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

**ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 3848-BQUQV2

Issue Date: August 21, 2020

Ellsin Environmental Ltd.  
360 Frankcom St  
Ajax, Ontario  
L1S 1R5

**Site Location:** 155 Yates Avenue  
155 Yates Ave  
Sault Ste. Marie City, District of Algoma  
L1S 1R5

*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 receive and thermally treat a maximum of up-to 10 tonnes per day of tire waste limited to used tires, off-specification tires, tire shred and tire crumb using microwave radiation to produce hydrocarbon vapours, carbon black and metal, and to manufacture black plastic concentrate by using shredded waste plastic and waste plastic pellets, and consisting of the following processes and equipment:

- one (1) in-feed system consisting of an in-feed hopper, a conveyor to feed tire waste, excluding the metal rim into one (1) sealed in-feed unit #1 pressurized with nitrogen gas, produced by one (1) nitrogen generator and one (1) conveyor connecting the in-feed unit #1 with one (1) sealed in-feed unit #2, pressurized with nitrogen gas, produced by one (1) nitrogen generator;
- one (1) sealed microwave tunnel to thermally treat tire waste through exposure to microwave radiation and to produce raw carbon black, hydrocarbon vapour and metal;
- one (1) dry out-feed system to remove raw carbon black and metal at the end of the thermal treatment tunnel, and including an enclosed raw carbon black and metal separator;
- equipment to utilize treated Syngas for pre-heating of the in-feed tire waste, heating of the thermal treatment tunnel, post-heating of raw carbon black at the end of thermal treatment and heating of the thermal oxidizer up-to the operating temperature;
- one (1) condenser to condense the condensable portion of the hydrocarbon vapours into oil to be stored in one (1) outdoor above-grade double wall storage

tank, having a maximum storage capacity of 22.73 cubic metres;

- one (1) 2-stage packed scrubber system with associated sprays and a mesh type mist eliminator to treat the non-condensable portion of the hydrocarbon vapours;
- one (1) indoor storage tank having a maximum storage capacity of 13.6 cubic metres to store treated Syngas;
- one (1) pulverizer to process raw carbon black;
- one (1) bagging unit to package the recovered carbon black;
- one (1) indoor silo having a maximum storage capacity of 20.4 cubic metres to store reclaimed carbon black;
- one (1) indoor silo having a maximum storage capacity of 20.4 cubic metres to store raw carbon black;
- two (2) outdoor silos, each having a maximum storage capacity of 54.3 cubic metres to store plastic resin pellets and/or waste plastic;
- one (1) extruder, chopper and a screen to manufacture black plastic concentrate;

and associated air pollution control equipment, oil and water separators and oil and waterwater treatment and storage.

Note: Use of the site for any other type of waste is not approved under this environmental compliance approval, and requires obtaining a separate approval amending this environmental compliance approval.

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

"Adverse Effect" has the same meaning as defined in the EPA;

"Air Approval" means the Environmental Compliance Approval and any Schedules to it for activities set out in section 9 of the EPA and carried out at the Site;

"Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;

"Area Supervisor" means the Area Supervisor, Sault Ste. Marie Area Office, Northern Region of the Ministry;

"AST" means above-ground storage tank;

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

"EASR" means the Environmental Activity and Sector Registry;

"Effluent" means the liquid discharged from the Site into the municipal sanitary sewer;

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

"Masterbatch" means black plastic concentrate manufactured at the Site by extrusion of the Reclaimed Carbon Black with plastic pellets and/or Waste Plastic and chopped into pellets;

"Metal" within the context of this Approval, means the recovered waste metal generated by waste management activities at the Site, including thermal treatment of the tire Waste;

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

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

"Owner" means any person that is responsible for the establishment and operation of the Site being approved by this Approval, and it includes Ellsin Environmental Ltd., 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;

"Processed Waste" within the context of this Approval, means Recovered Carbon Black, Recovered Oil, recovered Metal, Syngas and Masterbatch;

"Plant Building" means the building used for waste management activities approved under this Approval and including storage and thermal treatment of tire Waste, manufacture of Masterbatch, treatment/processing of the resulting outputs, including treatment of air discharges to the atmosphere in the air pollution equipment approved by the Air Approval and treatment of wastewater prior to discharge to the municipal sewer;

"Professional Engineer" means Professional Engineer as defined within the *Professional Engineers Act*, R.S.O. 1990, as amended;

"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 or Section 4 of NMA or Section 8 of SDWA;

"Raw Carbon Black" means the recovered raw carbon black produced during thermal treatment and prior to pulverization in the carbon finishing area of the Plant Building;

"Reclaimed Carbon Black" means the finished reclaimed carbon black after pulverization in the carbon finishing area of the Plant Building;

"Recovered Carbon Black" means the carbon black generated during thermal treatment of Tire Waste at the Site. Recovered Carbon Black includes both, the Raw Carbon Black and Reclaimed Carbon Black;

"Recovered Oil" means condensable portion of the hydrocarbon vapours originating from thermal treatment of the Tire Waste at the Site;

"Recyclable Waste" within the context of this Approval, means source separated and any other reusable waste identified in a regulation or approved waste diversion program unless it is a residue from processing of recyclable or reusable waste;

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

"Rejected Waste" means the incoming Waste loads received at the Site that do not meet the incoming Waste quality criteria set out in this Approval and which are unsuitable for recovery of the approved Waste from the load in accordance with the procedures in this Approval;

"Residual Waste" within the context of this Approval, means waste limited to the outputs from waste management activities approved under this Approval and to waste resulting from the housecleaning activities at the Site, destined for final disposal off-Site;

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

"Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:

- o Schedule 1 - Supporting Documentation;

"Site" means the approved waste disposal site located at 155 Yates Avenue in the City of Sault Ste. Marie;

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

"Syngas" means non-condensable portion of the hydrocarbon vapours originating from thermal treatment of the Tire Waste at the Site;

"Tire Waste" within the context of this Approval, means solid non-hazardous waste limited to waste types listed in condition 3.1(2);

"Trained Personnel" means a person trained in accordance with the requirements of condition 12.2;

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

"TSSA" means Technical Standards and Safety Authority;

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

"Waste Plastic" within the context of this Approval, means solid non-hazardous waste limited to waste types listed in condition 3.1(4).

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

## TERMS AND CONDITIONS

### **1.0 GENERAL**

#### **1.1 Compliance**

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

(2) Any person authorized to carry out work on or operate any aspect of the Site shall

comply with the conditions of this Approval.

## **1.2 Build, etc. in Accordance**

(1) Except as otherwise provided by this Approval, the Site shall be established, used, operated, maintained and monitored in accordance with the Application for an Environmental Compliance Approval (Waste Disposal Site) dated October 29, 2019, and the supporting documentation, plans and specifications listed in Schedule 1.

(2) Within ninety (90) days from the date of this Approval, a set of as-built drawings showing the facilities at the Site and bearing the stamp of a Professional Engineer, shall be prepared and retained at the Site.

(3) The as-built drawings, referred to in condition 1.2(2) shall be kept up-to-date through revisions undertaken from time to time and a copy shall be retained at the location of the Site or at the operational office of the Owner for the operational life of the Site.

(4) Notwithstanding provisions of condition 1.2(3), an amendment to this Approval shall be sought for changes to the as-built drawings, requiring approval.

(5) The as-built drawings shall be made available to Ministry staff upon request.

(6) The currently proposed equipment and processes described in the Application for an Environmental Compliance Approval dated October 29, 2019 and its supporting documentation included in the attached Schedule 1 and approved in this Approval shall be constructed and installed and must commence operation within five (5) years of issuance of this Approval, after which time the Approval ceases to apply in respect of any portions of the current proposal not in operation. In the event that the construction, installation and/or operation of any portion of the current proposed is anticipated to be delayed beyond the time period stipulated, the Owner shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).

## **1.3 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.

#### **1.4 Other Legal Obligations**

(1) The issuance of, and compliance with the conditions of this Approval does not:

- a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement; or
- b. limit in any way the authority of the Ministry to require certain steps be taken or to require the Owner to furnish any further information related to compliance with this Approval.

(2) Despite an Owner or any other person fulfilling any obligations imposed by this Approval, the person remains responsible for any contravention of any other condition of this Approval or any applicable statute, regulation, or other legal requirement resulting from any act or omission that caused the Adverse Effect or impairment of water quality.

#### **1.5 Adverse Effect**

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

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

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

## **1.6 Change of Owner**

(1) The Owner shall notify the Director in writing, and forward a copy of the notification to the Area Supervisor, within thirty (30) days of the occurrence of any change in:

- a. the ownership of the Site;
- b. the operator of the Site;
- c. the address of the Owner;
- d. the partners, where the Owner is or at any time becomes a partnership and a copy of the most recent declaration filed under the *Business Names Act*, R.S.O. 1990, c. B.17, as amended, shall be included in the notification; or
- e. the name of the corporation where the Owner is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the *Corporations Information Act*, R.S.O. 1990, c. C.39, as amended, shall be included in the notification.

(2) No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless the Director is notified in advance. In the event of any change in ownership of the Site, other than change to a successor municipality, the Owner shall notify the successor of and provide the successor with a copy of this Approval, and the Owner shall provide a copy of the notification to the Area Supervisor and the Director.

## **1.7 Inspections by the Ministry**

(1) No person shall hinder or obstruct a Provincial Officer from carrying out any and all inspections authorized by the OWRA, the EPA, the PA, the SDWA or the NMA of any place to which this Approval relates, and without limiting the foregoing:

- a. to enter upon the premises where the approved processing is undertaken, or the location where the records required by the conditions of this Approval are kept;



- b. to have access to, inspect, and copy any records required to be kept by the conditions of this Approval;
- c. to inspect the Site, related equipment and appurtenances;
- d. to inspect the practices, procedures, or operations required by the conditions of this Approval;
- e. to conduct interviews with staff, contractors, agents and assignees of the Owner; and
- f. to sample and monitor for the purposes of assessing compliance with the terms and conditions of this Approval or the EPA, the OWRA, the PA, the SDWA or the NMA.

## **1.8 Information**

(1) Any information requested by the Ministry, concerning the operation of the Site and its operation under this Approval, including but not limited to any records required to be kept by this Approval shall, upon request, be provided to the Ministry in a timely manner and in a format specified by the Ministry.

(2) The receipt of any information by the Ministry or the failure of the Ministry to prosecute any person or to require any person to take any action, under this Approval or under any statute, regulation or other legal requirement, in relation to the information, shall not be construed as:

- a. an approval, waiver, or justification by the Ministry of any act or omission of any person that contravenes any term or condition of this Approval or any statute, regulation or other legal requirement; or
- b. acceptance by the Ministry of the information's completeness or accuracy.

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

## **1.9 Financial Assurance**

(1) The Owner shall maintain the existing Financial Assurance, as defined in Section 131 of the EPA, for the amount of CND\$\$35,050.00 and the Owner shall submit the additional Financial Assurance for the amount of CND\$50,343.00 within sixty (60) days

from the date of this Approval. This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the transportation, Site clean-up and disposal of all quantities of waste on the Site at any one time.

(2) Commencing on December 31, 2024 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 1.9(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 twenty (20) days of written acceptance of the re-evaluation by the Director.

(3) Commencing on December 31, 2021, the Owner shall prepare and maintain at the Site an updated re-evaluation of the amount of Financial Assurance required to implement the actions required under condition 1.9(1) for each of the intervening years in which a re-evaluation is not required to be submitted to the Director under condition 1.9(2). The re-evaluation shall be made available to the Ministry, upon request.

(4) The amount of Financial Assurance is subject to review at any time by the Director and may be amended at his/her discretion. If any Financial Assurance is scheduled to expire or notice is received, indicating Financial Assurance will not be renewed, and satisfactory methods have not been made to replace the Financial Assurance at least sixty (60) days before the Financial Assurance terminates, the Financial Assurance shall forthwith be replaced by cash.

## **2.0 SIGNS and SECURITY**

### **2.1 Signs**

(1) The Owner shall ensure that sign(s) are posted as required in this Approval and as described in conditions 2.1(2) and 2.1(3).

(2) The Owner shall ensure that a sign visible from the main road leading to the Site includes the name of the Owner and the Site address.

(3) The Owner shall ensure that a sign visible from the private road leading to the Site includes the following:

- a. this Approval number;

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

(4) The Owner shall ensure that appropriate and visible signs are posted at the Site clearly identifying the wastes and the process reagents and stating any applicable warnings about the nature and any possible hazards of the wastes and the reagents.

(5) 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 storage of flammable materials.

(6) The Owner shall install and maintain appropriate and visible signs at the Site to direct vehicles to the Waste and reagents receiving areas and the Processed Waste and the Residual Waste removal areas.

## **2.1 Site Security**

(1) The Owner shall ensure that the Site is fenced in and equipped with lockable gates at all entrances.

(2) The Owner shall ensure that all entrances are secured to restrict access only to authorized personnel when the Site is not open.

(3) The Owner shall ensure that access to the Site is regulated and that no unauthorized persons are permitted at the Site without the Trained Personnel escort.

(4) The Owner shall ensure that the Site is operated in a safe and secure manner, and that Waste, the Processed Waste, the Residual Waste and the Rejected Waste are properly handled, packaged or contained and stored so as not to pose any threat to the general public and the Site personnel.

## **3.0 SERVICE AREA, WASTE TYPES and RATES**

### **3.1 Service Area and Approved Waste Types**

(1) The Owner is approved to receive solid non-hazardous waste generated from the sources within the Province of Ontario, the Province of Quebec, Province of Manitoba, and the State of Michigan.

(2) The Owner is approved to receive Waste limited to the following Tire Waste types:

- a. used tires;
- b. off-spec tires;
- c. tire shred; and
- d. tire crumb.

(3) Waste from condition 3.1(2) also includes "waste tire materials" and "scrap tires" referenced in the Air Approval.

(4) The Owner is approved to receive Waste Plastic limited to shredded waste plastic and waste plastic pellets, as described in the supporting documentation listed in the attached Schedule 1, for use in manufacturing of Masterbatch.

### **3.2 Prohibited Waste Types**

(1) Waste prohibited from being accepted at the Site for processing, including thermal treatment, includes the following Waste types:

- a. Waste that has been generated or has been previously transferred to any facility in the Province of Ontario from outside of Ontario, except when the waste originates from Ontario, Quebec, Manitoba and the State of Michigan.

(2) Waste prohibited from being accepted at the Site for thermal treatment, includes the following Waste types:

- a. Recyclable Waste.

### **3.3 Waste Receipt Rates**

(1) The maximum rate at which the Owner may receive Waste destined for thermal

treatment at the Site shall be 80 tonnes per day.

(2) The maximum rate at which the Owner may receive Waste destined for thermal treatment at the Site shall be 3,350 tonnes per year.

(3) The maximum rate at which the Owner may receive Waste destined for Masterbatch manufacturing at the Site shall be 60 tonnes per day.

(4) The maximum rate at which the Owner may receive Waste destined for Masterbatch manufacturing at the Site shall be 1,407 tonnes per year.

#### **4.0. SITE OPERATIONS**

##### **4.1 Operating Hours**

(1) The Site is approved to operate 24/7, 335 days per year.

(2) Waste receiving and shipping is limited to 7 a.m. to 8 p.m. Monday to Friday.

##### **4.2 Incoming Waste Receipt**

(1) The incoming Waste receipt shall be as follows:

- a. at the Plant Building, the Trained Personnel shall inspect the required documentation, including the weight receipts from the off-Site weigh scale operator, prior to acceptance of the incoming Waste at the Site;
- b. if possible, the Trained Personnel shall visually inspect all incoming Waste to ensure that the incoming Waste is approved for acceptance under this Approval; and
- c. the Owner shall only accept the incoming Waste that is delivered in vehicles that have been approved by the Ministry or registered on the EASR, as required.

(2) The incoming Waste shall only be unloaded in the approved unloading areas.

(3) As the incoming Waste is unloaded prior to thermal treatment or the Masterbatch manufacturing, the Waste shall be visually inspected by the Trained Personnel to ensure that only the approved Waste is thermally treated at the Site or used in the Masterbatch manufacturing.

##### **4.3 Rejected Waste Handling**

(1) In the event that waste that is not approved under this Approval is inadvertently accepted at the Site, the Owner shall ensure that all Rejected Waste is:

- a. stored in a way that ensures that no Adverse Effect results from the storage;
- b. segregated from all other waste;
- c. handled and removed from the Site in accordance with the EPA and Regulation 347; and
- d. removed from the Site within (4) days of its receipt or as acceptable to the Area Supervisor.

(2) In the event that Rejected Waste is inadvertently accepted at the Site, a record shall be made in the daily log book or in an electronic file of the reason why the waste was rejected and of the origin of the waste, if known.

(3) Area Supervisor shall be notified in writing of the receipt of unacceptable waste within four (4) business days of its receipt.

(4) The following information shall be included in the notification to the Area Supervisor:

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

#### **4.4 Approved Activities**

(1) The Site is approved to:

- a. receive, temporary store, pre-process, including sorting and manual dismantling and cleaning of whole waste tires, and thermally treat the Tire Waste;
- b. receive, temporary store, and process the Waste Plastic and/or virgin plastic pellets in the Masterbatch manufacturing;
- c. temporarily store, manage, including packaging for transfer off-Site,

the Processed Waste;

- d. manufacture, temporarily store and manage, including packaging for transfer off-site, the Masterbatch;
- e. utilize the Processed Waste, limited to treated Syngas, for indirect pre-heating of in-feed Tire Waste, heating of the thermal treatment tunnel, post-heating of Raw Recovered Carbon at the end of the thermal treatment and heating of the thermal oxidizer up-to the operating temperature, as set out in the Air Approval;
- f. temporarily store and manage the Residual Waste; and
- g. temporarily store and manage the Rejected Waste.

(2) The Owner shall ensure that the maximum thermal treatment rate of the Tire Waste at the Site does not exceed 10 tonnes per day.

(3) The Owner shall maintain the oxygen level lower than 1 per cent in the thermal treatment tunnel.

(4) The Owner shall ensure that pre-processing and thermal treatment of the Tire Waste, Masterbatch manufacturing and all Processed Waste, the Residual Waste and the Rejected Waste handling, including treatment and storage, are undertaken indoors within the confines of the Plant Building, except as approved in this Approval.

(5) Unless otherwise set out in the conditions of this Approval, pre-processing and thermal treatment of the Tire Waste at the Site is hereby approved to be carried out in accordance with the supporting documentation listed in the attached Schedule 1.

(6) The Owner shall ensure that at all times all gaseous discharges from the approved Waste management activities at the Site are exhausted through equipment approved in the Air Approval prior to being exhausted to the atmosphere.

(7) The Owner shall ensure that management of Waste at the Site is consistent with the provincial interests within the meaning of and laid out under the *Resource Recovery and Circular Economy Act, 2016*, S.O. 2016, c. 12, Sched. 1, as amended.

(8) The Owner shall ensure that the bay doors into the Plant Building are kept closed at all times except when the vehicles with Tire Waste are unloaded and/or the during the delivery of reagents and/or during loading of the Processed Waste or Residual Waste for transfer off-Site.

(9) The Owner shall ensure that the seal around the bay doors in the Plant Building is in

good condition at all times so that adequate containment of the indoor air is provided and there are no fugitive emissions leak through the seal from the Plant Building into the atmosphere.

(10) Conveying of the Recovered Carbon Black shall be carried out using totally enclosed systems and all its processing and storage areas shall be contained and exhausted into the equipment approved in the Air Approval.

(11) The Owner may use the equipment that comes in contact with different waste types, provided that prior to such use the equipment has been cleaned, as confirmed by visual inspections or other methods deemed suitable by the Owner, to ensure the removal of any contamination or hazardous residues to prevent cross contamination.

#### **4.5 Waste Storage**

(1) All Tire Waste received at the Site to be inputted into the approved thermal treatment equipment shall be stored indoors within the confines of the Plant Building or outdoors as approved in this Approval.

(2) Unless otherwise required by an applicable regulatory framework, all Rejected Waste shall be stored indoors within the confines of the Plant Building.

(3) The following outdoor trailer/bin storage is approved under this Approval:

- a. four (4) trailers with incoming Tire Waste for thermal treatment at the Site;
- b. one (1) trailer for storage of the Processed Waste limited to the Recovered Carbon Black, in bulk bags;
- c. one (1) trailer with incoming plastic pellets and/or Waste Plastic for Masterbatch manufacturing;
- d. two (2) trailers for storage of Masterbatch manufactured at the Site;
- e. one (1)-10 cubic metres bin for storage of solid non-hazardous waste generated at the Site and destined for final disposal; and
- f. one (1)-10 cubic metres bin for storage of the Processed Waste limited to the recovered Metal.

(4) A maximum of 80 tonnes Tire Waste destined for thermal treatment at the Site is approved to be stored at the Site, at any one time.



(5) The following maximum amounts of the solid waste are approved to be stored in the silos:

- a. one (1) indoor silo having a maximum storage capacity of 20.4 cubic metres to store Reclaimed Carbon Black, at any one time;
- b. one (1) indoor silo having a maximum storage capacity of 20.4 cubic metres to store Raw Carbon Black, at any one time; and
- c. two (2) outdoor silos, each having a maximum storage capacity of 54.3 cubic metres, to store plastic pellets or Waste Plastic, at any one time.

(6) The following maximum amounts of solid Waste are approved to be stored at the Site, at any one time:

- a. 10 tonnes of recovered Metal;
- b. 40 tonnes of Recovered Carbon Black;
- c. 172 tonnes of plastic pellets, Waste Plastic and the manufactured Masterbatch;
- d. 0.6 tonne of spent activated carbon filtering medium; and
- e. 4.8 tonnes of other solid non-hazardous waste.

(7) The following storage and the maximum amounts of liquid Waste are approved under this Approval:

- a. one (1) Oil Transfer Tank, having a maximum storage capacity of 1,136 Litres for collection and storage of oil from Oil Condensate Tank and the thermal treatment tunnel collection points, located indoors within the Plant Building, at any one time;
- b. one (1) Water/Oil Separator Tank, having a maximum storage capacity of 2,000 Litres, for storage of oily water from Oil Transfer Tank and of oily water collected at the bottom of the thermal treatment tunnel and for separation of the aqueous from the non-aqueous constituents, located indoors within the Plant Building, at any one time;
- c. up-to five (5) totes, each having a maximum storage capacity of 1,000 Litres, for storage of any of the following, at any one time:

- i. oil from Water/Oil Separator Tank;
  - ii. oil from scrubber Oil/Water Separator Tank;
  - iii. oily water from Water/Oil Separator Tank; and
  - iv. oily water from scrubber Oil/Water Separator Tank;
- d. one (1) stainless steel Conditioning Tank, having a maximum storage capacity of 2,139 Litres, for storage and conditioning of spent scrubber liquor from Syngas scrubber prior to discharge to the municipal sewer, located indoors within the Plant Building, at any one time;
- e. one (1) Oil/Water Separator Tank, having a maximum storage capacity of 360 Litres, for storage of spent scrubber liquor from the Syngas scrubber and for separation of the aqueous from the non-aqueous constituents, located indoors within the Plant Building, at any one time;
- f. one (1) oil AST, having a maximum storage capacity of 22,730 Litres, for storage of Recovered Oil from Oil Transfer Tank and oil collected in the totes as approved in this Approval, located outdoors on a bermed and covered concrete pad within a spill containment area designed as set out in the attached Schedule 1, at any one time; and
- g. a maximum of 200 Litres of waste oil from engine oil changes shall be stored in one 205-Litre drum located within the confines of the Plant Building.

(8) All liquid Waste and liquid reagent storage shall be as follows:

- a. if stored in totes, the totes shall be kept within the proposed plastic spill containment skids, designed and used in accordance 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 and as described in the supporting documentation listed in the attached Schedule 1;
- b. if stored in tanks, the tanks shall be located within a spill containment, designed and used in accordance 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 and as described in the supporting documentation listed

in the attached Schedule 1; and

- c. liquid Waste and liquid reagent unloading/loading areas shall be designed and used in accordance 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 and as described in the supporting documentation listed in the attached Schedule 1.

(9) All liquid Waste storage in tanks shall be done as proposed in the supporting documentation listed in the attached Schedule 1.

(10) The following gaseous Waste storage is approved under this Approval:

- a. TTSA-approved gas containment vessel with storage capacity of 13.6 cubic metres for treated Syngas, located indoors within the Plant Building, at any one time.

(11) The Owner shall ensure that,

- a. the drain hole in the spill containment area for the outdoor oil AST is kept closed prior to any unloading of the Recovered Oil from the AST;
- b. water from the AST spill containment area is not released to the natural environment unless it is inspected for presence of spills; and
- c. any water from the AST spill containment area contaminated with oil is pumped to the Conditioning Tank for treatment before being discharged to the sewer.

(12) All liquid storage tanks shall be equipped with automatic level controls and liquid level monitoring devices designed to provide a visual and an auditory alarm when the high level setpoint is reached.

(13) Any run-off that has been in contact with Waste or any spilled wastewater must be contained and handled in accordance with the EPA and Regulation 347. Any spills or wastewater drips must be cleaned up promptly and the generated waste handled in accordance with the EPA and Regulation 347.

(14) All storage/processing tanks and the piping shall be tested prior to their first time

use or the resumed use to ensure adequate containment integrity for their intended use.

(15) The Owner shall ensure that storage of all outdoor storage of Waste is undertaken in a manner that does not cause an Adverse Effect or a hazard to the environment or any person.

(16) Should there be verified complaints caused by fugitive odour or dust emissions from the outdoor storage of Waste in bins, the Owner shall cover the bins with lids when not being filled or move the bins indoors into the Plant Building.

(17) If in the opinion of the Area Supervisor, the fugitive emissions from the Site result in odour or dust complaint(s), the Owner shall, immediately upon receipt of the written notification from the Area Supervisor, follow the procedures proposed in the Emergency Response and Contingency Plan required by this Approval.

(18) If in the opinion of the Area Supervisor, the implementation of the procedures, as required by condition 4.5(17) is found to be ineffective, the Owner shall, immediately upon receipt of the written notification from the Area Supervisor, suspend receipt and processing of Waste, in accordance with the procedures proposed in the Emergency Response and Contingency Plan required by this Approval, until such time as the failure or malfunction is rectified.

(19) In the event that Waste cannot be processed at the Site and the Site is at its approved storage capacity, the Owner shall cease accepting additional Waste. Receipt of additional Waste may be resumed once such receipt complies with the waste storage limitations approved in this Approval.

#### **4.7 Wastewater Management**

(1) Wastewater generated at the Site shall be contained and treated as proposed in the supporting documentation listed in the attached Schedule 1.

(2) The Owner shall regularly empty and clean all wastewater storage/holding areas that are used to contain and collect the wastewater.

(3) Should the Owner commence discharging any process water into the municipal sewer in accordance with the local municipal sewer use by-law, the Owner shall submit a written notification to the Director within thirty (30) days of the commencement of such discharge.

#### **5.0 OPERATIONS/MAINTENANCE and INSPECTIONS**

## **5.1 Operation and Maintenance Manual**

(1) The Owner shall prepare and update as necessary, an Operation and Maintenance Manual for all the equipment associated with managing of the Waste and with control of environmental impacts from the Site. The Manual 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 Manual shall specify:

- a. operation procedures of the equipment used to thermally treat/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 control and/or 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, Processed Waste and the Residual Waste handling procedures;
- f. maintenance and preventative maintenance procedures as required by this Approval; and
- g. all measures deemed necessary to prevent an occurrence of an adverse effect from the operation of the Site.

(3) The Owner shall implement the operation, maintenance, preventative maintenance and calibration procedures set out in the Operations and Maintenance Manual required by this Approval.

## **5.2 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.

### **5.3 Inspections**

(1) Within the time frame acceptable to the Area Supervisor, the Owner shall prepare a comprehensive written inspection program which includes inspections of all aspects of the Site's operations as set out in the supporting documentation listed in the attached Schedule 1 and including, but not limited to the following:

- a. buildings and the outdoor waste storage areas;
- b. waste management equipment;
- c. equipment associated with control of air emissions from the Site;
- d. spill response and emergency situation response equipment;
- e. security fencing, gates, barriers and signs;
- f. presence of off-site Adverse Effect and/or nuisance impacts such as odour, dust, litter, etc.
- g. presence of stormwater or wastewater pooling at the Site; and
- h. condition of the on-Site roads.

(2) The inspections are to be undertaken daily by the Trained Personnel in accordance with the inspection program to ensure that the Site is maintained in good working order at all times. Any deficiencies detected during these regular inspections must be promptly corrected.

### **6.0 PROCESSED WASTE and RESIDUAL WASTE QUALITY CRITERIA, DISPOSAL and/or RE-USE REQUIREMENTS**

(1) The Processed Waste and the Residual Waste shall be transferred off-Site to one of the following destinations:

- a. a Ministry-approved waste disposal site for final disposal or further processing;
- b. a receiving site exempted from the Environmental Compliance Approval requirement under Regulation 347; or
- c. any other receiving site approved, licensed or permitted to accept such waste by an appropriate government agency of equivalent

jurisdiction, if the receiving site is outside of the Province of Ontario.

(2) The Recovered Carbon Black and/or the Recovered Oil intended for transfer off-Site to an approved site for final disposal or further processing shall not exceed the criteria set out in the Environmental Compliance Approval issued by the Ministry for the waste disposal site or in an approval or a license or a permit issued by an appropriate government agency of equivalent jurisdiction for the receiving site, if the receiving site is outside of the Province of Ontario.

(3) For management of the Processed Waste or the Residual Waste as a non-hazardous waste, the Waste shall not trigger any criteria from the hazardous waste definition from Regulation 347.

(4) Management of the Recovered Oil or the oily water as a liquid industrial waste shall be done in accordance with the requirements in the EPA and Regulation 347 or the requirements set out by the appropriate jurisdiction, if the receiving site is outside of the Province of Ontario.

(5) Management of the Processed Waste or the Residual Waste as a hazardous waste shall be in accordance with the Land Disposal Restrictions requirements in the EPA and Regulation 347 or the requirements set out by the appropriate jurisdiction, if the receiving site is outside of the Province of Ontario.

(6) The Owner shall notify, in writing, the receivers of the Processed Waste destined for re-use or of the Masterbatch manufactured at the Site, that the materials originate from Waste management activities at the Site and shall provide any testing results related to characterization of the Processed Waste, if requested.

## **7.0 TESTING**

### **7.1 General Requirements**

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

(2) Unless otherwise specified by the conditions of this Approval, the Owner shall implement the Quality Control Monitoring Plan of Wastes included in the supporting documentation listed in the attached Schedule 1, upon start-up of the Waste processing

operations at the Site.

(3) Based on the results of the pilot study testing previously carried out at the Site and on the scientific published data, the Owner shall determine the expected contaminating constituents of the Processed Waste and the Residual Waste.

(4) The Owner shall characterize the Processed Waste and the Residual Waste in accordance with this Approval and the applicable Ministry-published protocols and methods.

(5) The Ministry-published protocols and methods include the TCLP, the Slump Test and the protocols and methods set out in the Ministry's documents entitled *"Principles of Sampling and Analysis of Waste for TCLP under Reg. 347"*, dated February 2002, and *"Registration guidance manual for generators of liquid industrial and hazardous waste"*, dated April 1995, amended January 2016, and as amended from time to time.

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

(7) When the Ministry-published protocols and methods are not available, the samples shall be collected, handled and tested in accordance with the protocols and methods recommended by the accredited laboratory service provider.

## **7.2 Characterization of the Recovered Carbon Black**

(1) Prior to the first use of the Reclaimed Carbon Black in proposed manufacturing of Masterbatch or the first shipment of the Recovered Carbon Black from the Site, the Owner shall determine whether the Recovered Carbon Black is a non-hazardous or a hazardous waste.

(2) The Owner shall characterize the Recovered Carbon Black destined for disposal or further processing at a waste disposal site in accordance with the following:

- a. the Owner shall sample and test to demonstrate that the Recovered Carbon Black is suitable for acceptance at a receiving waste disposal site, as required by the receiving waste disposal site Environmental Compliance Approval;
- b. the Owner shall sample and test to demonstrate that the Recovered Carbon Black is suitable for acceptance at a receiving waste disposal site, as instructed by the owner of the receiving waste disposal site; or



- c. if no requirements or instructions from conditions 7.2(2)a. and 7.2(2)b. are available, the Owner shall prepare the Recovered Carbon Black Characterization Plan that complies with condition 7.1 and includes the following:
  - i. suitable locations in the process to collect representative samples of the Recovered Carbon Black for the required characterization;
  - ii. initial sampling frequency of the Recovered Carbon Black to establish the characteristics of the Recovered Carbon Black generated at the Site;
  - iii. confirmatory frequency of the sampling and testing of the Recovered Carbon Black after the initial testing;
  - iv. sampling methods and sample generation protocols;
  - v. sample handling methods;
  - vi. expected contaminating constituents to be tested for;
  - vii. test methods to be used, including the methods to determine bulk concentrations of the expected contaminating constituents and for leachate concentrations of the expected contaminating constituents;
- d. the Owner shall prepare separate Characterization Plans for the Reclaimed Carbon Black and the Raw Carbon Black, as required; and
- e. if no requirements or instructions from conditions 7.2(2)a. and 7.2(2)b. are available, the Owner shall sample and test the Recovered Carbon Black in accordance with Recovered Carbon Black Characterization Plan required in conditions 7.2(2)c. and 7.2(2)d. and as approved by the Director.

(3) The Owner shall sample and test the Recovered Carbon Black destined for re-use at a receiving site, in accordance with the following:

- a. to demonstrate that the Recovered Carbon Black is suitable for the proposed re-use in accordance with the instructions from the owner of the receiving site; or
- b. in absence of instructions from condition 7.2(3)a., the Owner shall characterize the Recovered Carbon Black in accordance with Recovered Carbon Black Characterization Plan required in conditions

7.2(2)c. and 7.2(2)d. and as approved by the Director.

(4) Prior to the first use of the Reclaimed Carbon Black in the proposed manufacturing of Masterbatch, the Owner shall,

- a. characterize the Reclaimed Carbon Black destined for proposed manufacturing of Masterbatch in accordance with Recovered Carbon Black Characterization Plan required in condition 7.2(2)c. and 7.2(2)d. and as approved by the Director; and
- b. compare the characteristics of the Reclaimed Carbon Black to specifications of a comparable virgin carbon black feedstock to demonstrate that the Reclaimed Carbon Black is suitable for the proposed manufacturing of Masterbatch.

(5) The Owner shall submit the Recovered Carbon Black Characterization Plan(s) for the Director's approval a minimum of six (6) months prior to commencement of the Recovered Carbon Black characterization required in this Approval.

(6) The Owner shall not carry out any compliance testing in accordance with condition 7.2(1)c. or condition 7.2(2)b. or condition 7.2(4)b. prior to receiving the Director's approval.

### **7.3 Characterization of the Recovered Oil**

(1) The Owner shall characterize the Recovered Oil for disposal or further processing at a waste disposal site in accordance with the following:

- a. the Owner shall sample and test to demonstrate that the Recovered Oil is suitable for acceptance at a receiving waste disposal site, as required by the receiving waste disposal site Environmental Compliance Approval;
- b. the Owner shall sample and test to demonstrate that the Recovered Oil is suitable for acceptance at a receiving waste disposal site, as instructed by the owner of the receiving waste disposal site; or
- c. if no requirements or instructions from conditions 7.3(1)a. and 7.2(1)b. are available, the Owner shall prepare the Recovered Oil Characterization Plan that complies with condition 7.1 and includes

the following:

- i. suitable locations in the process to collect representative samples of the Recovered Oil for the required characterization;
- ii. initial sampling frequency of the Recovered Oil to establish the characteristics of the Recovered Oil generated at the Site;
- iii. confirmatory frequency of the sampling and testing of the Recovered Oil after the initial testing;
- iv. sampling methods and sample generation protocols;
- v. sample handling methods;
- vi. expected contaminating constituents to be tested for; and
- vii. test methods to be used, including the methods to determine bulk concentrations of the expected contaminating constituents and for leachate concentrations of the expected contaminating constituents

(2) The Owner shall sample and test the Recovered Oil destined for re-use at a receiving site, in accordance with the following:

- a. to demonstrate that the Recovered Oil is suitable for the proposed re-use in accordance with the instructions from the owner of the receiving site; or
- b. in absence of instructions from condition 7.3(2)a., the Owner shall characterize the Recovered Oil in accordance with the Recovered Oil Characterization Plan required in condition 7.3(1)c. and as approved by the Director.

(3) The Owner shall submit the Recovered Oil Characterization Plan for Director's approval a minimum of six (6) months prior to commencement of the Recovered Oil characterization required in condition 7.3(1)c. or condition 7.3(2)b.

(4) The Owner shall not carry out any compliance testing in accordance with condition 7.3(1)c. or condition 7.3(2)b. prior to receiving the Director's approval.

#### **7.4 Characterization of the Residual Waste**

(1) The Owner shall characterize the Residual Waste to determine whether the Residual Waste is a non-hazardous or a hazardous waste.

(2) The Owner shall characterize the Residual Waste in accordance with the following:

- a. the Owner shall sample and test to demonstrate that the Residual Waste is suitable for acceptance at the receiving waste disposal site, as required by the waste disposal site Environmental Compliance Approval;
- b. the Owner shall sample and test to demonstrate that the Residual Waste is suitable for acceptance at the receiving waste disposal site, as instructed by the owner of the waste disposal site; or
- c. if no requirements or instructions from condition 7.4(1)a. and 7.4(1)b. are available, the Owner shall characterize the Residual Waste in accordance with condition 7.1.

## **8.0 PROCESS MONITORING**

(1) The Owner shall ensure that the oxygen concentration within the sealed in-feed unit is continuously monitored in accordance with the documentation listed in the attached Schedule 1.

(2) The Owner shall ensure that the oxygen concentration within the sealed in-feed unit is automatically controlled and that an alarm system is designed to provide a visual and an auditory alarm when the oxygen concentration exceeds of the proposed setpoint.

(3) The Owner shall ensure that the hydrogen sulphide and total hydrocarbons concentrations are continuously monitored as proposed in the documentation listed in the attached Schedule 1.

## **9.0 DISPOSAL and END-USE of OUTPUTS**

(1) Only haulers approved by the Ministry or registered on the EASR, as required, shall be used to transport the Processed Waste and/or the Residual Waste from the Site.

(2) The Processed Waste and/or the Residual Waste shall be transported from the Site in appropriately covered vehicles that will not allow fugitive dust emissions to be emitted into the natural environment during its transport.

(3) The Processed Waste and/or the Residual Waste generated at the Site shall only be 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 to a site exempted from the Environmental

Compliance Approval in accordance with Regulation 347.

(4) Should any Processed Waste and/or Residual Waste be deemed a hazardous waste, it shall be disposed of at an approved waste disposal site in accordance with the Land Disposal Restrictions requirements in the EPA and Regulation 347 or at a location with the appropriate jurisdictional approval or a license, if required.

(5) The Owner shall ensure that no portion of the Processed Waste and/or the Residual Waste undergoing compliance testing is transferred from the Site until the results of the compliance testing required by this Approval demonstrate compliance with this Approval and the relevant Ministry's requirements.

## **10.0 NUISANCE IMPACT CONTROL AND HOUSEKEEPING**

### **10.1 Vehicles and Traffic**

(1) The Owner shall ensure that all vehicles transporting waste are not tracking debris or leaking when leaving the Site.

(2) The Owner shall ensure that the exterior of all vehicles leaving the Site is cleaned prior to their departure from the Site, as appropriate.

(3) 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.

(4) 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.

### **10.2 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.

### **10.3 Fugitive Emissions**

(1) The Owner shall ensure that all on-Site roads and operations/yard areas are regularly wetted, as needed to prevent dust impacts off-Site.

(2) The Owner shall regularly clean all equipment and storage areas that are used to

handle, process and store waste at the Site, including the surfaces to prevent fugitive odour and dust emissions from the Site.

#### **10.4 Vermin and Vectors**

(1) The Owner shall:

- a. implement necessary housekeeping procedures to eliminate sources and potential sources of attraction for vermin and vectors; and
- b. if required by the District Manager, 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.

#### **11.0 COMPLAINT RESPONSE PROCEDURE**

(1) A designated representative of the Owner shall be available to receive public complaints caused by the operations at the Site twenty-four (24) hours per day, seven (7) days per week.

(2) If at any time, the Owner receives any environmental complaints from the public regarding the operation of the Site, the Owner shall respond to these complaints according to the following procedures:

- a. Step 1: Receipt of Complaint - The Owner shall record each complaint in a computerized tracking system. The information recorded shall include the following:
  - i. the name, address and the telephone number (or contact information) of the complainant, if known;
  - ii. the date and time of the complaint; and
  - iii. details of the complaint, including the description and duration of the incident.
- b. Step 2: Notification of Complaint - After the complaint has been received by the Owner and recorded in the tracking system, the Owner shall, immediately notify, either the Area Supervisor 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 Facility 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 Facility 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 Area Supervisor within one (1) week after the receipt of the complaint. The response shall include the results of the investigation of the complaint, the action(s) taken or planned to be taken to address the cause(s) of the complaint, and if follow-up response would be provided.
- f. Step 6: Recording - All of the information collected and actions taken must be recorded in the tracking system.

## **12.0 OPERATIONS MANUAL and PERSONNEL TRAINING**

### **12.1 Operations Manual**

(1) The Owner shall prepare an Operations Manual for use by the Site personnel. As a minimum, the Operations Manual shall contain the following:

- a. outline the responsibilities of Site personnel;
- b. personnel training protocols;
- c. waste receiving and screening procedures;
- d. waste unloading, handling, storage and processing procedures;
- e. process monitoring procedures;
- f. sampling and testing procedures;
- g. Site inspections, spill, fire, emergency situation response, process upset and leakage recording procedures; and
- h. procedure for handling complaints as required in this Approval.

(2) A copy of the Operations Manual shall be kept at the Site, must be accessible to

personnel at all times and must be updated, as required.

## **12.2 Personnel Training**

(1) All operators of the Site shall be trained as set out in the supporting documentation listed in the attached Schedule 1 and 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. records keeping procedures;
- f. contingency plan and emergency response procedures;
- g. specific written procedures for the control of adverse effects from the Site;
- h. specific written procedures for refusal of unacceptable incoming Waste loads; and
- i. 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.

## **13.0 CONTINGENCY MEASURES and EMERGENCY SITUATION RESPONSE PLAN**

(1) Prior to commencement of any processing of the Waste at the Site, the Owner shall update the existing Contingency Measures and Emergency Situation Response Plan.

The revised Contingency Measures and Emergency Situation Response Plan shall be prepared in consultation with the Area Supervisor. The Owner shall invite the local municipality, the local fire authority and any other relevant regulatory agency, including TSSA, to participate in the consultation process. The Contingency Measures and Emergency Situation Response Plan, as a minimum, shall include the following information:



- a. emergency response procedures to be undertaken in the event of a spill, process upset, power failure, fire, explosion or any other emergency situation, including specific clean-up methods for wastes expected to be generated from the emergency situation;
- b. odour abatement plan to propose the design and operation of the contingency measures necessary to alleviate impacts from odours emitted from the waste management activities at the Site;
- c. dust abatement plan to propose the design and operation of the contingency measure to alleviate impacts from dust originating from the waste management and vehicular activities at the Site;
- d. trigger mechanism for implementation of the abatement plans required by b. and c, above;
- e. a list of equipment and clean up materials available for dealing with the emergency situations;
- f. 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 authority, the local Medical Officer of Health, the Ministry of Labour and any other relevant regulatory agency and the names and telephone numbers of waste management companies available for emergency response;
- g. procedures and actions to be taken should the incoming Waste not meet the quality criteria specified by this Approval;
- h. procedures and actions to be taken should the outgoing Processed Waste and/or Residual Waste not meet the quality criteria set out in the receiving site's Environmental Compliance Approval or the receiving site's owner's requirements; and
- i. procedures and actions to be taken should the occurrence of the substantiated complaints require the Owner to suspend Waste management activities at the Site.

(2) An up-to-date version of the Contingency Measures and Emergency Situation Response Plan shall be kept at the Site at all times, in a central location available to all staff, and a copy shall be submitted to the Area Supervisor, and if requested, to the local municipality, the local fire authority and any other relevant regulatory agency, including TSSA.

(3) The Contingency Measures and Emergency Situation Response Plan shall be reviewed on an annual basis and updated, if necessary. The revised version of the Contingency Measures and Emergency Situation Response Plan shall be submitted to

the Area Supervisor, and if requested, to the local municipality, the local fire authority and any other relevant regulatory agency, including TSSA.

#### **14.0 EMERGENCY SITUATIONS RESPONSE and REPORTING**

(1) The Owner shall immediately take all necessary measures, as outlined in the Contingency Measures and Emergency Situation Response Plan, to handle the emergency situations occurring at the Site.

(2) The Owner shall ensure that the equipment and materials outlined in the Contingency Measures and Emergency Situation Response 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 personnel are trained in the use of the equipment and materials outlined in the Contingency Measures and Emergency Situation Response Plan, and in the procedures to be employed in the event of an emergency.

(4) All Spills and upsets shall be immediately reported to the **Ministry's Spills Action Centre at 1-800-268-6060** 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 Area Supervisor a written report within three (3) calendar days outlining the nature of the Spill, remedial measures taken and the measures taken to prevent future occurrences at the Site.

#### **15.0 RECORDS KEEPING and REPORTING**

(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.

##### **15.1 Daily Activities**

(1) The Owner shall maintain an on-site written or digital record of activities undertaken at the Site. The record shall include, as a minimum, the following:

- a. date of record;
- b. sources, types and weights of all Waste received at the Site;
- c. quantity and type of Waste thermally treated at the Site;
- d. maximum amount and type of Waste and the Processed Waste and the Residual Waste stored, at the Site, including the liquid level in the Recovered Oil AST;
- e. quantity and type of the Processed Waste and the Residual Waste shipped from the Site, including any required outgoing Processed Waste and the Residual Waste characterization results;
- f. types, weights and destinations of all Processed Waste and the Residual Waste, including Masterbatch, transferred from the Site;
- g. quantity and type of any Rejected Waste rejected from the Site;
- h. housekeeping activities, including litter collection, washing/cleaning activities, etc.;
- i. amount of Syngas combusted during the actual operating period for each day;
- j. amount of natural gas used to supplement the Syngas; and
- k. amount of wastewater discharged to the municipal sewer.

## **15.2 Emergency Situations**

(1) The Owner shall maintain an on-Site written or digital record of the emergency situations. The record shall include, as a minimum, the following:

- a. the type of an emergency situation;
- b. description of how the emergency situation was handled;
- c. the type and amount of material spilled, if applicable;
- d. a description of how the material was cleaned up and stored, if generated; and
- e. the location and time of final disposal, if applicable.

## **15.3 Inspections**

(1) The Owner shall maintain an on-Site written or digital record of inspections as required by this Approval. The record shall include, as a minimum, the following:

- a. the name of person, and the signature recording in a written format, that conducted the inspection;
- b. the date and time of the inspection;
- c. the list of any deficiencies discovered;

- d. the recommendations for remedial action; and
- e. the date, time and description of actions taken.

#### **15.4 Operations and Maintenance**

(1) The Owner shall maintain an on-Site written or digital record of inspections and maintenance as required by this Approval. As a minimum, the record shall include the following:

- a. the name and signature of the Trained Personnel that conducted the inspection;
- b. the date and time of the inspection;
- c. the list of any deficiencies discovered, including the need for a maintenance or repair activity;
- d. the recommendations for remedial action;
- e. the date, time and description of actions (repair or maintenance) undertaken; and
- f. the name and signature of the Trained Personnel who undertook the remedial action.

#### **15.5 Training**

(1) The Owner shall maintain an on-Site written or digital record of training as required by this Approval. The record shall include, as a minimum, the following:

- a. date of training;
- b. name and signature of person who has been trained if recording in a written format; and
- c. description of the training provided.

#### **15.6 Sampling & Testing Records**

(1) The Owner shall establish and maintain a written or digital record of all sampling and testing activities at the Site. This record shall include, as a minimum, the following information:

- a. waste sampled, sample collection locations and volume collected;
- b. day and time of collection;
- c. sample handling procedures;
- d. parameters tested for and the resulting concentrations;
- e. name of the laboratory facility conducting the testing;

- f. all other records produced during Waste compliance testing; and
- g. conclusions drawn with respect to the results of the testing.

### **15.7 Monitoring Records**

(1) The Owner shall establish and maintain a written or digital record of all monitoring activities at the Site as required by this Approval. This record shall include, as a minimum, the following information:

- a. parameters monitored for and the results of the monitoring; and
- b. conclusions drawn with respect to the results of the monitoring.

### **15.8 Complaints Response Records**

(1) The Owner shall establish and maintain a written or digital record of complaints received and the responses made as required by this Approval.

### **15.9 Annual Report**

(1) By March 31st following the end of each operating year, the Owner shall prepare and submit to the Area Supervisor an Annual Report summarizing the operation of the Site covering the previous calendar year. This Annual Report shall include, as a minimum, the following information:

- a. the total amount of Waste received during the total reporting period;
- b. the maximum amount of each waste type received during the reporting period;
- c. amounts, characterization and destinations of each of the Processed Waste types and of the Residual Waste transferred from the Site;
- d. subsequent re-use of the Processed Waste at each transfer destination;
- e. material balance for each month documenting the maximum amount of wastes stored at the Site;
- f. summaries and conclusions from the records required by conditions 14.(1) through 14.(8) of this Approval and the information required by the Air Approval;
- g. a statement as to compliance with all conditions of this Approval and with the inspection and reporting requirements of the conditions contained herein;
- h. any recommendations to minimize environmental impacts and improve Site operations and monitoring programs;
- i. a summary of any complaints received and the responses made;
- j. a summary of any emergency situations, including use of over/under pressure

- relief valves, that have occurred at the Site and how they were handled;
- k. an update on the amount of Financial Assurance which has been provided to the Director;
- l. a summary of all inspections and maintenance carried out at the Site; and
- m. any other information the Area Supervisor requires from time to time.

## **16.0 CLOSURE PLAN**

(1) Six (6) months prior to the permanent closure of the Site, the Owner shall submit, for approval by the Director, a detailed written Closure Plan. This Closure Plan must include, as a minimum, a description of the work that will be done to facilitate closure of the Site, including clean-up of all waste at 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 and the Area Supervisor, in writing, that the Site is closed and that the approved Closure Plan has been implemented.

### **SCHEDULE 1**

1. Application for the Environmental Compliance Approval dated October 29, 2019, and signed by Steve Kantor, Environmental Waste International, and its supporting documentation including Design and Operations Report, dated October 2019 and prepared by Independent Environmental Consultants.
2. E-mail dated May 13, 2020 (1:18 p.m.) from Steve Kantor, Environmental Waste International to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, including an attachment entitled "MECP Questions 200506 Response.pdf" providing additional information on the proposal.
3. E-mail dated June 8, 2020 (1:56 p.m.) from Steve Kantor, Environmental Waste International to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, including attachments entitled "Oil transfer and storage - rev 3.pdf", "Scrubber with OWS separator and carbon units-rev9.pdf" and "MECP Questions 05-31-2020 Response V1.0" providing additional information on the proposal.
4. E-mail dated August 12, 2020 (8:52 p.m.) from Steve Kantor, Environmental Waste International to Margaret Wojcik, Ontario Ministry of the Environment, Conservation and Parks, providing additional information on the proposal.

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

## **GENERAL**

Conditions 1.1, 1.3,1.4, 1.5 and 1.8 are included to clarify the legal rights and responsibilities of the Owner.

Condition 1.2 is 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 1.6(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 1.6(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 1.7 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 1.9 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.

Condition 4.2 is included to ensure that only the approved Waste types are accepted and handled/processed at the Site.

Conditions 4.3 through 4.7 are included to ensure that waste storage and management, run-off management and the discharges of emissions 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.

Condition 4.5 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.

### **EQUIPMENT and SITE INSPECTIONS and MAINTENANCE**

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.

### **COMPLIANCE CRITERIA**

Condition 6.0 is included to identify applicable regulatory compliance criteria for the Processed Waste and/or Residual Waste.

### **TESTING**

Condition 7.0 is included to ensure that the Owner regularly tests the Processed Waste and/or Residual Waste generated at the Site to verify its compatibility with the proposed final disposal, further processing or re-use destinations.

### **MONITORING**

Condition 8.0 is included to ensure that the Owner carries out the proposed monitoring so that the operation for the Site does not result in an Adverse Effect or a hazard to the natural environment or any person.

### **DISPOSAL and END-USE of OUTPUTS**

Condition 9.0 is included to ensure that all outputs from waste management activities at the Site are 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**

Condition 10.0 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.

### **COMPLAINTS RESPONSE PROCEDURE**

Condition 11.0 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 12.0 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 & EMERGENCY SITUATION RESPONSE PLAN**

Condition 13.0 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 14.0 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**

Condition 15.0 is included to ensure that detailed records of Site activities, inspections, monitoring and upsets are recorded and maintained for inspection and information purposes.

### **CLOSURE**

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

*In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:*

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

*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:*

The Secretary\*  
Environmental Review Tribunal  
655 Bay Street, Suite 1500  
Toronto, Ontario  
M5G 1E5

AND

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

**\* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or [www.ert.gov.on.ca](http://www.ert.gov.on.ca)**

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

DATED AT TORONTO this 21st day of August,  
2020

Mohsen Keyvani, P.Eng.  
Director  
appointed for the purposes of Part  
II.1 of the *Environmental Protection  
Act*

MW/

c: Area Manager, MECP Sault Ste. Marie

c: District Manager, MECP Sudbury

Donald Gorber, Independent Environmental Consultants