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement including, but not limited to:
 - a. obtaining site plan approval from the local municipal authority;
 - b. obtaining all necessary building permits from the local municipal authority Building Services Division;
 - c. obtaining approval from the Chief Fire Prevention Officer, local municipal authority; or
- 2. limit in any way the authority of the Ministry to require certain steps be taken or to require the Owner to furnish any further information related to compliance with this Approval.

1.6 Adverse Effects

- 1. The Site shall be constructed, operated and maintained in an environmentally safe manner which ensures the health and safety of all persons and minimizes adverse effects on the natural environment.
- 2. The Owner shall take steps to minimize and ameliorate any adverse effect on the natural environment or impairment of water quality resulting from the Site, including such accelerated or additional monitoring as may

be necessary to determine the nature and extent of the effect or impairment.

3. Despite an Owner or any other person fulfilling any obligations imposed by this Approval the person remains responsible for any contravention of any other condition of this Approval or any applicable statute, regulation, or other legal requirement resulting from any act or omission that caused the adverse effect to the natural environment or impairment of water quality.

1.7 Other Approvals

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

1.8 Change of Owner

- 1. The Owner shall notify the Director in writing, and forward a copy of the notification to the District Manager, within thirty (30) days of the occurrence of any changes:
 - a. the ownership of the Site;
 - b. the operator of the Site;
 - c. the address of the Owner;
 - d. the partners, where the Owner is or at any time becomes a partnership and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c. B.17, as amended, shall be included in the notification;
 - e. the name of the corporation where the Owner is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C.39, as amended, shall be included in the notification.
- 2. No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless the Director is notified in advance and sufficient financial assurance is deposited with the Ministry to ensure that these conditions will be carried out. In the event of any change in ownership of the Site, other than change to a successor municipality, the Owner shall notify the successor of and provide the successor with a copy of this Approval, and the Owner shall provide a copy of the notification to the District Manager and the Director.

1.9 Inspections by the Ministry

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:

- 1. 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;
- 2. to have access to, inspect, and copy any records required to be kept by the conditions of this Approval;
- 3. to inspect the Site, related equipment and appurtenances;
- 4. to inspect the practices, procedures, or operations required by the conditions of this Approval; and

5. 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.

1.10 Information and Record Retention

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

1.11 Financial Assurance

- 1. The Owner shall maintain Financial Assurance, as defined in Section 131 of the EPA, with the Director in the amount of CND\$180,000. Within sixty (60) days from the date of issuance of this Approval, the Owner shall submit to the Director additional Financial Assurance in the amount of CND \$902,577 for a total of CND\$1,082,577. The additional Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the analysis, transportation and disposal of all waste permitted on-site, Site clean-up, and long-term monitoring and maintenance of the Site.
- 2. Commencing on January 31, 2025 and at intervals of three (3) 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 1.11(1). The re-evaluation shall include an assessment based on any new information relating to the environmental conditions of the Site and shall include the costs of additional monitoring and/or implementation of contingency plans required by the Director upon review of the closure plan and annual reports. The Financial Assurance must be submitted to the Director within ten (10) days of written acceptance of the re-evaluation by the Director.
- 3. The amount of Financial Assurance is subject to review at any time by the Director and may be amended at his/her discretion. If any Financial Assurance is scheduled to expire or notice is received, indicating Financial Assurance will not be renewed, and satisfactory methods have not been made to replace the Financial Assurance at least sixty (60) days before the Financial Assurance terminates, the Financial Assurance shall forthwith be replaced by cash.

2. SIGNS and SITE SECURITY

2.1 Signs

- 1. The Owner shall ensure that a sign is posted at the entrance to the Site stating the following information:
 - a. name of the Owner:
 - b. this Approval number;
 - c. normal hours of operation;
 - d. the types of Waste that may be accepted at the Site;
 - e. telephone number to which complaints may be directed;

- f. 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. The Owner shall ensure that the sign noted above is visible from the main road leading to the Site.
- 3. The Owner shall ensure that appropriate and visible signs are posted at the Site to prohibit smoking, open flames or sources of ignition from being allowed near any flammable materials storage areas.
- 4. The Owner shall install and maintain appropriate and visible signs at the Site to direct vehicles to the Waste receiving and Waste removal areas and to the processing materials unloading areas.

2.2 Site Security

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

3. SERVICE AREA, APPROVED WASTE TYPES and RATES

3.1 Service Area

The Site may receive Waste generated in the Province of Ontario and the Province of Quebec.

- 3.2 Approved Waste Types, Bioremediation Materials and Solidification Materials
 - 1. The approved Waste types are limited to the following:
 - a. Dry Soil for Bioremediation or transfer;
 - b. Waste Slurries and Sludges for solidification at the Site;
 - c. Hazardous soil for transfer only;
 - d. liquid industrial waste for mixing/blending/bulking and transfer, as follows:
 - i. liquid industrial Waste with Waste Classes 251-254 inclusive;
 - ii. liquid industrial waste limited to fuel wastes with Waste Classes 221-222 inclusive;
 - iii. aliphatic solvents and residues limited to glycol waste with Waste Class 212; and
 - iv. liquid industrial wastes limited to aqueous wastes with Waste Classes 146, 221-222 and 251-254 inclusive;
 - e. hazardous and liquid industrial waste for bulking and transfer, as follows:
 - 1. liquid industrial waste, limited to aqueous waste with Waste Classes 146, 221-222 and 251-254 inclusive; and

- 2. hazardous Waste with Waste Classes 111-114 inclusive, 121-123 inclusive, 131-135 inclusive, 141-150 inclusive, 211-213 inclusive, 221, 222, 231-233 inclusive, 241, 242, 261-270 inclusive, 281, 282 and 331;
- f. waste electrical and electronic equipment for transfer; and
- g. Liquid Soils for de-watering, bulking and solidification.
- 2. Notwithstanding provisions of Condition 3.2(1)a., the Site may only receive Dry Soil for Bioremediation that:
 - a. is a solid:
 - b. contains biodegradable Contaminants of Concern in concentrations that can be Bioremediated in accordance with the Bioremediation process parameters approved in this Approval; and
 - c. does not contain non-biodegradable Contaminants of Concern at concentrations exceeding the applicable Excess Soil Criteria for re-use at the Reuse Site.
- 3. No free-phase liquid (non-aqueous phase liquid), excluding water, shall be present in the Dry Soil.
- 4. The Owner shall ensure that the only hazardous Waste accepted at Site is the Waste approved under this Approval.
- 5. The following Bioremediation Materials are approved for receipt, temporary storage and use at the Site:
 - a. Biostimulation Compounds;
 - b. Bioaugmentation Compounds; and
 - c. Amendment Materials, limited to the following: Compost, straw, wood chips, peat moss and natural wood products as listed in the supporting documentation listed in Schedule 1 as required to achieve desired porosity of the Mix.
- 6. The following Solidification Materials are approved for receipt and use at the Site:
 - a. sawdust
 - b. peat moss;
 - c. Polymer Mix; and
 - d. other suitable non-hazardous solidification materials acceptable to the District Manager.

3.3 Waste Receipt Rates

- 1. The maximum daily amounts of Waste that is approved to be received at the Site are as follows:
 - a. a maximum of 2,500 tonnes of Dry Soil per day; and
 - b. a maximum of 500 tonnes of all other waste, including hazardous and non-hazardous wastes and Liquid Soils.
- 2. Notwithstanding the approved Dry Soil daily receipt rate set out in Condition 3.3(1)a., the Site may receive up to 4,000 tonnes per day of Dry Soil from emergency response activities for up 10 consecutive days where the number of such days does not exceed 90 for the year.
- 3. The maximum annual amounts of Waste that is approved to be received at the Site are as follows:
 - a. a maximum of 100,000 tonnes of Dry Soil per year; and
 - b. a maximum of 144,000 tonnes per year of all other waste, including hazardous and non-hazardous wastes

and Liquid Soils.

4. SITE OPERATIONS

4.1 Hours of Operation

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

- 4.2 Documentation for Incoming Dry Soil and Liquid Soil Receiving
 - 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:
 - a. Dry Soil with Incomplete Documentation or without Documentation 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;
 - b. Dry Soil from Spills provided that the Dry Soil is generated from emergency spill response activities, any Dry Soil received at the Site shall remain segregated from all other Dry Soils, wastes and materials and be covered, until the Dry Soil is characterized at the Site in accordance with this Approval;
 - c. Dry Soil, Small Amounts for Bioremediation For Dry Soil from small-scale residential Source Site projects and destined for the Bioremediation at the Site, Dry Soil may be received at the Site without accompanying characterization results subject to the following:
 - i. the amount of Dry Soil received from any one Source Site shall not exceed 80 cubic metres or 150 tonnes;
 - ii. the total amount of Dry Soil stockpiled further to this sub-condition shall not exceed 800 cubic metres or 1,440 tonnes;
 - iii. all Dry Soils shall be inspected visually and olfactorily prior to receipt to ensure the Dry Soil quality matches the Dry Soil description provided and the requirements of this Approval;
 - iv. the Dry Soils may be stockpiled separately or in the same pile prior to sampling and testing; and
 - v. the Dry Soil stockpiles may be mixed prior to testing for the purposes of homogenization, provided that an Air Approval required under Section 9 of the EPA for the equipment used is obtained prior to mixing and this activity is approved in the Air Approval;
 - d. For Dry Soil from small-scale excavation IC&I Source Site projects and destined for the Bioremediation at the Site Dry Soil may be received at the Site without accompanying test results subject to the following:
 - i. the amount of Dry Soil received from any one Source Site shall not exceed 10 tonnes or 18 cubic metres and this amount shall not be exceeded in any one (1) year from the last excavation at the Source Site;
 - ii. the Dry Soil shall be inspected visually and olfactorily prior to receipt to ensure the Dry Soil quality matches the Dry Soil description provided and the requirements of this Approval;
 - iii. Dry Soils shall be stockpiled separately prior to testing; and
 - iv. if the Contaminants 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.

- 2. The documentation from Condition 4.2(1) shall be reviewed and deemed acceptable by Trained Personnel.
- 3. Excess Soil General Documentation Regardless of whether the Excess Soil is characterized by the Source Site owner/generator or the Owner, the documentation required in Condition 4.2(1) shall include the following Source Site information:
 - a. the generator's name and/or company name, address and contact information;
 - b. the Source Site location;
 - c. current Source Site's activities and land use;
 - d. past Source Site's activities and land use, if known; and
 - e. estimated quantity of the Excess Soil to be received at the Site.
- 4. The documentation required in Condition 4.2(1) shall be for the Excess Soil from each Source Site.
- 5. All applicable analytical results shall be from a laboratory service provider accredited by a Canadian Association for Laboratory Accreditation or equivalent.
- 6. Incoming Dry Soil, Transfer to a Reuse Site 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.
- 7. Incoming Dry Soil, Transfer to a Waste Disposal Site The documentation required in Condition 4.2(1) for the incoming Dry Soil destined for transfer to an approved non-hazardous waste disposal site as set out in Condition 8.0, shall also include sampling and testing protocols, methods and analytical results to demonstrate that the Dry Soil is a solid non-hazardous waste. As a minimum, the characterization documentation shall include the following information:
 - a. results of any Phase I ESA and Phase II ESA undertaken for the Source Site in accordance with the Ministry's requirements under O. Regulation 153/04; or
 - b. the following characterization results:
 - i. slump from the Slump Test, if the Excess Soil has a high moisture content;
 - ii. characterization to demonstrate that the Dry Soil is a non-hazardous waste which was done in accordance with the following:
 - 1. 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,
 - a. 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
 - b. 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
 - 2. 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.
- 8. Incoming Dry Soil, Bioremediation 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 as set out in Schedule 2.
- 9. Incoming Liquid Soil with Incomplete Documentation or without Documentation Prior to receipt of any Liquid Soil, the Owner shall acquire characterization documentation from the Source Site owner/generator to show whether the Waste is a Liquid Soil or a hazardous waste as determined in accordance with the regulatory framework under Regulation 347 and O. Regulation 406/19.
- 10. For Waste that meets the requirements of a Liquid Soil, the Owner shall acquire documentation from the Source Site owner/generator showing the origin of the Liquid Soil, including the description of the current and past Source Site activities and land uses and characterizing its contaminating constituents, as required in O. Regulation 406/19 and the Soil Rules.
- 11. If the required Liquid Soil characterization documentation from Condition 4.2(10) is not available, the Owner may accept the Waste as a liquid industrial waste and characterize it at the Site or solidify it separately from all other waste or Liquid Soil, separate solidified output from all other unprocessed Dry Soil and Solidified Liquid Soil and characterize solidified output at the Site in compliance with O. Regulation 406/19 and the Soil Rules.
- 12. Waste Slurries and Sludges for Solidification Before accepting any Waste limited to Waste Slurries and Sludges, for solidification, mixing, bulking or blending at the Site:
 - a. the Owner shall acquire documentation from the generator showing the origin of the Waste and to determine whether it is a non-hazardous or a hazardous waste and characterizing its contaminating constituents as in accordance with the regulatory framework under Regulation 347; and
 - b. if the required Waste characterization documentation is not available, the Owner, may:
 - i. accept the Waste as a liquid industrial waste, separate it from all other Waste and characterize it at the Site; or
 - ii. accept the Waste as a liquid industrial waste, solidify it separately from all other waste, separate solidified output from all other Dry Soil and characterize solidified output to demonstrate compliance with the quality criteria from the Environmental Compliance Approval for a waste disposal site, if intended for transfer to a waste disposal site.
- 13. Other Liquid Industrial and Hazardous Waste for Mixing/Blending and Transfer or Bulking and Transfer Prior to accepting any hazardous or liquid industrial Waste, other than Waste referred to in Condition 4.2(12), at the Site, the Owner shall acquire from the generator the documentation that contains the characterization information of the incoming Waste as proposed in the supporting documentation listed in the attached Schedule 1.
- 14. No Waste for mixing, bulking or blending and transfer shall be accepted at the Site unless the required characterization documentation is received by the Owner and deemed acceptable by Trained Personnel.
- 15. (15) Trained Personnel shall inspect the characterization documentation and all incoming Waste loads at the weigh scale.

4.3 Receipt of Waste at the Site

- 1. All Waste receipt and unloading shall be undertaken within the dedicated receiving area of the Site as set out in the supporting documentation listed in the attached Schedule 1.
- 2. The Trained Personnel shall visually inspect the incoming Waste at the scale and again as it is being unloaded.
- 3. Any Waste that exhibits characteristics suggesting that it is not an approved Waste shall be deemed a Rejected Waste and disposed of in accordance with this Approval, the EPA and Regulation 347.
- 4. The Owner shall only accept Waste that was transported to the Site by haulers approved by the Ministry, or registered on the EASR, as required.
- 5. The Excess Soil, including Dry Soil from emergency spill clean-up operations or insufficiently characterized or uncharacterized Dry Soil, upon arrival at the Site, shall be transferred forthwith from the receiving vehicle onto

the designated outdoor paved storage pad and shall be covered with a tarp.

6. The Owner shall carry out spill prevention measures during transfer of liquid industrial Waste to and from its storage tanks.

4.4 Unacceptable/Rejected Waste

- 1. Any Dry Soil characterized at the Site that is found to be unacceptable for Bioremediation but is acceptable for receipt and transfer, shall be transferred from the Site in accordance with the requirements of this Approval.
- 2. Waste shall be deemed to be a Rejected Waste if:
 - a. waste not approved under this Approval is inadvertently accepted at the Site; or
 - b. any Dry Soil or other Waste characterized at the Site that is found to be unacceptable for receipt at the Site.
- 3. All Rejected Waste shall be stored indoors or outdoors if covered in the way that ensures isolation from other Wastes and processing materials and from the natural environment.
- 4. The Rejected Waste shall be removed from the Site within (4) business days of its receipt or receipt of the laboratory report from the analysis of the Excess Soil deemed as the Rejected Waste, as applicable, or as acceptable to the District Manager.
- 5. In the event that the Rejected Waste is inadvertently accepted at the Site, the Owner shall keep a record in accordance with the requirements set out in Condition 14.9, below, and notify the District Manager in accordance with the requirements set out in Condition 15.0, below.
- 6. Notwithstanding provisions of Conditions 4.4(1) through 4.4(5) above, the Owner shall ensure that all Rejected Waste at the Site is managed and disposed of in accordance with the EPA and Regulation 347.

4.5 Residual Waste Handling and Disposal

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

4.6 Storage

Waste Storage Capacity

- 1. The maximum amounts of Waste to be stored at the Site, at any one time, are as follows:
 - a. the maximum amount of Dry Soil, including the Mix in-process, shall not exceed 25,000 tonnes;
 - b. the maximum amount of the Processed Soil, including the Tested Soil, shall not exceed 25,000 tonnes;
 - c. the maximum amount of liquid industrial waste, hazardous waste and solidified Waste Slurries and Sludges shall not exceed:
 - i. 300,000 litres in 5 above ground double walled vertical storage tanks;

- ii. 66,000 litres in 3 transport trailers;
- iii. 88,000 litres in 4 double walled dewatering bins;
- iv. 100 tonnes on a mixing pad; and
- v. 635,952 litres in 8 bi-level tanks;
- d. the maximum amount of Liquid Soil stored at the Site, at any one time, shall not exceed 24 tonnes.
- 2. Storage Facility All storage of the Dry Soil, the Rejected Waste, the Residual Waste, the Processed Soil, the Amendment Materials and/or reagents shall be carried out within the designated areas of the Site as set out in supporting documentation included in the attached Schedule 1 and as required below:
 - a. Dry Soil storage stockpiles shall be contained within the dedicated areas referred to as the fabric structure building and the tarped granular pad as described in Schedule 1;
 - b. all processing materials for Bioremediation shall be stored at the Site in compliance with the requirements set out in the Ministry's document entitled "Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities" dated May 2007, as amended;
 - c. the liquid Bioaugmentation Compound storage tanks shall be located within the confines of the fabric structure building in a spill containment area designed in accordance with the requirements of this Approval; and
 - d. the Amendment Materials required for the Bioremediation at the Site shall be stored in the fabric structure building.
- 3. Notwithstanding provisions of Condition 4.6(2)a., the Owner shall ensure that Dry Soils are kept segregated from all other waste and Dry Soils from different Source Sites until the testing at the Site is completed and the Dry Soil is ready for transfer into the Bioremediation, mixing, blending or bulking at the Site or transfer off-Site.
- 4. The Owner shall ensure that all subject Waste received at the Site is managed, stored and shipped from the Site in a manner that prevents the release of contaminants to the natural environment and minimizes the risk of fires, explosions and other hazards, and shall otherwise be carried out in accordance with any restrictions as described in applicable building permits or as imposed by the local fire service authority.
- 5. All subject Waste storage containers at the Site shall have a label or sign identifying the waste class(es), waste characteristic, and, when applicable, the WHMIS and TDGA classification of the contents contained within. The label or sign shall be clearly visible for inspection and record keeping.
- 6. Wastes shall be segregated from other incompatible wastes and materials.
- 7. Secondary containment for liquid wastes shall be constructed, utilized and maintained at the Site in accordance with the following:
 - a. All operations involving the transfer of waste between vehicles and storage facilities shall be conducted using drip trays, spray curtains that are sufficient to contain any spills or leaks from pumps, pipes, valves or hoses;
 - b. All storage of waste shall be within the designated secondary storage areas;
 - c. Secondary containment must be constructed and maintained to ensure that any spills are contained within it:
 - d. The secondary containment must be regularly cleaned to ensure that is free of debris and precipitation (snow, ice, water) that would decrease the volume of containment.
- 8. When in use, the interstitial space between the double walls of the above ground storage tanks and dewatering bins shall be monitored for leakage from the primary walls of the tanks.

- 9. The above ground storage tanks must be emptied and cleaned prior to storing a different Waste Class in order to prevent the cross contamination of wastes. The exception to this is that Waste Classes 251. 252, 253 and 254 may be combined provided that the resulting mixture is classified in accordance with Regulation 347 and the Owner has determined that the mixing is appropriate.
- 10. Prior to receiving any waste, four (4) monitoring wells shall be installed on the Site. Each well shall be sampled prior to receiving waste and then on an annual basis for the following contaminants:
 - a. Petroleum Hydrocarbons (F1-F4);
 - b. Semi-volatile organic compounds;
 - c. Volatile organic compounds;
 - d. Metals;
 - e. Inorganics; and
 - f. Field Parameters (water level, pH, conductivity).
- 4.7 Approved Waste Management Activities
 - 1. The Owner is approved to carry out the following Waste processing activities:
 - a. weighing all incoming and outgoing truck loads and recording the results;
 - b. receipt, temporary storage, screening and processing of the Dry Soil that can be Bioremediated as follows:
 - i. mixing of Similar Soils destined for Bioremediation at the Site;
 - ii. mixing of the Dry Soil or mixed Similar Soils with the Bioaugmentation Compound(s) solution, the Biostimulation Compound(s) and the Amendment Materials into the Mix, as required; and
 - iii. Bioremediation of the Mix in Biopiles inside the fabric shelter building, including subsequent mechanical aeration and addition of the Bioaugmentation Compound(s) solution, the Biostimulation Compound(s) and/or the Amendment Materials, as required;
 - c. The dewatering and solidification of Liquid Soils;
 - d. sorting of the Residual Waste to remove Rock(s) and decontamination of Rock(s);
 - e. solidification of Waste Slurries and Sludges, where solidification is limited to de-watering and mixing with the approved solidification materials.
 - 2. The Owner is approved to carry out the following transfer activities:
 - a. bulking and transfer of the Dry Soil;
 - b. bulking and transfer of liquid industrial waste and hazardous waste with Waste Classes 111, 112, 113, 114, 121, 122, 123, 131, 132, 133, 134, 135, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 211, 212, 213, 221, 222, 231, 232, 233, 241, 242, 251, 252, 253, 254, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 281, 282, 311 and 331.
 - 3. The Owner is approved to carry out the following blending, bulking and mixing activities in four (4) dedicated storage tanks and transfer from the Site:
 - a. mixing/blending/bulking and transfer of liquid industrial waste, limited to oily wastes, with Waste Classes 251-254 inclusive.
- 4.8 Bioremediation

- 1. Bioremediation shall only take place inside the fabric shelter building.
- 2. All Biopiles, Dry Soil and Processed Soil storage stockpiles shall be located on a liner or asphalt surface.
- 3. The maximum height for all Bioremediation Biopiles shall not exceed 10 metres.
- 4. The maximum height for the Processed Soil storage piles shall not exceed 10 metres.
- 5. The Biopiles shall be constructed with 2:1 (H:V) slopes, and shall be located in the fabric shelter or the tarped granular pad described in Schedule 1.
- 6. The Owner shall ensure that no Dry Soil handling activities, including screening, Biopile formation activities or transfer to storage locations or into vehicles are undertaken during high wind events.
- 7. All Biopiles and storage stockpiles shall be managed in a manner that minimizes dust emissions and in accordance with the procedures stipulated in the Best Management Practices Plan.
- 8. The Owner shall segregate the Processed Soil stockpiles of different quality and destined for different types of Reuse Sites to ensure that the outbound Processed Soil is sent to appropriate Reuse Sites as restricted in this Approval.
- 9. All emergency spill clean-up Excess Soil shall be segregated from other Dry Soil and the Processed Soil until the required characterization is completed, at which point the said Dry Soil may be commingled with the Dry Soil destined to undergo comparable processing or transfer off-Site.
- 10. The Owner shall ensure that only Similar Soils are to be used for blending and mixing with Dry Soil prior to processing at the Site.
- 11. No Bioremediation Materials can be added to the Dry Soil other than those approved in this Approval.
- 12. The Owner shall ensure that the Processed Soil piles that meet different quality criteria from Condition 8.0 are segregated to avoid mixing of Processed Soils of different quality.
- 13. The following Amendment Materials are approved for use in the Bioremediation process at the Site, as listed in the supporting documentation listed in Schedule 1 and required to achieve desired porosity of the Mix:
 - a. straw:
 - b. wood and woodwaste chips and other wood and woodwaste products, excluding painted wood, chipped treated wood or chipped laminated wood or painted woodwaste, chipped treated woodwaste or chipped laminated woodwaste;
 - c. peat moss; and
 - d. Compost.
- 4.9 Liquid Soil and Waste Slurries and Sludges Solidification
 - 1. Solidification of Waste Slurries and Sludges shall be carried out as described in the supporting documentation listed in the attached Schedule 1.
 - 2. No hazardous Waste shall be solidified at the Site.
 - 3. Solidification pads shall be cleaned, as required, to prevent cross contamination between batches when the required quality criteria of final destinations differ.
 - 4. Washwater from solidification pad cleaning shall be collected and tested to confirm disposal requirements as described in the supporting documentation listed in the attached Schedule 1.
 - 5. Liquid Soil shall only be dewatered on the designated sludge pad.
 - 6. All free-phase liquid from the dewatering of Liquid Soil shall be pumped to an on-site storage tank for disposal

off-site.

7. Any Liquid Soils that have been mixed with polymers shall not be sent off-site for reuse but shall be disposed of off-site as waste in accordance with Reg. 347 and the EPA.

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

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

4.11 Bulking, Blending, Mixing and Transfer of Other Waste

- 1. The Owner shall ensure that all bulking, blending, mixing of liquid industrial Wastes approved for bulking, blending, mixing at the Site does not result in uncontrollable reactions that could result in a fire or release of contaminants to the natural environment.
- 2. All loads of liquid industrial waste and hazardous waste shipped from the Site shall be inspected by Trained Personnel prior to their transfer off-Site.

4.12 Transfer of Dry Soil

- 1. The Dry Soil transfer encompasses the following waste management activities:
 - a. weighing all incoming and outgoing truck loads and recording the results;
 - b. receipt;
 - c. temporary storage;
 - d. screening, as required;
 - e. mixing with Similar Soils;
 - f. transfer of the Dry Soil intended for transfer to a Reuse Site or a waste disposal site.
- 2. The maximum storage duration of the Dry Soil destined for transfer from the Site shall not exceed ninety (90) days from its receipt.
- 3. Dry Soil intended for transfer shall be segregated from other material on-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.

4.13 Control of Discharges to the Atmosphere - Noise

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

4.14 Control of Discharges to the Atmosphere - Contaminants

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

4.15 Wastewater Management

Wastewater shall be managed in accordance with the EPA, the OWRA and all applicable municipal by-laws.

5. OPERATIONS/MAINTENANCE AND INSPECTIONS

5.1 Operation and Maintenance Manuals

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

5.2 Inspections

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

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

5.3 Critical Spare Parts

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

6. BIOREMEDIATION MONITORING

- 1. During the normal operating hours, the Owner shall monitor the following Bioremediation process parameters in Biopiles in accordance with the protocol set out in the supporting documentation listed in the attached Schedule 1 and the following requirements:
 - a. temperature;
 - b. oxygen level;
 - c. moisture level;
 - d. pH;
 - e. carbon dioxide level; and
 - f. total residual petroleum hydrocarbons.
- 2. The readings shall be taken, as a minimum, at five (5) locations representing the full depth profile of the Biopile, starting at the location one (1) metre from the surface of the Biopile.
- 3. The monitoring shall be carried out on a weekly basis, unless Trained Personnel determines an alternative monitoring frequency and retains written justification for the change as part of the monitoring records required by Condition 14.0.
- 4. Should any measured oxygen concentration within the Biopile fall below 15%, the Biopile shall be mechanically aerated.

7. REQUIREMENT to CHARACTERIZE at the SITE

7.0.1 QA/QC

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

7.1 Characterization of Excess Soil

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

7.2 General Requirements for Characterization

- 1. Unless the incoming Dry Soil has already been adequately characterized at the Source Site or at the spill site as required by this Approval, the Owner shall upon receipt at the Site characterize the Dry Soil at the Site to determine its nature, constituents and characteristics and carry out sampling of the incoming Dry Soil, within twenty four (24) hours from its receipt, or on the next business day, whichever comes first.
- 2. For the Processed Soil, sampling shall be carried out within twenty four (24) hours from completion of processing or Solidification or on the next business day, whichever comes first.
- 3. Discrete Samples shall be taken when analysing for:
 - a. 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 m3/mol and/or vapour pressure greater than 0.05 mm Hg and which, for example, are Acenaphthene, Acenaphthylene, Anthracene, Benz(a)anthracene, Cresol (m&p-), Cresol(o-), Fluoranthene, Fluorene, Methlynapththalene (2-(1-)), Naphthalene, and Phenanthrenre; and
 - e. polycyclic aromatic hydrocarbons / acid/base/neutral compounds (PAHs/ABNs).
- 4. Composite Samples shall be taken when analysing for SVOCs with the Henry's Law constant less than 1x10-5 atmosphere m3/mol and/or vapour pressure less than 0.05 mm Hg.
- 5. For sampling of the Dry Soil or the Processed Soil, the Owner shall 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.
- 6. Analytical methods For testing of the Dry Soil, Processed Soil or the solidified Waste Slurries and Sludges, the Owner shall:
 - a. for determining bulk concentrations of contaminants, use the analytical methods as set out in the Ministry's document entitled "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act" dated March 9, 2004, amended July 1, 2011, and as further amended at any time or in Section B of Part I of the Soil Rules;
 - b. for determination of the leachate concentrations of Contaminants 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. for determination if Waste is a solid or a liquid, use the Slump Test;
- d. to demonstrate that the Dry Soil or the Liquid Soil or the Waste Slurries and Sludges do not trigger any criteria from the hazardous waste definition from Regulation 347, including TCLP analysis, use the Ministry-published methods and if unavailable, use methods recommended by the accredited laboratory service provider; and
- e. submit samples to an accredited laboratory service provider no later as instructed, for the required analysis.

7.3 Testing of Waste to be Transferred to Waste Disposal Site

- 1. The testing requirements of Condition 7.3(2) apply to the following Wastes destined for transfer to an approved non-hazardous waste disposal site:
 - a. incoming Dry Soil; or
 - b. solidified Waste Slurries and Sludges.
- 2. For solid Waste destined for transfer to an approved non-hazardous waste disposal site as set out in Condition 8.0, the required Waste characterization sampling and testing protocols/methods shall be in accordance with the following:
 - a. if the Waste has a high moisture content, determine the slump; and
 - b. sample and test the Waste in accordance with one of the following:
 - i. sampling and testing results to demonstrate that the Waste does not trigger any criteria from the hazardous waste definition from Regulation 347, including TCLP analysis results, from samples:
 - 1. collected in accordance with the procedures set out in the Ministry's document entitled "Principles of Sampling and Analysis of Waste for TCLP under Reg. 347", as amended; and
 - 2. tested for Contaminants 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
 - ii. sampling and testing results to demonstrate that the Waste is suitable for acceptance at the receiving waste disposal site, as required by the waste disposal site Environmental Compliance Approval or sampling and testing results to demonstrate that the Waste is suitable for acceptance at the receiving waste disposal site, as instructed by the owner of the waste disposal site.

7.4 Testing of Incoming Dry Soil for Bioremediation

- 1. For Dry Soil destined for the Bioremediation at the Site, the required on-Site characterization sampling and testing protocols/methods shall be in accordance with the following:
 - a. for characterization of the Dry Soil from residential Source Sites received at the Site, sampling and testing requirements, including the number of samples taken and their locations shall be as follows:
 - i. a minimum of one (1) sample shall be collected for each 500 m3 of the Dry Soil to be excavated/excavated for testing of VOCs and SVOCs, excluding petroleum hydrocarbon fractions 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 m3 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 m3, a minimum of 2 samples shall be collected;
 - ii. for stockpile volume between 221 m3 and 430 m3, a minimum of 3 samples shall be collected;
 - iii. for stockpile volume between 431 m3 and 670 m3, a minimum of 4 samples shall be collected;
 - iv. for stockpile volume between 671 m3 and 950 m3, a minimum of 5 samples shall be collected;
 - v. for stockpile volume between 951 m3 and 1,250 m3, a minimum of 6 samples shall be collected;
 - vi. for stockpile volume between 1,251 m3 and 1,550 m3, a minimum of 7 samples shall be collected;
 - vii. for stockpile volume between 1,551 m3 and 1,850 m3, a minimum of 8 samples shall be collected;
 - viii. for stockpile volume between 1,851 m3 and 2,200 m3, a minimum of 9 samples shall be collected;
 - ix. for stockpile volume between 2,201 m3 and 2,500 m3, a minimum of 10 samples shall be collected;
 - x. for stockpile volume between 2,501 m3 and 2,900 m3, a minimum of 11 samples shall be collected;
 - xi. for stockpile volume between 2,901 m3 and 3,300 m3, a minimum of 12 samples shall be collected;
 - xii. for stockpile volume between 3,301 m3 and 3,700 m3, a minimum of 13 samples shall be collected;
 - xiii. for stockpile volume between 3,701 m3 and 4,100 m3, a minimum of 14 samples shall be collected;
 - xiv. for stockpile volume between 4,101 m3 and 4,500 m3, a minimum of 15 samples shall be collected;
 - xv. for stockpile volume between 4,501 m3 and 5,000 m3, a minimum of 16 samples shall be collected;
 - xvi. for stockpile volume of greater than 5,000 m3, a minimum number of samples to be collected shall be calculated in accordance with the following formula: N = [32 + (volume 5000 / 300)]/2 where "volume" is the actual stockpile volume;
- c. sampling methods used and procedures for handling of the samples shall be in accordance with the requirements set out in the Section B of Part I of the Soil Rules or in accordance with the instructions of the accredited laboratory service provider carrying out the analytical testing;
- d. sampling of the Dry Soil for determination of the leachate concentrations of Contaminants 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:
 - i. bulk concentrations of the following:
 - ii. petroleum hydrocarbon fractions: F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and F4 (>C34);
 - iii. heavy metals;

- iv. Benzene, Toluene, Ethyl Benzene and Xylene; and
- v. 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
- g. analytical methods listed in Condition 7.2 shall be used.

7.5 Characterization of Incoming Liquid Soil

Liquid soil that has been dewatered shall be tested as Dry Soil in accordance with either Condition 7.3 or 7.4 above prior to being transferred from the Site for disposal or sent to the on-site Bioremediation process, respectively.

7.6 Testing of Processed Soil

Prior to its shipment from the Site to a Re-use Site, the Owner shall characterize the Processed Soil in accordance with Schedule 3.

7.7 Testing of Solidified Mixed Liquid Soil for Transfer

- 1. Liquid Soil that has been dewatered and processed as Dry Soil shall be tested as Dry Soil in accordance with Condition 7.6 above prior to its shipment from the Site to a Re-use Site.
- 2. Liquid Soil that has been dewatered and will be transferred to a waste disposal site shall be characterized in accordance with the requirements of the receiving site.

8. 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

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 for a Waste Disposal Site or a Site in Another Jurisdiction

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

Except for the Processed Soil intended for deposition at a Reuse Site, the Owner shall ensure that:

1. all Rock that does not meet the definition of an Inert Fill;

- 2. all Excess Soil that contains more Rock than allowed in Excess Soil and which does not meet the definition of an Inert Fill:
- 3. all Excess Soil that contains more than an insignificant amount of incidental construction and/or demolition waste or other non-hazardous waste debris; and
- 4. all Excess Soil that contains foundry sands, slag, emission control dusts or treatment residues;

are only transferred to:

- 1. 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
- 2. a location not required to obtain an Environmental Compliance Approval but having an appropriate jurisdictional approval or a license, if required.

8.5 Other Wastes - Transfer or Disposal

- 1. The Owner shall ensure that other Wastes received and managed at the Site or wastes generated at the Site are transferred to an approved waste disposal site in accordance with the requirements in the EPA and Regulation 347 or to a location with the appropriate jurisdictional approval or a license, if required or a site exempted from the Environmental Compliance Approval in accordance with Regulation 347.
- 2. The Owner shall ensure that any waste that triggers any of the criteria from the definition of "hazardous waste" set out in Regulation 347, is handled and disposed of in accordance with the Land Disposal Restrictions requirements set out in the EPA and Regulation 347.

9. NUISANCE IMPACT CONTROL and HOUSEKEEPING

9.1 Vehicles and Traffic

- 1. The Owner shall ensure that all vehicles leaving the Site are not leaking or dripping wastes or wastewater when leaving the Site.
- 2. The Owner shall ensure that the exterior of all vehicles delivering the Waste to the Site or hauling waste from the Site is cleaned prior to their departure from the Site, as appropriate.
- 3. Should the Owner become aware that a vehicle delivering Waste to the Site has leaked waste and/or wastewater on the municipal roadways, the Owner shall immediately report the violation to the owner of the vehicle(s) and to the District Manager.
- 4. The Owner shall ensure that vehicles leaving the Site do not drag mud or waste onto the public roadways.
- 5. The Owner shall ensure that the wheels of all vehicles departing from the Site are inspected and cleaned, as required, prior to the vehicles' departure from the Site.
- 6. The Owner shall ensure that there is no queuing or parking of vehicles that are waiting to enter the Site on any roadway that is not a distinct part of the Site.
- 7. The Owner shall ensure that the vehicles transporting any wastes from the Site are appropriately covered as they depart from the Site, so that fugitive dust or odour emissions are minimized during the transit to their destination.
- 8. Only haulers approved by the Ministry or registered on the EASR, as required, shall be used to transport any waste from the Site.
- 9. The Owner shall dust emissions are minimized during loading of vehicles for transportation off the Site.
- 10. The Owner shall ensure that all new drivers of vehicles transporting waste to and from the Site are instructed/trained on the acceptable on Site procedures.

9.2 Litter

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

9.3 Fugitive Dust

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

9.4 Fugitive Odour

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

9.5 Vermin and Vectors

The Owner shall:

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

10. 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. 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, 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.

11. 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:
 - 1. outline of the responsibilities of the Site personnel;
 - 2. personnel training protocols;
 - 3. Site operating procedures including but not limited to:
 - 1. the Waste and the reagents and amendments receiving, unloading/loading, screening, handling and storage procedures and the Bioremediation processing procedures;
 - 2. Waste solidification procedures; and
 - 3. Waste mixing, bulking and blending procedures;
 - 4. sampling, testing, monitoring and recording procedures as required by this Approval;
 - 5. required data recording procedures;
 - 6. 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;
 - 7. the contingency plans for the Site;
 - ${\bf 8.}\ equipment\ and\ Site\ inspection\ procedures,\ as\ required\ by\ this\ Approval;$
 - 9. nuisance impact control and housekeeping procedures, as required by this Approval; and
 - 10. the procedures for handling and recording complaints as described in this Approval.
- 2. A copy of this Operations Manual shall be kept at the Owner's office, must be accessible to Site personnel at all

times and must be updated, as required.

11.2 Personnel Training

- 1. All operators of the Site shall be trained with respect to the following as per the specific job requirements of each individual operator:
 - a. relevant air, noise, wastewater and waste management legislation, regulations and guidelines;
 - b. major environmental concerns pertaining to the wastes to be handled at the Site;
 - c. occupational health and safety concerns pertaining to the processes and wastes to be handled at the Site;
 - d. management procedures including the use and operation of equipment for the processes and wastes to be handled at the Site;
 - e. dust management procedures in accordance with the Best Management Practices Plan for the Site;
 - f. odour management procedures;
 - g. records keeping procedures;
 - h. contingency plan and emergency response procedures;
 - i. specific written procedures for the control of adverse effects from the Site;
 - j. specific written procedures for refusal of unacceptable incoming Waste loads; and
 - k. the requirements of this Approval.
- 2. The training of the operators of the Site shall also include the procedures contained in the Operations Manual.
- 3. The training of the operators of the Site shall be undertaken:
 - a. upon commencing employment at the Site in a particular position;
 - b. whenever procedures are updated or during the planned three (3)-year refresher training.

12. CONTINGENCY MEASURES and EMERGENCY SITUATION RESPONSE PLAN

- 12.1 Emergency Response and Contingency Plan
 - 1. The Owner shall maintain an up-to date Emergency Response and Contingency Plan for the Site. The Emergency Response and Contingency Plan shall be revised, as required, in consultation with the District Manager. The Owner shall also invite the local municipality and the local fire service authority to provide input and/or comments into revisions of the Emergency Response and Contingency Plan. The Emergency Response and Contingency Plan, as a minimum must include the following:
 - a. emergency response procedures to be undertaken in the event of a spill, process upset, power failure, fire or any other emergency situation, including specific clean up methods for wastes expected to be generated from the emergency situation;
 - b. a list of equipment and clean up materials available for dealing with the emergency situations and their locations on the Site plan;
 - c. notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the Site, the Ministry's District Office and Spills Action Centre, the local fire service authority, the local Municipality, the local Medical Officer of Health, and the Ministry of Labour, and the names and telephone numbers of waste management companies available for emergency response;
 - d. procedures and actions to be taken should the incoming Waste not meet the quality criteria set out in this

Approval;

- e. procedures and actions to be taken should the outgoing Residual Waste or the Tested Soil not meet the required quality criteria;
- f. procedures and actions to be taken should the temporary storage of the Waste at the Site result in occurrence of complaints;
- g. procedures and actions to be taken should the occurrence of complaints require the Owner to implement additional environmental impact control measures; and
- h. procedures and actions to be taken should the occurrence of complaints require the Owner to suspend the Waste handling activities at the Site.
- 2. An up-to-date version of the Emergency Response and Contingency Plan shall be kept at the Owner's office, in a central location known and available to all Site personnel. A copy shall be made available to Ministry staff upon request and to the local municipality and the local fire service authority, if requested.
- 3. The Emergency Response and Contingency Plan shall be reviewed on an annual basis and updated, if necessary. The revised version of the Emergency Response and Contingency Plan shall be provided to the District Manager and to the local municipality and the local fire service authority, if requested.

12.2 Fire Safety Plan

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

13. 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. 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

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:

- 1. date of receipt and the name of the Dry Soil generator, Source Site location, land/use of the Source Site, and the quantity (tonnage and number of trucks) of the Dry Soil received;
- 2. date of receipt and the name of the Waste, other than the Dry Soil, generator, and the quantity (tonnage and number of trucks);
- 3. results of the required characterization of the incoming Waste;
- 4. 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;
- 5. date, quantity, type, quality (including the analytical data from any compliance testing) and the destination of the Tested Soil:
- 6. 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;
- 7. Waste solidification, mixing, bulking or blending activities undertaken at the Site;
- 8. date, quantity, type, quality (including the analytical data from any compliance testing) and the destination of the Waste destined for transfer off-Site;
- 9. date, quantity, type, and the destination of the total Residual Waste, transferred from the Site for final disposal;
- 10. 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;
- 11. housekeeping activities, including wetting of the Biopiles and/or storage stockpiles for dust control and the type of material used;
- 12. 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;
- 13. the running total of the Processed Soil and its characterization results, if characterization has been completed;
- 14. the results and interpretation of the annual groundwater monitoring program.

14.2 Emergency Situations

The Owner shall maintain a written or digital record of the emergency situations. The record shall include, as a minimum, the following:

- 1. the type of an emergency situation;
- 2. description of how the emergency situation was handled;
- 3. the type and amount of material spilled, if applicable;
- 4. a description of how the spilled material was cleaned up and waste stored, if generated; and

5. the location and time of final disposal, if applicable.

14.3 Inspections and Maintenance

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:

- 1. the name and signature of person that conducted the inspection;
- 2. the date and time of the inspection;
- 3. the list of any deficiencies discovered;
- 4. the recommendations for remedial action;
- 5. the date, time and description of actions taken; and
- 6. all records on the maintenance, repair and inspection of the equipment.

14.4 Personnel Training

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:

- 1. date of training;
- 2. name and signature of person who has been trained; and
- 3. description of the training provided.

14.5 Sampling and Testing Records

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:

- 1. Waste type sampled, number of samples, sample collection locations and volume collected;
- 2. day and time of collection;
- 3. sample handling procedures;
- 4. name of the person undertaking the sampling;
- 5. parameters tested for and the results;
- 6. name of the laboratory facility conducting the testing, if applicable; and
- 7. conclusions drawn with respect to the results of the testing.

14.6 Monitoring Records

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

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

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:

- 1. the reason for rejection; and
- 2. 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:
 - 1. annual amount and quality of the Dry Soil intended for Bioremediation;
 - 2. annual amount and quality of the Dry Soil intended for transfer off-Site;
 - 3. annual amount and quality of the Tested Soil transferred from the Site and its final destination(s);
 - 4. annual amount and quality of the solidified Waste Slurries and Sludges transferred from the Site and its final destinations;
 - 5. annual amount and quality of Waste other than the Waste referred to in Conditions 14.9(1)a., 14.9(1)b. 14.9(1)c., and 14.9(1)d., tracked by waste class number, transferred from the Site and its final destinations;
 - 6. a summary describing any Rejected Waste including quantity, type, reasons for rejection, its origin and its final destination:
 - 7. annual amount of the Residual Waste transferred from the Site for final disposal and its destination;
 - 8. number of Bioremediation Biopiles and the status of processing at the end of the operating year;
 - 9. amount of unprocessed the Dry Soil temporarily stored at the Site at the end of the operating year;
 - 10. amount of the Dry Soil intended for transfer off-Site temporarily stored at the Site at the end of the operating year;
 - 11. 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;
 - 12. 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;
 - 13. any recommendations to minimize environmental impacts from the operation of the Site and to improve Site operations and monitoring programs in this regard;
 - 14. a summary of any complaints received and the responses made, as required by this Approval;
 - 15. a summary of the monitoring results and analyses required by this Approval;
 - 16. 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;
 - 17. 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

18. 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. DISTRICT OFFICE NOTIFICATION

15.1 Rejected Waste Notification

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:

- 1. quantity and type of the Rejected Waste;
- 2. source of the Rejected Waste, if known;
- 3. reason for the rejection;
- 4. final destination of the Rejected Waste; and
- 5. date of receipt and time and date of removal from the Site.

16. 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.

REASONS

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

1. GENERAL

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

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

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

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

Condition 1.9 is included, pursuant to subsection 197(1) of the EPA, to provide that any persons having an interest in the

Site are aware that the land has been approved and used for the purposes of waste disposal.

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

SIGNS and SITE SECURITY

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

SERVICE AREA, APPROVED WASTE TYPES and RATES

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

SITE OPERATIONS

Condition 4.1 is included to specify the hours of operation for the Site to ensure that the hours of Site's operation do not result in an Adverse Effect or a hazard to the natural environment or any person.

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

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

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

OPERATIONS/MAINTENANCE and INSPECTIONS

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

BIOREMEDIATION MONITORING

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

REQUIREMENT to CHARACTERIZE at the SITE

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

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

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

NUISANCE IMPACT CONTROL and HOUSEKEEPING

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

COMPLAINT MANAGEMENT

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

OPERATIONS MANUAL and PERSONNEL TRAINING

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

CONTINGENCY MEASURES and EMERGENCY SITUATION RESPONSE PLAN

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

EMERGENCY SITUATIONS RESPONSE and REPORTING

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

RECORDS KEEPING and RETENTION

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

DISTRICT OFFICE NOTIFICATION

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

SITE CLOSURE

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

APPEAL PROVISIONS

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me and the Ontario Land Tribunal, within 15 days after the service of this notice, require a hearing by the Tribunal. You must also provide notice to, the Minister of the Environment, Conservation and Parks in accordance with Section 47 of the *Environmental Bill of Rights, 1993* who 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:

- I. 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;
- II. 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:

- I. The name of the appellant;
- II. The address of the appellant;
- III. The environmental compliance approval number;
- IV. The date of the environmental compliance approval;
- V. The name of the Director, and;
- VI. 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:

The Minister of the The Director appointed for the purposes of Part Registrar* Environment, II.1 of the *Environmental Protection Act* Ontario Land Tribunal Conservation and Parks Ministry of the Environment, Conservation and 655 Bay Street, Suite 1500 and 777 Bay Street, 5th and **Parks** Toronto, Ontario Floor 135 St. Clair Avenue West, 1st Floor M5G 1E5 Toronto, Ontario Toronto, Ontario OLT.Registrar@ontario.ca M7A 2J3 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 <u>ero.ontario.ca</u>, 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 12th day of June, 2022



Mohsen Keyvani

Director

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

c: Damian Rodriguez, GFL ENVIRONMENTAL INC. Dave Lake, Dillon Consulting

The following schedules are a part of this environmental compliance approval:

SCHEDULE 1

- 1. Application for an Environmental Compliance Approval dated October 16, 2019 and signed by Damian Rodriguez, Vice President, GFL Environmental Inc. including all attachments.
- 2. E-mail communication from Damian Rodriguez, Vice President, GFL Environmental Inc to Ian Parrott, MECP (7/28/2020 6:13 PM) entitled "GFL (Sudbury) 0374-BH7JHJ regarding responses to Ministry review comments and including drawing entitled "Sludge Pit Drawings, July 24, 2020.
- 3. E-mail communication from Damian Rodriguez, Vice President, GFL Environmental Inc to Ian Parrott, MECP (7/30/2020 8:30 AM) entitled "GFL (Sudbury) 0374-BH7JHJ regarding responses to Ministry review comments and including drawings for the bio-level storage tanks.
- 4. Application for an administrative amendment to Environmental Compliance Approval dated November 30, 2020 and signed by Damian Rodriguez, Vice President, GFL Environmental Inc.
- 5. Environmental Compliance Approval application dated June 11, 2021, and signed by Damian Rodriguez, GFL Environmental Inc., including all supporting documentation.
- 6. Emails dated January 30, 2022 from Damian Rodriguez, Vice President, GFL Environmental Inc., to Andrew Neill, P.Eng., MECP, with site drawings and additional information on liquid soil handling.

SCHEDULE 2

Schedule 2

The required incoming Dry Soil characterization documentation required in Condition 4.2(1) for Dry Soil destined for Bioremediation at the Site, shall include the following characterization information, sampling and testing protocols/methods:

- 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:
- 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. 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(3);
- c. the following sampling and testing information:
- i. sampling protocols, including the number of samples taken and their locations collected in accordance with one of the following:
- I. for an in-situ and ex-situ characterization of the Dry Soil from residential Source Sites:
- A. a minimum of one (1) sample shall be collected for each 500 m3 of the Dry Soil to be excavated/excavated for testing of VOCs and SVOCs, excluding petroleum hydrocarbon fractions F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and F4 (>C34); and
- B. a minimum of one (1) sample shall be collected for each 300 m3 of the Dry Soil to be excavated/excavated for testing for petroleum hydrocarbon fractions F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and F4 (>C34) and for all other testing,
- II. for an in-situ characterization of the Dry Soil from IC&I Source Sites:
- A. a minimum of three (3) samples shall be collected if less than 600 m3 of the Dry Soil is to be excavated;
- B. a minimum of one (1) sample shall be collected for each 200 m3 of the Soil for the first 10,000 m3 of the Dry Soil to be excavated;
- C. a minimum of one (1) sample shall be collected for each additional 450 m3 of the Dry Soil after the first 10,000 m3 of the Dry Soil to be excavated; and
- D. at least one (1) sample shall be collected for each additional 2,000 cubic metres after the first 40,000 cubic metres of the Dry Soil to be excavated;
- III. when carrying out an ex-situ characterization of the Dry Soil from IC&I Source Sites, the sampling frequency requirements are as follows:
- A. for stockpile volume of less than 220 m3, a minimum of 2 samples shall be collected;
- B. for stockpile volume between 221 m3 and 430 m3, a minimum of 3 samples shall be collected;
- C. for stockpile volume between 431 m3 and 670 m3, a minimum of 4 samples shall be collected;
- D. for stockpile volume between 671 m3 and 950 m3, a minimum of 5 samples shall be collected;
- E. for stockpile volume between 951 m3 and 1,250 m3, a minimum of 6 samples shall be collected;
- F. for stockpile volume between 1,251 m3 and 1,550 m3, a minimum of 7 samples shall be collected;
- G. for stockpile volume between 1,551 m3 and 1,850 m3, a minimum of 8 samples shall be collected;
- H. for stockpile volume between 1,851 m3 and 2,200 m3, a minimum of 9 samples shall be collected;
- I. for stockpile volume between 2,201 m3 and 2,500 m3, a minimum of 10 samples shall be collected;
- J. for stockpile volume between 2,501 m3 and 2,900 m3, a minimum of 11 samples shall be collected;
- K. for stockpile volume between 2,901 m3 and 3,300 m3, a minimum of 12 samples shall be collected;
- L. for stockpile volume between 3,301 m3 and 3,700 m3, a minimum of 13 samples shall be collected;
- M. for stockpile volume between 3,701 m3 and 4,100 m3, a minimum of 14 samples shall be collected;

- N. for stockpile volume between 4,101 m3 and 4,500 m3, a minimum of 15 samples shall be collected;
- O. for stockpile volume between 4,501 m3 and 5,000 m3, a minimum of 16 samples shall be collected; and
- P. for stockpile volume of greater than 5,000 m3, a minimum number of samples to be collected shall be calculated in accordance with the following formula: N = [32 + (volume 5000 / 300)]/2 where "volume" is the actual stockpile volume;

ii. sampling methods used and procedures for handling of the samples in accordance with the requirements set out in the Section B of Part I of the Soil Rules or in accordance with the instructions of the accredited laboratory service provider carrying out the analytical testing;

iii. sampling of the Dry Soil for determination of the leachate concentrations of Contaminants 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.

SCHEDULE 3

Prior to its shipment from the Site to a Re-use Site as noted in Condition 7.6(2) of this Approval, the Owner shall characterize the Processed Soil in accordance with the following:

I. sampling frequency shall be as set out in the Section B of Part I of the Soil Rules or as follows:

- A. for stockpile volume of less than 220 m3, a minimum of 2 samples shall be collected;
- B. for stockpile volume between 221 m3 and 430 m3, a minimum of 3 samples shall be collected;
- C. for stockpile volume between 431 m3 and 670 m3, a minimum of 4 samples shall be collected;
- D. for stockpile volume between 671 m3 and 950 m3, a minimum of 5 samples shall be collected;
- E. for stockpile volume between 951 m3 and 1,250 m3, a minimum of 6 samples shall be collected;
- F. for stockpile volume between 1,251 m3 and 1,550 m3, a minimum of 7 samples shall be collected;
- G. for stockpile volume between 1,551 m3 and 1,850 m3, a minimum of 8 samples shall be collected;
- H. for stockpile volume between 1,851 m3 and 2,200 m3, a minimum of 9 samples shall be collected;
- I. for stockpile volume between 2,201 m3 and 2,500 m3, a minimum of 10 samples shall be collected;
- J. for stockpile volume between 2,501 m3 and 2,900 m3, a minimum of 11 samples shall be collected;
- K. for stockpile volume between 2,901 m3 and 3,300 m3, a minimum of 12 samples shall be collected;
- L. for stockpile volume between 3,301 m3 and 3,700 m3, a minimum of 13 samples shall be collected;
- M. for stockpile volume between 3,701 m3 and 4,100 m3, a minimum of 14 samples shall be collected;
- N. for stockpile volume between 4,101 m3 and 4,500 m3, a minimum of 15 samples shall be collected;
- O. for stockpile volume between 4,501 m3 and 5,000 m3, a minimum of 16 samples shall be collected;
- P. for stockpile volume of greater than 5,000 m3, a minimum number of samples to be collected shall be calculated in accordance with the following formula: N = [32 + (volume 5000 / 300)]/2 where "volume" is the actual stockpile volume;

II. sampling of the Processed 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 or in accordance with Condition 7.6(2)a., whichever generates more samples;

III. 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;

IV. slump shall be determined to confirm that the Processed Soil is a solid;

V. 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;

VI. 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;

VII. analytical methods listed in Condition 7.2 shall be used.