



Conservation and Water Stewardship

Environmental Stewardship Division
Environmental Approvals Branch
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www.gov.mb.ca/conservation/eal

CLIENT FILE NO.: 3741.10

July 14, 2015

Allan Hambley, Plant EHS Manager
Swan Valley OSB
P.O. Box 189
Minitonas, MB R0A 1A0

Dear Mr. Hambley:

Re: LP Swan Valley Plant – Notice of Alteration

Enclosed is a revised **Environment Act Licence No. 2954 RR** dated July 14, 2015 issued to **Louisiana-Pacific Canada Ltd.** for the Notice of Alteration (NoA) dated June 12, 2015 proposed to upgrade the existing Oriented Stranded Board plant to an insecticide impregnated siding product manufacturing facility. The upgrade will involve in the following:

1. Construction activities, site reconfiguration, rail tracks improvement, and equipment rearrangements and retrofitting.
2. The removal of the phenol-formaldehyde for the production process and conversion of the binding agent to be 100% methylene di-phenyl di-isocyanate (MDI).
3. Introduction of zinc borate to increase insect, fire and fungi resistance of the siding product.
4. Installation of a new Panel and Lap finishing line that includes paper application, paint booths, paint drying ovens, and an embossing plate.
5. Use of water-based paint at the finishing line of the siding product.

The alteration will result in non-detected emission of zinc borate and an increase in MDI emissions that will remain below the existing licence limit of 0.089 g/s. The facility will also maintain its capacity to manufacture OSB as per the existing process to accommodate a future market demand.

Upon review of the alteration request, I have concluded that the environmental effects of the NoA will be insignificant, and, therefore, in accordance with Section 14(2) of *The Environment Act* you are hereby authorized to carry out the proposed alteration as described in the June 12, 2015 NoA and in accordance with the enclosed revised Licence.

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.

If you have any questions on this matter, please contact Mr. Eshetu Beshada of this office at (204) 945-7023. For any operational issues please contact the District Supervisor Nicole Lavallee at (204) 622-2125.

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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
Environmental Approvals Branch

Enc.

- c: Don Labossiere, Director, Environmental Compliance and Enforcement Branch
- Tim Prawdzik, Provincial Manager, Environmental Compliance and Enforcement Branch
- Nicole Lavallee, District Supervisor, Environmental Compliance and Enforcement Branch
- Peter Crocker, Environment Officer, Environmental Compliance and Enforcement Branch
- Mike McKernan, Stantec; Kevin Betcher, Louisiana-Pacific Canada Ltd.
Public Registries

NOTE: Confirmation of Receipt of this Licence No. 2954 RR (*by the Licensee 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 by July 28, 2015.

On behalf of Louisiana-Pacific Canada Ltd.;

Date

LICENCE

Licence No. / Licence n° 2954 RR

Issue Date / Date de délivrance March 24, 2011

Revised: December 21, 2011

Revised: July 14, 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 Section 10(2) / Conformément au Paragraphe 10(2)

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

LOUISIANA-PACIFIC CANADA LTD.;
"the Licencee"

for the continued operation of the Development, being an Oriented Strand Board and insecticide-impregnated siding product manufacturing plant located on the East half of Section 16, Township 36, Range 25 WPM, excepting that portion taken for the right-of-way of the Canadian National Railway, in the Rural Municipality of Minitonas, pursuant to The Environment Act Proposal submitted on May 5, 1994, and altered on June 28, 1994, September 9, 1994, February 9, 1995, April 25, 1995, October 2, 1995, October 11, 1995, May 14, 1996, and April 21, 1997, and pursuant to the Environment Act Proposal submitted on January 19, 2009 and the additional information submitted on July 3, 2009, and the Notice of Alteration dated June 12, 2015 and subject to the following specifications, limits, terms and conditions:

PART 1—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 Conservation 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;

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

"days" means calendar days unless otherwise indicated;

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

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

"E-tube" means a trademark wet electrostatic precipitator by Geoenergy International Corporation;

"effluent" means treated wastewater flowing or pumped out of the wastewater treatment lagoon or run-off retention pond;

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

"ESP" means electrostatic precipitator;

"failure" means either an event or series of events where a piece of equipment is not operating or is operating outside the normal operating range for any parameter and which may result in the release of a pollutant in excess of any specification, limit, term, or condition of this Licence, or the omission of an action described in the approved contingency plan or detailed inspection and maintenance plan which may result in the non-detection of a release of a pollutant in excess of any specification, limit, term, or condition of this Licence;

"fecal coliform" means aerobic and facultative, Gram-negative, nonspore-forming, rod-shaped bacteria capable of growth at 44.5°C, and associated with fecal matter of warm-blooded animals;

"five-day biochemical oxygen demand" means that part of the oxygen demand usually associated with biochemical oxidation of organic matter within five days at a temperature of 20°C;

"fugitive dust emissions" means particulate matter escaping from sources within the plant property into the atmosphere other than through any of the emission stacks or vents;

"grab sample" means a single sample taken at a given place and time;

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

"high water mark" means the line on the interior surface of the primary and secondary cells which is normally reached when the cell is at the maximum allowable liquid level;

"low water mark" means the line on the interior surface of the primary and secondary cells which is normally reached when the cell is discharged;

"MDI" means Diphenyl Methane Diisocyanate;

"MPN Index" means the most probable number of coliform organisms in a given volume of wastewater which, in accordance with statistical theory, would yield the observed test result with the greatest frequency;

"90th percentile" means the statistically derived value that equals to the quantity produced or consumed daily by a component of the Development, that was exceeded on 10 percent of the days that the component of the Development operated in the year;

"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;

"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;

"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;

"ponding" means the surface retention of water or liquid for a period of time sufficient to allow infiltration of the water or liquid below the soil surface, excluding riprap, to a depth in excess of 10 centimetres;

"primary cell" means the first in a series of cells of the wastewater treatment lagoon system and which is the cell that receives the untreated wastewater;

"recyclable material" means a waste that is intended for reuse, recovery or recycling but does not include a product, substance or organism that is intended to be:

- a) applied into or onto land, or
- b) disposed of in a thermal destruction process;

"reference level" means the rate, as the average tons per hour, of production or consumption that equals the value of the 90th percentile of the daily production or consumption by a component of the Development over the previous year;

"riprap" means small, broken stones or boulders placed compactly or irregularly on dykes or similar embankments for protection of earth surfaces against wave action or current;

"secondary cell" means a cell of the wastewater treatment lagoon system which is the cell that receives partially treated wastewater from the primary cell;

"SAR" means sodium absorption ratio;

"sodium absorption ratio" means the dimensionless value where:

$$\text{SAR} = \frac{0.044 \times \text{Sodium concentration}}{\sqrt{(0.025) \text{ Calcium concentration} + (0.041) \text{ Magnesium concentration}}};$$

"stack" means a structure through which air pollutants generated at the Development are conveyed to the atmosphere;

"total coliform" means a group of aerobic and facultative anaerobic, Gram-negative, nonspore-forming, rod-shaped bacteria, that ferment lactose with gas and acid formation within 48 hours at 35 °C, and inhabit predominantly the intestines of man or animals, but are occasionally found elsewhere and include the sub-group of fecal coliform bacteria;

"total particulate matter" means the total of both the condensable and non-condensable particulate matter;

"TPM" means total particulate matter;

"trained observer" means a person who attended approved field determination of opacity training within the preceding year;

"VOC" means volatile organic compound;

"volatile organic compound" means any organic compound which participates in atmospheric photochemical reactions, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic

carbides and carbonates, ammonium carbonate, and other compounds which may be exempt by the Director; and

"wastewater treatment lagoon" means the component of the Development which consists of an impoundment into which wastewater is discharged for storage and treatment by natural oxidation.

PART 2—GENERAL REQUIREMENTS

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

1. In addition to any of the following specifications, limits, terms and conditions specified in this Licence, the Licencee shall, 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, ambient quality, aquatic toxicity, leachate characteristics, or discharge rates, for such duration and at such frequencies as may be specified;
 - b) determine the environmental impact associated with the release of any pollutants from the said plant;
 - 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, 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" published jointly by the American Public Health Association, the American Waterworks Association and the Water Pollution Control Federation, or in accordance with an equivalent analytical methodology approved in advance;
 - b) carry out all sampling of, and preservation and analyses on air samples in accordance with the appropriate Schedule attached to this Licence or with methodologies approved in advance for those variables for analyses not listed in a Schedule;
 - c) carry out all sampling of, and preservation and analyses on solid samples in accordance with methodologies approved in advance;
 - d) have all analytical determinations undertaken by an accredited laboratory or by a laboratory acceptable to the Director; and
 - e) report the results to the Director within 60 days of the samples being taken.
3. The Licencee shall have all monitoring activities, data collection and interpretations requested through the provisions of this Licence carried out by individuals properly trained or qualified to carry out these tasks.

4. 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 specified by the Director or Environment Officer, and each submission shall be clearly labelled with the Licence Number and Client File Number associated with this Licence.
5. The Licencee shall reduce the production and dissemination of wastes by initiating and maintaining waste reduction and waste recycling programs.
6. The Licencee shall, as deemed necessary by the Director for effective environmental management, carry out any remedial measures, modifications, or alterations in respect to matters authorized under this Licence.
7. The Licencee shall participate on a Community Liaison Committee established by the Director for the purpose of facilitating the exchange of information between the residents of the Swan River Valley and the Licencee, and shall, as deemed necessary by the Director, provide the Community Liaison Committee with information relating to the construction, operation and monitoring activities and such other matters authorized by this Licence including proposed amendments to operating, monitoring, or disposal plans.
8. 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.
9. The Licencee shall, following the reporting of an event pursuant to Clause 8.
 - 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 one week of the repairs being done.
10. 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.
11. The Licencee shall maintain the financial assurance plan, approved on April 28, 1995. The Licencee may submit, for approval, proposed amendments to the plan. The Licencee shall implement any amendments approved, in a manner and within the time frames specified in the Approval.
12. The Licencee shall provide satisfactory written evidence of the financial assurance described in Clause 11 of this Licence, as requested by the Director.

13. The Licencee shall prevent the release of fugitive dust emissions beyond the property on which the Development is located.
14. The Licencee shall cooperate with and/or conduct any health studies deemed necessary by the Director and Manitoba Health.

PART 3—MONITORING AND REPORTING

15. The Licencee shall provide a stack or stacks at any area of the Development 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 Conservation Guideline, *Guideline for Stack Sampling Facilities*, unless otherwise approved by the Director.
16. The Licencee shall conduct stack emission monitoring, while the Development is operating at or above the reference level, for each component and parameter listed in Schedule 4 attached to this Licence:
 - a) prior to December 31, 2012;
 - b) every two years thereafter.
17. The Licencee, at least 60 days prior to performing stack sampling as required by Clause 16 of this Licence, 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. 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.
18. The Licencee shall perform all stack sampling in accordance with the most recent version of Manitoba Conservation Report No. 96-07, *Interim Stack Sampling Performance Protocol*, unless otherwise approved by the Director.
19. The Licencee shall arrange the scheduling of the sampling program, approved pursuant to clause 17 of this Licence, such that a representative of Manitoba Conservation is available to monitor and audit the implementation of the sampling program.
20. The Licencee, within 60 days of the receipt of the analytical results of the sampling program approved pursuant to Clause 17 of this Licence, shall submit a report for the approval of the Director containing 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.
21. The Licencee shall conduct a wastewater treatment lagoon effluent monitoring program and the monitoring program shall, unless otherwise approved in advance:
- a) continue for such a period of time as is required for 5 separate discharge events to occur;
 - b) include the collection of one grab sample of effluent on the first day and every other day thereafter for:
 - i) The duration of the effluent discharge; or
 - ii) Until 15 samples are so collected;
 - c) include the analyses of the grab samples collected for: five-day biochemical oxygen demand, fecal coliform content, total coliform content, electrical conductivity, sodium, calcium, and magnesium;
 - d) include the determination of the SAR of the grab samples collected; and
 - e) determine the environmental impact associated with the release of the wastewater treatment lagoon effluent characterized by the determined SAR.
22. The Licencee shall:
- a) record and retain the record of the operating parameter information listed in Schedule 5 of this Licence, for a period not less than five (5) years, unless otherwise approved in advance;
 - b) make the records of the operating parameter information listed in Schedule 5 of this Licence, available to an Environment Officer upon request; and
 - c) upon request of the Director, prepare and make a copy available to the Director a report of the operating parameter information listed in Schedule 5 of this Licence.
- The Licencee may submit, for approval, proposed amendments to Schedule 5. The Licencee shall implement any amendments approved, in a manner and within the time frames specified in the Approval.
23. The Licencee shall continue implementation of the following:
- a) an ambient air quality monitoring plan as outlined in Schedule 1 attached to this Licence, and following methodology approved by the Director, at the three existing ambient monitoring site locations, and the existing meteorological station, for a period of five years from March 24, 2011 licence issue date at which time the Director will determine whether the program is required to continue;
 - b) an ambient surface water quality monitoring plan as outlined in Schedule 2 attached to this Licence; and
 - c) a groundwater monitoring plan as outlined in Schedule 3 attached to this Licence.

The Licencee may submit, for approval, proposed amendments to the ambient air quality, ambient surface water quality or the groundwater monitoring plans. The Licencee shall implement any amendments approved, in a manner and within the time frames specified in the Approval.

24. The Licencee shall report the results of the ambient air monitoring program within 60 days of the end of each three month sampling period.
25. The Licencee shall continue the fauna portion of the flora and fauna study, approved on March 24, 1997, for a period of five years from the date of this Licence, at which time the Director will determine if the study is required to continue.
26. The Licencee shall conduct detailed inspection and maintenance of emission control and monitoring equipment according to the Inspection and Maintenance for Emission Control and Monitoring Equipment Plan approved on November 17, 1995, and shall take action to ensure that all pollutant control and monitoring equipment operate in accordance with design specifications. The Licencee may submit, for approval, proposed amendments to the plan. The Licencee shall implement any amendments approved, in a manner and within the time frames specified in the Approval.
27. The Licencee shall be responsible for payment of costs incurred by the Director or on his or her behalf, deemed by the Director to be necessary for the purpose of:
 - a) monitoring any pollutants for which a limit is prescribed pursuant to Part 6 of this Licence;
 - b) reviewing the Licencee's obligation to monitor pursuant to Clause 16 of this Licence or reviewing any other obligations for monitoring imposed on the Licencee pursuant to this Licence; or
 - c) determining compliance with any other specification, limit, term, or condition of this Licence.

The information collected as a result of monitoring of any pollutant for which a limit is prescribed in this Licence or while determining compliance with any other specification, limit, term, or condition of this Licence, may be used in evidence in any prosecution for an offense under *The Environment Act* subject to evidentiary rules as applicable.

28. The Licencee shall inform the Director of any complaints received related to air emissions or odour emissions from the Development, and shall provide the required notification within 24 hours of receiving a complaint or before noon of the first business day following a complaint on a weekend or statutory holiday. Such notification shall be by facsimile, e-mail or any other notification procedure approved in advance.

PART 4—SOLID WASTES MANAGEMENT

29. The Licencee shall handle, process, and/or dispose of all wood residuals in a manner that does not allow contamination of groundwater, surface water, or soil.

30. The Licencee shall maintain the ash collection, conveyance, storage and transfer facilities in such a manner so as to prevent:
 - a) the contamination of surface water or groundwater;
 - b) the release of fugitive dust emissions from the ash handling facilities beyond the boundary of the property on which the Development is situated; and
 - c) the release of hot ash to nearby combustible materials.
31. The Licencee shall dispose of all ash in an approved manner. The Licencee may submit, for approval, proposed amendments to the disposal method. The Licencee shall implement any amendments approved, in a manner and within the time frames specified in the Approval.
32. The Licencee shall, unless otherwise approved in advance, dispose of all blender waste by incineration in the thermal oil heater system.
33. The Licencee shall maintain the excess bark and wood fines collection, conveyance, and storage facilities in such a manner so as to prevent:
 - a) the contamination of groundwater;
 - b) the release of fugitive dust emissions from the excess bark and wood fines handling facilities beyond the boundary of the property on which the Development is situated; and
 - c) combustion of the excess bark or wood fines while being handled or in storage.
34. The Licencee shall deposit all domestic and office solid wastes that are not recycled into a waste disposal ground approved pursuant to either Manitoba Regulation 150/91 or The Environment Act.

PART 5—LIQUID WASTES MANAGEMENT

35. The Licencee shall not discharge wastewater from the run-off retention pond without prior approval of an Environment Officer and shall only discharge wastewater from the run-off retention pond in accordance with any instructions issued in the Approval.
36. The Licencee shall maintain the raw log storage area, in a manner acceptable to the Director, with materials and at such slopes so as to prevent ponding and to direct all the runoff water to the runoff collection ditch network.
37. The Licencee shall maintain, in a manner acceptable to the Director, the runoff collection ditch network at such slopes so as to prevent ponding and that directs all the runoff water to the runoff retention pond.
38. The Licencee shall direct all sewage generated at the Development toward the wastewater treatment lagoon or other approved sewage treatment facilities.

39. The Licencee shall not discharge the following substances to the wastewater collection system or the wastewater treatment lagoon:
 - a) hazardous wastes;
 - b) plant and equipment wash water;
 - c) fire control water; or
 - d) water treatment wastewater.
40. The Licencee shall operate and maintain the wastewater treatment lagoon in such a manner that:
 - a) the organic loading on the primary cell, as indicated by the five-day biochemical oxygen demand, is not in excess of 56 kilograms per hectare per day; and
 - b) the depth of liquid in the primary cell or secondary cell does not exceed 1.5 metres.
41. The Licencee shall install and maintain a fence around the wastewater treatment lagoon to restrict access.
42. The Licencee shall, if in the opinion of the Director, significant erosion of the interior surfaces of a wastewater treatment lagoon dyke occurs, repair the erosion and install riprap as necessary. The riprap shall be placed on the interior dyke surfaces from 0.6 metres above the high water mark to 0.6 metres below the low water mark to protect the dykes from wave action.
43. The Licencee shall provide and maintain a vegetation cover on the dykes of the wastewater treatment lagoon and shall regulate the growth of the vegetation on the dykes so that the height of the vegetation does not exceed 0.3 metres.
44. The Licencee shall not discharge effluent from the wastewater treatment lagoon:
 - a) where the organic content of the effluent, as indicated by the five-day carbonaceous biochemical oxygen demand, is in excess of 25 milligrams per litre;
 - b) where the fecal coliform content of the effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample;
 - c) where the total coliform content of the effluent, as indicated by the MPN index, is in excess of 1500 per 100 millilitres of sample;
 - d) between the 1st day of October of any year and the 15th day of May of the following year; or
 - e) where the SAR is in excess of the limit, which limit shall be prescribed by the Director upon completion of a review of the monitoring program results and the environmental impact determined pursuant to Clause 23 of this Licence.
45. The Licencee shall:
 - a) dispose effluent by spray irrigation onto land owned by or under control of the Licencee;
 - b) only discharge effluent to irrigate:
 - i) actively growing cereal, forage or oil seed crops;
 - ii) grasslands which will not be utilized for grazing:
 - A. by dairy cattle for at least 30 days after effluent is applied; or
 - B. by livestock other than dairy cattle for at least 7 days after effluent is applied;
 - c) not harvest agriculture crops for at least 7 days after the crops are irrigated with effluent;
 - d) use any corn irrigated with effluent solely for making silage;
 - e) not apply effluent to particular lands for more than 10 continuous hours in every 24-hour period; and

- f) if ponding or surface runoff occurs during application, reduce the gross depth of effluent applied during any application of effluent so that ponding or surface runoff does not occur.
46. The Licencee shall not discharge effluent by spray irrigation:
- a) within 300 metres of any dwelling not owned or lawfully controlled by the Licencee;
 - b) within 100 metres of any surface watercourse or groundwater well not protected from effluent runoff; or
 - c) within 100 metres of any adjoining property boundary, existing as of October 31, 1997.

PART 6—ATMOSPHERIC EMISSION MANAGEMENT

47. The Licencee shall not emit total particulate matter from:
- a) any source of emission within the Development such that:
 - i) the average of any 24 consecutive opacity observations taken at 15 second intervals exceeds 20 percent;
 - ii) more than 16 individual opacity observations within any 1 hour period exceed 20 percent; or
 - iii) any individual opacity observation exceeds 40 percent; or that
 - b) any source of emission within the Development such that a visible particulate residue is deposited, at any time, beyond the boundary of the property on which the Development is situated.
48. The Licencee shall not cause or permit a noise nuisance to be created as a result of the construction, operation, or alteration of the facility, and shall take such steps as the Director may require to eliminate or mitigate a noise nuisance.
49. The Licencee shall not cause or permit an odour nuisance to be created as a result of the construction, operation, or alteration of the facility, and shall take such steps as the Director may require to eliminate or mitigate an odour nuisance.
50. The Licencee shall not emit any pollutant from any pollutant source listed in Schedule 6 of this Licence other than through the corresponding control equipment listed in Schedule 6 of this Licence, unless otherwise approved in advance.
51. The Licencee shall, upon the request of the Director, conduct a review of Best Available Control Technology Economically Achievable for the control of VOC, particulate matter, and other air pollutant control at the Development. This review shall include, but not be limited to, the pollutants for which air emission limits are described in clauses 52 to 56 of this Licence.

Baghouses

52. The Licencee shall not emit pollutants from the Development such that any pollutant from the following sources exceeds the limit value listed, as determined pursuant to the stack sampling required by Clause 16 of this Licence:

Pollutant Source	Pollutant	Limit (grams per second)
a) BH1 Trim Saws:.....	TPM.....	0.15
b) BH2 Formers:.....	TPM.....	0.09
	Phenol.....	0.30
c) BH3 Raw fuel storage bin:.....	TPM.....	0.09
d) BH4 Sander dust:.....	TPM.....	0.11
e) BH5 Flying cut-off saw:.....	TPM.....	0.13
f) BH6 Sander Dust:.....	TPM.....	0.11

Thermal Oil Heater System

53. The Licencee shall not emit pollutants from the Development such that any pollutant from the following source exceeds the limit value listed, as determined pursuant to the stack sampling as required by Clause 16 of this Licence:

Pollutant Source	Pollutant	Limit (grams per second)
Thermal oil heater ESP	Benzene.....	0.0066
	Nitrogen Oxides.....	5.3
	Phenol.....	0.4
	TPM.....	2.18
	Total VOCs.....	1.41

Wood Strand Dryers

54. The Licencee shall not emit pollutants from the Development such that any pollutant from the following source exceeds the limit value listed, as determined pursuant to stack sampling as required by Clause 16 of this Licence:

Pollutant Source	Pollutant	Limit (grams per second)
Combined Dryer E-tubes	Acrolein.....	0.28
	Benzene.....	0.172
	Formaldehyde.....	4.0
	Nitrogen oxides.....	5.3
	Phenol.....	0.5
	TPM.....	5.14
	Total VOCs.....	20.96

Press

55. The Licencee shall not emit pollutants from the Development such that any pollutant from the following source exceeds the limit value listed, as determined pursuant to the stack sampling as required by Clause 16 of this Licence:

Pollutant Source	Pollutant	Limit (grams per second)
Press	Benzene.....	0.0197
	Formaldehyde.....	1.1
	MDI.....	0.089
	Phenol.....	0.7
	TPM.....	2.1
	Total VOCs.....	2.78

56. The Licencee shall immediately cease operation of any wood strand dryer in the event of a shutdown or a failure of an E-tube emission control system connected to that wood strand dryer.

57. The Licencee shall record each occurrence of shutdown or a failure of a Dryer E-tube, or each occurrence of emissions from the Thermal Oil Heater System emergency stack or Dryer Energy System emergency stack, compiling the following information:

- a) date and time of the occurrence;
- b) time required to shut down the affected component;
- c) component affected;
- d) reason for the occurrence;
- e) action taken to correct the cause of the occurrence and the action taken to prevent the occurrence from repeating;
- f) date and time of re-start or cessation of emission; and

submit that information to the Director, within 24 hours of the re-start or cessation of emission or before noon of the first business day following an occurrence on a weekend or statutory holiday. Such notification shall be by facsimile, e-mail or any other notification procedure approved in advance.

58. The Licencee shall submit an annual report to the Director summarizing the information compiled in Clauses 8, 26, and 57 of this Licence over the previous calendar year, not later than March 1 of each year.

59. The Licencee shall not burn fuel oil that has a sulphur content in excess of 0.05% by weight in stationary equipment at the Development.

60. The Director may impose such additional specifications, limits, terms, or conditions deemed necessary for effective environmental management in response to the results of monitoring obligations imposed on the Licencee by this Licence.

61. The Licencee shall provide advance notification to the Director of periods lasting in excess of one week during which the Development will not be operating. Such notification shall be by facsimile, e-mail or any other notification procedure approved in advance.

REVIEW AND REVOCATION

- A. This Licence replaces Licence No. 2954 R which is hereby rescinded.
- B. If in the opinion of the Director, the Licencee has exceeded or is exceeding or has failed 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 set out in this Licence, the Director may require the filing of a new proposal pursuant to the Environment Act.

“original signed by”

Tracey Braun, M.Sc.
Director
Environment Act

File No.: 3741.10

Schedule 1
to
Environment Act Licence No 2954 RR
Ambient Air Quality Monitoring Plan

Table 1.1 Variables and Methods for Analysis and Monitoring Frequency

Pollutant	Averaging Period	Sampling Frequency
Acrolein	24-hour	6-day cycle
Benzene	24-hour	6-day cycle
Formaldehyde	1-hour ¹	6-day cycle
MDI	24-hour	6-day cycle

¹ Calculated by applying a conversion factor of 2.5 to the measured 24 hour average

Schedule 2
to
Environment Act Licence No 2954 RR
Ambient Surface Water Quality Monitoring Plan

Table 2.1 Monitoring Site Locations and Frequency.

Sampling Point	Location¹	Sampling Method	Frequency
AP1	South end of property	Grab	Weekly ² , when flow is present
AP2	South end of property	Grab	Weekly, when flow is present
AP4	Northwest of mill	Grab	Weekly, when flow is present
Surface Drain	North end of property	Grab	Weekly, when flow is present

¹ As indicated on attached Figure 1

² weekly means at an interval between sample collection events of not less than 5 days and not greater than 7 days

Table 2.2 Water Quality Variables for Analysis

Ammonia	Total Dissolved Solids	Total Suspended Solids
Biochemical Oxygen Demand	Total Kjeldahl Nitrogen	Turbidity
Colour (true)	Total Organic Carbon	
Conductivity	Total Phenols	
Dissolved Organic Carbon	Total Phosphorus	
Dissolved Oxygen	Total Suspended Solids	
Fecal Coliform (MPN)	Total Solids	

Schedule 3
to
Environment Act Licence No 2954 RR
Ground Water Monitoring Plan

Table 3.1 Monitoring Site Locations and Frequency.

Well¹	Location	Frequency
LP1	North of railway spur in the South-east corner of property (as shown on Figure 3.1)	Semi-annually ²
LP2	North-west corner of ash storage (as shown on Figure 3.1)	Semi-annually ²
LP3	Center of log yard (as shown on Figure 3.1)	Semi-annually ²
LP4	Centre of the North boundary of log yard (as shown on Figure 3.1)	Semi-annually ²
LP5	North-east corner of log yard (as shown on Figure 3.1)	Semi-annually ²
LP6	Centre of the East boundary of log yard (as shown on Figure 3.1)	Semi-annually ²
LP7	North-east corner of property (as shown on Figure 3.1)	Semi-annually ²
K1	Existing domestic well located in the South-west corner of the South-west quarter of section 16-36-25W	Semi-annually ²

¹ As indicated on attached Figure 1

² Semi-annually means at an interval of not less than 150 days and not greater than 210 days.

Table 3.2 Water Quality Variables for Analysis

Fecal Coliform (MPN)	Total Organic Carbon	Total Phenols
Colour (true)	Total Cyanide	pH
Dissolved Organic Carbon	Total Dissolved Solids	Conductivity
Nitrate-nitrite nitrogen		

Additional Information: Elevation of water table for each well except K1.

Commencement Date: Upon issuance of this Licence or at such later date as may be approved in advance by the Director.

Environment Act Licence No 2954 RR

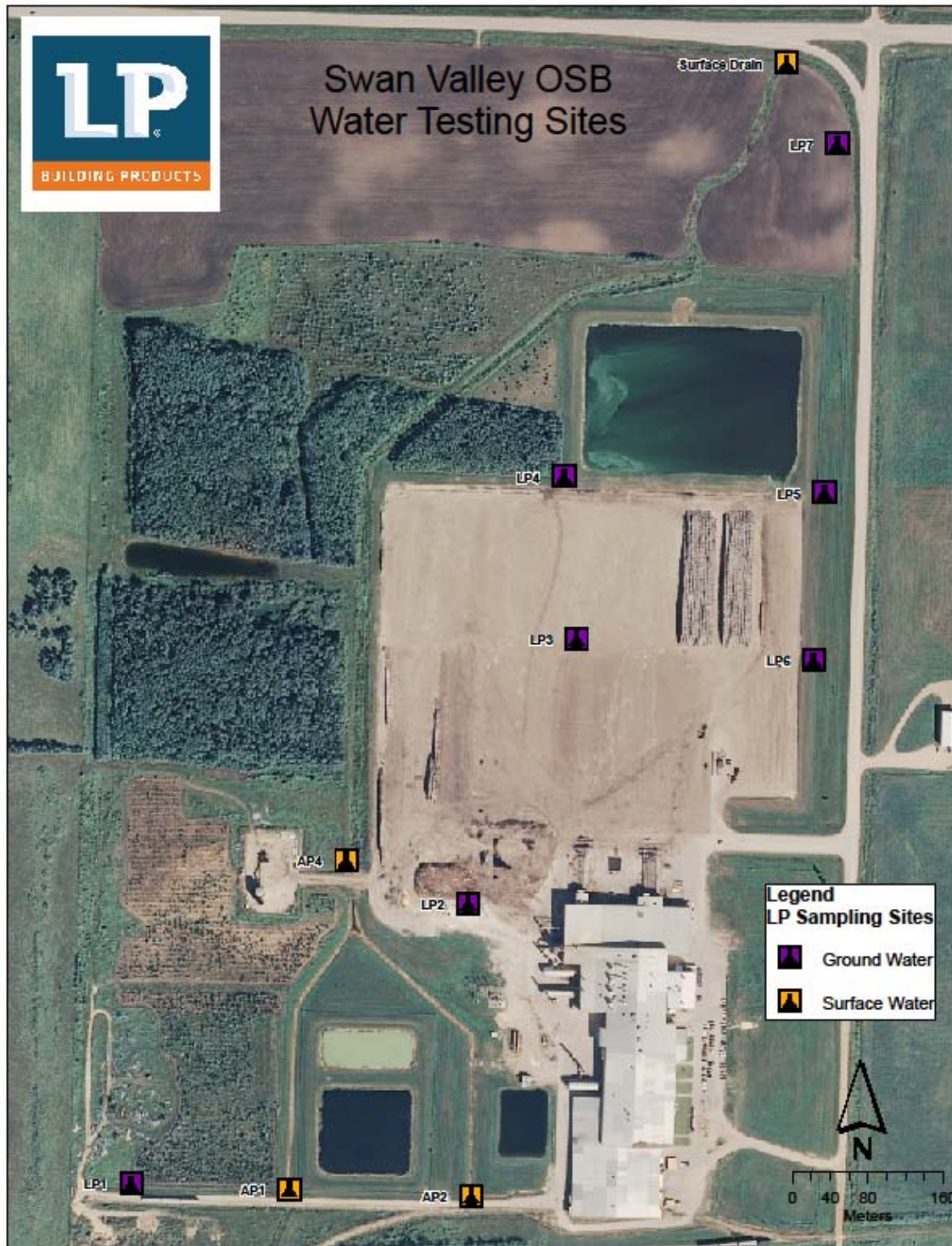


Figure 1. Surface and Groundwater Monitoring Locations

Schedule 5
to
Environment Act Licence No 2954 RR
Operating Parameters

General Plant

- a) Daily production recorded as tons of finished product from the Press;
- b) Daily weight and rate of application of each resin added;
- c) Daily weight and rate of application of zinc borate;
- d) Major plant components (listed as Pollutant Source and Control Equipment in Schedule 6) operating; and
- f) The sulfur content (% by weight) for each shipment of fuel oil received as determined by means of the most current ASTM method or by supplier guaranteed sulfur content.

Baghouses

- a) Pressure drop across each baghouse as recorded each day;
- b) Daily observations for visual emissions; and
- c) One set of opacity readings (the average of any 24 consecutive opacity observations taken at 15 second intervals) as recorded by a trained observer, during all occasions of visual emissions, for each baghouse stack.

Thermal Oil Heater System

- a) Daily fuel source and usage;
- b) Daily ESP electrostatic field voltage as recorded hourly;
- c) Daily ESP electrostatic field current as recorded hourly; and
- d) Any corrective actions taken.

Wood Strand Dryer System

The following information shall be provided for each component individually:

Dryers

- a) Daily fuel source and usage; and
- b) Dryer inlet and outlet temperatures as recorded hourly.

E-Tube ESP

- a) Daily ESP electrostatic field voltage as recorded every two hours;
- b) Daily ESP electrostatic field current as recorded every two hours; and
- c) Any corrective actions taken.

Schedule 6
to
Environment Act Licence No 2954 R
Air Pollution Control Equipment and Emission Stack Heights

Table 6.1

Pollutant Source	Control Equipment	Height
Thermal oil heater:.....	ESP ¹	30.5 metres
Thermal oil heater by-pass:.....	none.....	22.9 metres
Standby Thermal oil heater:.....	none.....	24.4 metres
Press	none	30.5 metres
Dryers:.....	E-tube ²	In accordance with Clause 14 of this Licence
Trim Saws:.....	Baghouse.....	22.4 metres
Formers:.....	Baghouse.....	25.4 metres
Raw fuel storage bin:.....	Baghouse.....	23.9 metres
Sander dust:.....	Baghouse.....	22.4 metres
Flying cut-off saw:.....	Baghouse.....	25.5 metres
Sander Dust:.....	Baghouse.....	22.4 metres

¹ Electrostatic Precipitator

² Wet Electrostatic Precipitator Trade Mark by Geoenergy International Corporation