

Environment, Climate and Parks Environmental Approvals Branch 1007 Century St Winnipeg MB R3H 0W4 T 204-945-8321 F 204-045-5229 www.gov.mb.ca/sd

File No.: 3851.00

May 17, 2022

Barry Blue, Landfill Manager Waste Connections of Canada Inc. Box 19, Grp 25 RR2 Winnipeg MB R3C 2E6 barry.blue@wasteconnections.com

Dear Barry Blue:

# Re: Waste Connections of Canada Inc. - Notice of Alteration Approval for Landfill Height Adjustment (Phase 2) - Environment Act Licence No. 2177 E R5

Thank you for your notice of alteration dated March 28, 2022. The alteration is to increase the peak elevation of your landfill from 260.3 metres to 269.8 metres above sea level. The landfill is known as the Prairie Green Integrated Waste Management Facility. It is located on portions of N1/2 of 11 and 14-12-2 EPM within the Rural Municipality of Rosser.

I am satisfied that the potential changes in the environmental effects resulting from the proposed alteration would be insignificant. I approve the notice of alteration under section 14(2) of The Environment Act.

All clauses of Environment Act Licence No. 2177 E R5 remain in effect.

If you have any questions about this approval, please contact Edwin Yazon, Environmental Engineer, Environmental Approvals Branch at <u>Edwin.Yazon@gov.mb.ca</u> or 431-335-2554.

If you have any questions about the ongoing administration of the licence, please contact Nada Suresh, Regional Supervisor, Environmental Compliance and Enforcement Branch at <u>EnvCEWinnipeg@gov.mb.ca</u> or 204-945-8214.

Sincerely,

Original Signed by James Capotosto Director

 Kristal Harman, Yvonne Hawryliuk, Nada Suresh - Environmental Compliance and Enforcement Asit Dey, Edwin Yazon - Environmental Approvals Fabiano Gondim - Golder Associates Public Registry



Conservation and Water Stewardship

Environmental Stewardship Division Environmental Approvals Branch 123 Main Street, Suite 160, Winnipeg, Manitoba R3C 1A5 T 204 945-8321 F 204 945-5229 www.gov.mb.ca/conservation/eal

#### CLIENT FILE NO.: 3851.00

November 13, 2015

Cliff Lechow, District Manager Progressive Waste Solutions Canada Inc. PO Box 19, Grp 245, RR2 Winnipeg, MB R3C 2E6

Dear Mr. Lechow:

Enclosed is **revised Environment Act Licence No. 2177 E R5** dated November 13, 2015 issued to **Progressive Waste Solutions Canada Inc.** for the construction and operation of the Development being an Integrated Waste Management Facility, to be located on Section 14 and the north half of Section 11, Township 12, Range 2 EPM, in the Rural Municipality of Rosser and in accordance with the Proposal and supporting documents filed under *The Environment Act* on July 24, 1994, the Environmental Impact Assessment dated June, 1995, the Environmental Impact Assessment Addendum dated October, 1995, the Revised Landfill Design Drawings submitted March 5, 1996, December 13, 2011, April 23, 2012 and March 13, 2013.

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 Yvonne Hawryliuk, Environment Officer at 204-945-5305.

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 Conservation and Water Stewardship within 30 days of the date of the Licence.

Yours truly,

"original signed by"

#### Tracey Braun, M.Sc. Director Environment Act

- c: Don Labossiere, Donna Smiley, Yvonne Hawryliuk, Environmental Compliance and Enforcement Brent Olynyk - R.M. West St. Paul; Beverley Wells - R.M. Rosser Public Registries
- NOTE: Confirmation of Receipt of this Licence No. 2177 E R5 (*by the Licencee only*) is required by the Director of Environmental Approvals. Please acknowledge receipt by signing in the space provided below and faxing a copy (letter only) to the Department by November 27, 2015

On behalf of Progressive Waste Solutions Canada Inc.

Date

# THE ENVIRONMENT ACT LOI SUR L'ENVIRONNEMENT





Licence No. / Licence n°	2177 E R5
Issue Date / Date de délivrance	June 28, 1996
<b>Revised:</b>	June 28, 2000
<b>Revised:</b>	April 24, 2002
<b>Revised:</b>	October 16, 2012
<b>Revised:</b>	July 18, 2013
<b>Revised:</b>	November 13, 2015

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 Sections 11(1) and 14(2) / Conformément au Paragraphes 11(1) et 14(2)

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

## PROGRESSIVE WASTE SOLUTIONS CANADA INC.; ''the Licencee''

for the construction and operation of the Development being an Integrated Waste Management Facility, to be located on Section 14 and the north half of Section 11, Township 12, Range 2 EPM, in the Rural Municipality of Rosser and in accordance with the Proposal and supporting documents filed under *The Environment Act* on July 24, 1994, the Environmental Impact Assessment dated June, 1995, the Environmental Impact Assessment Addendum dated October, 1995, the Revised Landfill Design Drawings submitted March 5, 1996, December 13, 2011, April 23, 2012 and March 13, 2013 and subject to the following specifications, limits, terms and conditions:

# **DEFINITIONS**

In this Licence:

"access road" means a road that leads to the Development from a Provincial Trunk Highway, Provincial Road, or a municipal road;

PWS Canada Inc. - Integrated Waste Management Facility Licence No. 2177 E R5 Page 2 of 20

"accredited laboratory" means an analytical facility accredited by the Standard Council of Canada (SCC), or accredited by another accrediting agency recognized by Manitoba Conservation and Water Stewardship 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;

"active area" means a designated trench, cell, or berm confined area of a waste disposal ground in which solid wastes are deposited, also known as waste disposal cell or landfill cell;

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

"alternative daily cover" means materials approved by the Director for use in temporarily covering waste in an active area;

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

"BTEX" means the following components of gasoline and other specific petroleum products:

B = Benzene; T = Toluene; E = Ethylbenzene; and X = Xylene;

"**compliance boundary**" means the planar surface that circumscribes the Development, extends vertically downward from the land surface, and constitutes the place at which the parameters of the background water quality as specified in a Licence issued pursuant to *The Environment Act* are not to be exceeded;

"compost" means solid mature product resulting from composting;

"**composting**" means a managed process of bio-oxidation of a solid heterogeneous organic substrate including a thermophilic phase;

"cover material" means inorganic soil, free of refuse, trash and vegetation, or other materials as approved by the Director, that is used to cover compacted solid waste;

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

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

"groundwater" means water below the ground surface and within the zone of saturation;

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

PWS Canada Inc. - Integrated Waste Management Facility Licence No. 2177 E R5 Page 3 of 20

"leachate" means liquid that has percolated through waste or other permeable matter, and contains soluble, dissolved or suspended materials derived from the waste;

"liquid industrial waste" means waste generated by industrial processes that has a slump of more than 150 mm using the slump test method (slump test, C.S.A. Standards Test Method A23.2-5C);

"**liquid waste**" means sewage, sewage effluent and sludge from septic tanks, holding tanks and municipal sewage treatment systems and has a slump of more than 150 mm using the slump test method (slump test, C.S.A. Standards Test Method A23.2-5C);

**"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 and who do not live in the same household;

"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 within a 90 day period and in a form satisfactory to the Director, 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;

"**operator**" means the company or person who is responsible for the day-to-day maintenance and operation of the Development;

PWS Canada Inc. - Integrated Waste Management Facility Licence No. 2177 E R5 Page 4 of 20

"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;

"**piezometric surface**" means the surface of the groundwater defined by the level to which groundwater will rise in a well completed into a confined aquifer;

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

"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 Water Works Association and the Water Environment Federation; and

"waste" means solid residential, commercial and light institutional wastes such as general household waste, office waste, landscape waste, uncontaminated construction or demolition waste, uncontaminated packaging materials and food and grain wastes.

# **GENERAL TERMS AND CONDITIONS**

This Section of the Licence contains terms and conditions 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.

#### **General Terms**

- 1. The Licencee shall participate on a Community Liaison Committee to be established by the Director. The Committee will include, but not be limited to, representatives from the Rural Municipality of Rosser, adjacent Municipalities, and Manitoba Conservation and Water Stewardship.
- 2. The Licencee shall, within one year of the date of this Licence, submit a plan to the Director for approval for:
  - a) the construction of a Materials Recovery Facility; and
  - b) future recovery of landfill gas;
  - at the Development.
- 3. The Licencee shall take all necessary measures to preserve the native prairie grass currently present on the site of the proposed Development.

# **Future Sampling**

- 4. The Licencee shall, in addition to any of the following specifications, limits, terms and conditions specified in this Licence, upon the request of the Director:
  - a) sample, monitor, analyze 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 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.

# Sampling Methods

- 5. Unless otherwise required by this Licence, all sampling and analysis shall be conducted using current standards or accredited methods, and as approved by the Director.
- 6. 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 or in a format acceptable to the Director, within 60 days of the samples being taken, or within another timeframe as specified by the Director.

# **Fire Reporting**

7. The Licencee shall in the event of a fire which continues in excess of thirty (30) minutes, or requires implementation of the Emergency Response Plan in Clause 96, or requires fire suppression assistance from personnel outside of the Development (e.g., the fire department) report the fire by calling (204) 944-4888 (toll free 1-855-944-4888), identifying the type of materials involved and the location of the fire.

## **Reporting and Information**

- 8. The Licencee shall make available all information required by this Licence to the public, the Rural Municipality of West St. Paul, and the Rural Municipality of Rosser.
- 9. The Licencee shall, in addition to the requirements of this Licence, carry out all aspects of the operation of the Development in compliance with the current Agreement between Browning-Ferris Industries Ltd., and assigned to BFI Canada Inc., and the Rural Municipality of Rosser.
- 10. 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.
- 11. The Licencee shall initiate and offer an educational program to its industrial, commercial and institutional clients to identify means to reduce waste generation.

## **Records Management**

12. The Licencee shall, unless otherwise specified by this Licence, retain all environmental records related to the operation of the Development during the full life of operation of the Development, and after closure, for such period of time as may be specified by the Director. Records may be transferred from their original form to other accepted forms for information storage.

#### Signage and Site Security

- 13. The Licencee shall post appropriate signage at the entrance to the Development indicating:
  - a) the hours and days of operation;
  - b) the types of waste not accepted; and
  - c) telephone numbers to call in the event of an emergency.
- 14. The Licencee shall staff and secure the Development so that:
  - a) an attendant is on duty at all times during hours of operation;
  - b) gates are provided for all access locations to the site; and
  - c) the gates are kept locked when an attendant is not on duty or the Development is closed.

# **Approvals and Permits**

15. The Licencee shall locate fuel storage and equipment servicing areas established for the construction and operation of the Development a minimum distance of 100 metres from any body of water, and shall comply with the requirements of Manitoba Regulation

PWS Canada Inc. - Integrated Waste Management Facility Licence No. 2177 E R5 Page 7 of 20

188/2001 respecting Storage and Handling of Petroleum Products and Allied Products or any future amendments thereof.

16. The Licencee shall, in accordance with Section 14 of *The Environment Act*, give notice to, and receive approval from, the Director for any proposed alteration to the Development including any future plan for leachate recirculation at the Development.

# **Equipment Operation and Maintenance**

- 17. 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 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.
- 18. The Licencee shall, following the reporting of an event pursuant to Clause 17:
  - 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; and
  - d) submit a report to the Director about the causes of breakdown and measures taken, within four weeks of the repairs being done.
- 19. The Licencee shall maintain a high standard of equipment maintenance and good housekeeping and operational practices with respect to the Development, at all times.

#### **Odours and Air Emissions**

- 20. The Licencee shall not cause or permit an odour nuisance to be created as a result of the operation of the Development, and shall take such steps as the Director may require to eliminate or mitigate an odour nuisance.
- 21. The Licencee shall inform the assigned Environment Officer, within 48 hours, whenever an odour complaint is received and provide to the Environment Officer a summary on the incident, including information on what action was taken to resolve the concerns.
- 22. The Licencee shall, at such times, for such duration, for such pollutants and at such locations as may be requested by the Director:
  - a) arrange to have a qualified person(s) undertake source tests and/or special studies to determine the ambient air quality beyond the property line of the Development, in a manner satisfactory to the Director, and including an interpretation of the results relative to the limits of Clause 60 of this Licence; and
  - b) submit a report on the test results and all related data, including the interpretation, to the Director within 90 days after completion of the test or study.

## <u>Noise</u>

- 23. 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.
- 24. The Licencee shall inform the assigned Environment Officer, within 48 hours, whenever a noise complaint is received and provide to the Environment Officer a summary on the incident, including information on what action was taken to resolve the concerns.

#### **Mitigating Erosion and Runoff**

- 25. The Licencee shall landscape berms within 24 months of berm construction. The landscaping design shall include, but not be limited to, planting of trees and shrubbery and include input from the Community Liaison Committee.
- 26. The Licencee shall ensure that the Stormwater Retention Ponds are designed and constructed to contain runoff from the Development on the basis of a 1 in 100 year rainfall event.

#### Vehicular Access and Traffic

- 27. The Licencee shall ensure that:
  - a) all vehicle traffic approaches to the facility can be accessed safely by all vehicles entering and exiting the facility, and that all necessary safety measures are taken to ensure the safe passage of through traffic on PTH #7;
  - b) an agreement with Manitoba Infrastructure and Transportation is put in place, respecting the development and maintenance of access and egress lanes from the Development, as well as, any traffic control signage or devices that may be required; the agreement may include arrangements respecting the use of the Development weigh scales as an alternate to the Manitoba Infrastructure and Transportation scale;
  - c) access roads from PTH #7 to the site are paved with asphalt or concrete to control dust;
  - d) an onsite dust control program at the Development is implemented; and
  - e) devices are installed and operated, including bumps and wheel washers, to reduce mud adherence to vehicles departing the Development.

### **Bird Hazard**

28. The Licencee, in consultation with Transport Canada, shall review and respond to the report on bird-aircraft interaction currently being prepared by LGL Consultants Ltd. Any relevant matters, including appropriate mitigation plans, shall be incorporated as amendments to this Licence as the Director deems necessary.

## **Materials Handling**

- 29. Subject to Clause 34 of this Licence, the Licencee shall accept any wastes generated within the Province of Manitoba for handling, treatment, or disposal at the Development.
- 30. The Licencee shall not accept any waste generated out of the Province of Manitoba without the approval of the Director and the Rural Municipality of Rosser in consultation with the Citizen Liaison Committee and the Rural Municipality of West St. Paul.
- 31. The Licencee shall deposit all waste, other than material intended for recycling or composting, in an active area within the Development.
- 32. The Licencee shall cover all solid waste with cover material at the end of each day of operation.
- 33. The Licencee shall:
  - a) carry out recycling activities in a location separate from the active area(s);
  - b) provide appropriate containers for all materials being recycled; and
  - c) post signs indicating which materials will be accepted for recycling.

## **Special Wastes**

- 34. Unless otherwise approved by the Director, the Licencee shall not receive the following at the Development:
  - a) biomedical waste;
  - b) hazardous waste;
  - c) liquid waste;
  - d) liquid industrial waste;
  - e) dead livestock;
  - f) outdated drugs or cytotoxic waste;
  - g) PCB's or PCB contaminated material;
  - h) radioactive waste or materials;
  - i) explosives;
  - j) unbagged asbestos; or
  - k) white goods containing chlorofluocarbons.
- 35. Notwithstanding Clause 34 of this Licence, the Licencee may receive a limited quantity of dead animals at the Development provided that they are buried immediately with a minimum of one metre of earthen cover.
- 36. Notwithstanding Clause 34 of this Licence, household hazardous waste collected or received by the Licencee, shall be allowed in a designated area at the Development prior to final treatment or disposal.

## SPECIFICATIONS, LIMITS, TERMS, AND CONDITIONS

#### **General - Construction**

37. The Licencee shall, to facilitate inspection of the Development during construction, provide such access, as the Director deems necessary, to the assigned Environment Officer throughout the duration of construction of the Development.

# LANDFILL CELLS

## **<u>Construction – Landfill Cells</u>**

- 38. The Licencee shall, unless otherwise required by this Licence or the Director, construct the Landfill component of the Development in accordance with the specifications outlined in the Report on "Design & Development of Proposed Waste Management Facility R.M. Of Rosser, Manitoba" by Golder Associates dated June, 1995 and the Revised Landfill Drawings No.'s 3A, 6A, 7A dated March, 1996. Alternative cell construction is authorized as identified in the report "Alternative Composite Liner System" by Dillon Consulting dated July 2015.
- 39. The Licencee shall, within 60 days of the date of this Licence, submit for the approval of the Director, an engineering construction plan for the Landfill component of the Development.
- 40. The Licencee shall install the 60 mil High Density Polyethylene geomembrane and the secondary Geosynthetic Clay Liner in accordance with the current version of ASAE Standard EP 340.2 for the installation of Flexible Membrane Linings, or an alternate equivalent standard approved by the Director.

#### **Quality Assurance – Landfill Cells**

- 41. The Licencee shall test the integrity of all field seams of the High Density Polyethylene and Geosynthetic Clay Liner by the air lance or ultrasonic pulse echo test methods in accordance with the current version of ASTM Standard D-4437, or an alternate equivalent standard approved by the Director.
- 42. The Licencee shall recompact any clay lined component to achieve a hydraulic conductivity of  $5 \times 10^{-8}$  cm/sec or less.
- 43. The Licencee shall submit a report, for approval by the Director prior to operation of any landfill cell, detailing any liners installed and testing results conducted, pursuant to Clauses 40, 41 and 42 of this Licence.

## Alternative Liners – Landfill Cells

- 44. The Licencee, upon written request and approval by the Director, may utilize an alternative geomembrane, synthetic or composite liner system that is at minimum: equivalent to the hydraulic conductivity of a 60 mil HDPE liner and the secondary Geosynthetic Clay Liner identified in Clause 38 which is compatible with landfill leachate; and subject to terms and conditions set by the Director at the time of approval.
- 45. The Licencee shall provide a written report regarding the installation, QA/QC, engineering oversight and any other identified requirements of the approval of Clause 44, within 90 days of completion of work of the component.
- 46. The Licencee shall not cover an alternative liner or use an alternative lined component of the Development until receiving written approval of the report submitted pursuant to Clause 45 of this Licence from the Environment Officer.

## **Operation-Landfill Cells**

- 47. The Licencee shall, unless otherwise required by this Licence or the Director, operate and maintain the Development in accordance with the information submitted in *The Environment Act* Proposal, dated July 29, 1994, the Environmental Impact Assessment, dated June, 1995 and the Environmental Impact Assessment Addendum, dated October, 1995.
- 48. The Licencee shall ensure that, as a result of the operation of the Development, the concentration values of the parameters listed in Table 1, attached to this Licence, do not exceed background levels in groundwater at the compliance boundary.

# SOIL REMEDIATION FACILITY

### **General – Soil Remediation Facility**

- 49. The Licencee shall only accept for treatment at the petroleum contaminated soil treatment facility, unless otherwise approved by the Director, soils in accordance with the following acceptance criteria:
  - a) soil contaminated with Benzene, Toluene, Ethylbenzene or Xylenes up to 30,000 mg/kg for each constituent;
  - b) soil contaminated with Canada Wide Standard for Petroleum Hydrocarbons Fraction 1,
    2, 3 or 4 up to 30,000 mg/kg for each Fraction; and
  - c) soil contaminated with metals at any concentration subject to capability to treat to achieve leachate extraction criteria.

PWS Canada Inc. - Integrated Waste Management Facility Licence No. 2177 E R5 Page 12 of 20

- 50. The Licencee shall treat soil to the following cleanup criteria:
  - a) Criteria for Acceptance of Contaminated Soil at Licenced Waste Disposal Grounds, Guideline January 2015 or as amended from time to time; and
  - b) MR 282/87 Classification Criteria for Products, Substances and Organisms Regulation, as amended from time to time; or
  - c) as approved by the Director.
- 51. The Licencee shall prevent, by means of dyking, or other method(s) approved by the Director, the migration of surface water onto or off of the petroleum contaminated soil treatment facility.

#### **<u>Construction – Soil Remediation Facility</u>**

- 52. The Licencee shall, prior to constructing the pad, submit two paper copies and one electronic copy of final engineering design plans, sealed by an engineer(s) registered with Engineers Geoscientists Manitoba, to the Director.
- 53. The Licencee shall construct the pad in accordance with the design plans pursuant to Clause 52 of this Licence.
- 54. The Licencee shall:
  - a) prepare "record drawings" for the petroleum contaminated soil treatment facility and shall label the drawings "record drawings"; and
  - b) provide to the Director, 30 days after completion of construction, two paper copies and one electronic copy of "record drawings" of the petroleum contaminated soil treatment facility.

#### **Operation – Soil Remediation Facility**

- 55. The Licencee shall submit to the Director, within 30 days after the issuance of this Licence, an operations manual for the petroleum contaminated soil treatment facility. The operations manual shall address, but not be limited to the following:
  - a) soil remediation procedures;
  - b) handling and treatment procedures;
  - c) inspection and maintenance;
  - d) soil receiving and placement;
  - e) surface water management; and
  - f) monitoring and reporting.
- 56. The Licencee shall operate the petroleum contaminated soil treatment facility in accordance with the operations manual submitted pursuant to Clause 55 of this Licence.

PWS Canada Inc. - Integrated Waste Management Facility Licence No. 2177 E R5 Page 13 of 20

57. The Licencee shall operate the petroleum contaminated soil treatment facility such that ground level concentrations of any of the following pollutants, at the property line of the Development, are not in excess of the following limits as determined from any ambient air sample or samples collected and analyzed, upon the request of the Director, in accordance with procedures and methods satisfactory to the Director:

Air Pollutant	Averaging Period	Ground Level Concentration Limits
Benzene	24 hour average	150 micrograms per cubic metre of air
Toluene	24 hour average	2000 micrograms per cubic metre of air
Ethylbenzene	24 hour average	4000 micrograms per cubic metre of air
Xylenes	24 hour average	2300 micrograms per cubic metre of air

## **Monitoring– Soil Remediation Facility**

- 58. The Licencee shall maintain, at the operator's office, records of all soils received at the petroleum contaminated soil treatment facility. These records shall contain, but not be limited to the following:
  - a) the date soils were received at the facility;
  - b) the original location of the soils;
  - c) the volume received, either estimated or actual;
  - d) preliminary analyses of the soils taken at the remediation site (for example head space results or field composite results); and
  - e) final confirmatory results of laboratory analyses of the soils taken at the Development.
- 59. The Licencee shall maintain, at the operator's office, records of all soils removed from the Development. These records shall contain, but not be limited to the following:
  - a) the date the soils were removed;
  - b) the volume of soils removed;
  - c) the final end use destination of the soils removed;
  - d) the results of analyses to determine the concentrations of the pollutants of concern, as identified by the analyses performed as required by Clause 58 d) of this Licence; and
  - e) any additional information as requested by the Director.
- 60. The Licencee shall have available for inspection by an Environment Officer upon request the records referred to in Clauses 58 and 59 of this Licence and shall provide annually to the Director a report summarizing the activities at the petroleum contaminated soil treatment facility in the annual report pursuant to Clause 91 of this Licence.

PWS Canada Inc. - Integrated Waste Management Facility Licence No. 2177 E R5 Page 14 of 20

# **COMPOSTING FACILITY**

## <u>Construction – Composting Facility</u>

- 61. The Licencee shall submit to the Director for approval at least 30 days prior to construction of the compost facility two paper copies and one electronic copy of engineering design plans. The engineering design plans, sealed by an engineer(s) registered with Engineers Geoscientists Manitoba shall address construction specifications of the compost facility and include, but not be limited to the following:
  - a) engineering design with respect to construction of the compost facility;
  - b) location of access road(s) to the compost facility;
  - c) details of the location of the compost facility with respect to property lines;
  - d) details of the compost facility drainage system;
  - e) details of a drainage system to prevent storm water runoff from entering the compost facility; and
  - f) details of fencing around the compost facility.
- 62. The Licencee shall construct the compost facility in accordance with the design plans approved pursuant to Clause 61 of this Licence.

#### **Operation – Composting Facility**

- 63. The Licencee shall establish the appropriate Carbon to Nitrogen ratio (C:N) for each batch of compost prior to the start of the composting for that batch.
- 64. The Licencee shall maintain sufficient carbon source on site to achieve the desired C:N ratio.
- 65. The Licencee shall only accept and use food waste, yard trimmings, yard waste, garden waste, leaves, livestock bedding waste and manure or other material acceptable to the Director, as compost feedstock at the facility.
- 66. The Licencee shall dispose of any process material that does not achieve the compost quality as required by Clause 69 of this Licence only in a manner that is acceptable to the Director.
- 67. The Licencee shall submit to the Director for approval at least 30 days before any wastes are deposited at the compost facility, an operations manual for the compost facility. The operations manual shall address, but not be limited to:
  - a) waste receiving and placement;
  - b) nuisance control;
  - c) surface water management;
  - d) compost handling and treatment procedures;
  - e) inspection and maintenance;
  - f) leachate management; and

PWS Canada Inc. - Integrated Waste Management Facility Licence No. 2177 E R5 Page 15 of 20

- g) monitoring and reporting.
- 68. The Licencee shall operate the compost facility in accordance with the operations manual approved by the Director pursuant to Clause 67 of this Licence.
- 69. The Licencee shall not sell or make available to any third party compost generated at the development that does not achieve the quality requirements and specifications as contained in the most recent edition of the Canadian Council of Ministers of the Environment publication entitled "Guidelines for Compost Quality PN1340".
- 70. The Licencee shall not discharge any leachate from the compost facility without prior written authorization from the Director.

## **Monitoring – Composting Facility**

- 71. The Licencee shall maintain, at the operator's office, records of all wastes received at the compost facility. These records shall contain, but not be limited to the following:
  - a) the date wastes were received at the compost facility;
  - b) the original location of any industrial source wastes; and
  - c) the volume received, either estimated or actual.
- 72. The Licencee shall maintain, at the operator's office, records of all waste or compost removed from the compost facility. These records shall contain, but not be limited to the following:
  - a) the date the waste or compost was removed;
  - b) the volume removed;
  - c) the final end use destination of the waste or compost removed; and
  - d) any additional information as requested by the Director.
- 73. The Licencee shall, from the date of this Licence until such time that the Director agrees to adjust the monitoring requirements, conduct a monitoring program that includes, but is not limited to the following:
  - a) daily measurements of moisture content and temperature of the compost;
  - b) weekly measurements of moisture content and temperature of the curing compost;
  - c) semiannual measurements of ammonia, nitrate, sulphur, phosphorus, potassium, zinc, magnesium, iron, copper, boron, sodium and calcium of the final compost;
  - d) daily record of type and quantity of material processed;
  - e) weekly record of quantity of compost generated;
  - f) weekly record of disposal method for compost and other processed material; and
  - g) any other parameter at any frequency as required by the Director.
- 74. The Licencee shall have available for inspection by the assigned Environment Officer upon request the records referred to in Clauses 71, 72 and 73 of this Licence and shall provide annually to the Director a report summarizing the activities at the compost facility in the annual report pursuant to Clause 91 of this Licence.

## SITE DRAINAGE, PONDS AND LEACHATE

#### **Operation – Site Drainage, Ponds and Leachate**

- 75. The Licencee shall, within sixty days of the date of this Licence, file a management plan, and receive approval of the Director, prior to operation of the Development, for the collection, storage and treatment of leachate collected from the Development.
- 76. The Licencee shall manage leachate in accordance with the management plan approved by the Director, pursuant to Clause 75 of this Licence.
- 77. The Licencee shall collect and manage all liquids collected in drain sumps at the Development in a manner approved by the Director, or at an alternate off-site licenced facility approved by the Director.
- 78. The Licencee shall collect and treat all wash water from the truck wheel wash area in a manner approved by the Director, or at an alternate off-site licenced facility approved by the Director.
- 79. The Licencee shall collect and contain all surface runoff at the Development in the Stormwater Retention Ponds.

#### Monitoring-Site Drainage, Ponds and Leachate

80. The Licencee shall test the quality of the liquid in the Stormwater Retention Ponds and receive approval of the assigned Environment Officer prior to release or use of the liquid.

#### **MONITORING**

- 81. The Licencee shall keep for inspection, records of all monitoring at the Development, at the operator's office.
- 82. The Licencee shall develop a monitoring program for the Development, to address monitoring of air, soil, groundwater, piezometric level, surface water quality, leachate buildup and landfill gas generation. The program shall address, but not be limited to:
  - a) obtaining background information on air, surface and groundwater quality prior to operation of the Development;
  - b) ongoing monitoring during Development operation;
  - c) the number of monitoring sites/wells including private wells down gradient from the Development;
  - d) the frequency of monitoring; and
  - e) the parameters to be monitored.

- 83. The Licencee shall submit the monitoring program developed pursuant to Clause 82 of this Licence, to the Director for approval within 60 days of the date of this Licence.
- 84. The Licencee shall undertake the sampling and analysis of the background water quality for surface water and groundwater in accordance with the plan approved pursuant to Clause 82, of this Licence. Monitoring shall include the chemical and microbiological parameters listed in Table 1 of this Licence.
- 85. The Licencee shall compare the analytical results obtained for the sampling carried out pursuant to Clause 82 with the levels that were determined in the wells prior to the operation of the Development.
- 86. Where the Licencee fails to undertake the monitoring program approved pursuant to Clause 82, of this Licence, the Director may cause such monitoring to be undertaken and recover the cost of such monitoring from the Licencee.

# **CONTIGENCY PLAN**

- 87. The Licencee shall develop a contingency plan to be implemented in the event that the monitoring program identifies any pollutant in air, soil, surface or groundwater, as a result of the operation of the Development, in excess of background levels. The plan shall be submitted to the Director for approval within 60 days of the date of this Licence.
- 88. The Licencee shall report to the assigned Environment Officer all incidents requiring contingency plan action regarding groundwater or surface water pollution within seven (7) days from the occurrence of such incidents, including the nature of the incident, substances involved, the area affected, action taken and follow up action proposed to be taken.
- 89. The Licencee shall implement and maintain the monitoring program and contingency plan as approved by the Director, pursuant to Clauses 82 and 87 of this Licence.
- 90. The Licencee shall keep for inspection, records of the details of all incidents requiring the implementation of the contingency plan of the Development, at the Development site office.

# ANNUAL REPORT

91. The Licencee shall, on or before the 15th day of March of the year following that which the report addresses, submit an annual report with respect to all monitoring activities at the Development conducted pursuant to this Licence during the previous calendar year. The format and content of the report shall be approved by the Director. The report shall be filed with Manitoba Conservation and Water Stewardship, adjacent municipal governments, and the Community Liaison Committee.

PWS Canada Inc. - Integrated Waste Management Facility Licence No. 2177 E R5 Page 18 of 20

- 92. The Licencee shall include in the annual report stipulated in Clause 91 of this licence, the following information with respect to all activities at the petroleum contaminated soil treatment facility conducted pursuant to this Licence during the previous calendar year:
  - a) the amount and type of petroleum contaminated soils treated at the soil remediation facility and a summary of the results of after treatment analyses of petroleum contaminated soils and the final disposition of the treated soils;
  - b) a summary of all citizen complaints concerning dust, noise and odour from the petroleum contaminated soil treatment facility together with a report on each incident that includes information on what actions were taken to resolve the concerns; and
  - c) summary reports and details of all incidents that required implementation of the Development contingency plan.

# FINANCIAL ASSURANCE/INSURANCE

- 93. The Licencee shall, within 60 days of the date of this Licence, file an irrevocable letter of credit with the Director in the sum of \$100,000. The letter of credit shall be replaced annually with the Director with a new letter of credit adding an incremental \$100,000 per year until a maximum aggregate value of \$1,000,000 is reached.
- 94. The Licencee shall, within 60 days of the date of this Licence, file verification with the Director, of the Licencee accruals for closure and post closure care and maintenance of the Development, in the form of an insurance policy in the amount of \$1,000,000 payable to the Director's use in case of any default by the Licencee.
- 95. The Licencee shall purchase and maintain:
  - a) Comprehensive General Liability Insurance with a minimum limit of \$5.0 million per occurrence providing coverage for the premises and all operations of the Licencee, including completed operations. The terms and conditions of coverage shall be satisfactory to the Director, and without limitations shall include coverage for bodily injury (including death), personal injury and accidental property damage, blanket contractual broad form property damage, and non-owned automobile coverages;
  - b) Automobile Liability Insurance for all owned and non-owned licenced vehicles used in connection with the operation of the Development and which provides coverage against liability arising from third party bodily injury or property damage for a minimum of \$5.0 million per occurrence with terms and conditions satisfactory to the Director. If the automobile liability policy excludes coverage for sudden and accidental pollution, this coverage shall be provided under the Environmental Impairment Liability Policy or the Comprehensive General Liability Policy; and
  - c) Environmental Impairment Liability Insurance providing coverage for the Licencee's On and Off-site operations associated with the Development. The minimum limits shall be \$5.0 million per occurrence or claim and shall include, without limitation, coverage for on-site and off-site clean up, gradual pollution and sudden and accidental pollution incidents. Terms and conditions of coverage shall be satisfactory to the Director. Environmental impairment resulting from the loading and unloading of

PWS Canada Inc. - Integrated Waste Management Facility Licence No. 2177 E R5 Page 19 of 20

> licenced vehicles shall be covered under the Environmental Impairment Liability Policy or under the Comprehensive General Liability Policy on a sudden and accidental basis; or via a specific endorsement on the automobile liability policy. The Environmental Impairment Liability Insurance shall be maintained for a minimum period of five years after Development closure.

## EMERGENCY RESPONSE PLAN

96. The Licencee shall prepare and maintain an emergency response plan in accordance with the Canadian Centre for Occupational Health and Safety "Emergency Response Planning Guide" or other emergency planning document acceptable to the Director.

# **CLOSURE AND POST CLOSURE**

- 97. The Licencee shall submit, within one year of the date of issuance of this Licence, for the approval of the Director, a Preliminary Closure and Post Closure Plan for the Development. The Plan shall include, but not be limited to, information with respect to:
  - a) final cover design and maintenance;
  - b) maintenance of leachate detection, collection and treatment;
  - c) groundwater monitoring;
  - d) landfill gas monitoring, collection and treatment; and
  - e) financial assurance required to implement the Plan.
- 98. Within one year prior to imminent closure of the Development, the Licencee shall submit, for the approval of the Director, a formal detailed Closure and Post Closure Plan for the Development.
- 99. The Licencee shall implement and maintain the approved Closure and Post Closure Plan.

# **REVOCATION**

- A. Licence No. 2177 E RRRR 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 the Licencee has not commenced construction within three years of the date of this Licence, this Licence is revoked.

PWS Canada Inc. - Integrated Waste Management Facility Licence No. 2177 E R5 Page 20 of 20

- 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*.
- E. The Financial Assurance/Insurance Requirements of this Licence shall be reviewed, affirmed or amended by the Director at five year intervals.

"original signed by"

Tracey Braun, M.Sc. *The Environment Act* 

Client File No.: 3851.00

# TABLE 1TO ENVIRONMENT ACT LICENCE NO. 2177 E R5, Clauses 48 and 84BACKGROUND WATER QUALITY CHEMICAL AND MICROBIOLOGICAL PARAMETERS

Parameter	Notes
Alkalinity-bicarbonate	Dissolved
Alkalinity-carbonate	Dissolved
Alkalinity-hydroxide	Dissolved
Alkalinity-total	Dissolved
Hardness- as CaC0 <sub>3</sub>	Dissolved
pH-units	Dissolved
Specific Conductivity	Dissolved
Turbidity-NTU	
Residue-filterable	
Residue-non filterable	
Residue-total	
Chloride	Dissolved
Sulphate	Dissolved
Cyanide-total	Dissolved
Ammonia	Dissolved
Nitrate-Nitrite-Nitrogen	Dissolved
Total Kjeldhal Nitrogen	
Phosphorus	Dissolved
Arsenic	Dissolved
Barium	Dissolved
Beryllium	Dissolved
Cadmium	Dissolved
Calcium	Dissolved
Chromium	Dissolved
Copper	Dissolved
Iron	Dissolved
Lead	Dissolved

#### TABLE 1 (cont'd.) TO ENVIRONMENT ACT LICENCE NO. 2177 E R5, Clauses 48 and 84 BACKGROUND WATER QUALITY CHEMICAL AND MICROBIOLOGICAL PARAMETERS

Parameter	Notes
Magnesium	Dissolved
Manganese	Dissolved
Mercury	Extractable
Nickel	Dissolved
Potassium	Dissolved
Selenium	Dissolved
Silver	Dissolved
Sodium	Dissolved
Zinc	Dissolved
Naphthalene	
Benzo a pyrene	
Anthracene	
CCME Petroleum Hydrocarbon Fraction 1	
CCME Petroleum Hydrocarbon Fraction 2	
CCME Petroleum Hydrocarbon Fraction 3	
CCME Petroleum Hydrocarbon Fraction 4	
Benzene	
Ethylbenzene	
Toluene	
Xylene	
Vinyl Chloride	
Diazinon	
2, 4-D	
Coliforms	Fecal & Total