



**Environment and Climate**  
Environmental Approvals Branch  
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File No.: 6137.00

May 3, 2023

Alasdair Knox  
VP, Project Engineering  
Canadian Premium Sand Inc.  
2000, 715 5th Avenue SW  
Calgary AB T2P 2X6  
[alsadair.knox@cpsmail.com](mailto:alsadair.knox@cpsmail.com)

Dear Alasdair Knox:

**Re: Environment Act Licence No. 3401**

Please find enclosed Environment Act Licence No. 3401 in response to your proposal dated October 5, 2022, additional information dated December 13, 2022, and January 9, 2023. You wish to construct and operate a solar glass manufacturing facility in the City of Selkirk.

Canadian Premium Sand Inc. must follow all licence requirements and federal, provincial, and municipal regulations and by-laws. The licensee must get approval from the director per The Environment Act to alter the development.

Anyone affected by this decision may appeal, in writing, to the Minister of Environment and Climate at [minec@leg.gov.mb.ca](mailto:minec@leg.gov.mb.ca) by June 2, 2023. The licence is available on the public registry at <https://www.gov.mb.ca/sd/eal/registries/index.html>.

If you have any questions regarding this approval, please contact Tyler Kneeshaw, Regional Supervisor, Environmental Compliance and Enforcement Branch at [EnvCEInterlake@gov.mb.ca](mailto:EnvCEInterlake@gov.mb.ca) or 204-870-1598.

Sincerely,

Original Signed By  
Siobhan Burland Ross  
A/Director

Enclosure

c. Tyler Kneeshaw

# LICENCE

File No.: 6137.00

Licence No. / Licence n°: 3401  
Issue Date / Date de délivrance : May 03, 2023

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)

Under Section 11(1) / Conformément au Paragraphe 11(1)

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

**CANADIAN PREMIUM SAND INC.; "the licensee"**

for the construction and operation of the development being a solar glass manufacturing facility at Lot 1 Plan 60001 WLTO in River Lots 67 to 70, Parish of St. Clements in the City of Selkirk, Manitoba, in accordance with the Proposal dated October 5, 2022, additional information dated December 13, 2022 and January 9, 2023, and subject to the following specifications, limits, terms and conditions:

## **DEFINITIONS**

In this licence;

**"accredited laboratory"** means an analytical facility accredited by the Standards Council of Canada (SCC), or accredited by another accrediting agency recognized by Manitoba Environment and Climate 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 assigned environment officer in writing;

**"approved facility"** means a facility operating in accordance with the requirements of The Environment Act and its regulations;

**"Closure Plan"** means a plan indicating the actions to be taken for the closure of the development;

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

**"director"** means an employee so designated under The Environment Act;

**"environment officer"** means an employee so designated under The Environment Act;

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

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

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

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

**"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;

**"Phase 1"** means the construction stage in which the facility has a production capacity of 600 to 800 tonnes of solar glass per day;

**"Phase 2"** means the construction stage in which the facility expands its production from Phase 1 capacity to 1200 tonnes of solar glass per day;

**"PM<sub>10</sub>"** means particulate matter with a mean aerodynamic diameter equal to or less than 10 micrometres (µm);

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

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

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

**"Post-Closure Plan"** means a plan indicating the actions to be taken for the care, maintenance, and monitoring of the development after closure, that will prevent, mitigate, or minimize the threat to public health and the environment;

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

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

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

**"sewage"** means household and commercial wastewater that contains human waste;

**"solid waste"** means solid waste as defined in the Waste Management Facilities Regulation, or any future amendments;

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

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

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

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

### **GENERAL TERMS AND CONDITIONS**

1. The licensee shall at all times maintain a copy of this licence at the development or at the premises from which the development's operations are managed.
2. The licensee shall implement a high standard of equipment maintenance and good housekeeping and operational practices with respect to the development, at all times.
3. The licensee shall reduce the production and dissemination of wastes by initiating and maintaining waste reduction and waste recycling programs.
4. The licensee 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 labelled with the licence number and file number associated with this licence.
5. The licensee shall comply with the requirements of The Heritage Resources Act, and suspend any construction and immediately notify the Historic Resources Branch if heritage resources are encountered during the construction of the development.
6. In addition to any of the limits, terms and conditions specified in this licence, the licensee shall, upon the request of the director:
  - a) sample, monitor, analyze and/or investigate specific areas of concern regarding any segment, component or aspect of pollutant storage, containment, treatment, handling, disposal or emission systems, for such pollutants or ambient quality, aquatic toxicity, leachate characteristics and discharge or emission rates, for such duration and at such frequencies as may be specified;
  - b) determine the environmental impact associated with the release of any pollutant(s) from the development;
  - c) conduct specific investigations in response to the data gathered during environmental monitoring programs; or

- d) provide the director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and analytical procedures being used, bioassay data, flow rate measurements and such other information as may from time to time be requested.
7. The licensee shall, unless otherwise specified in this licence:
- a) carry out all preservations and analyses on liquid samples in accordance with the methods prescribed in the most current edition of Standard Methods for the Examination of Water and Wastewater or in accordance with equivalent preservation and analytical methodologies approved by the director;
  - b) carry out all sampling of, and preservation and analyses on, soil and air samples in accordance with methodologies approved by the director;
  - c) have all analytical determinations undertaken by an accredited laboratory; and
  - d) report the results to the director, in writing and in an electronic format acceptable to the director, within 60 days of the samples being taken.
8. The licensee shall designate an employee, within 14 days of the date of issuance of this licence, as the licensee's environmental coordinator, whose job description will include assisting the licensee in complying with the limits, terms and conditions in this licence and assisting Senior Management of the licensee to manage environmental issues at the development. The name of the environmental coordinator shall be submitted in writing to the director within 14 days of appointment and any subsequent appointment.

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

#### **Respecting Facility Construction**

9. The licensee shall notify the designated environment officer not less than two weeks prior to beginning any construction of Phase 1 and/or Phase 2 at the development. The notification shall include the intended starting date of construction and the name of the contractor(s) responsible for the construction.
10. The licensee shall obtain all necessary federal, provincial and/or municipal licences, authorizations, permits and/or approvals for construction of relevant components of the Development prior to commencement of construction.
11. The licensee shall dispose of non-reusable construction debris from the development at a waste management facility operating under the authority of a permit issued under the Waste Management Facilities Regulation or any future amendment, or a licence issued under The Environment Act.
12. The licensee shall, during construction at the development, operate, maintain and store all materials and equipment in a manner that prevents any deleterious substances (fuel, oil, grease, hydraulic fluids, coolant, paint, uncured concrete and concrete wash water, etc.) from entering watercourses, and have an emergency spill kit for in-water use available on site during construction

13. The licensee shall pressure test the integrity of the connections of any new underground piping of the development, which is intended to transport wastewater under pressure, before such pipe connections are backfilled with earth and make repairs as required.
14. The licensee shall prepare, within 90 days of commissioning the facility, and submit to the director an electronic copy of:
  - a) engineered and scaled as-constructed "record drawings" of the development sealed by a professional engineer registered with Engineers Geoscientists Manitoba, showing and identifying by means of a legend: property boundaries, all buildings, roadways, storage areas, parking areas, sewer drains, off-site surface drainage discharge locations and other manmade structures;
  - b) engineered and scaled as-constructed "record drawings" of the plant layout sealed by a professional engineer registered with the Engineers and Geoscientists Manitoba, showing and identifying by means of a legend: all work stations and process areas, all equipment, all ductwork and all air emission control systems.

### **Respecting Air Emissions – Limits**

15. The licensee shall not emit particulate matter from the development such that:
  - a) particulate matter:
    - i) exceeds 0.23 grams per dry standard cubic metre calculated at 25 degrees Celsius and 760 millimetres of mercury, corrected to 12 per cent carbon dioxide for processes involving combustion, from any point source of the development;
    - ii) exhibits a visible plume with an opacity of greater than five per cent at any point beyond the property line of the development; or
    - iii) results in the deposition of visible particulate residue at any time beyond the property line of the development; or
  - b) opacity from any point source of the development equals or exceeds:
    - i) 20 percent as the average of any 24 consecutive opacity observations taken at 15 second intervals;
    - ii) 20 percent for more than 16 individual opacity observations within any 1 hour period; or
    - iii) 40 percent for any individual opacity observation.
16. The licensee shall not cause or permit an odour nuisance to be created as a result of the construction, operation, or alteration of the development, and shall take such steps as the director may require to eliminate or mitigate an odour nuisance.
17. The licensee 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.
18. The licensee shall control, by methods acceptable to the director or environment officer, the emission of dust into the air at the development resulting from the operation of vehicles or the transportation, storage or handling of aggregate or other material.

19. The licensee shall not emit carbon monoxide, hydrochloric acid, Hydrogen fluoride, nitrogen dioxide, particulate matter, silicon dioxide or sulphur dioxide from any part or process of the development such that their ambient concentration in air, when measured by a method approved by the director and at any point of reception beyond the property line of the development, exceeds the following limits:

Pollutant	Period of Measurement	Limit
Carbon monoxide	1 hour average	35 milligram/m <sup>3</sup>
Hydrogen fluoride	24 hour average	0.85 microgram/m <sup>3</sup>
Hydrogen chloride	1 hour average	100 microgram/m <sup>3</sup>
Nitrogen dioxide	1 hour average	400 microgram/m <sup>3</sup>
Particulate matter (PM <sub>2.5</sub> )	24 hour average	30 microgram/m <sup>3</sup>
Particulate matter (PM <sub>10</sub> )	24 hour average	50 microgram/m <sup>3</sup>
Total suspended particulate (TSP)	24 hour average	120 microgram/m <sup>3</sup>
Silicon dioxide	24 hour average	5 microgram/m <sup>3</sup>
Sulphur dioxide	1 hour average	900 microgram/m <sup>3</sup>
Sulphur dioxide	24 hour average	300 microgram/m <sup>3</sup>

20. The licensee shall operate and maintain any boiler at the development in accordance with the most recent version of the Environment and Climate Change Canada Multi-Sector Air Pollutants Regulation SOR/2016-151.

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

21. The licensee shall direct all air streams that contain a pollutant(s) of concern to the director to a pollution control device which has been designed for and demonstrated to be capable of reducing, altering, eliminating or otherwise treating the pollutant(s).
22. The licensee shall prepare, within 90 days prior to commissioning of the facility for operation, and maintain the following manuals which shall be kept at the development and available for review upon request by an environment officer:
- a standard operating procedural manual and a maintenance schedule for each air emission pollution control device based on the manufacturer's specifications and recommendations;
  - an updated standard operating procedural manual and a maintenance procedure for each air emission pollution control device within 120 days of the addition, elimination or change regarding any air emission control device; and
  - a copy of the manufacturer's operational and maintenance manual.
23. The licensee shall not operate any process directing an emission to an air pollution control device at the development unless:
- the operating and maintenance measures and status of the device are in full compliance with the procedures and timetables as per clause 22;



- b) all emissions from the process are directed to the fully operational air pollution control device;
  - c) all discharges of treated emissions from the air pollution control devices are immediately directed to a stack; and
  - d) the emissions do not contain concentrations of pollutants which:
    - i) are in violation of any other applicable legal instrument including an act, regulation or by-law; or
    - ii) otherwise create a significant negative environmental or health impact in the affected area.
24. The licensee shall maintain a log of the most recent 24 month period to record any downtime of an air pollution control device due to either the breakdown or maintenance of that air pollution control device. The log shall be kept at the development and shall be available upon request for inspection by an environment officer. The log shall record, at minimum, the following information:
- a) identification of the air pollution control device and the process(es) it serves;
  - b) time/date of log entry;
  - c) nature of event;
  - d) time and duration of event;
  - e) action taken;
  - f) the accumulated downtime of this air pollution control device for the events for each calendar year; and;
  - g) approval by the environmental coordinator.
25. The licensee shall handle, store and dispose of all pollutants collected by the air pollution control equipment in a manner suitable to their characterization as type of waste or dangerous good.

#### **Respecting Air Emission Sampling and Analysis**

26. The licensee shall, within 90 days of commissioning the facility, perform stack sampling and analysis in accordance with schedule A of this licence.

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

27. The licensee, upon the written request of the director, shall submit a proposal, for the approval of the director, to:
- a) sample, analyse and report ambient air pollutants, as determined by the director, at a selected location(s) beyond the property boundaries of the development; and
  - b) locate, install and operate a meteorological monitoring station.

The proposal shall be prepared by a professional engineer registered with the Engineers Geoscientists Manitoba, or other qualified person acceptable to the director, who is knowledgeable and experienced in the field of ambient air monitoring.

28. The licensee, upon the written request of the director, shall implement the approved plan submitted pursuant to clause 27 of this licence, within a time frame to be determined by the director.

### **Respecting Chemical Storage and Spill Containment**

29. The licensee shall provide containment for all vessels containing chemicals in each area of the development where the chemicals are stored, loaded, transferred, used or otherwise handled, in compliance with the current Manitoba Fire Code Regulation, or any future amendment.
30. The licensee shall prevent pollution of groundwater and surface water from any product leakage or spillage and any contaminated liquid generated on site.
31. The licensee shall store and handle all dangerous goods and chemicals in a manner acceptable to the director or environment officer.
32. The licensee shall comply with all the applicable requirements of:
  - a) the Storage and Handling of Petroleum Products and Allied Products regulation or any future amendment;
  - b) the Dangerous Goods Handling and Transportation Act, and its regulations; and
  - c) the Office of the Fire Commissioner – Province of Manitoba.
33. The licensee shall not receive at the development any hazardous waste from any generator off site of the development.

### **Respecting Wastewater and Surface Water Runoff**

34. The licensee shall provide confirmation from the City of Selkirk of their approval to provide effluent to the development prior to commissioning the solar glass manufacturing facility.
35. The licensee shall:
  - a) prepare and execute a current, comprehensive and enforceable Industrial Services Agreement, which is acceptable to the director, for the purposes of defining maximum daily and maximum weekly influent limits respecting volume and pollutant loading rates which would protect the operational integrity of the City of Selkirk Wastewater Treatment Facility in terms of the design capability and/or in consideration of the actual performance of the City of Selkirk wastewater collection system relative to the effluent quality limits as specified in this Licence, or any revision thereof;
  - b) provide the director, within 90 days prior to commissioning of the facility, a copy of the Industrial Services Agreement signed by all parties and a copy of any future revised Industrial Services Agreement.
36. The licensee shall not release any process wastewater from the development except to the City of Selkirk wastewater collection system in accordance with the requirements set out in the Industrial Services Agreement with the City of Selkirk.
37. The licensee shall operate the development in such a manner that all sewage is discharged to the City of Selkirk wastewater collection system.
38. The licensee shall comply with the requirements of the Water and Wastewater Facility Operators Regulation or any amendment thereof.

39. The licensee shall contain all runoff from the development that is potentially contaminated and discharge only in a manner acceptable to the environment officer or the director.

### **Respecting Solid Waste**

40. The licensee shall dispose of all domestic solid waste generated at the development, which is not recycled, only to a waste management facility operating under the authority of a permit issued under the Waste Management Facilities Regulation or any future amendment, or a licence issued under The Environment Act.

### **Respecting Emergencies**

41. The licensee 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.
42. The licensee shall, following the reporting of an event under to clause 41:
- a) identify the repairs required to the mechanical equipment;
  - b) undertake all repairs to minimize unauthorized discharges of a pollutant;
  - c) complete the repairs in accordance with any written instructions of the director or the environment officer; and
  - d) submit a report to the director about the causes of breakdown and measures taken, within one week of the repairs being done.
43. The licensee shall prepare 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.

### **Closure and Post-Closure**

44. Within one year prior to imminent closure of the development, the licensee shall submit, for the approval of the director, a formal detailed Closure and Post-Closure Plan for the development.
45. The licensee shall implement and maintain the approved Closure and Post-Closure Plan.

### **REVIEW AND REVOCATION**

- A. If in the opinion of the director, the licensee 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.

- B. If the licensee has not commenced construction of the development within three years of the date of this licence, the licence is revoked.
- 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 Section 11 of The Environment Act or request that the licensee file a notice of alteration.

Original Signed By  
Siobhan Burland Ross  
Director

## **Schedule "A" to Environment Act Licence No. 3401**

### **Air Emission Sampling and Analysis Pursuant to clause 26**

1. The licensee shall provide a stack or stacks including all necessary sampling facilities for the sampling of air emissions at the development. The stack or stacks shall be provided:
  - a) at a location(s) and within a time frame satisfactory to the director; and
  - b) to the specifications and in accordance with the most recent version of Manitoba Environment and Climate Guideline, Guideline for Stack Sampling Facilities, unless otherwise approved by the director.
2. The licensee shall submit a detailed plan which is acceptable to and approved by the director, for the sampling and analysis of potential air pollutants, released as stationary point and fugitive emissions, including any compounds determined by the director. The plan shall identify the rationale for the sampling, the ways and means by which the sampling program will be implemented including any special measures or methods which would be necessitated by influencing factors such as unfavourable weather conditions, the need for large or additional sample volumes, the need for multiple sampling runs, the methods used for the sampling and the analysis for each compound, the detection level to be attained, a comprehensive QA/QC program, and other items as may be identified by the director.
3. The licensee shall perform all stack sampling in accordance with the most recent version of Manitoba Environment and Climate Report No. 96-07, Interim Stack Sampling Performance Protocol, unless otherwise approved by the director.
4. The licensee shall arrange the scheduling of the sampling program submitted pursuant to clause 2 of this schedule such that a representative of Manitoba Environment and Climate is available to monitor and audit the implementation of the sampling program.
5. The licensee shall complete the sampling of emissions according to the approved plan submitted pursuant to clause 2 of this schedule, within a timeframe to be determined by the director.
6. The licensee shall submit a report, for the approval of the director, of the completed sampling and analysis plan approved pursuant to clause 2 of this schedule, within 60 days of the receipt of the analytical results of that sampling plan. The report shall contain at minimum:
  - a) the raw data collected;
  - b) a discussion of the sampling and analytical portions of the program including any anomalies of sampling and analysis; and
  - c) a discussion of the significance of the data gathered with specific attention to:
    - i) the significance for potential acute and chronic impacts to health or environment from exposure to concentrations of the compounds detected;
    - ii) the need for risk assessment of the impact of emissions;
    - iii) the need for the establishment of ambient air monitoring stations;
    - iv) the need for dispersion modeling of emissions;
    - v) results and conclusions of the QA/QC program; and
    - vi) other issues as may be determined by the director.

**Schedule "A" to Environment Act Licence No. 3401 (Cont.)**

7. The licensee, upon the written request of and in a timeframe stipulated by the director, shall comply with any air emission or ambient air quality criteria specified by the director for any pollutant of concern to the director which has been identified pursuant to this schedule.