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-500-2094980750
Version: 2.0
Issue Date: May 25, 2025

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:

TUQ4 Inc.

1036 HALDIMAND ROAD ,LOCAL 3
NANTICOKE ONTARIO
N0A 1L0

For the following site:

1036 Haldimand 3 Road , Nanticoke, HALDIMAND, ONTARIO, CANADA,
N0A 1L0

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s) A-500-2094980750 version 1.0, issued on June 23, 2021.

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:

a waste disposal site to be used for the transfer and processing of excess soil and soil that is hazardous waste, limited as per the conditions of this Approval.

DEFINITIONS

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

1. **Definition**
   "Approval" means this entire provisional Environmental Compliance Approval document, issued in accordance with Part II.1 of the EPA, and includes any schedules to it, the application, and the supporting documentation listed in Schedule"A", as amended from time to time;

   "Design and Operations Report" means the document describing all on-site operations, procedures and environmental protection measures, further described in the conditions of this Approval;

"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 II.1 of the EPA;

“District Manager” means the District Manager of the local district office of the Ministry in which the Site is geographically located;

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

“excess soil” has the same meaning as in Regulation 406/19, and for clarity does not include hazardous waste and does not include soil mixtures;

“inert fill” means earth or rock fill or waste of a similar nature that contains no putrescible materials or soluble or decomposable chemical substances but does not include excess soil;

“listed waste” has the same meaning as in Reg. 347;

"Minister" means the Minister of the Environment, Conservation and Parks, or such other member of the Executive Council, as may be assigned the administration of the EPA and OWRA under the *Executive Council Act*, R.S.O. 1990 c. E.25;

"Ministry" means the ministry of the Minister;

"Operator" means any person, other than the Owner's employees, authorized by the Owner as having the charge, management or control of any aspect of the Site, and includes its successors or assigns;

"Owner" means any person that is responsible for the establishment or operation of the Site being approved by this Approval, and includes TUQ4 Inc., its successors and assigns;

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

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

"PFAS" means per- and polyfluoroalkyl substances;

"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 PA;

"Provincial Water Quality Objectives" means the Provincial Water Quality Objectives

(PWQO) listed in Table 2 of the Ministry's"Water Management: Policies, Guidelines, Provincial Water Quality Objectives" document dated 1994, as amended;

“Qualified Person (QP)” has the same meaning as in Regulation 153/04, or equivalent environmental professional designation if from a non-Ontario location;

"Reg. 347" means R.R.O. 1990, Regulation 347: General - Waste Management, made under the EPA, as amended from time to time;

"Registration Guidance Manual" means the Ministry's"Registration guidance manual for generators of liquid industrial and hazardous waste" document;

“rock” has the same meaning as in Regulation 406/19;

"Site" means the facility located at 1036 Haldimand Road, Nanticoke, Ontario, authorized by this Approval;

“soil” has the same meaning as in Regulation 406/19;

"Soil Rules" means the Ministry's"Rules for Soil Management and Excess Soil Quality Standards" document;

“Trained Personnel” means persons knowledgeable in the following through instruction and/or practice:

- relevant waste management legislation, regulations and guidelines;
- major environmental concerns pertaining to the material being handled;
- occupational health and safety concerns pertaining to the processes and materials being handled;
- management procedures including the use and operation of equipment for the processes and materials being handled;
- emergency response procedures;
- specific written procedures for the control of nuisance conditions;
- specific written procedures for the management of unacceptable loads;
- the requirements of this Approval.

TERMS AND CONDITIONS

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

A. **GENERAL**

1. **Compliance**
    1. The Owner and Operator 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.
    3. The Site shall be operated and maintained at all times including management and disposal of all waste in accordance with the EPA, Reg. 347 and the conditions of this Approval. At no time shall the discharge of a contaminant that causes or is likely to cause an adverse effect be permitted.
2. I**n Accordance**
    1. Except as otherwise provided by this Approval, the Site shall be designed, developed, built, operated and maintained in accordance with the most recent application for this Approval and the supporting documentation listed in Schedule “A”.
    2. Construction and installation of the aspects of the Site described in the most recent application for this Approval must be completed within 5 years of the later of:
        a. the date this Approval is issued; or
        b. if there is a hearing or other litigation in respect of the issuance of this Approval, the date that this hearing or litigation is disposed of, including all appeals.
    3. This Approval ceases to apply in respect of the aspects of the Site noted above that have not been constructed or installed before the later of the dates identified in condition A.2.2. above.
3. **Interpretations**
    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"A", 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"A", 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.

4. **Others Legal Obligations**
    1. The issuance of, and compliance with the conditions of, this Approval does not:
        a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement; or
        b. limit in any way the authority of the Ministry to require certain steps be taken or to require the Owner and Operator to furnish any further information related to compliance with this Approval.

5. **Adverse Effect**
    1. The Owner and Operator shall take steps to minimize and ameliorate any adverse effect (as defined in the EPA) or impairment of water quality resulting from operations at the Site, including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.
    2. Despite an Owner, Operator 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 (as defined in the EPA) or impairment of water quality.

6. **Change of Owner**
    1. The Owner shall notify the Director, in writing, and forward a copy of the notification to the District Manager, within 30 days of the occurrence of any changes in the following information:

a. the ownership of the Site;

b. the Operator of the Site;

c. the address of the Owner or Operator;

d. the partners, where the Owner or Operator 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, 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 works, 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.

7. **Inspections**

1. No person shall hinder or obstruct a Provincial Officer in the performance of their duties, including any and all inspections authorized by the OWRA, the EPA or the PA of any place to which this Approval relates, and without limiting the foregoing to:

a. enter upon the premises where the Site is located, or the location where the records required by the conditions of this Approval are kept;

b. have access to, inspect, and copy any records required by the conditions of this Approval;

c. inspect the practices, procedures, or operations required by the terms and conditions of this Approval; and

d. sample and monitor for the purposes of assessing compliance with the conditions of this Approval or the EPA, the OWRA or the PA.

8. **Information and Record Retention**

1. Any information requested by the Ministry concerning 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 in a timely manner to the Ministry, upon request. Records shall be retained for 5 years unless otherwise authorized in writing by the Director.

2. The receipt of any information by the Ministry or the failure of the Ministry to prosecute any person or to require any person to take any action, under this Approval or under any statute, regulation or other legal requirement, in relation to the information, shall not be construed as:
    a. an approval, waiver, or justification by the Ministry of any act or omission of any person that contravenes any term or condition of this Approval or any statute, regulation or other legal requirement; or
    b. acceptance by the Ministry of the information’s completeness or accuracy.
3. The Owner shall ensure that a copy of this Approval, in its entirety and including documentation listed in Schedule"A", are retained at the Site at all times.
4. Any information related to this Approval and contained in Ministry files may be made available to the public in accordance with the provisions of the *Freedom of Information and Protection of Privacy Act*, RSO 1990, CF-31.

9. **Financial Assurance**
    1. The Owner shall maintain financial assurance, as defined in Section 131 of the EPA, with the Director in the amount of $645,000. This financial assurance shall be in a form and amount acceptable to the Director and shall provide sufficient funds to pay for compliance with and performance of any action specified in this Approval, including Site clean-up, monitoring and the disposal of all quantities of waste on-site, closure and post-closure care of the Site and contingency plans for the Site.
    2. 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 60 days before the financial assurance terminates, the financial assurance shall forthwith be replaced by cash.
    3. Commencing on March 31, 2029, and every 5 years thereafter, the Owner shall provide to the Director a re-evaluation of the amount of the financial assurance required to facilitate the actions described under Condition A.9.1 above. Additional financial assurance, if required, must be submitted to the Director within 20 days of written acceptance of the re-evaluation by the Director.

B. **OPERATIONS**

1. **Hours of Operation**
    1. Waste may be received at, managed at and shipped from the Site between the

hours of 7:00am and 7:00pm, Monday to Friday, unless otherwise restricted by municipal by-laws.

2. Notwithstanding Condition B.1.1 above, waste generated through emergency clean-up activities, including waste resulting from the clean-up of natural disasters, spills or accidents, may be received at the Site 24 hours per day, 7 days per week, unless otherwise restricted by municipal by-laws.
3. The operating hours can be changed after receiving approval from the District Manager.

2. **Service Area**
    1. No waste other than waste generated in Canada and the United States of America shall be accepted at the Site.
3. **Waste Types**
    1. No wastes other than the following shall be accepted at the Site:
        a. Solid hazardous waste, limited to soil that is hazardous waste where the primary waste characterization is Waste Class No. 243D (hazardous due to PCB content greater than 50 microgram per kilogram), Waste Class No. 146C or 270C (hazardous due to corrosivity) or Waste Class No. 146T or 270T (hazardous due to leachate toxicity);

        b. excess soil that is solid, including PFAS-impacted soil that is solid; and

        c. excess soil that is liquid.
    2. For clarity:
        a. no listed waste shall be received at the Site;

        b. the term"excess soil" does not include hazardous waste.
4. **Storage and Receiving Limits**
    1. The following limits apply to the receipt and storage of waste:
        a. The amount of excess soil (both solid and liquid) received at the Site shall not exceed 86,500 tonnes per year.

        b. The amount of excess soil that is solid received at the Site shall not exceed 2,000 tonnes per day.

        c. The amount of excess soil that is liquid received at the Site shall not exceed 200 cubic metres or 400 tonnes per day.

        d. The amount of hazardous waste received at the Site shall not exceed either:

i. 200 cubic metres per day; or

ii. 36,500 tonnes per year.

2. The amount of waste material (processed and unprocessed) present at the Site at any one time shall not exceed the following:
    a. 3,000 tonnes of hazardous waste;
    b. 9,000 tonnes of all other waste (including excess soil received from off-site that has not been processed, excess soil received from off-site that has been processed, granular material, debris, and non-hazardous process residuals), other than the excess soil stored outdoor on beneficial purpose product pads, as per Figure 9-3 of the Design and Operations Report included as Item 4 in Schedule"A", awaiting reuse on-site; and
    c. 75,000 cubic metres of excess soil stored on the outdoor designated beneficial purpose product pad(s) awaiting reuse on-site as per Condition B.4.2.b., subject to municipal approval.
3. The Owner shall refuse any load if the receipt of that load could reasonably be expected to cause non-compliance with the receipt and storage limitations described above and elsewhere in this Approval.
4. All Processed Soil and Processed Granular material (chemically tested) products determined to be suitable for reuse as defined in this Approval shall be temporarily stored outdoors on designated beneficial purpose product pad(s), as shown on Figure 9-3 of the Design and Operations Report included as Item 4 in Schedule"A", awaiting reuse on-Site or off-Site. Process produced materials that have been tested shall remain segregated from all other soils on-site.
5. Commencing from the date of issuance of this Approval, pursuant to paragraph 5 of subsection 5(1) of Regulation 406/19, the excess soil received and stored for on-Site grading shall be finally placed no later than 2 years after it is received unless Condition B.4.6. is satisfied.
6. Within 18 months of the issuance of this Approval, the Owner shall provide an updated Site grading plan approved by the local municipal official to the District Manger. The grading plan shall include:
    1. quantity of excess soil required for on-Site grading;
    2. quality of excess soil for on-Site grading purposes; and
    3. period of time for which excess soil must be placed in achieving final

grade.

5. **Incoming Waste Documentation**
    1. Documentation for excess soil that is solid:
        a. Prior to accepting any dry excess soil at the Site for excess soil that is solid, the Owner shall ensure that documents are obtained from each source site/generator delivering waste to the Site that contains the following information at a minimum:
            i. the generator's name and/or the company's name, address and contact information;
            ii. the source site/generator location;
            iii. current source site/generator activities and land use, including details of any certain or likely potentially contaminating activity;
            iv. past source site/generator activities and land use, including details of any certain or likely potentially contaminating activity;
            v. a list of all certain or likely spilled materials and clean-up materials present in the excess soil if the excess soil is from an emergency response location; and
            vi. the estimated quantity of excess soil to be received at the Site.
        b. The Owner shall ensure that:
            i. the soil has been characterized under the supervision of a Qualified Person in accordance with instructions prepared by a Qualified Person or equivalent if from a non-Ontario source site; and
            ii. all characterization documentation has been prepared by a Qualified Person or equivalent if from a non-Ontario source site.
        c. Incoming excess soil shall not be deemed to be characterized unless the documentation set out below has been provided:
            i. the results of all Phase 1 and Phase 2 site assessments undertaken for the source site in accordance with the Ministry's requirements under O. Reg. 153/04 and/or in accordance with sections 1 to 3, Section B of Part 1 of Soil Rules, or equivalent if from non-Ontario source site; or
            ii. all of the following:
                a. analytical results from the TCLP test, and any other analytical

results required to confirm that the soil is not a hazardous waste as defined in Regulation 347 based on the review of the general documentation noted above;

b. PFAS testing, if the excess soil is PFAS-impacted excess soil;

c. results from the Slump Test;

d. results of testing for the contaminants listed in paragraph 2(3)14 in Section B of Part I of the Soil Rules; and

e. a description of all sampling and testing protocols used to determine the above, including confirmation that the soil has been sampled in accordance with either paragraph 2(3)15 (in-situ) or paragraph 2(3)16 (stockpile) in Section B of Part I of the Soil Rules, and that the samples have been handled, stored and analyzed in accordance with subsection 2(4) in Section B of Part I of the Soil Rules.

d. In the event that the excess soil is from emergency spill response activities, the Owner shall:

i. ensure that the soil is not a hazardous waste prior to receipt;

ii. keep the excess soil segregated on-site, either indoors or under cover to prevent contact with stormwater, until characterization can be completed;

iii. characterize the soil within 24 hours of receipt at the Site;

iv. ensure that the soil has been characterized under the supervision of a Qualified Person in accordance with instructions prepared by a Qualified Person, and that all characterization documentation has been prepared by a Qualified Person;

v. ensure the soil has been characterized in accordance with Condition B.5.1.c.ii. above.

vi. a notification to the District Manager within 5 business days outlining the quantity and type of waste received at the Site.

2. Documentation for excess soil that is liquid:

a. Prior to accepting any excess soil at the site where the excess soil is liquid, the Owner shall ensure that documents are obtained from each source site/generator delivering waste to the Site that contains following information at a minimum:

  i. the generator's name and/or the company's name, address and contact information;
  ii. the source site/generator location;
  iii. current source site/generator activities and land use, including details of any certain or likely potentially contaminating activity;
  iv. past source site/generator activities and land use, including details of any certain or likely potentially contaminating activity;
  v. a list of all certain or likely spilled materials and clean-up materials present in the excess soil if the excess soil is from an emergency response location; and
  vi. the estimated quantity of excess soil to be received at the Site.

3. Documentation for hazardous soil:
   a. Prior to accepting any hazardous soil at the Site, the Owner shall ensure that documents are obtained from each source site/generator delivering waste to the Site that contains the following information at a minimum:
      i. the waste generator's name and/or company name, site address, and contact information;
      ii. the estimated quantity of soil being shipped;
      iii. current source site activities and land use;
      iv. past source site activities and land use, if known;
      v. the results of any Phase 1 or Phase 2 site assessments undertaken for the source site;
      vi. a list of any potential contaminants of concern;
      vii. confirmation that the waste has been characterized in accordance with the Registration Guidance Manual;
      viii. TCLP test results for any identified contaminants of concern listed in Schedule 4 of Regulation 347;
      ix. PCB test results demonstrating the concentration of PCBs in the waste if PCBs are known to be or suspected of being present;
      x. test results for corrosivity if the waste is a corrosive waste;

xi. confirmation that the waste is not a listed waste.

b. Notwithstanding Condition B.5.3.a. above, hazardous soil from an emergency spill response activity that has not been characterized may be received at the Site in accordance with the following:
   i. Prior to receipt, the Owner shall obtain the following:
      a. the waste generator's name and/or company name, site address, and contact information;
      b. the estimated quantity of soil being shipped;
      c. information about the nature of the spilled material and an estimate of the amount of the spilled material that may be present in the soil;
      d. a list of any other contaminants of concern; and
      e. any available waste characterization or testing data.
   ii. The Owner, after reviewing the information noted above, shall only accept the soil if the waste is permitted to be received under this Approval.
   iii. Upon receipt, the Owner shall ensure that the soil is stored indoors and remains segregated from all other materials.
   iv. The Owner shall characterize the soil within 7 days of receipt, and prior to any on-site processing or off-site disposal, in accordance with the Registration Guidance Manual including any testing as may be necessary to establish the Waste Class Number and waste characteristic.
   v. In the event that the results of on-Site waste characterization indicate the soil is not permitted to be on-Site, the Owner shall remove the soil from the Site forthwith for disposal at an approved waste disposal facility.

6. **Waste Receiving**
   1. Trained Personnel shall supervise all shipments of waste received at the Site. Prior to any shipment being unloaded, Trained Personnel shall review the accompanying information for that shipment and examine the contents of the vehicle to ensure the waste matches the description provided and that the waste is permitted to be received further to the conditions of this Approval. If any shipment is suspected of containing unapproved waste, that shipment shall

be refused and shall not be unloaded at the Site.

2. If at any time a shipment is discovered to contain unapproved material, the shipment shall be refused and all portions of the shipment that can be recovered shall be removed from the Site.
3. When unloading waste at the Site:
    a. all excess soil that is solid received at the Site for direct reuse on-Site shall be unloaded directly on a designated outdoor beneficial purpose product pads, as per Figure 9-3 of the Design and Operations Report included as Item 4 in Schedule"A", or at the intended on-Site reuse location;
    b. all excess soil that is liquid shall be unloaded directly into a pit building;
    c. all other waste, including hazardous waste, received at the Site shall be unloaded indoors in the appropriate Soil Receiving Building or Process Building.
4. Hazardous and non-hazardous wastes shall remain segregated on-site at all times. All equipment used to handle hazardous waste during receiving shall be cleaned and decontaminated prior to being used to handle non-hazardous waste.

7. **Waste Storage**
    1. All waste shall be stored indoors, other than the which may be stored outdoors on the beneficial purpose storage areas as shown on Figure 9-3 of the Design and Operations Report included as Item 4 in Schedule"A':
        a. excess soil that does not exceed Table 5.1 in the Soil Rules or soil criteria approved in the Site grading plan per Condition B.4.6. that has been received from off-site for the purposes of being reused on-Site for site grading further to the Conditions of this Approval;
        b. Processed excess soil that does not exceed Table 5.1 in the Soil Rules derived from the processing of hazardous soil received from off-Site and that has been tested in accordance with the Conditions of this Approval to demonstrate that the material is non-hazardous and acceptable to be reused further to the Conditions of this Approval, which shall be stored in a segregated area on the beneficial purpose storage areas;
        c. Processed granular material derived from the processing of excess soil received from off-Site, stored on the beneficial purpose storage areas;
        d. Processed granular material derived from the processing of hazardous soil received from off-Site that has been tested in accordance with the Conditions of this Approval to demonstrate that the material is non-

hazardous and acceptable to be reused shall be stored in a segregated area on the beneficial purpose storage areas.

2. At no time shall hazardous waste or PFAS-impacted excess soil be:
    a. mixed with other soil or wastes on-site; or
    b. stored outdoors, or otherwise in a manner that allows contact with stormwater.
3. The Owner shall ensure that any outdoor storage of waste is carried out in accordance with any restrictions set out in an Environmental Compliance Approval (Wastewater) for the Site.
4. The following buildings may be constructed on-Site as generally described in Item 4 of Schedule"A":
    a. Building A - Office Trailer;
    b. Building B - Employee Lunch/Locker Room Trailer;
    c. Building C - Washroom and Laboratory Trailer;
    d. Building D - Soil Storage and Pre-process Preparation;
    e. Building E - Soil Receiving and Soil Storage;
    f. Building F - Process Building and Soil Storage;
    g. Building G - Weigh Scale Trailer;
    h. Building H - Soil Storage and Other Waste Storage;
    i. Building I - Liquid Soil Dewatering and Soil Storage;
    j. Building J - Soil Receiving and Soil Storage.
5. All on-site buildings shall be constructed as generally described in the Design and Operations Report included as Item 4 in Schedule"A". All waste storage and processing building shall include the following features:
    a. a steel or structural fibre reinforced concrete floor that has been treated to be impervious to water and to the waste types being stored and/or processed;
    b. metal doors that can be closed and locked; and
    c. a sump/catchbasin system to collect any generated leachate.

6. The Owner shall ensure that all on-Site liquids and chemicals are stored in accordance with the Ministry's"Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities" document dated May 2007, including the use of spill protection measures for any liquids.
7. All hazardous waste storage areas shall be clearly marked with a sign indicating the material is hazardous and describing the waste contained therein.
8. Hazardous and non-hazardous wastes shall remain segregated on-Site at all times. All equipment used to handle hazardous waste during storage shall be cleaned and decontaminated prior to being used to handle non-hazardous waste.

8. **Waste Processing**
    1. The Site is approved for the following waste management processes and activities:
        a. The receipt, temporary storage and transfer of waste.
        b. The reuse of excess soil including processed dry soil and granular materials for Site re-grading in accordance with Condition B.10 below.
        c. The passive dewatering of excess soil that is liquid in accordance with Condition B.11 below.
        d. The processing of excess soil and hazardous soil using the following methods, limited as per the conditions of this Approval:
            i. the PhysChemBio process subject to Condition B.12 below;
            ii. the Hot Box soil heating process, subject to Condition B.13 below; and
            iii. the Stablization process, subject to Condition B.14 below.
    2. No hazardous soil or PFAS-impacted excess soil shall be received at the Site or treated on-Site unless the Owner has completed a bench-scale treatability test that shows the soil can be treated to meet the performance objectives set out in this Approval.
    3. Hazardous and non-hazardous wastes, processed soils including processed granular material shall remain segregated on-Site at all times. All equipment used to handle hazardous waste during processing shall be cleaned and decontaminated prior to being used to handle non-hazardous waste.
    4. Spent filter media (fully or partially spent) generated on-Site as a result of processed wastewater treatment shall be sent to an approved incineration

facility for thermal treatment of PCBs and/or PFAS contaminants that have been removed from the processed wastewater.

5. Spent filter media (fully or partially spent) generated on-Site as a result of PCBs and/or PFAS processed wastewater treatment shall not disposed of at any approved landfill site in Ontario.

9. **Waste Operations - Trained personnel**
    1. The Owner shall ensure that all waste receiving, handling, storage, processing and transfer is carried out by Trained personnel in accordance with the conditions of this Approval, Reg. 347, the EPA, and all relevant regulations, standards and guidelines.
    2. The Owner shall ensure that all on-site operations are carried out by Trained personnel in a manner that prevents off-Site impacts and adverse effects as defined in the EPA.

10. **Soil Reuse on-site**
    1. Excess soil may only be deposited on-Site for Site regrading purposes in accordance with an approved Site grading plan by the local municipality required in Condition B.4.6., provided the deposition does not exceed the prescribed contours and/or volume limit or the quality standards set out in the Site grading Plan. In the absence of any quality standards in the Site grading plan, the excess soil shall not exceed Table 3.1 and Table 5.1 in the Soil Rules.
    2. Only excess soil that has accompanying documentation demonstrating compliance with the soil quality standards for the Site as noted above, or that has been tested to demonstrate compliance with the soil quality standards noted above, may be deposited on-Site for Site regrading purposes.
    3. Excess soil to be used for Site regrading shall be stored as per Condition B.7. All such soil shall be stored in segregated piles by source site in such a manner that the soil and its accompanying documentation can be easily identified.
    4. At no time shall excess soil that contains PFAS compound PFOS concentrations above Canadian Council of Ministers of the Environment (CCME) agricultural land use soil quality guideline of 0.01 mg/kg (2021) and the Health Canada Soil Screening Values or PFAS compounds for agricultural land use (May, 2019),as revised, be used for Site regrading purposes.

11. **Liquid Soil Dewatering**
    1. Excess soil that is liquid may be processed by passive dewatering on-Site.
    2. Excess soil that is liquid shall only be received and processed in dewatering pit building.

3. The Owner shall ensure that all process water from the passive dewatering of excess soil that is liquid is:
    a. captured and contained within the building; and
    b. either sent to the on-Site wastewater treatment unit for processing ,or sent off-Site to a wastewater treatment facility or waste disposal site approved to accept that material.
4. Excess solid that is solid derived from the dewatering of excess soil that is liquid shall be characterized in accordance with Condition B.5.1.c.ii. above prior to being managed further on-Site.

12. **PhysChemBio Processing**
    1. The PhysChemBio process shall be carried out in accordance with the following:
        a. The PhysChemBio process includes the following:
            i. The wet-screening of soils and the removal of debris;
            ii. Size/density separation;
            iii. Wet processing;
            iv. chemical separation; and
            v. Wastewater treatment.
        b. No hazardous soil shall be processed using the PhysChemBio other than soil that is hazardous due to PCB content (Waste Class No. 243D), corrosivity (146C or 270C) or leachate toxicity (Waste Class No. 146T or 270T).
        c. No hazardous soil shall be processed using the PhysChemBio process unless a bench-scale testing shows all of the following:
            i. that the contaminant concentrations in the processed soil can be reduced to a level such that a TCLP test carried out on the processed soil indicates it is non-hazardous waste;
            ii. that the concentration of PCBs in the processed soil can be reduced to meet the limits set out in the Soil Rules;
            iii. that the contaminant concentrations in the soil can be reduced to comply with the requirements set out in Section 82 in Reg. 347; and
            iv. that the concentration of PCB in the process water can be reduced after processing in the wastewater treatment process to meet the

Table 3 non-potable groundwater limit for Industrial / Commercial / Community Property Use in the Soil, Groundwater and Sediment Standards for Use under Part XV.1 of the *Environmental Protection Act*, as revised.

d. No PFAS-impacted excess soil shall be processed using the PhysChemBio unless a bench-scale testing shows all of the following:
    i. that the concentration of PFAS compound PFOS in the processed soil can be reduced to meet the Canadian Council of Ministers of the Environment (CCME) agricultural land use soil quality guideline of 0.01 mg/kg (2021) and the Health Canada Soil Screening Values for PFAS compounds for agricultural land use (May, 2019), as revised; and
    ii. that the concentration of PFAS in the processed water after processing in the wastewater treatment process can be reduced to meet the Ontario drinking water advisory limit of 70 ng/L for the sum of eleven (11) PFAS compounds, as revised.
e. Only the process chemicals identified in the Design and Operations Report may be used in the PhysChemBio process, subject to compatibility with the waste as demonstrated by the bench-scale treatability test.
f. No later than 10 days from the date of issuance of this Approval, the Owner shall engage with the local fire department to ensure that the storage and use of any solvents or any other potentially flammable or explosive material is carried out in accordance with any relevant safety requirements.
g. Process water and spent solvent shall be managed in accordance with the following:
    i. all process water and spent solvent shall be tested after processing to determine PCB and PFAS content;
    ii. all process water and spent solvent shall be characterized in accordance with the Registration Guidance Manual after processing to determine waste class and characteristic;
    iii. all process water and spent solvent being disposed of shall be disposed of in accordance the EPA, the OWRA and Reg. 347, any municipal by-laws that may apply to discharges to sanitary sewer, and any site-specific requirements set out in an environmental compliance approval for any approved waste disposal site or sewage

treatment facility where the processed water or spent solvent will be disposed of;

iv. at no time shall processed water that contains PCB or PFAS levels specified in Condition B.12.1.c.iv. and B.12 1.d.ii. be discharged to sanitary sewer.

h. Process water that has been treated using the wastewater treatment process may be reused in the PhysChemBio process provided:

i. the treated process water is only used for processing soils from the same source site being treated for the same contaminants; or

ii. the treated process water has been tested to show it meets the PCB and PFAS levels specified in Condition B.12.1.c.iv and B.12.1.d.ii.

i. The PhysChemBio unit shall be decontaminated after each use.

j. All solid or semi-solid material, including flocculant and filter material, recovered from the processing of wastewater from the processing of hazardous waste shall be characterized in accordance with the Registration Guidance Manual, including mandatory TCLP and PCB testing, along with any other testing necessary to establish waste class and characteristic, prior to further on-site handling or off-site disposal. Process residuals shall not be mixed with other materials on-Site or sent off-Site for reuse, but may be transferred off-Site for further processing or disposal to a facility approved to receive that type of waste.

k. Solid or semi-solid material, including flocculant and filter material, recovered from the processing of wastewater from the processing of PFAS-impacted excess soil shall only be sent off-Site for disposal at a facility specifically approved to accept PFAS-impacted material. If such a facility is not available at the time of processing, PFAS-impacted soil shall not be processed at the Site.

l. The Owner shall ensure that spill containment infrastructure is in-place and maintained in good condition around the PhysChemBio and wastewater treatment process units at all times, and that the spill containment complies with Section 3 in the Ministry's"Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities" document dated May 2007, having a minimum containment volume of 110% of the liquid storage capacity of the system.

13. **Hot Box Processing**

1. The Hot Box process shall be carried out in accordance with the following:

a. The Hot Box process includes the following:
   i. The heating of soil in a metal box to a temperature not to exceed 100 Celsius, using an external energy source; and
   ii. Associated fans, ventilation and gas collection systems.
b. The Hot Box shall not be operated unless:
   i. an Environmental Compliance Approval (Air) has been issued for the Site that approves this type of processing;
   ii. an amendment has been made to this Approval to recognize the issuance of the Environmental Compliance Approval (Air) noted above; and
   iii. the Owner has received confirmation in writing from the local fire department that they have no objections to the operation of the Hot Box.
c. No waste shall be processed in the Hot Box unit unless a bench-scale testing shows that:
   i. the waste is not an ignitable waste, and does not evolve ignitable gases upon heating; and
   ii. the waste contains organic contaminants that are amenable to volatilization, and the concentrations of these contaminants in the waste can be reduced below the limits set out in Schedule 4 in Reg. 347 for those contaminants.
d. No PCB waste or PFAS-impacted excess soil shall be processed using the Hot Box process until the treatability testing of these contaminants in the waste can reduced below limits set out in Condition B.12.1.c.ii. for PCB and B.12.1.c.i. for PFAS.
e. The Hot Box shall be cleaned and decontaminated after each use.

14. **Stabilization Process**
   1. The Stabilization process shall be carried out in accordance with the following:
      a. The Stabilization process includes the following:
         i. the addition of stabilizing compounds to hazardous waste to reduce contaminant mobility prior to disposal; and
         ii. the use of an excavator, pug mill and open-top leakproof steel bin.
      b. Only the following wastes may be treated using the Stabilization process:

    i. hazardous soil that is leachate toxic (146T or 270T);
    ii. hazardous soil that is corrosive (146C or 270C); and
    iii. process residuals from the processing of the above-noted wastes.

2. None of the following wastes shall be processed using the Stabilization process:
    a. any aqueous wastes;
    b. any solid non-hazardous wastes;
    c. any hazardous soil that was was received as PCB waste;
    d. any process residuals from the processing of PCB waste;
    e. any hazardous soil that was received as corrosive waste, unless the soil has been treated to remove the corrosive characteristic or the Stabilization process will remove the corrosive characteristic through neutralization;
    f. any hazardous soil that does not meet the contaminant level requirements set out in Section 82(1)2 in Reg. 347 further to Table 1 - Organic Constituents;
    g. any PFAS-impacted excess soil;
    h. any process residuals from the processing of PFAS-impacted excess soil.
3. Only the stabilizing agents listed Section 3, Appendix E2 of the Design and Operations Report, included as Item 4 may be used in the stabilization process, subject to compatibility with the waste as demonstrated by the bench-scale treatability test.
4. The amount of solidification agent added shall not exceed 15% of the weight of the waste being processed.
5. Waste that has been treated using the Stabilization process shall be tested prior to further on-Site handling or disposal to ensure compliance with the contaminant level requirements set out in Section 82(1)2 of Reg. 347, as amended.
6. Waste that has been treated using the Stabilization process shall not be mixed with other wastes on-Site.
7. Waste that has been treated using the Stabilization process shall not be sent off-Site for reuse.

8. Waste that has been treated using the Stabilization process shall not be sent off-Site for land disposal unless the requirements of Section 82 in Reg. 347 have been met.
9. The equipment used in the Stabilization process shall be cleaned and decontaminated after each use.

15. **Soil Testing**
    1. The following applies to soil received at the site as excess soil:
        a. No soil that was received as, and remains, excess soil shall leave the Site for reuse unless accompanying documentation has been prepared as follows:
            i. For excess soil from a single source site that was not processed on-Site or mixed or contaminated with any other soil or material on-Site, the accompanying documentation may consist of the accompanying documentation required for that excess soil during receipt.
            ii. For excess soil consisting of soil from more than one source site that was mixed together on-Site, provided it was not otherwise processed on-Site or contaminated with any other material on-site, the accompanying documentation may consist of:
                a. the maximum concentration for each contaminant present in the accompanying documentation for all source sites forming a part of the mixture; and
                b. the information identified in Condition B.5.1. through B.5.3 above for each source site forming part of the mixture.
            iii. For all other excess soils, the documentation shall be prepared further to sampling and analysis of the soil as set out in Condition B.15.1.b. below.
        b. When creating documentation for soil based on sampling and analysis prior to leaving the Site for reuse, including dewatered excess soil that was received as a liquid, the Owner shall ensure the following:
            i. the soil characterization is carried out by, or under the supervision of, a Qualified Person, and all characterization documentation is prepared by a Qualified Person;
            ii. the soil is tested using the TCLP test, and any other analytical results required to confirm that the soil is not a hazardous waste as defined in Regulation 347;

iii. the soil is tested using the Slump Test;

iv. the soil is tested for PFAS content, if the soil was received as PFAS-impacted excess soil;

v. the soil is sampled in accordance with the stockpile sampling frequency set out in paragraph 2(3)16 of Section B of Part I of the Soil Rules for the contaminants listed in paragraph 2(3)14 of Section B of Part I of the Soil Rules, and that the samples are handled, stored and analyzed in accordance with subsection 2(4) in Section B of Part I of the Soil Rules;

vi. all analysis of soil samples is carried out by an accredited laboratory (Canadian Association for Laboratory Accreditation or equivalent).

2. The following applies to soil received at the Site as hazardous waste:
    a. All processed soil from processing of hazardous soil shall be characterized in accordance with the Registration Guidance Manual, including mandatory TCLP and PCB testing, testing required to satisfy Section 82 of Reg. 347, and any other testing required to determine waste type and characteristic, prior to being considered for reuse.
    b. If soil testing shows any of the following, that soil shall not be considered for reuse:
        i. TCLP testing shows that the soil is a hazardous waste; or
        ii. PCB testing shows that the PCB content exceeds Table 3.1 of Soil Rules;
        iii. the requirements of Section 82 in Reg. 347 have not been met;
        iv. the waste is hazardous waste for any other reason.
    c. If soil testing shows that all of the criteria in Condition 15.2.b. above have been met, the soil shall be tested in accordance with Condition B.15.1.b. above prior to being considered for reuse on-Site or off-Site.

16. **Off-Site Reuse of Excess Soil**
    1. No excess soil, including liquid or solid excess soil whether or not it has been processed or is derived from the processing of excess soil or hazardous waste, shall leave the Site for reuse except in accordance with the requirements set out in O. Reg. 406/19 and the Soil Rules, and only where:
        a. the material is no longer a hazardous waste or liquid waste; and

    b. if the material has been processed, the material has met the processing objectives and requirements set out in Conditions B.12 or B.13 above.

2. Before shipping any soil from the Site to a receiving site for reuse, the Owner shall:
    a. provide the receiver with a written description of the source of the material, a written description of the nature of the contamination in the soil loads from which the material was derived, a written description of the processing carried out on the soil (if any), and the results of all testing carried out on the soil; and
    b. obtain written acknowledgement from the receiver that they have read and accepted the written descriptions and confirmation noted above, and that they agree to receive the soil.
3. The Owner shall ensure that a Qualified Person has certified that the confirmations required above have been based on engineering or scientific opinions made in accordance with generally accepted principles and practices as recognized by members of the environmental engineering or science profession or discipline practising at the same time and in the same or similar location.

17. **Debris and Granular Material**
    1. Debris (solid material with a particle size of more than 60 millimetres), including recyclable material, recovered from the processing of hazardous soil shall be handled as follows:
        a. All debris recovered from the processing of hazardous waste shall be segregated on-site.
        b. No debris derived from hazardous waste may leave the Site for land disposal or reuse purposes unless the treatment requirements set out in Section 83 of Reg. 347 have been met, including TCLP testing and corrosivity testing to demonstrate that the debris is not leachate toxic or corrosive, but may be transferred from the Site for further processing at an approved waste disposal site.
        c. No debris derived from hazardous waste may leave the Site for reuse unless the following have been satisfied:
            i. the Owner has provided the user with a written description of the source of the material, a written description of the nature of the contamination in the soil loads from which the material was recovered, and test results demonstrating that the treatment

requirements for the material set out in Section 83 of Reg. 347 have been met;

ii. the Owner has received written acknowledgement from the receiver that they have read and accepted the written descriptions and confirmation noted above; and

iii. the Owner has received written confirmation from the receiver that the material can be received further to one of the following:

   a. either a regulatory exemption, or in accordance with the conditions of an Environmental Compliance Approval in effect for the receiving site if the site is located within Ontario; or

   b. in accordance with applicable receiving requirements if the receiving site is located outside of Ontario.

2. Processed granular material (soil-like or rock-like material having a particle size of more than 2 millimetres but less than 60 millimetres) shall be handled as follows:
   a. All granular material recovered from the processing of hazardous waste shall be segregated on-site.
   b. No granular material derived from hazardous waste may leave the Site for land disposal or reuse purposes unless the treatment requirements set out in Section 79 of Reg. 347 have been met, but granular material may be transferred from the Site for further processing at an approved waste disposal site.
   c. No granular material derived from hazardous waste may leave the Site for reuse unless the following have been satisfied:
      1. the Owner has tested the granular material in accordance with the modified Synthetic Precipitation Leaching Procedure and the results meet the Soil Rules.
      2. the Owner has provided the user with a written description of the source of the material, a written description of the nature of the contamination in the soil loads from which the material was recovered, and written confirmation that the treatment requirements for the material set out in Section 79 of Reg. 347 have been met and that the results of the modified Synthetic Precipitation Leaching Procedure meet the Soil Rules.
      3. the Owner has received written acknowledgement from the receiver

that they have read and accepted the written descriptions and confirmation noted above.

18. **Signage**
    1. A sign shall be posted and maintained at the entrance to the Site in a manner that is clear and legible, and shall include the following information:
        a. the name of the Site and Owner;
        b. this Approval number;
        c. the name of the Operator;
        d. the normal hours of operation;
        e. the allowed materials that may be accepted at the Site, and any materials explicitly prohibited by conditions of this Approval;
        f. a telephone number to which complaints may be directed; and
        g. a twenty-four (24) hour emergency telephone number (if different from above).

19. **Design and Operations Report**
    1. No later than 30 days from the date of issuance of this Approval, the Owner shall prepare and retain on-site a consolidated Design and Operations Report that reflects the Conditions of this Approval and includes the following as a minimum:
        a. details of all on-site operations, including site plans and drawings showing designated waste and wastewater management areas at the Site, drawings and written descriptions of all waste and wastewater management infrastructure in use at the Site, and written descriptions of all waste and wastewater management activities taking place on-site;
        b. details of all environmental protection measures required by the conditions of this Approval, including drawings and written descriptions of all infrastructure in place and written descriptions of procedures to be followed; and
        c. details of all procedures required by the conditions of this Approval, including written descriptions of staff training procedures, site security procedures, site inspection procedures, complaint response procedures, emergency response procedures and record keeping procedures.
    2. The Design and Operations Report shall be kept up-to-date, with any

substantive changes to the Design and Operations Report being submitted to the Director for approval prior to implementation.

20. **Nuisances**

    1. The Site shall be operated and maintained such that vermin, vectors, dust, litter, odour, noise and traffic do not create a nuisance. The Owner shall implement nuisance control measures as required to address any nuisances.

21. **Site Security**

    1. The Site shall be operated and maintained in a secure manner, such that unauthorized persons cannot enter the Site.

22. **Staff Training**

    1. The Owner shall ensure the following:
        a. No waste is received or processed at the Site except when the Site is under the direct supervision of Trained personnel.
        b. Only Trained personnel shall operate any aspect of the Site, or carry out any activity required under this Approval.
    2. The Owner shall ensure that all employees are trained, and receive annual refresher training, on the operation and management of the Site, or area(s) within the Site, in accordance with the specific job requirements of each individual, including but not limited to:
        a. an outline of the responsibilities of employees;
        b. waste receiving, refusal, on-Site management, processing, transfer, and record keeping procedures and requirements;
        c. any environmental concerns pertaining to the wastes accepted at the Site;
        d. occupational health and safety concerns for operators of the Site, including those related to waste handling;
        e. procedures for the safe operation of equipment;
        f. procedures to be followed in the event of a process upset;
        g. the use of equipment and the procedures to be followed in the event of an emergency;
        h. recording procedures as required throughout this Approval;
        i. Site inspection procedures;
        j. preventative maintenance procedures; and

k. procedures for recording and responding to public complaints;

l. relevant waste management legislation, including but not limited to Regulation 347;

m. the terms, conditions and operating requirements of this Approval.

3. The Owner shall keep a written record of all staff training, including the following as a minimum:

   a. the date and time of training;

   b. the name of the staff member being trained;

   c. the training provided.

23. **Site Inspections**

1. The Owner shall ensure that Trained personnel conduct an inspection of the entire Site and all equipment each day the Site is in operation to ensure that:

   a. the Site is secure;

   b. the operation of the Site is not causing any nuisances;

   c. the operation of the Site is not causing any adverse effects on the environment;

   d. all on-Site equipment and infrastructure is in good working order;

   e. all environmental protection measures are in place, in good working order and operating within normal parameters;

   f. the Site is being operated in compliance with this Approval.

2. Any deficiencies discovered as a result of the inspection noted above shall be remedied immediately, including temporarily ceasing operations at the Site if needed.

3. The Owner shall keep a written record of the inspections noted above, including the following information as a minimum:

   a. the name and signature of the Trained personnel that conducted the inspection;

   b. the date and time of the inspection;

   c. a list of any deficiencies discovered;

d. a description of all remedial actions taken, and the date and time those actions were taken;

e. any recommendations for future preventative or remedial actions required.

24. **Complaints**

1. If at any time the Owner receives a complaint regarding an adverse effect (as defined in the EPA) due to operation of the Site, the Owner shall respond to the complaint according to the following procedure:
    a. The Owner shall record and number each complaint, either electronically or in a separate log book, along with the following information:
        i. the nature of the complaint;
        ii. the name, address and telephone number of the complainant (if provided);
        iii. the date and time the complaint was received;
        iv. a description of the weather conditions at the time of the complaint;
        v. a description of the liquid soils, processed soils and process water handling activities taking place at the time of the complaint; and
        vi. a description of the known or suspected activity causing the complaint.
    b. The Owner shall:
        i. initiate appropriate steps to determine all possible causes of the complaint;
        ii. proceed to take the necessary actions to eliminate the cause of the complaint;
        iii. notify the District Manager of the complaint within 24 hours of receiving the complaint;
        iv. forward a report to the District Manager, including a copy to the complainant if they have identified themselves, within 24 hours of receiving the complaint that describes the response to the complaint; and
        v. forward daily updates to the District Manager until the complaint is resolved.
    c. The Owner shall complete and retain on-site a report written within one

(1) week of the complaint date, including:

i. the information required in conditions B.24.1.a. and B.24.1.b. above;

ii. a list of the actions taken to resolve the complaint; and

iii. recommendations for any remedial measures, managerial changes or operational changes that would reasonably avoid the recurrence of similar incidents in the future.

25. **Emergency Response Plan**

1. The Owner shall prepare and provide copies of an emergency response plan to the Fire Department within 60 days of the issuance of this Approval, and shall inform the District Manager in writing within 10 days of receiving acceptance of the plan by the Fire Department.
2. The emergency response plan submitted to the Fire Department shall include, at a minimum, a list of all potential fire and explosion hazardous at the site, including those associated with wastes and process chemicals/reagents, along with all emergency response equipment, infrastructure and procedures to be employed in the event of an emergency.
3. The emergency response plan shall be kept up to date, and a copy shall be retained and accessible to all staff at all times.
4. The equipment, materials and personnel requirements outlined in the emergency response plan shall be immediately available on the Site at all times. The equipment shall be kept in a good state of repair and in a fully operational condition.
5. Each staff member that operates the Site shall be fully trained in the use of the equipment required under the emergency response plan and in the procedures to be employed in the event of an emergency.
6. The Owner shall immediately take all measures necessary to contain and clean up any spill (as defined in the EPA) which may result from the operation of this Site and immediately implement the emergency response plan if required.

26. **Environmental Monitoring Program**

1. The Owner shall conduct the environmental monitoring program in accordance with Appendix F - TUQ4 SRF Groundwater Monitoring Plan of the Design and Operations Report included as Item 4 in Schedule"A" and Figure A of Schedule"B". In addition to the proposed chemical testing protocol, the groundwater samples shall be tested for PCBs and PFAS.
2. Any off site exceedances of parameters for groundwater shall be reported to

the District Manager within seven (7) days of receiving laboratory test results that indicate an exceedance. In addition, a statement detailing which results are out of compliance with the Ministry's guidelines and objectives shall be provided at the same time as the results.

27. **Groundwater Wells**

    1. The Owner shall ensure that all groundwater monitoring wells which form part of the monitoring program shall be properly capped, locked and protected from damage.
    2. Any groundwater monitoring wells included in the ongoing monitoring program that are damaged shall be assessed, repaired, replaced or decommissioned by the Owner, as required.
    3. The Owner shall repair or replace any groundwater monitoring wells that is destroyed or in any way made to be inoperable for sampling, but still required as part of the monitoring program, such that no more than one regular sampling event is missed.
    4. All groundwater monitoring wells which are no longer required as part of the groundwater monitoring program, and have been approved by the District Manager for abandonment, shall be decommissioned by the Owner, as required, in accordance with Ontario Regulation 903. A report on the decommissioning of the well shall be included in the Annual Report for the reporting period during which the well was decommissioned.

28. **Compliance Criteria**

    1. The Site shall be operated in accordance with the Reasonable Use Guideline B-7 for the protection of the groundwater at the Site.

29. **Trigger Mechanism and Contingency Plan**

    1. In the event of a confirmed exceedance of a site-specific trigger level relating to groundwater impacts due to on-Site waste operations, the Owner shall immediately notify the District Manager, and an investigation into the cause and the need for implementation of remedial or contingency actions shall be carried out by the Owner in accordance with the approved trigger mechanisms and associated contingency plan.
    2. The Owner shall ensure that any proposed changes to the site-specific trigger levels for groundwater impacts shall be approved in advance by the Director via an amendment to this Approval.
    3. If monitoring results, investigative activities and implementation criteria indicate the need to implement contingency measures, the Owner shall ensure

that the following steps are taken:

a. The District Manager shall be notified by the Owner as soon as possible of the need to implement contingency measures;

b. Detailed plans, specifications and descriptions for the design, operation and maintenance of the contingency measures shall be prepared and submitted by the Owner to the District Manager for approval.

30. **Changes to the Monitoring Plan**

1. The Owner may request to make changes to the monitoring program(s) to the District Manager in accordance with the recommendations of the Annual Report. The Owner shall make clear reference to the proposed changes in a separate letter that shall accompany the Annual Report.

2. Within fourteen (14) days of receiving the written correspondence from the District Manager confirming that the District Manager is in agreement with the proposed changes to the environmental monitoring program, the Owner shall forward a letter identifying the proposed changes and a copy of the correspondences from the District Manager and all other correspondences and responses related to the changes to the monitoring program, to the Director requesting the Approval be amended to approve the proposed changes to the environmental monitoring plan prior to implementation.

3. In the event any other changes to the environmental monitoring program are proposed outside of the recommendation of the Annual Report, the Owner shall follow current ministry procedures for seeking approval for amending the Approval.

31. **Annual Report**

1. By March 31st of each year, the Owner shall prepare a written report for the previous calendar year that shall be kept on-site and made available to any Provincial Officer upon request. The report shall include, at a minimum, the following information:

   a. a detailed monthly summary of the type, quantity and origin of all wastes received, processed and transferred from the Site, including the destination, type and quantity of waste destined for final disposal and also including any reconciliations on mass balance made;

   b. The results and an interpretive analysis of the results of all leachate, groundwater, surface water and landfill gas monitoring, including an assessment of the need to amend the monitoring programs and trigger mechanisms or to implement contingency measures;

c. a drawing(s) indicating all groundwater, surface water and gas monitoring locations;
d. tables outlining monitor locations, analytical parameters sampled and frequency of sampling;
e. any environmental and operational problems that could negatively impact the environment, encountered during the operation of the Site and during the facility inspections and any mitigative actions taken;
f. a statement as to compliance with all Terms and Conditions of this Approval and with the inspection and reporting requirements of the Conditions herein;
g. a descriptive summary of any spills or other emergency situations which have occurred at the Site, the remedial measures taken and the measures taken to prevent future occurrences;
h. a summary of all rejected loads, including quantity, waste class, reason for rejection and origin of the rejected waste;
i. a summary of the types and amounts of the waste received, processed, transferred or disposed through the Site; and
j. a summary of complaints received and the manner in which they were handled.

32. **Closure Plan**
    1. A Closure Plan shall be submitted to the Director for approval, with a copy to the District Manager, no later than six (6) months before the planned closure date of the Site. The Closure Plan shall include, at 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. The Site shall be closed in accordance with the approved Closure Plan.
    3. No more than 10 days after closure of the Site, the Owner shall notify the Director, in writing, that the Site is closed and that the approved Closure Plan has been implemented

C. **References**

1. **Sampling, Analysis and Testing**
    1. All testing required by the Conditions of this Approval shall be carried out on representative samples using approved methods.
    2. All sample analysis shall be carried out by an accredited laboratory (Canadian

Association for Laboratory Accreditation, or equivalent).

3. When testing soil quality for compliance with Part II of the Soil Rules, the Owner shall use the following analytical methods:
    a. analytical methods for determining bulk concentrations of contaminants in the 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
    b. analytical methods described in Section B of Part I of the Soil Rules;
4. When testing for leachability using the modified Synthetic Precipitation Leaching Procedure, the Owner shall use the Ministry's Synthetic Precipitation Leaching Procedure (E9003 or mSPLP).
5. When testing for leachate toxicity (TCLP), the Owner shall use the Toxicity Characteristic Leaching Procedure, Method 1311, that appears in United States Environmental Protection Agency Publication SW-846 entitled “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”.
6. When sampling soil for leachate toxicity (TCLP), the Owner shall sample soil in accordance with the Ministry's"Principles of Sampling and Analysis of Waste for TCLP under Reg. 347" document.
7. When testing to determine whether a material is liquid, the Owner shall use the Slump Test described in Schedule 9 in Reg. 347.
8. When testing for PCB content, the Owner shall use either US EPA Method 8080B Revision 2 or a method approved by the US EPA, the Canadian Council of Ministers of the Environment or Environment Canada.
9. When testing for PFAS, the Owner shall use a method approved by the US EPA, the Canadian Council of Ministers of the Environment or Environment Canada.
10. For PFAS soil results evaluation, following documents shall be used:
    a. Canadian Soil and Groundwater Quality Guidelines for the Protection of Environment and Human Health, 2021
    b. Updates to Human Health Canada Soil Screening Values for Perfluoralkylated Substances (PFAS), May, 2019.

2. **Continuous Review of PFAS Handing Requirements**
    1. No later than 1 year from the date of issuance of this Approval, and on an annual basis thereafter, the Owner shall submit to the District Manager a report on PFAS handling at the Site including the following:

a. an assessment of the current regulatory requirements from the handling of PFAS, both provincial and federal;
b. a list of any changes to the regulatory requirements since the last report;
c. an assessment of whether the current handling practices at the Site meet the most current regulatory requirements, and if not:
    i. a list of changes required at the Site to meet these requirements; and
    ii. an assessment of whether or not an amendment to the conditions of this Approval are required to address those changes.

REASONS

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

1. • The reason for the definitions section is to simplify the wording of the subsequent conditions and define the specific meaning of terms as used in this Approval.

Section A - General

- The reason for Conditions 1, 3, 4, 5, and 8 is to clarify the legal rights and responsibilities of the Owner and Operator.
- The reason for Condition 2 is to ensure that the Site is operated in accordance with the application and supporting documentation submitted by the Company, and not in a manner which the Director has not been asked to consider.
- The reasons for Condition 6(1) are 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.
- The reasons for Condition 6(2) are 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.
- The reason for Condition 7 is to ensure that appropriate Ministry staff have ready access to the Site for inspection of facilities, equipment, practices and operations required by the conditions in this Approval. This condition is supplementary to the powers of entry afforded a Provincial Officer pursuant to the EPA and OWRA.
- The reason for Conditions 9 is to ensure that sufficient funds are available to the Ministry to clean up the Site in the event that the Company is unable or unwilling to do so.

Section B - Operations

- The reasons for Conditions 1, 2, 3 and 4 are to specify hours of operations, the approved service area from which waste may be accepted at the Site, the types of waste that may be accepted at the Site, the amounts of waste that may be stored at the Site and the maximum rate at which the Site may receive waste based on the Company's application and supporting documentation.
- The reason for Conditions 5 and 6 is to ensure that incoming waste has been properly characterized prior to receipt at the Site.
- The reasons for Conditions 7 and 20 are to ensure that the Site is constructed and operated in a manner which does not result in a nuisance or a hazard to the health and safety of the environment or people, and to describe the conditions under which processed material may be reused off-site.
- The reason for Conditions 8, 9, 10, 11, 12, 13, and 14 are to describe the approved processing activities that may be carried out at the Site.
- The reason for Conditions 15, 16 and 17 is to ensure that all processed soil is properly characterized prior to leaving the Site.
- The reasons for Conditions 18 is to ensure that important information about this Approval is posted for easy public access, and to ensure that the Site is operated in a secure manner.
- The reason for Condition 19 is to ensure that a consolidated Design and Operations Report is prepared and retained on-site for use by Site staff and Ministry staff carrying out inspections.
- The reason for Condition 21 is to ensure the controlled access and integrity of the Site by preventing unauthorized access when the Site is closed and no site attendant is on duty.
- The reason for Conditions 22 is to ensure that the Site is operated by properly Trained personnel in a manner which does not result in a hazard or nuisance to the natural environment or any person.
- The reasons for Condition 23 are to ensure that regular Site inspections are carried out and that detailed records of Site inspections are recorded and maintained for inspection and information purposes.
- The reason for Condition 24 is to ensure that any complaints regarding Site operations at the Site are responded to in a timely manner.
- The reasons for Condition 25 is to ensure that an Emergency Response Plan is developed and maintained at the Site and that staff are properly trained in the operation of the equipment used at the Site and emergency response procedures.

- Condition 26 is included to specify groundwater monitoring program to prevent water pollution at the Site.
- Condition 27 is included to ensure the integrity of the monitoring network so that accurate monitoring results are achieved and the natural environment is protected.
- The reason for Condition 28 is to specify the performance requirements of the Site to ensure that the Site is performing as designed and the impacts on the natural environment are acceptable.
- Condition 29 is added to ensure the Owner has a plan with an organized set of procedures for identifying and responding to potential issues relating to groundwater and surface water contamination at the Site's compliance points.
- Condition 30 are included to streamline the approval of the changes to the monitoring plan.
- The reasons for Condition 31 are to ensure that regular review of site development, operations and monitoring data is documented and any possible improvements to site design, operations or monitoring programs are identified. An annual report is an important tool used in reviewing site activities and for determining the effectiveness of site design.
- The reason for Conditions 32 is to ensure that the Site is closed in accordance with Ministry standards and to protect the health and safety of the public and the environment.

Section C- References

- Conditions in Section C are included to ensure that the testing of incoming waste and processed soil are completed in accordance with the ministry's prescribed protocols or generally accepted industry 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:

1. 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;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

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

The Notice should also include:

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

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

This Notice must be served upon:

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

	Toronto, Ontario M7A 2J3	Floor Toronto, Ontario M4V 1P5

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

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 Environmental Registry of Ontario, 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 25th day of May, 2025

Mohsen Keyvani

Director

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

c: Bruce Tucker, TUQ4 Inc.

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

SCHEDULE 1

Schedule"A"

The following documents form a part of this Approval:

1. Environmental Compliance Approval application uploaded July 15, 2020, including the Design and Operations Report and all supporting documentation.
2. Email dated March 1, 2021 from Bruce Tucker, TUQ4, to Andrew Neill, P.Eng., MECP, with information on process additives.
3. Environmental Compliance Approval application dated March 30, 2024 (Ref. Number: 1000273631).
4. Design and Operations Report, Contaminated Soil Recycling / Decontamination Facility, dated February 2025, revised March 2025.

SCHEDULE 2

Schedule"B"
Groundwater Monitoring wells