

**Licence No.: 2469**

**Licence Issued: August 2, 2000**

**IN ACCORDANCE WITH THE MANITOBA ENVIRONMENT ACT (C.C.S.M. c. E125)  
THIS LICENCE IS ISSUED PURSUANT TO SECTION 11(1) TO:**

**EASTERN INTERLAKE REGIONAL RECYCLING CO-OP LTD.; "the Licencee"**

for the construction and operation of the Development being a 25,000 tonne per year recycling and waste-to-energy facility, located at Parcel 'B' Plan 12395 WLTO in fraction of Section 18, Township 14, Range 5 EPM in the Rural Municipality of St. Andrews, in accordance with the Proposal filed under The Environment Act on October 20, 1999, subject to the following specifications, limits, terms and conditions:

**DEFINITIONS**

In this Licence,

**"accredited laboratory"** means facilities accredited by the Standard Council of Canada (SCC), or facilities accredited by another accrediting agency recognized by Manitoba Conservation to be equivalent to the SCC, or facilities which can demonstrate to Manitoba Conservation, upon request, that quality assurance/quality control (QA/QC) procedures are in place equivalent to accreditation based on the Canadian Standard Can/CSA-Z753, extension of the international standard ISO 9000, Guide 25;

**"affected area"** means a geographical area, excluding the property of the Development;

**"approved"** means approved by the Director in writing;

**"as-constructed drawings"** means engineering drawings complete with all dimensions which indicate all features of the Development as it has actually been built;

**"ASR"** means that material known as automobile shredder residue that is a by-product of the shredding of discarded goods that have a significant metallic content including motor vehicles and large appliances, and that is comprised mainly of the non-metallic components of those goods;

**"biomedical waste"** means waste generated by human or animal health care facilities, medical or veterinary research and teaching establishments, health care teaching establishments, clinical testing or research laboratories, and facilities involved in the production or testing of vaccines and are human anatomical waste, animal waste, microbiological laboratory waste, human blood and body fluid waste and waste sharps;

**"commercial non-hazardous waste"** means that collected solid waste generated by businesses within a Municipality which is acceptable for deposition into a Class 1, 2 or 3 waste disposal ground in the Province of Manitoba;

**"condensable particulate matter (CPM)"** means material that is vapour phase at stack conditions, but which condenses and/or reacts upon cooling and dilution in the ambient air to form solid or liquid particulate matter immediately after discharge from the stack;

**"dangerous goods"** means any product, substance or organism designated in the regulations, or conforming with the criteria set out in the regulations, or in any regulation adopted in accordance with The Dangerous Goods Handling and Transportation Act, and includes hazardous wastes;

**"Director"** means an employee so designated pursuant to The Environment Act;

**"Environment Officer"** means an employee so designated pursuant to The Environment Act;

**"filterable particulate matter"** means material that is directly emitted by a source as a solid or liquid at stack or

release conditions and is captured on the filter of a stack test train;

**"gasification"** means the processes occurring in the thermal reactor module whereby RDF is converted into various by-products, including combustible gases;

**"hazardous waste"** means any substance or group of substances so designated by the regulations, or conforming to criteria set out in the regulations;

**"institutional non-hazardous waste"** means that collected solid waste generated by institutions within a Municipality which is acceptable for deposition into a Class 1, 2 or 3 waste disposal ground in the Province of Manitoba;

**"litter"** means animal and agricultural wastes, domestic animal wastes, liquid and semi-liquid wastes, dead animals, ashes, garbage, construction and demolition wastes, industrial refuse, rubbish, solid wastes or refuse, motor vehicle parts, scrap metal, abandoned or unattended shopping carts and special wastes, including, but not limited to street cleanings, containers, packages, bottles, cans or parts thereof, and any discarded articles, products or goods of manufacture;

**"maximum rate"** means the determined maximum mass of waste material feedstock processed or RDF gasified over a stated period of time at the Development and which may be used as reference for other determinations for limits, terms or conditions of this Licence;

**"MSW (Municipal Solid Waste)"** means that collected solid waste generated primarily by households within a Municipality which is acceptable for deposition into a Class 1, 2 or 3 waste disposal ground in the Province of Manitoba;

**"noise nuisance"** means an unwanted sound, in an affected area, which is annoying, troublesome, or disagreeable to a person:

- a. residing in an affected area;
- b. working in an affected area; or
- c. present at a location in an affected area which is normally open to the members of the public;

if the unwanted sound

- d. is the subject of at least 5 written complaints, received by the Director in a form satisfactory to the Director, and within a 90 day period, from 5 different persons falling within clauses a), b), or c), who do not live in the same household; or
- e. is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses a), b), or c), and the Director is of the opinion that if the unwanted sound had occurred in a more densely populated area there would have been at least 5 written complaints received within a 90 day period from 5 different persons who do not live in the same household;

**"non-contaminated wood, plastic or fibreglass wastes or upholstered items "** means any wood, plastic or fibreglass material or upholstered item containing any hazardous substance or other contaminant that might cause or create an odour or health concern;

**"non-recyclable waste"** means that portion of the approved waste stream material which after processing is not suitable as a recyclable material or as a RDF;

**"normal rate"** means the determined average mass of waste material feedstock processed or RDF gasified over a stated period of time at the Development and which may be used as reference for other determinations for limits, terms or conditions of this Licence;

**"odour nuisance"** means a continuous or repeated odour, smell or aroma, in an affected area, which is offensive, obnoxious, troublesome, annoying, unpleasant, or disagreeable to a person:

- a. residing in an affected area;
- b. working in an affected area; or
- c. present at a location in an affected area which is normally open to the members of the public;

if the odour, smell or aroma

- d. is the subject of at least 5 written complaints, received by the Director in a form satisfactory to the Director, and within a 90 day period, from 5 different persons falling within clauses a), b), or c), who do not live in the same household; or
- e. is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses a), b), or c), and the Director is of the opinion that if the unwanted odour, smell or aroma had occurred in a more densely populated area there would have been at least 5 written complaints received within a 90 day period from 5 different persons who do not live in the same household;

**"opacity"** means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background;

**"particulate matter"** means any finely divided liquid or solid matter other than water droplets;

**"particulate residue"** means that part or portion of an atmospheric emission which is deposited onto a surface;

**"PM<sub>2.5</sub>"** means particulate matter with a mean aerodynamic diameter equal to or less than 2.5 microns;

**"point source"** means any point of emission from the Development where pollutants are emitted to the atmosphere by means of a stack;

**"processing"** means any handling, manipulation or other treatment of an approved waste stream material to alter its physical characteristics such that constituents of that approved material may be separated into recyclable waste; non-recyclable waste, or RDF;

**"QA/QC"** means quality analysis/quality control;

**"radioactive material"** means any radioactive component of the waste stream material which is in excess of the Scheduled Quantities as specified in the most recent criteria of the Atomic Energy Control Act and associated Atomic Energy Control Regulation, and which is not an excluded radioactive material as determined by Health Canada, Health Protection Branch, Radiation Protection Bureau *"Canadian Guidelines for the Management of Naturally Occurring Radioactive Materials (NORM)"*;

**"recyclable waste"** means that portion of the approved waste stream material which during or after processing is recovered for sale or disposal off the Development;

**"RDF (refuse derived fuel)"** means that portion of the approved waste stream material which after processing is to be used as fuel in the thermal reactor module for the waste-to-energy process;

**"sanitary wastes"** means human body, toilet, liquid, waterborne culinary, sink or laundry waste;

**"scrap tire"** means a tire that is no longer suitable for its original intended purpose because of wear, damage, or defect;

**"sewage"** means human body, toilet, liquid, waterborne culinary, sink or laundry waste;

**"shutdown"** means that period of time, not to exceed one hour, between commencement of the stoppage of the gasification process and the cessation of emissions of gas from the thermal reactor module;

**"sludge"** means any composition of inorganic and organic solids and entrained fluids, separated from wastewater,

which has a slump of more than 150 mm using the slump test method (slump test, C.S.A. Standards Test Method A23.1-5C);

**"stack"** means a duct, pipe, chimney, vent, opening or other structure through which pollutants are emitted to the atmosphere;

**"Standard Methods for the Examination of Water and Wastewater"** means the most recent edition of Standard Methods for the Examination of Water and Wastewater published jointly by the American Public Health Association, the American Waterworks Association and the Water Environment Association;

**"startup"** means that period of time, not to exceed one hour, between the commencement of the gasification process in the thermal reactor module and its reaching operating conditions;

**"thermal reactor module"** means that equipment designed to receive and heat RDF such that the RDF is converted into a variety of compounds and by-products including gases;

**"total particulate matter (Total PM)"** means the combined mass of filterable and condensable particulate matter;

**"vector"** means a carrier that is capable of transmitting a pathogen from one organism to another;

**"waste material feedstock"** means the approved material received at the Development for processing; and

**"wastewater"** means any liquid containing a pollutant as defined in The Environment Act, associated with or resulting from the Development which is discharged into the environment.

### **GENERAL TERMS AND CONDITIONS**

This Section of the Licence contains requirements intended to provide guidance to the Licencee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

1. The Licencee shall implement a high standard of equipment maintenance and good housekeeping and operational practices with respect to the Development, at all times.
2. The Licencee shall reduce the production and dissemination of wastes by initiating and maintaining waste reduction and waste recycling programs.
3. The Licencee shall, upon the request of the Director and in addition to any of the limits, terms or conditions specified in this Licence:
  - a. sample, monitor, analyze and/or investigate specific areas of concern regarding any segment, component or aspect of pollutant storage, containment, treatment, handling, disposal or emission systems, for such pollutants or ambient quality, aquatic toxicity, leachate characteristics and discharge or emission rates, for such duration and at such frequencies as may be specified;
  - b. determine the environmental impact associated with the release of any pollutants from the said Development; or
  - c. provide the Director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and analytical procedures being used, bioassay data, flow rate measurements and such other information as may from time to time be requested.
4. The Licencee shall, unless otherwise specified in this Licence:
  - a. carry out all preservations and analyses on liquid samples in accordance with the methods prescribed in the most current edition of Standard Methods for the Examination of Water and Wastewater or in

- accordance with equivalent preservation and analytical methodologies approved by the Director;
  - b. carry out all sampling of, and preservation and analyses on, soil and air samples in accordance with methodologies approved by the Director;
  - c. ensure that all analytical determinations are undertaken by an accredited laboratory; and
  - d. report the results to the Director within 60 days of the samples being taken.
5. The Licencee shall provide to the Director, upon request, all information required under this Licence, in writing and in such form and content (including number of copies), as may be specified by the Director.

### **LIMITS, TERMS AND CONDITIONS**

#### **Respecting Site Plans and Building Plans**

6. The Licencee shall submit, prior to constructing the Development, detailed engineered drawings of the Development sealed by a professional engineer registered with the Association of Professional Engineers and GeoScientists of the Province of Manitoba, containing:
- a. the proposed scaled site layout showing and identifying property boundaries, all existing buildings, roadways, storage areas, wells, fence lines, ponds, off-site drainage wastewater discharge locations and other man made structures;
  - b. all material and water storage areas and process buildings and dimensions thereof, identification of all processing equipment, air handling equipment, all air pollution control and treatment equipment, emission stacks, water supply and wastewater collection systems; and
  - c. all processing equipment including but not limited to: the thermal reactor, gas cooling/cleaning and transporting equipment; thermal oxidizer; etc.

All drawings shall be of sufficient size, but no smaller than 11" by 17", so as to clearly identify all features including textural descriptions.

7. The Licencee shall submit, prior to operating the Development, detailed engineered as-constructed drawings of the Development sealed by a professional engineer registered with the Association of Professional Engineers and GeoScientists of the Province of Manitoba, containing:
- a. the existing scaled site layout showing and identifying property boundaries, all existing buildings, roadways, storage areas, wells, fence lines, ponds, off-site drainage wastewater discharge locations and other man made structures;
  - b. all material and water storage areas and process buildings and dimensions thereof, identification of all processing equipment, air handling equipment, all air pollution control and treatment equipment, emission stacks, water supply and wastewater collection systems; and
  - c. all processing equipment including but not limited to: the thermal reactor, gas cooling/cleaning and transporting equipment; thermal oxidizer; etc.

All drawings shall be of sufficient size, but no smaller than 11" by 17", so as to clearly identify all features including textural descriptions.

#### **Respecting Waste Material Feedstock/RDF Receipt and Storage**

8. The Licencee shall only accept, store or accumulate at the Development the following waste material feedstock which is intended for processing:
- a. MSW;
  - b. commercial non-hazardous waste;
  - c. institutional non-hazardous waste;
  - d. scrap tires; and
  - e. other materials as approved in writing by the Director.

9. The Licencee shall not accept dangerous goods or hazardous waste at the Development except those dangerous goods or hazardous wastes which are considered to be an expected component both in nature and limited quantity, of MSW, at any time.
10. The Licencee, notwithstanding Clause 9 of this Licence, shall remove all dangerous goods or hazardous waste from the waste material feedstock during the processing and prior to shredding of the waste material feedstock, and shall properly segregate, store and dispose of the dangerous goods, in a manner approved in writing by the Director.
11. The Licencee shall store all waste material feedstock only within the enclosed receiving area, except for:
  - a. scrap tires which are to be stored as required by Clause 20 of this Licence; and
  - b. non-contaminated wood, plastic or fibreglass wastes or upholstered items which are to be stored in a secured and appropriately fenced area of not greater than 200 m<sup>3</sup>.
12. The Licencee shall store all non-RDF material which has been separated from the waste material feedstock in a suitable fashion and only inside the processing building as described in the Proposal filed under The Environment Act and dated October 20, 1999, except that, if needed:
  - a. the non-RDF materials suitable for recycling such as newsprint, cardboard, plastics, glass, and metal cans may be stored in a maximum of three (3) totally enclosed transport trailers at the Development in a location specifically designed and constructed for their location; and
  - b. these non-RDF materials are handled in a manner which prevents the release of any of the materials so as to create a litter concern, and where, if material is accidentally released it shall be immediately retrieved and properly disposed of.
13. The Licencee shall immediately remove and properly dispose of all that MSW, commercial non-hazardous waste and institutional non-hazardous waste from the Development which has been accepted, but not processed, within 72 hours of its acceptance.
14. The Licencee shall immediately remove and properly dispose of all that RDF from the Development which has been produced and stored for a period of greater than 72 hours.
15. The Licencee shall not store more than 250 tonnes of RDF at the Development at any time.
16. The Licencee, upon the written request of the Director, shall install radiation monitoring equipment at the Development in a manner and to the specifications as stipulated by the Director. The equipment shall:
  - a. monitor all incoming waste material feedstock for radioactivity; and
  - b. alert facility operators upon detecting unacceptable radioactive material.
17. The Licencee shall not accept radioactive material at the Development at any time.
18. The Licencee shall not accept biomedical waste at the Development at any time.
19. The Licencee shall not accept ASR at the Development unless:
  - a. an ASR disposal management plan has been approved by the Director; and
  - b. the ASR has been sampled, analysed and characterized as a non-hazardous waste, to the satisfaction of the Director within a period of 180 days immediately prior to consideration of its acceptance.
20. The Licencee shall not store more than 3000 scrap tires nor a volume greater than 200 m<sup>3</sup> of scrap tires at any time at the Development.

21. The Licencee shall store the scrap tires in a manner which:
  - a. prevents the breeding and harbouring of mosquitoes, rodents and other vectors; and
  - b. allows access for fire fighting.
22. The Licencee shall not allow litter beyond the property boundaries of the Development resulting from the transportation, storage or processing of waste material feedstock at the Development.
23. The Licencee shall immediately remove any MSW which has been improperly deposited at the Development or along any roadway allowances or ditches within 20 metres of the property boundaries fronting or adjacent to the Development.

#### **Respecting Waste Material Feedstock and RDF Recordkeeping**

24. The Licencee shall account for and record all waste material feedstock received at the Development for the most recent 24 months, on a 24 hour basis. This 24 hour period shall begin at 12:00 am. The record shall identify for each day that waste material feedstock is received:
  - a. the date of receipt of the waste material feedstock; and
  - b. the 24 hour period gross mass of the waste material feedstock received in tonnes.
25. The Licencee shall account for and record all RDF gasified at the Development for the most recent 24 months, on a 24 hour basis. This 24 hour period shall begin at 12:00 am. The record shall identify for each day that waste material feedstock is processed:
  - a. the date of processing of the RDF; and
  - b. the 24 hour period gross mass of the RDF gasified in tonnes.
26. The Licencee shall submit to the Director, upon written request of the Director, monthly summaries of the information required by Clauses 24 and 25 of this Licence by the last day of the following month.

#### **Respecting Waste Material Feedstock Processing**

27. The Licencee shall notify the Director in writing, of the intention to commence operations, at least 90 working days prior to the commencement of processing of waste material feedstock at the Development.
28. The Licencee shall submit to the Director in writing, the date of the commencement of processing of waste material feedstock at the Development within 10 days after that commencement.
29. The Licencee shall submit to the Director, within 180 days after the commencement of processing of waste material feedstock at the Development, measured ranges of operating specifications and parameters for all processing equipment which does or could potentially alter any physical or chemical characteristics of the waste material feedstock by means of drying, shredding, separation of components, application either indirectly or directly of heat, addition of other materials, mechanical agitation, pressurization or other processes as may be identified by the Director.

#### **Respecting Operation of the Thermal Reactor Module**

30. The Licencee shall continually monitor and immediately adjust the generation of gases by the thermal reactor module to prevent a production of gaseous fuel in greater quantity than is necessary for the proper operation of the available internal combustion engines, or than is required by load demands of the generating system.
31. The Licencee shall immediately discontinue the generation of gases by the thermal reactor module in the event that the internal combustion engines are not operational.

32. The Licencee shall direct all gases produced by the thermal reactor module only to:
- the fully operational internal combustion engines driving the generators; or
  - the fully operational thermal oxidizer.

### **Respecting Operation of the Thermal Oxidizer**

33. The Licencee shall direct gases generated by the thermal reactor module to the thermal oxidizer only under the following conditions:
- during start-up or shut-down of the thermal reactor module;
  - when the internal combustion engines become inoperative due to scheduled maintenance or unavoidable breakdown;
  - when there is a sudden reduction in load demand by the generators;
  - when the thermal reactor module produces momentary spikes of excess gas; or
  - during an emergency situation.
34. The Licencee shall notify the Director within 12 hours of commencement of directing gases generated by the thermal reactor module to the thermal oxidizer during an emergency situation or for any reason other than has been stipulated in Clause 33 of this Licence.
35. The Licencee shall install and operate instrumentation which records all occurrences when gas from the thermal reactor module is directed to the thermal oxidizer, prior to the operation of the thermal reactor module. The instrument shall record on a chart or by other acceptable means, the date and times of each occurrence on a continuous basis.
36. The Licencee shall maintain and continuously operate the instrumentation required by Clause 35 of this Licence whenever the thermal reactor module is producing gas, and in the event that the instrumentation becomes inoperable, shall either shut-down the thermal reactor module or provide a continuous manual watch of the thermal oxidizer or the mechanisms which control the flow of the gas to the thermal oxidizer such that the information as required by Clause 35 of this Licence is gathered and recorded.
37. The Licencee shall maintain a log of all occurrences of direction of gases generated by the thermal reactor module to the thermal oxidizer as required by Clauses 33 and 34 of this Licence recording:
- time/date of log entry;
  - nature of event;
  - duration of event;
  - the accumulated downtime for the events for each calendar year; and
  - signature of employee or manager.
38. The Licencee shall submit to the Director by the last day of the following month:
- copies of the records required by Clauses 36 and 37 of this Licence;
  - a summary of the total hours of occurrences for the previous months operation; and
  - a running summary of the total hours of occurrences for the previous 12 months.

### **Respecting the Determination of Processing/Gasification Rates**

39. The Licencee shall determine a normal rate and a maximum rate for both the processing of waste material feedstock and the gasification of RDF not later than 150 days after the commencement of the operation of the thermal reactor module at the Development.
40. The Licencee shall submit to the Director the rates determined by Clause 39 of this Licence, showing all data and calculations as to how these rates were determined. The rates shall be stated in kilograms or tonnes of waste

material feedstock processed and RDF gasified as:

- a. a monthly average;
- b. a daily and hourly average as calculated from the monthly average; and
- c. a maximum hourly.

### **Respecting Fire Pond Management**

41. The Licencee shall not direct any water to the fire pond including sanitary sewage, wash water or any other water used in the process at the Development which may have come into contact with waste material feedstock or any other pollutant, unless:
  - a. the water is sampled and analysed for compounds listed in Attachment 'A' to this Licence; and
  - b. the water is treated such that the compounds of concern are removed to the satisfaction of the Director.
42. The Licencee shall install and maintain a fence around the fire pond to restrict unauthorized access.

### **Respecting Ash Management**

43. The Licencee shall sample a representative portion of ash generated at the facility:
  - a. once per month for the first six months after commencement of processing waste material feedstock at the Development; and
  - b. semi-annually thereafter, unless otherwise required by the Director.
44. The Licencee shall have the ash samples collected pursuant to Clause 43 of this Licence analysed by an accredited laboratory to determine:
  - a. toxicity in accordance with the most recent edition of Environment Canada, Environmental Protection Service test method EPS 1/RM11, "*Biological Test Method: Acute Lethality Test Using Daphnia spp.*"; and
  - b. leachate characteristics for compounds listed in Table 1 of Manitoba Regulation 282/87 and copper, mercury, nickel, and zinc.
45. The Licencee shall submit a report of the analyses conducted pursuant to Clause 44 of this Licence to the Director within 15 days of their receipt.
46. The Licencee shall not dispose of ash generated at the Development which is characterized as a hazardous waste without written approval from the Director.
47. The Licencee shall determine and record the mass and volume of all ash generated by the thermal reactor module on a weekly basis and shall maintain the most recent 24 months of records at the Development.

### **Respecting Air Emissions**

48. The Licencee shall ensure that, a stack or stacks including all necessary sampling facilities are provided for the sampling of air emissions at the Development. The stack or stacks shall be provided:
  - a. at a location(s) and within a time frame satisfactory to the Director; and
  - b. to the specifications and in accordance with the most recent version of Manitoba Conservation Guideline No. 97-05, *Guideline for Stack Sampling Facilities*, unless otherwise approved by the Director.
49. The Licencee shall submit, within 180 days of the issuance of this Licence, a detailed plan which is acceptable

- to and approved by the Director, for the sampling and analysis of potential air pollutants, released as stationary point and fugitive emissions, including those compounds listed in Attachment 'B' to this Licence. The plan shall identify the rationale for the sampling; the ways and means by which the sampling program will be implemented including any special measures or methods which would be necessitated by influencing factors such as unfavourable weather conditions, the need for large or additional sample volumes, the need for multiple sampling runs, etc.; the methods used for the sampling and the analysis for each compound; the detection level to be attained; a comprehensive QA/QC program, and other items as may be identified by the Director.
50. The Licencee shall perform all stack sampling in accordance with the most recent version of Manitoba Conservation Report No. 96-07, *Interim Stack Sampling Performance Protocol*, unless otherwise approved by the Director.
51. The Licencee shall arrange the scheduling of the sampling program submitted pursuant to Clause 49 of this Licence such that a representative of Manitoba Conservation is available to monitor and audit the implementation of the sampling program.
52. The Licencee shall complete the sampling of emissions according to the approved plan submitted pursuant to Clause 49 of this Licence, after the submission of the determined rates of processing submitted pursuant to Clause 40 of this Licence, but within 270 days of the commencement of operation of the thermal reactor module at the Development, unless otherwise approved by the Director.
53. The Licencee shall submit a report, for the approval of the Director, of the completed sampling and analysis plan approved pursuant to Clause 49 of this Licence, within 60 days of the receipt of the analytical results of that sampling plan. The report shall contain at minimum:
- a. the raw data collected;
  - b. a discussion of the sampling and analytical portions of the program including any anomalies of sampling and analysis; and
  - c. a discussion of the significance of the data gathered with specific attention to:
    - i. the significance for potential acute and chronic impacts to health or environment from exposure to concentrations of the compounds detected;
    - ii. the need for risk assessment of the impact of emissions;
    - iii. the need for the establishment of ambient air monitoring stations;
    - iv. the need for dispersion modelling of emissions;
    - v. results and conclusions of the QA/QC program; and
    - vi. other issues as may be determined by the Director.
54. The Licencee, upon the written request of and in a timeframe stipulated by the Director, shall comply with any air emission or ambient air quality criteria specified by the Director for any pollutant of concern to the Director which has been identified pursuant to Clauses 3 or 53 of this Licence.
55. The Licencee shall not emit from the Development:
- a. particulate matter in any air emission that:
    - i. exceeds 0.23 grams per dry standard cubic metre calculated at 25 degrees Celsius and 760 millimetres of mercury, corrected to 12 percent carbon dioxide for processes involving combustion, from any point source of the Development;
    - ii. exhibits a visible plume with an opacity of greater than 5 percent at any point beyond the property line of the Development; or
    - iii. results in the deposition of visible particulate residue at any time beyond the property line of the Development; or

- b. particulate matter from any point source with an opacity that equals or exceeds:
  - i. 20 percent as the average of any 24 consecutive opacity observations taken at 15 second intervals;
  - ii. 20 percent for more than 16 individual opacity observations within any 1 hour period; or
  - iii. 40 percent for any individual opacity observation.
56. The Licencee shall not cause or permit a noise nuisance to be created as a result of the construction, operation, or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate a noise nuisance.
57. The Licencee shall not cause or permit an odour nuisance to be created as a result of the construction, operation, or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate an odour nuisance.

### **Respecting Air Pollution Control Equipment**

58. The Licencee shall not operate any process which might cause pollutants to be emitted from the Development unless:
  - a. a Standard Operating Procedure manual for the operation and maintenance of the air handling and air pollution control equipment is prepared and approved by the Director;
  - b. all emissions from the process are directed to a fully operational air pollution control device(s) which removes or treats the pollutants of interest;
  - c. all discharges of treated emissions from the air pollution control devices are immediately directed to a stack which meets the conditions as stipulated in this Licence; and
  - d. the emissions do not contain concentrations of pollutants which:
    - i. are in violation of any limit stipulated in this Licence or any other applicable legal instrument including an Act, Regulation or by-law;
    - ii. are in violation of any limit to be stipulated for the Development by the Director at a future date; or
    - iii. otherwise create a significant health or environmental impact beyond the boundaries of the Development.
59. The Licencee shall maintain a log book of the most recent 24 months of downtimes of any air pollution control equipment due to either the breakdown or maintenance of any air pollution control equipment. The log book shall be kept at the Development and shall be available upon request for inspection by an Environment Officer. The log book shall record, at minimum, the following information:
  - a. identification of the unit and the process(s) it serves;
  - b. time/date of log entry;
  - c. nature of event;
  - d. duration of event;
  - e. the accumulated downtime of this equipment for the events for each calendar year; and
  - f. signature of employee or manager.
60. The Licencee shall dispose of all pollutants collected by the air pollution control equipment in a manner suitable to their characterization as type of waste or dangerous good.

### **Respecting Ambient Air Quality Monitoring**

61. The Licencee shall submit for the approval of the Director, upon written request from the Director, a proposal for:

- a. the sampling and analysis of air pollutants to be specified by the Director, at selected locations beyond the property boundaries of the Development; and
- b. the location, installation and operation of a meteorological monitoring station.

### **Respecting Water Usage**

62. The Licencee shall install a water meter which measures and records all water usage at the Development. The water meter shall have an accuracy of not less than plus or minus 1%.
63. The Licencee shall record the water usage at the Development on a monthly basis and shall provide upon the request of an Environment Officer, a record of the most recent 24 months of water usage.

### **Respecting Groundwater**

64. The Licencee shall conduct a groundwater hazard assessment of all areas at the Development which may be impacted by any construction or activity including: the septic field; the fire pond; the tire storage area; and the waste material feedstock transportation and handling areas, prior to undertaking any construction or other activity at the Development.
65. The Licencee shall submit a report of the assessment conducted pursuant to Clause 64 of this Licence, for the approval of the Director, prior to undertaking any construction activity at the Development.
66. The Licencee shall install monitoring wells or take other such measures as stipulated in writing by the Director based on the report submitted pursuant to Clause 65 of this Licence.
67. The Licencee shall collect a sufficient sample of groundwater for the analysis of the compounds listed in Attachment 'A' to this Licence. The samples shall be taken in a manner approved by the Director, from the well identified in the Proposal filed under The Environment Act and dated October 20, 1999, or any other monitoring wells. All wells are to be constructed such that contamination from surface waters is prevented at the well head. The samples are to be taken:
  - a. once or more as requested by the Director, prior to commencement of construction at the Development, to establish background concentrations; and
  - b. thereafter, on an annual basis, unless otherwise requested by the Director.
68. The Licencee shall, for the samples collected pursuant to Clause 67 of this Licence, have each sample analysed using methods approved by the Director.
69. The Licencee shall analyse each sample collected pursuant to Clause 67 of this Licence such that the detection level of each analyte reported is sufficient to verify compliance with the most conservative of the Water: Community Criteria, as listed in the most current *Canadian Environmental Quality Guidelines* published by the Canadian Council of Ministers of the Environment.
70. The Licencee shall submit to the Director, a report of the results of the groundwater sampling and analysis program, within 60 days of receipt of the analytical data. The report shall contain at minimum: a discussion of the sampling and analytical program; a discussion of the data; a discussion of any trends; a copy of all raw data including QA/QC information (blanks, duplicates, methodologies) from the laboratory.
71. The Licencee shall have completed the requirements of Clauses 64 and 70 of this Licence, to the satisfaction of the Director, prior to the commencement of construction at the Development.

### **Respecting Surface Water**

72. The Licencee, notwithstanding Clause 41 of this Licence, shall prevent all surface waters from contacting contaminated areas of the Development and shall keep surface waters and fire pond water separated from any

water which has been used in or generated from any process at the Development.

73. The Licencee shall not discharge surface water beyond the boundaries of the Development:
- a. except at the designated wastewater discharge location(s) as identified on the scaled site layout required by Clause 7 of this Licence; and
  - b. unless, at the written request of the Director, the surface water has been sampled and analysed for those compounds identified in Attachment 'A' to this Licence, and shown to be not acutely lethal to water fleas, as determined by means of a 48-hour exposure period which results in mortality to more than 50 percent of the test water fleas exposed to undiluted discharge water, with the test carried out in accordance with section 5 or 6 of the *Reference Method for Determining the Acute Lethality of Effluent to Daphnia magna*, outlined in Environment Canada's Report, EPS 1/RM/14 July 1990, or any future amendment thereto.

#### **Respecting Sanitary Wastes**

74. The Licencee shall discharge only sanitary wastes to the sewage system.

#### **Respecting Vehicular Washing**

75. The Licencee shall not wash vehicles at the Development, unless approved by the Director.

#### **Respecting Sludge Management**

76. The Licencee shall not dispose of sludge generated by any processing activity at the Development, except in a manner which has received the written approval of the Director.

#### **Respecting Decommissioning**

77. The Licencee shall submit a decommissioning plan for the Development, suitable to the Director, prior to commencement of operation at the Development.
78. The Licencee shall remove any or all waste material feedstock, RDF or dangerous goods stored at the Development, upon written request of and in a manner approved by the Director.
79. The Licencee shall decommission and remediate the Development, if so ordered by and to the satisfaction of the Director.

#### **Respecting Financial Assurance**

80. The Licencee shall, prior to commencement of operation at the Development, post with the Manitoba Department of Conservation in the amount of \$1,000,000 Cdn:
- a. a permit bond issued by a surety company licenced to do business in the Province of Manitoba; or
  - b. an irrevocable letter of credit; or
  - c. another acceptable security satisfactory to the Director.

This permit bond, irrevocable letter of credit, or other security and renewals thereof shall remain in place for the duration of the operation of the facility. The Director may order forfeiture of the permit bond, irrevocable letter of credit, or other security, either in whole or in part, by giving written notice to that effect to the Licencee, upon the Director being satisfied that the Licencee is in breach of any specification, limit, term or condition of this Licence, or for reimbursement of any costs or expenses incurred by the Province of Manitoba in rectifying environmental damage caused or contributed to by the operation of the facility.

81. The Licencee shall, prior to commencement of operation at the Development, provide to the Director confirmation of the following financial insurance coverage:

- a. Environmental Impairment Liability insurance providing coverage subject to a minimum limit of \$5.0 million per occurrence or claim, including coverage for gradual, and sudden and accidental pollution. Coverage to include on-site and off-site clean up costs, and be placed with insurers satisfactory to the Province of Manitoba. The Province of Manitoba is to be added as an Additional Insured on the policy. The policy shall contain a clause stating that the Insurer will give Manitoba 60 days prior written notice in case of significant reduction in coverage or policy cancellation.

### **Respecting Emergency Planning**

82. The Licencee shall submit to the Director for approval, prior to operation of the Development, a contingency plan prepared and ratified by all members of the Eastern Interlake Regional Recycling Co-op Ltd. that addresses alternate plans for the management of MSW and other wastes collected at the Development if for any reason the Development does not accept the MSW for an extended period of time.
83. The Licencee shall submit to the Director for approval, prior to operation of the Development, a contingency plan, in accordance with the Manitoba Industrial Accidents Council (MIAC) *Industrial Emergency Response Planning Guide*, outlining procedures to be used in the event of a leak, spill, fire, or other hazardous condition at the Development.

### **REVIEW AND REVOCATION**

- A. The Director shall review the specifications, limits, terms, and conditions set out in this Licence on the anniversary date of this Licence or at such other frequency as determined by the Director.
- B. This Director may revoke this Licence within one year from the date of its issuance, if the Director is not satisfied, for any reason, with the progress which is being made at the Development.
- C. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- D. If, in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Director may require the filing of a new Proposal pursuant to Section 11 of The Environment Act.

"original signed by"

**Larry Strachan, P. Eng.**  
**Director**  
**Environment Act**

**Client File No.: 4483.00**

**Attachment 'A' To Environment Act Licence No. 2469**  
**Compounds to be Sampled in Water**

alkalinity (Total CaCO <sub>3</sub> )	nitrite (as N)
ammonia (un-ionized, NH <sub>3</sub> )	total nitrogen
chloride	non-filterable residue

colour	oil & grease
conductivity	pH
dissolved oxygen	sodium
filterable residue	total phosphorous
hardness (as CaCO <sub>3</sub> )	temperature
sulphate	total dissolved solids
nitrate (as N)	turbidity
total metals (Cu; Fe; Pb; Zn; As; Cd; Cr; Ni; Mn; Hg)	Biological Oxygen Demand (BOD)

**Attachment 'B' To Environment Act Licence No. 2469**  
**Compounds to be Sampled in Air Emissions**

Particulate Matter (CPM; PM <sub>2.5</sub> ; Total PM)	Chromium (Cr)
Hydrogen Chloride (HCl)	Nickel (Ni)
Carbon Monoxide (CO)	Polyaromatic Hydrocarbons (PAHs)
Carbon Dioxide (CO <sub>2</sub> )	Polychlorinated Biphenyls (PCBs)
Sulphur Dioxide (SO <sub>2</sub> )	Chlorophenol (CP)
Nitrogen Oxides (NO <sub>x</sub> as NO <sub>2</sub> )	Chlorobenzene (CB)
Lead (Pb)	Temperature (Celsius)
Cadmium (Cd)	Methane (CH <sub>4</sub> )
Mercury (Hg)	Total polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (PCDDs/PCDFs)
Arsenic (As)	