



Sustainable Development

Environmental Stewardship Division
Environmental Approvals Branch
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CLIENT FILE NO.: 4655.10

June 28, 2018

Mr. Femi Ferreira
Simplot Canada (II) Ltd.
Hwy 1 & Simplot Road
Portage la Prairie MB R1N 3J9

Dear Mr. Ferreira:

Enclosed is **Environment Act Licence No. 3262** issued to **Simplot Canada (II) Ltd.** for the construction, operation and expansion of a potato processing plant, process wastewater pre-treatment plant and process wastewater treatment plant located in the Rural Municipality of Portage la Prairie in accordance with the Proposals filed under The Environment Act.

In addition to the enclosed Licence requirements, please be informed that all other applicable federal, provincial and municipal regulations and by-laws must be complied with. A Notice of Alteration must be filed with the Director for approval prior to any alteration to the Development as licensed.

For further information on the administration and application of the Licence, please feel free to contact Tyler Kneeshaw, Environment Officer, at 204-239-3608.

Pursuant to Section 27 of The Environment Act, this licensing decision may be appealed by any person who is affected by the issuance of this Licence to the Minister of Sustainable Development within 30 days of the date of the Licence.

Yours truly,

Tracey Braun, M.Sc.
Director
Environmental Approvals Branch

c: Don Labossiere/Scott Davies/Tyler Kneeshaw; Environmental Compliance and Enforcement
Jennifer Winsor; Environmental Approvals
Public Registries

NOTE: Confirmation of Receipt of this Licence No. 3262 (*by the Licencee only*) is required by the Director of Environmental Approvals. Please acknowledge receipt by signing in the space below and provide a copy (letter only) to the Department (Jennifer.Winsor@gov.mb.ca) by July 12, 2018.

On behalf of Simplot Canada (II) Ltd.

Date

****A COPY OF THE LICENCE MUST BE KEPT ON SITE AT THE DEVELOPMENT AT ALL TIMES****

LICENCE

Licence No. / Licence n° 3262

Issue Date / Date de délivrance June 28, 2018

In accordance with The Environment Act (C.C.S.M. c. E125) /
Conformément à la Loi sur l'environnement (C.P.L.M. c. E125)

Pursuant to Section 11(1) and 14(3) / Conformément au Paragraphe 11(1) et 14(3)

THIS LICENCE IS ISSUED TO: / CETTE LICENCE EST DONNÉE À:

SIMPLOT CANADA (II) LIMITED;
"the Licencee"

for the construction, operation and expansion of a potato processing plant, process wastewater pre-treatment plant and process wastewater treatment plant located on Lots 40 and 41 in the Parish of Portage la Prairie in the Poplar Bluff Agricultural Industrial Park in the Rural Municipality of Portage la Prairie with sanitary wastewater effluent discharged to the Portage la Prairie Water Pollution Control Facility and process wastewater effluent discharged directly to the Assiniboine River and in accordance with the Proposals filed under The Environment Act on July 26, 2001 and February 14, 2018 and the Notices of Alteration dated August 19, 2002, July 23, 2009, November 17, 2010, August 21, 2012 and July 10, 2015 and additional information provided on May 4, 2018 and subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence,

"accredited laboratory" means an analytical facility accredited by the Standards Council of Canada (SCC), or accredited by another accrediting agency recognized by Manitoba Sustainable Development to be equivalent to the SCC, or be able to demonstrate, upon request, that it has the quality assurance/quality control (QA/QC) procedures in place equivalent to accreditation based on the international standard ISO/IEC 17025, or otherwise approved by the Director;

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

"anaerobic digestion" means the degradation of organic matter brought about through the action of microorganisms in the absence of elemental oxygen;

"approved" means approved by the Director or assigned Environment Officer in writing;

"aquifer" means a water saturated geologic unit that will yield water to wells or springs at a sufficient rate so that the wells or springs can serve as practical sources of water supply;

"ASAE" means the American Society of Agricultural Engineers;

"ASTM" means the American Society for Testing and Materials;

"biogas" means combustible gas derived from the anaerobic digestion of organic materials containing primarily methane (CH₄) and carbon dioxide (CO₂);

"biosolids" means accumulated organic sludge solids, resulting from wastewater treatment processes, that have received adequate treatment to permit the material to be recycled;

"blanch" means to process by scalding or hot water;

"cull potatoes" means potatoes received at the potato processing plant that are not usable for processing into final product;

"DAF" means dissolved air flotation;

"day" or "daily" means any 24-hour period;

"dangerous good" means a product, substance or organism as defined in The Dangerous Goods Handling and Transportation Act, or any amendments thereto;

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

"effluent" means wastewater flowing or pumped out of the potato processing plant;

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

"Environmental Management System (EMS)" means the part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes, and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy;

"first order waterway" means a drain or watercourse serving a watershed with a drainage area of up to one square mile;

"flooding" means the flowing of water onto lands, other than waterways, due to the overtopping of a waterway or waterways;

"forcemain" means a pressure pipe joining the pump discharge at a water or wastewater pumping station with a point of gravity flow;

"HDPE" means high density polyethylene;

"high water mark" means the fluid level mark on the interior surface of the LRAR which is normally reached when the cell is at the maximum allowable liquid level;

"hydraulic conductivity" means the quantity of water that will flow through a unit cross-sectional area of a porous material per unit of time under a hydraulic gradient of 1.0;

"Industrial Services Agreement" means a signed and legally binding agreement, arrived at between the Licencee and the City of Portage la Prairie which outlines clear limits respecting the maximum daily and maximum weekly flow rates, as well as maximum daily and maximum weekly loading limits on such physical, chemical and biological parameters as may be requested by the Licencee and/or the City of Portage la Prairie;

"industrial wastewater" means wastewater derived from an industry which manufactures, handles or processes a product and does not include wastewater from commercial and residential buildings;

"LRAR" means a low rate anaerobic reactor;

"LSAF" means the Poplar Bluff lift station and forcemain;

"NIST" means the National Institute of Standards and Technology;

"NO_x" means oxides of nitrogen, and refers collectively to nitric oxide (NO) and nitrogen dioxide (NO₂) expressed as a nitrogen dioxide equivalent;

"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 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;

"nubbins" means small imperfect pieces of potatoes;

"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 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 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;

"oily wastewater" means wastewater from the fryer, packaging and freezer areas of the potato processing plant, including wastewater from the fryer exhaust emission control system;

"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;

"plant-available nitrogen" means nitrogen which is readily available to plants by uptake through the roots and is determined by adding a percentage (2% for soil residue & tare material, and 20% for biosolids) of the organic nitrogen (as nitrogen), 100% of the ammonia (as nitrogen) and 100% of the nitrate (as nitrogen);

"PM₁₀" means airborne particles equal or less than 10 micrometres in diameter;

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

"pollutant" means a pollutant as defined in The Environment Act;

"potato processing" means the cleaning, the peeling, the cutting, the removal of defects, the blanching, the drying, the frying, the freezing and the packaging of potatoes, or any one of these activities;

"potato processing plant" means the main potato processing plant structure;

"process wastewater" means a liquid stream, containing or comprised of process water or any chemicals used by the Development, which is designated for release into the environment;

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

"reference material" means soil or sludge material which is used as a reference;

"reference value" means the value established by the agency that supplied the reference material;

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

"SDS" means safety data sheets;

"second order waterway" means a drain or watercourse servicing a watershed with a drainage area greater than one square mile or having a tributary or tributaries which are first order waterways;

"significant" means of important negative consequence as determined by an individual with demonstrated expertise who is qualified to make such judgments;

"sludge" means accumulated solid material containing large amounts of entrained water, which has separated from wastewater during processing;

"sludge solids" means solids in sludge;

"soil residues" means receiving area wastes, excluding tare material, intended for land application and includes dry dirt and silt concentrate;

"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 Federation;

"sulphide oxidation facility" means a reactor designed to provide biological and/or chemical oxidation of sulphide to sulphate in the LRAR effluent prior to entering the lift station;

"tare material" means rocks, potato vines and foreign material that accumulate in the raw receiving area;

"waste" means waste product of any kind or the run-off from such waste product and includes both liquid and solid material;

"wastewater" means the spent or used water of a community of industry which contains dissolved and suspended matter;

"water table" means the upper surface of the zone of saturation of a water bearing geologic unit;

"white water" means water used to convey potatoes and potato pieces in the peeling, cutting, blanching and drying areas of the potato processing plant and contains starch, sugars and other dissolved and suspended potato solids;

"WPCF" means the City of Portage la Prairie Water Pollution Control Facility.

"wastewater collection system" means the sewer and pumping system used for the collection and conveyance of domestic, commercial, industrial and process wastewater; and

"WHMIS" means Workplace Hazardous Materials Information System.

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.

Future Sampling

1. In addition to any of the limits, terms and conditions specified in this Licence, the Licencee shall, upon the request of the Director:
 - 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 pollutant(s) from the Development;
 - c) conduct specific investigations in response to the data gathered during environmental monitoring programs; or
 - d) 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.

2. 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, compost, and air samples in accordance with methodologies approved by the Director;
 - c) have all analytical determinations undertaken by an accredited laboratory; and
 - d) report the results to the Director, in writing and in an electronic format acceptable to the Director, within 60 days of the samples being taken.

Reporting Format

3. The Licencee shall submit all information required to be provided to the Director or Environment Officer under this Licence, in written and electronic format, in such form (including number of copies) and of such content as may be required by the Director or Environment Officer, and each submission shall be clearly labeled with the Licence Number and Client File Number associated with this Licence.

Equipment Breakdown

4. The Licencee shall, in the case of physical or mechanical equipment breakdown or process upset where such breakdown or process upset results or may result in the release of a pollutant in an amount or concentration, or at a level or rate of release, that causes or may cause a significant adverse effect, immediately report the event by calling the 24-hour environmental accident reporting line at 204-944-4888 (toll-free 1-855-944-4888). The report shall indicate the nature of the event, the time and estimated duration of the event and the reason for the event.
5. The Licencee shall, following the reporting of an event pursuant to Clause 4,
 - a) identify the repairs required to the mechanical equipment;
 - b) undertake all repairs to minimize unauthorized discharges of a pollutant;
 - c) complete the repairs in accordance with any written instructions of the Director or Environment Officer; and
 - d) submit a report to the Director or Environment Officer about the causes of breakdown and measures taken, within one week of the repairs being done.

Safety and Security

6. The Licencee shall continually maintain an up-to-date inventory of any process and cleaning chemicals used and/or stored on-site that would be captured by any applicable federal/provincial WHMIS regulations and protocols, and make this information and applicable SDS sheets available to an Environment Officer upon request.
7. The Licencee shall prepare, within 90 days of the date of issuance of this Licence, and maintain an emergency response contingency plan in accordance with the Canadian Centre for Occupational Health and Safety "Emergency Response Planning Guide" or other emergency planning guidelines acceptable to the Director.

8. The Licencee shall implement and continually maintain in current status, an Environmental Management System (EMS) for the Development which is acceptable to the Director.

Environmental Coordinator

9. The Licencee shall designate an employee, within 60 days of the date of issuance of this Licence, as the Licencee's Environmental Coordinator, whose job description will include assisting the Licencee in complying with the limits, terms and conditions in this Licence and assisting Senior Management of the Licencee to manage environmental issues at the Development. The name of the Environmental Coordinator shall be submitted in writing to the Director within 14 days of appointment and any subsequent appointment.

Certification

10. The Licencee shall obtain and maintain classification of the Development pursuant to Manitoba Regulation 77/2003 respecting Water and Wastewater Facility Operators or any future amendment thereof and maintain compliance with all requirements of the regulation including, but not limited to, the preparation and maintenance of a Table of Organization, Emergency Response Plan and Standard Operating Procedures.
11. The Licencee shall carry out the operation of the Development with individuals properly certified to do so pursuant to Manitoba Regulation 77/2003 respecting Water and Wastewater Facility Operators or any future amendment thereof.

Future Studies

12. The Licencee shall actively participate in any future watershed based management study, plan or nutrient reduction program, approved by the Director.

Industrial Services Agreement

13. The Licencee shall:
 - a) prepare and execute a current comprehensive and enforceable Industrial Services Agreement, which is acceptable to the Director, for the purposes of defining maximum daily and maximum weekly influent limits respecting volume and pollutant loading rates which would protect the operational integrity of the Portage la Prairie Water Pollution Control Facility in terms of the design capability and/or in consideration of the actual performance of the Portage la Prairie Water Pollution Control Facility;
 - b) provide the Director with a copy of the Industrial Services Agreement upon being signed by all parties; and
 - c) provide the Director with a copy of any future revised Industrial Services Agreement.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Respecting Construction

14. The Licencee shall notify the designated Environment Officer not less than two weeks prior to beginning construction of the Development. The notification shall include the intended starting date of construction and the name of the contractor responsible for the construction.
15. The Licencee shall obtain all necessary federal, provincial and/or municipal licences, authorizations, permits and/or approvals for construction of relevant components of the Development prior to commencement of construction.
16. The Licencee shall, during construction of the Development, operate, maintain and store all materials and equipment in a manner that prevents any deleterious substances (fuel, oil, grease, hydraulic fluids, coolant, paint, uncured concrete and concrete wash water, etc.) from entering watercourses, and have an emergency spill kit for in-water use available on site during construction.
17. The Licencee shall construct silt fences in the drainage routes transporting surface runoff off the property of the Development, and keep the silt fences maintained in a functioning manner until vegetation has been re-established on the disturbed areas.
18. The Licencee shall revegetate surface areas on the property of the Development, affected by construction and re-contouring, in order to minimize or prevent soil erosion.
19. The Licencee shall, where open cut stream crossing techniques are used on intermittent waterways and artificial drainage channels, minimize disturbance to riparian areas and restore the bottom and banks of the waterways to their original elevations and shapes.
20. The Licencee shall pressure test the integrity of the connections of any new underground piping of the Development, which is intended to transport wastewater under pressure, before such pipe connections are backfilled with earth and make repairs as required.
21. The Licencee shall:
 - a) conduct all ditch related work activities during no flow or dry conditions and not during the April 1 to June 15 fish spawning and incubation period;
 - b) not construct the wastewater collection system or wastewater discharge outlet during periods of heavy rain;
 - c) place and/or isolate all excavated and construction material where it will not erode into any watercourse;
 - d) implement effective long-term sediment and erosion control measures to prevent soil-laden runoff and/or silt from entering any watercourse during construction and until vegetation is established;
 - e) routinely inspect all erosion and sediment control structures and immediately complete any necessary maintenance or repair;

- f) revegetate soil exposed during the construction of the Development with native or introduced grasses or legumes. Native species shall be used to revegetate areas where native species existed prior to construction; and
 - g) use rock that is free of silt and clay for riprap.
- 22. The Licencee shall, during construction and maintenance of the Development, prevent the introduction and spread of foreign aquatic and terrestrial biota by cleaning equipment prior to its delivery to the site of the Development in accordance with the requirements of Manitoba Regulation 173/2015 respecting Aquatic Invasive Species, or any future amendment thereof.
- 23. The Licencee shall:
 - a) construct and make available for use by an Environment Officer, at locations acceptable to the Director, secured and heated monitoring stations with direct access to the process wastewater influent and effluent pipelines;
 - b) make the monitoring stations accessible to an Environment Officer at all times;
 - c) install and maintain a continuous flow measuring devices, equipped with an interface compatible with departmentally owned ISCO sampler, at the monitoring stations or at a location acceptable to the Director which is capable of measuring the volume of effluent with an accuracy of ± 2 percent;
 - d) have the flow measuring device re-calibrated every two years or on the request of an Environment Officer;
 - e) submit to the Director a certificate of calibration, signed by a person qualified to calibrate the flow measuring device, for each flow measuring device within two weeks of the completion of each calibration, identifying the plus or minus percent error associated with each calibrated flow measuring device; and
 - f) equip the monitoring stations with a flow-proportional sampling device equipped to function with the flow measuring device and have the sampling device available on request for use by an Environment Officer.

Respecting the Operation of the Development - General

- 24. The Licencee shall erect and maintain warning signs, approved by Manitoba Infrastructure, on Trans Canada Highway 1 to warn of the potential for fog and ice.
- 25. The Licencee shall not emit water vapour from the Development such that, at any point beyond the property boundaries of the Development, visibility is obscured or a negative impact is otherwise created, which causes or might cause a safety concern.
- 26. The Licencee shall monitor the Trans Canada Highway 1 adjacent to the Development to determine if water vapour emissions from the plant are affecting the surface of the roadway or visibility and submit a summary report to the Director on or before June 1 of each year. The summary report shall include the following:
 - a) a summary of the monitoring program carried out in the previous year;
 - b) the dates on which icing and/or fogging were observed on the Trans Canada Highway 1 adjacent to the Development;

- c) for the dates identified in Clause 26 b) of this Licence, the general weather conditions, including icing and/or fogging on other sections of the Trans Canada Highway 1; and
 - d) a summary of required maintenance on the warning signs installed pursuant to Clause 24 of this Licence.
- 27. The Licencee shall implement a high standard of equipment maintenance and good housekeeping and operational practices with respect to the Development, at all times.
- 28. The Licencee shall not discharge to the ground surface beyond the property boundaries of the Development any water which is polluted from contact with any material or process at the Development.
- 29. The Licencee shall not permit any pollutants to be directed into, or transported by, any surface drainage route leading off the property of the Development.
- 30. The Licencee shall:
 - a) effectively treat polluted storm water in an oil/water separator prior to discharge to the surface drainage system; or
 - b) direct polluted storm water to the LRAR.
- 31. The Licencee shall maintain a continuous HDPE double liner on the interior surface of the LRAR and ensure that:
 - a) the HDPE double liner is installed in accordance with the specifications approved by the Director or in accordance with the ASAE Standard EP340.2 for the installation of Flexible Membrane Linings, whichever is the most stringent;
 - b) the inner primary liner has a minimum thickness of 1.5 mm (60 mil), and the outer secondary liner has a minimum thickness of 1.0 mm (40 mil);
 - c) each liner is free of holes and has a hydraulic conductivity not exceeding 1.0×10^{-9} centimetres per second over the entire surface area of each liner;
 - d) the primary and secondary liner are separated by a porous Geo-Net membrane in accordance with the specifications approved by the Director;
 - e) a gas relief system is installed under the primary liner as well as under the secondary liner in accordance with the specifications approved by the Director; and
 - f) each liner is tested for the integrity of all field seams in accordance with the specifications approved by the Director, and that a testing report, or any progressive testing report, is prepared and submitted to the Director for each liner, with:
 - i) the testing report or any progressive testing reports, on the secondary liner seams, submitted to the Director no less than two weeks before the secondary liner, or any tested portion thereof in the case of progressive testing, is overlain with the geonet material and the primary liner; and
 - ii) the testing report or any progressive testing reports on the primary liner, submitted to the Director no later than two weeks after the seam testing on the primary liner, or any portion thereof in the case of progressive testing, has been completed.

32. The Licencee shall maintain a sulphide oxidation facility such that:
- a) the facility is constructed using steel tank walls and concrete floor; and
 - b) the facility is constructed and maintained with corrosion protection.
33. The Licencee shall maintain an insulated geomembrane cover on the LRAR in a manner which is acceptable to the Environment Officer.

Respecting Chemical Storage and Spill Containment

34. The Licencee shall provide containment for all vessels containing chemicals in each area of the development where the chemicals are stored, loaded, transferred, used or otherwise handled, in compliance with the National Fire Code of Canada (2015), or any future amendment thereof, such that any product leakage or spillage and any contaminated liquid generated is contained within the Development and contamination of groundwater and surface water is prevented.
35. The Licencee shall:
- a) provide cooking oil spill containment at rail and truck unloading stations;
 - b) store cooking oil indoors; and
 - c) provide spill containment in the cooking oil storage area for a volume of liquid equal to 110 percent of the largest tank volume and the effective displacement volume of all other tanks and structures located therein.
36. The Licencee shall grade, surface, and dike or curb all areas where chemicals are stored, loaded, transferred or otherwise handled in a manner and using appropriate impermeable materials approved by the Director, such that all product spillage and contaminated run-off water from these areas is contained within the Development.
37. The Licencee shall have spill recovery equipment available on-site at all times.

Respecting Solid Wastes

38. The Licencee shall minimize the generation of domestic solid waste and maximize, wherever possible, the collection and recycling of recyclable wastes generated through the operation of the Development.
39. The Licencee shall dispose of non-reusable construction debris and solid waste from the Development at a waste management facility operating under the authority of a permit issued pursuant to Manitoba Regulation 37/2016 respecting Waste Management facilities, or any future amendment thereof, or a Licence issued pursuant to The Environment Act.
40. The Licencee shall not undertake any on-site burning of solid waste.
41. The Licencee shall not deposit solid waste, including livestock feed material as identified in Clause 45 of this Licence, tare material, soil residues and biosolids, into the environment except:
- a) in accordance with this Licence;

- b) as feedstock for off-site composting by third party entities operating pursuant to a Licence issued under The Environment Act, with the approval of the Director; or
- c) in the event of an emergency situation and with the prior approval of an Environment Officer, into a waste disposal ground where the operator of the waste management facility has provided written agreement to accept the solid waste.

Respecting Dangerous Goods or Hazardous Waste

42. The Licencee shall not release dangerous goods or hazardous wastes into the wastewater collection system.
43. The Licencee shall comply with all the applicable requirements of:
- a) The Manitoba Dangerous Goods Handling and Transportation Act, and regulations issued thereunder, respecting the handling, transport, storage and disposal of any dangerous goods brought onto or generated at the Development; and
 - b) Manitoba Storage and Handling of Petroleum Products and Allied Products Regulation 188/2001, or any future amendments thereto.
44. The Licencee shall collect, transport and store used oil or hydraulic fluids removed from on-site machinery in secure, properly labeled, non-leaking containers and shall regularly send them to a recycling or disposal facility approved to accept hazardous wastes.

Respecting Livestock Feed Material

45. The Licencee shall collect the following materials for livestock feed:
- a) cull potatoes;
 - b) screenings from the white water screens, which includes insoluble peel fibre;
 - c) excess or unusable potato pieces, including defects;
 - d) solids from the oil filter system in the fryer area;
 - e) potato spillage from the packaging area;
 - f) settled solids from the DAF unit; and
 - g) the oily concentrate from the DAF unit, unless federally restricted as such, whereupon the oily concentrate may be offered as a feedstock for off-site biodiesel refining and/or offered for off-site refining of the oil into a heating fuel, by third party entities licensed under The Environment Act, or offered for an alternative use approved by the Director.
46. The Licencee shall store cull potatoes, potato solids, peel fibre and other livestock feed material indoors.
47. The Licencee shall not store livestock feed materials, including screened peel solids, trim waste, culls, nubbins and frozen waste, on the property of the Development for more than 48 hours, unless:
- a) in the opinion of an Environment Officer, inclement weather or road conditions prevent transportation from the property of the Development; and

- b) the Licencee keeps a record, available to an Environment Officer on request, of each incidence of storage of livestock feed materials on the property of the Development for more than 48 hours.
48. The Licencee shall dispose of livestock feed material identified in Clause 45 of this Licence such that the livestock feed material:
- a) is disposed of as livestock feed;
 - b) is disposed of as feedstock for off-site composting by third party entities operating pursuant to a Licence issued under The Environment Act;
 - c) is not disposed of by application to land; and
 - d) if disposed at a waste disposal facility pursuant to Clause 41 of this Licence, is disposed in accordance with any requirements specified by an Environment Officer.

Respecting Tare Material and Soil Residues

49. The Licencee shall, except as provided by Clause 41 of this Licence, dispose of tare material and soil residues:
- a) by application to non-potato producing agricultural land;
 - b) for use by third party commercial developments as landscaping topsoil, clean construction fill, compost feedstock or landfill cover material in accordance with all applicable regulations; or
 - c) by an alternative end use approved in writing by an Environmental Officer.
50. The Licencee shall transport tare material and soil residues in containers in such a manner to prevent loss of the material to the satisfaction of an Environment Officer.
51. The Licencee shall operate the facility such that all accumulated soil residues and tare material temporarily stored on site will be dry enough to form a pile without slumping or creating soil residue run off and at minimum be disposed of on an annual basis.
52. The Licencee shall not apply tare material or soil residues to agricultural land:
- a) less than 300 metres from any occupied residence (other than the residence occupied by the owner of the land on which the tare material is to be applied);
 - b) less than 1 kilometre from a residential area;
 - c) less than 15 metres from a first order waterway;
 - d) less than 30 metres from a second or higher order waterway;
 - e) less than 50 metres from any groundwater well; or
 - f) on land that is subject to flooding.
53. The Licencee shall not apply tare materials or soil residues on agricultural land:
- a) with a depth of clay or clay till of less than 1.5 metres between the soil surface and the water table;
 - b) within 100 metres of an identifiable boundary of an aquifer which is exposed to the ground surface; or
 - c) where the surface slope of the land is greater than 5 percent.

54. The Licencee shall not apply soil residues on agricultural land where prior to the application:
- a) the soil pH is less than 6.0;
 - b) the level of nitrate-nitrogen exceeds 101 kilograms per hectare in the upper 60 centimetres of the soil; or
 - c) the concentration of sodium bicarbonate extractable phosphorous, as P, exceeds 60 micrograms per gram in the upper 15 centimetres of the soil.
55. The Licencee shall, at least two weeks prior to the commencement of any application of tare material or soil residues to agricultural land:
- a) produce scaled site plan drawings of each site intended for the application of tare material or soil residues, showing all the applicable features and set back boundaries relevant to the surface and sub-surface criteria specified in Clauses 52, 53, and 54 of this Licence, and indicating the total remaining eligible area (in hectares) available in each intended application site;
 - b) stake out the determined boundaries of each intended application site in advance of the application, to ensure that the tare material and soil residues are applied to the land in conformity with Clauses 52, 53, and 54 of this Licence; and
 - c) provide to the Director and the respective municipal authority:
 - i) the legal descriptions for the agricultural land on which tare material or soil residues are to be applied; and
 - ii) one set of scaled site plan drawings produced pursuant to Clause 55 a) of this Licence for the application sites intended to be used.
56. The Licencee shall plant on all agricultural land onto which soil residues have been applied, a crop, other than a vegetable crop, at the commencement of the next growing season following such application and for a period of three years from the date of application of soil residues.
57. The Licencee shall, on all agricultural land onto which tare material or soil residues have been applied, not plant a potato crop for a period of ten years from the date of application of the material.
58. The Licencee shall apply tare material and soil residue to agricultural land such that the cumulative weight per hectare of each heavy metal in the soil, as calculated by adding

the amount of each heavy metal in the tare materials or soil residues applied to the background level of the same metal, does not exceed the following levels: *

Metal	Kilogram per Hectare
Arsenic	21.6
Cadmium	2.52
Chromium (Total)	115.2
Chromium (VI)	0.72
Copper	113.4
Lead	126
Mercury	11.9
Nickel	90
Zinc	360

* Calculated values shall be based on a soil bulk density of 1200 kilograms per cubic metre and a soil depth of 15 centimetres. Analysis for heavy metals must be carried out in accordance with Schedule B of this Licence.

59. The Licencee shall apply tare material and soil residue to agricultural land such that not more than one-third of the initial maximum addition of each heavy metal is applied in any single application of tare materials or soil residues.
60. The Licencee shall, when applying tare material and soil residue to agricultural land, develop and carry out a field monitoring program on the tare material and soil residues disposal operation, which is acceptable to the Director, to determine:
- the surface slope of the land;
 - the presence of clay and clay till to a depth of 1.5 metres;
 - for soil residues disposal operations, the sodium bicarbonate extractable phosphorous, as P, in the upper 15 centimetres of the soil; the nitrate-nitrogen and total nitrogen in the upper 60 centimetres of the soil; and the pH of the soil;
 - the number of hectares in each field that can receive tare material or soil residues in accordance with the Licence; and
 - the number of hectares on which tare material or soil residues were applied on a daily basis, the Licencee shall make this information available to an Environment Officer on request.
61. The Licencee shall conduct a monitoring and analysis program, approved by the Director and in accordance with Schedules A and B of this Licence to determine:
- the composition of the tare materials and soil residues;
 - the background levels of selected soil parameters for each parcel of agricultural land where tare material and soil residues are to be applied; and
 - the crops grown on agricultural land on which soil residues and tare material have been applied during the previous 3-year period.
62. The Licencee shall, on or before the 15th day of March of each year, submit to the Director a report, which will include the following:

- a) for all soil residue and tare materials applied to agricultural land, specify the details of the tare materials and soil residues application program carried out during the previous 12-month period including:
 - i) a description of each parcel of land on which tare materials or soil residues were distributed;
 - ii) the background levels of soil parameters as listed in Schedule A of this Licence, for each parcel of land;
 - iii) the weight of each heavy metal, in milligrams per kilogram of soil, added to each parcel of land for the metals listed in Schedule A of this Licence;
 - iv) the cumulative weight, in kilograms per hectare, of each heavy metal for each parcel of land as calculated by adding the amount of each heavy metal applied to the background level of the same metal;
 - v) the amount of nitrogen, phosphorus, and potassium which was added per hectare for each parcel of land; and
 - vi) the type of crops grown on land on which soil residues were applied during the previous 3-year period.
 - b) for all soil residue and tare materials disposed of in a manner consistent with clause 48 b) or c) of this licence, the Licence shall provide details on end use disposal during the previous 12 month period including:
 - i) name(s) of business and proprietor of third party development utilizing soil residues and tare materials;
 - ii) location(s) of third party development;
 - iii) description(s) of management of tare material and soil residue and final use; and
 - iv) amount(s) of soil residue and tare material utilize at each development.
 - c) the results of analysis of the tare materials, soil residues and soil required by this Licence; and
 - d) a copy of the analytical procedures used and the results of analysis of reference materials in accordance with Schedule B of this Licence.
63. The Licencee shall, during any year in which soil residues are applied, determine that the amount of plant-available nitrogen added to the land from all sources does not exceed 101 kilograms per hectare.

Respecting Wastewater Treatment

64. The Licencee shall discharge sanitary wastewater to a lift station and forcemain directly to the WPCF.
65. The Licencee shall operate and maintain the wastewater treatment plant in such a manner that:
- a) the maximum daily flow rate is not in excess of 12,615 cubic metres over any 24-hour period; and
 - b) the organic loading is not in excess of 316 kilograms of five-day biochemical oxygen demand over any 24-hour period.

66. The Licencee shall not discharge any wastewater from the wastewater treatment plant as sampled in the effluent monitoring station, referred to in Clause 23 of this Licence, where:

- a) the organic content of the effluent, as indicated by the five day biochemical oxygen demand, is in excess of 25 milligrams per litre;
- b) the total suspended solids content of the effluent is in excess of 25 milligrams per litre;
- c) the fecal coliform content of the effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample, as determined by the monthly geometric mean of 1 grab sample collected at equal time intervals on each of a minimum of 3 consecutive days per week;
- d) the total residual chlorine is in excess of 0.02 milligram per litre;
- e) the total nitrogen is in excess of 15 milligram per litre as determined by a 30 day rolling average;
- f) the total phosphorus is in excess of 1.0 milligram per litre as determined by a 30 day rolling average; or
- g) the total ammonia nitrogen (as N) is in excess of:

Period	Total Ammonia Nitrogen (as N) (kg/any 24 hour period)
January	282
February	286
March	307
April	282
May	166
June	89
July	53
August	42
September	51
October	100
November	143
December	202

67. The Licencee shall not release a quality of effluent from the wastewater treatment plant which:

- a) on any day, causes, or contributes to, the mixing zone for the effluent in the Assiniboine River being acutely lethal to aquatic life passing through the mixing zone; or
- b) can be demonstrated to be acutely lethal to fish within the mixing zone for the effluent in the Assiniboine River by using a 96-hour static acute lethality test which results in mortality to more than 50 percent of the test fish exposed to 100 percent concentration of effluent, with the test carried out in accordance with the protocol outlined in Environment Canada's "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout: EPS 1/RM/13 Second Edition – December 2000" or any future amendment thereof.

Respecting Wastewater Monitoring

68. The Licencee shall:

- a) continuously measure and record the volume of the wastewater discharged from the LSAF to the Assiniboine River;
- b) take one flow proportional sample of wastewater discharged from the LSAF to the Assiniboine River over a 24 hour period every 6 days;
- c) have the samples analyzed for five day biochemical oxygen demand, chemical oxygen demand, total suspended solids, total nitrogen, nitrate-nitrite, total ammonia (as N) and total phosphorous;
- d) calculate the five day biochemical oxygen demand, chemical oxygen demand, total suspended solids, total nitrogen, total ammonia (as N) and total phosphorous loads (kilograms per day) for the days during which samples were collected;
- e) prepare a monthly report on:
 - i) the daily, average, peak, minimum and total monthly volume of wastewater discharged from the LSAF to the Assiniboine River; and
 - ii) the five day biochemical oxygen demand, chemical oxygen demand, total suspended solids, total nitrogen, total ammonia (as N) and total phosphorous loads (kilograms per day) and the flow conditions on the days the samples were collected; and
- f) file a copy of the report with the Director within 30 days of the end of each month during which the loads were determined.

69. The Licencee shall:

- a) take three (3) grab samples of effluent from the wastewater treatment plant at equal time intervals once each week;
- b) have the grab samples analyzed for fecal coliform content, field temperatures, and field pH;
- c) record the daily, average, peak, minimum, and total monthly volume of wastewater discharged from the wastewater treatment plant;
- d) report the results to the Director within 60 days of the samples and recordings being taken; and
- e) notwithstanding sub-clause f) above, if the results of the fecal coliform analysis exceed the discharge criteria specified in Clause 66 of this licence, report the results to the Director immediately upon receipt of the results.

70. The Licencee shall:

- a) once every three months, until four consecutive tests pass, and then once every six months in accordance with the protocol outlined Environment Canada's "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout: EPS 1/RM/13 Second Edition – December 2000" or any future amendment thereof, collect a bioassay sample of the effluent from the wastewater treatment plant and test the sample at 100 percent concentration for lethality;
- b) report the results to the Director within 30 days of the end of each month during which the lethality was determined; and

- c) recommence quarterly sampling as required by Clause 70 (a) of this Licence in the event that one of the quarterly tests required by Clause 70 (a) of this Licence fails.

Respecting Operation – LRAR and Sulphide Oxidation Facility

- 71. The Licencee shall carry out all aspects of the operation of the LRAR and sulphide oxidation facility in accordance with the Industrial Services Agreement required in Clause 13 of this Licence.
- 72. The Licencee shall maintain the contents of the LRAR at a temperature not less than 20°C.
- 73. The Licencee shall not accept wastewater or liquid sludge into the LRAR from any source other than the potato processing facility, except with the prior approval of the Director in order to seed the LRAR with selected organisms upon the start-up of the LRAR or to recover from a treatment process upset.
- 74. The Licencee shall:
 - a) if the leak detection manhole for the primary liner of the double lined LRAR indicates a continuous leakage of the liner:
 - i) install a permanent pump, and pump the fluids into the inlet chamber of the LRAR; and
 - ii) if necessary, raise the top elevation of the manhole to above the high water mark in the LRAR to contain the leakage; and
 - b) if the leak detection manhole for the primary liner of the double lined LRAR indicates a continuous leakage at a rate greater than that which would be expected at the maximum operating depth to seep through the entire submerged surface area of the primary liner with an overall hydraulic conductivity not exceeding 1×10^{-9} centimetres per second, repair the primary liner to the satisfaction of the Director.
- 75. The Licencee shall continually maintain the biogas containment cover of the LRAR in a state of proper function to minimize biogas leakage to the atmosphere.
- 76. The Licencee shall:
 - a) collect all biogas from the LRAR;
 - b) send all the biogas to the potato processing plant and utilize it as an energy source in the operation of the potato processing plant; and
 - c) flare excess or non-required amounts of collected biogas to the atmosphere.
- 77. The Licencee shall treat the effluent from the LRAR in the sulphide oxidation facility prior to discharge to the LSAF.
- 78. The Licencee shall, upon written request from the Director:
 - a) submit a plan to the Director for approval for the provision of treatment of the sulphide oxidation facility off-gas; and
 - b) carry out the approved plan in accordance with any specifications, limits, terms or conditions of the approval.

Respecting Biosolids

79. The Licencee shall not, except as provided by Clause 41 of this Licence, dispose of biosolids except by application to agricultural land.
80. The Licencee shall, prior to removal for disposal on agricultural land, subject the biosolids to anaerobic digestion for a period of 30 days at a minimum temperature of 20°C, or an equivalent digestion process acceptable to the Director.
81. The Licencee shall transport biosolids in containers in such a manner as to prevent loss of biosolids to the satisfaction of an Environment Officer.
82. The Licencee shall apply all biosolids to agricultural land such that biosolids are injected into the soil at a minimum depth of 15 centimetres below the soil surface or that soil is mounded to a depth of 15 centimetres above the level at which the biosolids were injected into the soil in such a manner as to cover all of the biosolids.
83. The Licencee shall apply all biosolids to agricultural land such that:
 - a) the biosolids remain in the furrow opening; and
 - b) the surface expression of the injected biosolids is acceptable to an Environment Officer.
84. The Licencee shall submit to the Director, at least two weeks prior to commencing with the biosolids and sludge solids land application activities, the details of the sludge solids sampling and analysis program used to determine if phosphorus-based or nitrogen-based sludge application limits are most appropriate and for determining field-specific application rates for the lands on which the sludge solids are to be applied.
85. The Licencee shall apply biosolids to land such that the application rate of biosolids onto the land does not exceed 10 tonnes per hectare, on a dry weight basis, over any four year period and that the amount of plant-available nitrogen added to the land from all sources does not exceed 101 kilograms per hectare during any year in which biosolids are applied.
86. The Licencee shall not apply biosolids:
 - a) to frozen soil;
 - b) less than 300 metres from any occupied residence (other than the residence occupied by the owner of the land on which the biosolids are to be applied);
 - c) less than 1 kilometre from a residential area;
 - d) less than 15 metres from a first order waterway;
 - e) less than 30 metres from a second or higher order waterway;
 - f) less than 50 metres from any groundwater well;
 - g) between November 10th of any year and April 10th of the following year, unless otherwise authorized in writing by the Director;
 - h) less than 8 metres from a major wetland, bog, marsh or swamp; or
 - i) on land that is subject to flooding.

87. The Licencee shall not apply biosolids on land:

- a) with a depth of clay or clay till of less than 1.5 metres between the soil surface and the water table;
- b) within 100 metres of an identifiable boundary of an aquifer which is exposed to the ground surface;
- c) where, prior to the application of biosolids, the soil pH is less than 6.0;
- d) where the surface slope of the land is greater than 5 percent;
- e) where, prior to the application of biosolids, the level of nitrate-nitrogen exceeds 101 kilograms per hectare in the upper 60 centimetres of the soil; or
- f) where, prior to the application of biosolids, the concentration of sodium bicarbonate extractable phosphorous, as P, exceeds 60 micrograms per gram in the upper 15 centimetres of the soil.

88. The Licencee shall:

- a) at least 30 days prior to the commencement of any application of biosolids to land, produce scaled site plan drawings of each site intended for the application of biosolids, showing all the applicable features and set back boundaries relevant to the surface and sub-surface criteria specified in Clauses 85 and 86 of this Licence, and indicating the total remaining eligible area (in hectares) available in each intended biosolids application site; and
- b) stake out the determined boundaries of each intended biosolids application site in advance of the application of biosolids, to ensure that the biosolids are applied to the land in conformity with Clauses 86 and 87 of this Licence.

89. The Licencee shall, on all agricultural land onto which biosolids have been applied, plant a crop other than a potato crop or a vegetable crop at the commencement of the next growing season following such application and for a period of three years from the date of application of biosolids.

90. The Licencee shall, on all agricultural land onto which biosolids have been applied, not plant a potato crop for a period of five years from the date of application of biosolids.

91. The Licencee shall apply biosolids to land such that the cumulative weight per hectare of each heavy metal in the soil, as calculated by adding the amount of each heavy metal in the biosolids applied to the background level of the same metal, does not exceed the following levels: *

Metal	Kilogram per Hectare
Arsenic	21.6
Cadmium	2.52
Chromium (Total)	115.2
Chromium (VI)	0.72
Copper	113.4
Lead	126
Mercury	11.9
Nickel	90
Zinc	360

- * Calculated values shall be based on a soil bulk density of 1200 kilograms per cubic metre and a soil depth of 15 centimetres. Analysis for heavy metals must be carried out in accordance with Schedule B of this Licence.

92. The Licencee shall apply biosolids to land such that not more than one-third of the initial maximum addition of each heavy metal is applied in any single application of biosolids.
93. The Licencee shall provide to the Director and the respective municipal authority, on or before the 15th day of March of each year, the legal descriptions for all land on which biosolids are to be applied in the current calendar year.
94. The Licencee shall, on or before the 15th day of March of each year, print a public notice in the local newspapers to advise local residents of the intended biosolids application sites for the current calendar year.
95. The Licencee shall develop and carry out a biosolids sampling and analysis program, acceptable to the Director, to determine the volume and solids content of the biosolids removed on a daily basis and the volume and the solids content of biosolids applied to each field. The Licencee shall make this information available to an Environment Officer on request.
96. The Licencee shall submit to the Director, each year and at least 30 days prior to the commencement of any application of biosolids onto land, one set of scaled site plan drawings produced pursuant to Clause 88 of this Licence for the biosolids application sites intended to be used in that year.
97. The Licencee shall develop and carry out a field monitoring program on the biosolids disposal operation, which is acceptable to the Director, to determine:
 - a) The sodium bicarbonate extractable phosphorous, as P, in the upper 15 centimetres of the soil;
 - b) the nitrate-nitrogen and total nitrogen in the upper 60 centimetres of the soil;
 - c) the pH of the soil;
 - d) the surface slope of the land;
 - e) the presence of clay and clay till to a depth of 1.5 metres;
 - f) the number of hectares in each field that can receive biosolids in accordance with the Licence;
 - g) the number of hectares on which biosolids were applied on a daily basis; and
 - h) make this information available to an Environment Officer on request.
98. The Licencee shall conduct a monitoring and analysis program, approved by the Director and in accordance with Schedules A and B of this Licence to determine:
 - a) the composition of the biosolids;
 - b) the background levels of selected soil parameters for each parcel of land; and
 - c) the crops grown on land on which biosolids have been applied during the previous 5-year period.

99. The Licencee shall, on or before the 15th day of March of each year, submit to the Director a report, which will include the following:
- a) details of the biosolids injection program carried out during the previous 12-month period including:
 - i) a description of each parcel of land on which biosolids were distributed;
 - ii) the background levels of soil parameters as listed in Schedule A of this Licence, for each parcel of land;
 - iii) the dry weight of biosolids applied per hectare;
 - iv) the weight of each heavy metal, in milligrams per kilogram of soil, added to each parcel of land for the metals listed in Schedule A of this Licence; and
 - v) the cumulative weight, in kilograms per hectare, of each heavy metal for each parcel of land as calculated by adding the amount of each heavy metal applied to the background level of the same metal;
 - b) the amount of nitrogen, phosphorus, and potassium which was added per hectare for each parcel of land;
 - c) the results of analysis of the biosolids and soil required by this Licence;
 - d) a copy of the analytical procedures used and the results of analysis of reference materials in accordance with Schedule B of this Licence; and
 - e) the type of crops grown on land on which biosolids were applied during the previous 5-year period.
100. The Licencee shall apply biosolids and sludge solids such that the amounts of residual nitrate-nitrogen in the 0-24 inch soil depth and Olsen-P phosphorus in the 0-6 inch soil depth do not exceed the limits of the most limiting Nutrient Management Zone, regardless of size, set forth in the Nutrient Management Regulation under The Water Protection Act or any future amendment thereof.

Respecting Air Pollution Control Devices

101. The Licencee shall direct all air streams, which contain a pollutant(s) of concern to the Director, to a pollution control device which has been designed for and demonstrated to be capable of reducing, altering, eliminating or otherwise treating the pollutant(s).
102. The Licencee shall prepare, within 90 days of the issuance of this Licence, and maintain the following manuals which shall be kept at the Development and available for review upon request by an Environment Officer:
- a) a standard operating procedural manual and a maintenance schedule for each air emission pollution control device based on the manufacturer's specifications and recommendations;
 - b) an updated standard operating procedural manual and a maintenance procedure for each air emission pollution control device within 120 days of the addition, elimination or change regarding any air emission control device; and
 - c) a copy of the manufacturing operational and maintenance manual.

103. The Licencee shall not operate any process directing an emission to an air pollution control device at the Development unless:
- a) the operating and maintenance measures and status of the device are in full compliance with the approved procedures and timetables as per Clause 102;
 - b) all emissions from the process are directed to the fully operational air pollution control device;
 - c) all discharges of treated emissions from the air pollution control devices are immediately directed to a stack; and
 - d) the emissions do not contain concentrations of pollutants which:
 - i) are in violation of any other applicable legal instrument including an Act, Regulation or by-law; or
 - ii) otherwise create a significant negative environmental or health impact in the affected area.
104. The Licencee shall maintain a log of the most recent 24 month period to record any downtime of an air pollution control device due to either the breakdown or maintenance of that air pollution control device. The log shall be kept at the Development and shall be available upon request for inspection by an Environment Officer. The log shall record, at minimum, the following information:
- a) identification of the air pollution control device and the process(es) it serves;
 - b) time/date of log entry;
 - c) nature of event;
 - d) time and duration of event;
 - e) action taken;
 - f) the accumulated downtime of this air pollution control device for the events for each calendar year; and
 - g) approval of the Environmental Coordinator.
105. The Licencee shall handle, store and 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 Air Emissions

106. The Licencee shall install and maintain emission control devices on the fryer stacks to provide reduction in the emission of PM10 to the satisfaction of the Director.
107. The Licencee shall not emit particulate matter from the Development such that:
- a) particulate matter:
 - 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.
- 108. The Licencee shall not cause or permit a safety hazard to be created as the result of airborne emissions from the development impacting any public roadway beyond the Development property boundaries.
- 109. 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.
- 110. 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 specify to eliminate or mitigate a noise nuisance.

Respecting Air Emission Sampling and Analysis

- 111. The Licencee, upon written request from the Director, shall provide a stack or stacks including all necessary sampling facilities 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 Sustainable Development Guideline, Guideline for Stack Sampling Facilities, unless otherwise approved by the Director.
- 112. The Licencee, upon a written request from the Director, shall submit 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 any compounds determined by the Director. 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, 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.
- 113. The Licencee shall perform all stack sampling in accordance with the most recent version of Manitoba Sustainable Development Report No. 96-07, Interim Stack Sampling Performance Protocol, unless otherwise approved by the Director.

114. The Licencee shall arrange the scheduling of the sampling plan, approved pursuant to Clause 112 of this Licence, such that a representative of Manitoba Sustainable Development is available to monitor and audit the implementation of the sampling program.
115. The Licencee shall complete the sampling of emissions according to the approved plan submitted pursuant to Clause 112 of this Licence, within a timeframe to be determined by the Director.
116. The Licencee shall submit a report, for the approval of the Director, of the completed sampling and analysis plan approved pursuant to Clause 112 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 modeling of emissions;
 - v) results and conclusions of the QA/QC program; and
 - vi) other issues as may be determined by the Director.
117. 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 in this Licence.

Respecting Ambient Air Quality Monitoring

118. The Licencee shall submit, upon the written request and for the approval of the Director, a program for:
 - a) the sampling, analysis and reporting of levels of pollutants, as determined by the Director, at a selected location(s) beyond the property boundaries of the Development; and
 - b) the location, installation and operation of a meteorological monitoring station.
119. The Licencee shall:
 - a) implement the program approved pursuant to Clause 118 of this Licence within a timeframe stipulated by the Director; and
 - b) submit a report within 60 days of the receipt of the analytical results of the sampling program pursuant to Clause 118 of this Licence for the approval of the Director containing at minimum:

- i) the raw data collected;
- ii) a discussion of the sampling and analytical portions of the program including any anomalies of sampling and analysis; and
- iii) 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. results and conclusions of the QA/QC program; and
 - v. other issues as may be determined by the Director.

Respecting Decommissioning

120. The Licencee shall submit a decommissioning plan for the Development, suitable to the Director, prior to commencement of the operation of the expanded Development.

Record Drawings

121. The Licencee shall:
- a) prepare "record drawings" for the Development and shall label the drawings "Record Drawings"; and
 - b) provide to the Director, within one year from the date of this Environment Act Licence, two electronic copies of the "record drawings".

REVIEW AND REVOCATION

- A. Environment Act Licence No. 2518 R8 is hereby rescinded.
- B. 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.
- C. 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.



Tracey Braun, M.Sc.
Director
Environment Act

SCHEDULE 'A' TO
ENVIRONMENT ACT LICENCE NO. 3262

Tare Materials, Soil Residues and Biosolids

1. A representative sample of biosolids shall be collected every year. A representative sample of biosolids shall be a composite of samples of biosolids taken over an 8-hour period from the biosolids that will be removed for disposal on agricultural land.
2. A representative sample of tare materials shall be collected quarterly. A representative sample of tare materials shall be a composite of samples of tare materials taken over an 8-hour period from the tare materials that will be removed for disposal on agricultural land.
3. A representative sample of soil residues shall be collected quarterly. A representative sample of soil residues shall be a composite of samples of soil residues taken over an 8-hour period from the soil residues that will be removed for disposal on agricultural land.
4. The samples of tare materials, soil residues and biosolids shall be analyzed for the following parameters: *

a. conductivity	j. potassium
b. pH	k. arsenic
c. total solids	l. cadmium
d. volatile solids (total and VI)	m. chromium (total and VI)
e. nitrate nitrogen	n. copper
f. total Kjeldahl nitrogen	o. lead
g. ammonia nitrogen	p. mercury
h. organic nitrogen	q. nickel
i. total phosphorus	r. zinc

* Analysis for heavy metals must be carried out in accordance with Schedule 'C' of this Licence.

Soil

5. Composite samples from each field onto which tare materials, soil residues or biosolids will be applied shall be taken prior to application of tare materials, soil residues or biosolids. Each field of twenty-four hectares or less shall be sampled from a minimum of twelve representative sites or a minimum of one sample site per two hectares for larger fields. Each sample site shall be sampled from 0 to 15 centimetres and from 0 to 60 centimetres. The entire core extracted for each sample shall be collected. All samples from similar depths within a field shall be bulked in one container for thorough mixing prior to analysis yielding two samples per field.

SCHEDULE 'A' TO
ENVIRONMENT ACT LICENCE NO. 3262 (cont'd.)

6. Soil samples from 0 to 15 centimetres shall be analyzed for the following: *

- | | |
|--|------------|
| a. pH | g. copper |
| b. potassium | h. lead |
| c. arsenic | i. mercury |
| d. cadmium | j. nickel |
| e. chromium (total and VI) | k. zinc |
| f. sodium bicarbonate extractable phosphorus, as P | |

* Analysis for heavy metals must be carried out in accordance with Schedule 'C' of this Licence.

7. Soil samples from 0 to 60 centimetres shall be analyzed for the following:

- | | |
|---------------------|-------------------|
| a. nitrate nitrogen | b. total nitrogen |
|---------------------|-------------------|

Crops

8. The type of crop grown on lands on which biosolids have been applied during the previous 3-year period shall be listed along with the legal description of the land and the date of application of biosolids.

9. The type of crop grown on lands on which soil residues have been applied during the previous 3-year period shall be listed along with the legal description of the land and the date of application of soil residues.

SCHEDULE 'B' TO
ENVIRONMENT ACT LICENCE NO. 3262

The analysis for all metals shall be carried out in accordance with the following requirements:

1. Soil and sludge samples shall be prepared using non-contaminating grinding and sieving procedures such as agate or porcelain mortar and pestle along with nylon sieves. Soil samples shall be ground to at least 100 mesh size prior to digestion or sample pretreatment.
2. Analysis for heavy metals must be carried out following strong acid digestion.
3. The laboratory performing these analyses shall operate an acceptable quality assurance program including the following:
 - a) Samples of reference material shall be analyzed to monitor the accuracy of the sludge and soil analyses and each set of ten or fewer samples of sludge or soil shall include a minimum of the following:
 - i) For sludge samples:
 - one NIST Domestic Sludge sample (SRM 2781);
 - ii) For soil samples:
 - one NIST Estuarine Sediment sample (SRM 1646a);
 - one NIST San Joaquin Soil sample (SRM 2709); or
 - a replacement reference soil sample, acceptable to the Director, with analyte concentrations that reflect values found in the field samples; and
 - b) Field duplicates of samples shall be analyzed based on a frequency of one in each set of ten or fewer field samples and the acceptance criteria for duplicate analysis should be within ± 10 percent.
4. A copy of the analytical procedures and the analytical results for the reference materials, and any other controls used in the analysis, shall be submitted with the field sample results.
5. If the analytical results of the reference materials do not meet the following criteria, the soil and/or sludge samples must be re-analyzed:

Arsenic	± 35 percent from the reference value
Cadmium	± 25 percent from the reference value (for values above 1 $\mu\text{g/g}$)
Cadmium	± 35 percent from the reference value (for values below 1 $\mu\text{g/g}$)
Copper	± 25 percent from the reference value
Chromium	± 25 percent from the reference value
Lead	± 25 percent from the reference value
Mercury	± 35 percent from the reference value
Nickel	± 25 percent from the reference value
Zinc	± 25 percent from the reference value