



**Conservation and Water Stewardship**

Environmental Stewardship Division  
Environmental Approvals Branch  
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**CLIENT FILE NO.: 4970.00**

September 21, 2015

Mr. Brian Dempsey  
Standard Aero Ltd.  
33 Allen Dyne Road  
Winnipeg, MB R3H 1A1

Dear Mr. Dempsey:

Receipt of your June 22, 2015 submission is acknowledged as a notice of alteration in accordance with section 14 of *The Environment Act*. The requested change to the Development as Licensed is to modify the plating facility layout, tank sizes and ventilation as well as the addition of a new scrubber for both the chrome plating line and the cyanide/alkaline line. Additionally, a change to the surface tension monitoring schedule for the chrome plating tanks is requested.

The submission included a "Plant 3 Plating Facility Alteration, Screening Assessment of Impact on the Environment and Human Health – Report" prepared by Boma Environmental & Safety Inc. on behalf of Standard Aero. Potential impact on the environment and human health due to emissions resulting from the development alterations was assessed using a screening dispersion model. Based on the assessment, the report concluded that impacts would be insignificant.

The potential environmental effect of the requested changes to the Development as Licensed is insignificant and considered to be a minor alteration in accordance with section 14(2) of *The Environment Act*. The request to alter the development as described in the June 22, 2015 submission is hereby approved subject to the following condition:

- 1) The Licencee shall, within 90 days following the installation of the second Chromium line:
  - a) perform stack testing on both the existing and new Chromium lines;
  - b) perform a Screen 3 modeling using the stack emission results; and
  - c) submit the modeling results to the Director.

The revised surface tension monitoring schedule of Schedule A Part 1 is reflected in the attached revised Environment Act Licence No. 2616 RR. If you have any questions, please contact Jennifer Winsor, P.Eng. at 204-945-7012 or Regional Supervisor Yvonne Hawryliuk at 204-945-5305.

Yours sincerely,

*"original signed by"*

Tracey Braun, M.Sc.  
Director, Environmental Approvals Branch

Enc.

c: Don Labossiere, Donna Smiley, Yvonne Hawryliuk, Environmental Compliance and Enforcement Branch  
Public Registries

**NOTE: Confirmation of Receipt of this Licence No. 2616 RR (by the Licencee only) is required by the Director of Environmental Approvals. Please acknowledge receipt by signing in the space below and provide a copy (letter only) to the Department by October 5, 2015.**

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On behalf of Standard Aero

Date

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

LICENCE

Licence No. / Licence n°	<u>2616 RR</u>
Issue Date / Date de délivrance	<u>August 22, 2003</u>
Revised:	<u>August 24, 2004</u>
Revised:	<u>September 21, 2015</u>

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(1) and 14(2) / Conformément au Paragraphe 10(1) et 14(2)

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

**STANDARD AERO LIMITED;**  
**"the Licencee"**

for the operation of the Development being a manufacturing and industrial facility known as Plant 3 in Parcel K, Plan 27994; Lot 4 S.S. Plan 6097; Parcel F, Plan 27994; Parcel E, Plan 27944 and a portion of Parcel A, Plan 29085 at or near 1844 Sargent Avenue in the City of Winnipeg in accordance with the Proposal filed July 12, 1993, the request for alteration received February 26, 1996, the request for alteration dated March 5, 1997, the request for alteration with supporting documentation filed May 7, 2003 and the request for alteration received on June 24, 2015 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 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;

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**"ampere-hour (Ah)"** means the integral of electrical current applied to a plating tank (amperes) over a period of time (hours);

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

**"boiler"** means any combustion equipment fired with fossil fuel, biomass or a by-product derived from fossil fuel, for the purpose of generating hot water or steam;

**"cadmium"** means an elemental expressed as Cd, unless otherwise indicated, which has the designated CAS Number 7440-43-9;

**"Carbon Monoxide"** means an inorganic compound comprised of one atom of carbon and one atom of oxygen expressed as CO, unless otherwise indicated, which has the designated CAS Number 630-08-0;

**"CAS Number"** means the Chemical Abstracts Service Registry Number (referred to as CAS RNs or CAS Numbers) which are unique identifiers that have been assigned by the Chemical Abstracts Service, a division of the American Chemical Society, for chemical substance **"chromic acid"** means a compound expressed as CrO<sub>3</sub>, unless otherwise indicated, which has the designated CAS Number 1333-82-0;

**"chromium"** means an element expressed as Cr, unless otherwise indicated, which has the designated CAS Number 7440-47-3;

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

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

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

**"foam blanket"** means the type of chemical fume suppressant that generates a layer of foam across the surface of a solution when current is applied to that solution;

**"fume suppressant"** means any substance that reduces or suppresses fumes or mists at the surface of an electroplating or anodizing bath;

**"hard chrome electroplating"** means a process by which chromium is electro-deposited from a solution containing compounds of chromium onto an object, for functional purposes, typically resulting in a chrome layer thicker than 1 micron;

**"hexavalent chromium"** means chromium in an oxidative state of +6 expressed as Cr<sup>+6</sup> unless otherwise indicated, which has the designated CAS Number 18540-29-9;

**"hydrogen chloride"** means a compound expressed as HCl, unless otherwise indicated, which has the designated CAS Number 7647-01-0;

**"hydrogen cyanide"** means a compound expressed as HCN, unless otherwise indicated, which has the designated CAS Number 74-90-8;

**"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;

**"Nitrogen Oxides"** means the sum of nitric oxide expressed as NO, unless otherwise indicated, which has the designated CAS Number 10102-43-9 and nitrogen dioxide expressed as NO<sub>2</sub>, unless otherwise indicated, which has the designated CAS Number 10102-44-0, and expressed collectively as a nitrogen dioxide equivalent NO<sub>x</sub>;

**"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;

**"Plant 3"** means the facility involved with the overhaul, repair and rework of aircraft, marine and industrial engines and engine components, and includes such activities as engine disassembly and assembly, parts cleaning, metal working including welding, and surface finishing including hard chrome electroplating;

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

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

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

**"sewerage system"** means all sewers, appurtenances, pumping stations, treatment works, and all physical properties of the system, but does not include extensions to the collection systems;

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

**"stack"** means a duct, pipe, chimney, vent, or similar opening 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;

**"sulphuric acid mist"** means finely dispersed liquid droplets which contain sulphuric acid, a compound expressed as  $H_2SO_4$ , unless otherwise indicated, which has the designated CAS Number 7664-93-9;

**"surface tension"** means the molecular force, measured in dynes per cm, that exists, in a tank where chrome electroplating occurs, at the surface of chromic acid solution or at the point where the chromic acid solution and air meet;

**"total chromium"** means the sum of chromic acid, hexavalent chromium and all other compounds containing chromium;

**"waste water"** means any water contaminated by pollutants during the electroplating processes at the Development, or as otherwise determined by the Director;

**"wetting agent"** means the type of chemical fume suppressant that reduces the surface tension of a liquid; and

**"WHMIS"** means Workplace Hazardous Materials Information System.

### **GENERAL TERMS AND CONDITIONS** **FOR ALL FACILITIES IN THE DEVELOPMENT**

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

#### **Future Sampling**

1. In addition to any of the limits, terms and conditions specified in this Licence, the Licencee shall, upon the request of the Director:
  - a) sample, monitor, analyze and/or investigate specific areas of concern regarding any segment, component or aspect of pollutant storage, containment, treatment, handling, disposal or emission systems, for such pollutants or ambient quality, aquatic toxicity, leachate characteristics and discharge or emission rates, for such duration and at such frequencies as may be specified;
  - b) determine the environmental impact associated with the release of any pollutant(s) from the Development;
  - c) conduct specific investigations in response to the data gathered during environmental monitoring programs; or
  - d) provide the Director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and analytical procedures being used, bioassay data, flow rate measurements and such other information as may from time to time be requested.

2. The Licencee shall, unless otherwise specified in this Licence:
  - a) carry out all preservations and analyses on liquid samples in accordance with the methods prescribed in the most current edition of Standard Methods for the Examination of Water and Wastewater or in accordance with equivalent preservation and analytical methodologies approved by the Director;
  - b) carry out all sampling of, and preservation and analyses on, soil, compost, and air samples in accordance with methodologies approved by the Director;
  - c) have all analytical determinations undertaken by an accredited laboratory; and
  - d) report the results to the Director, in writing and in an electronic format acceptable to the Director, within 60 days of the samples being taken.
3. The Licencee shall carry out remedial measures, modifications, or alterations, as deemed necessary by the Director, in respect to matters authorized under this Licence.

#### **Reporting Format**

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 required by the Director or Environment Officer, and each submission shall be clearly labeled with the Licence Number and Client File Number associated with this Licence.

#### **Equipment Breakdown**

5. 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.
6. The Licencee shall, following the reporting of an event pursuant to Clause 5,
  - 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.

### **Safety and Security**

7. The Licencee shall continually maintain an up-to-date inventory of any process and cleaning chemicals used and/or stored on-site that would be captured by any applicable federal/provincial WHMIS regulations and protocols, and make this information and applicable MSDS sheets available to an Environment Officer upon request.
8. 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.
9. The Licencee shall, at all times during the operation of the Development, implement a high standard of equipment maintenance and operational practices.
10. The Licencee shall implement and continually maintain in current status, an Environmental Management System (EMS) for the Development which is acceptable to the Director.

### **Environmental Coordinator**

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

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

### **Respecting Construction**

12. The Licencee shall notify the designated Environment Officer not less than two weeks prior to beginning construction of the expansion at the Development. The notification shall include the intended starting date of construction and the name of the contractor responsible for the construction.
13. The Licencee shall obtain all necessary federal, provincial and/or municipal licences, authorizations, permits and/or approvals for construction of relevant components of the Development prior to commencement of construction.



14. The Licencee shall dispose of non-reusable construction debris from the Development at a waste disposal ground operating under the authority of a permit issued pursuant to *Manitoba Regulation 150/91* respecting *Waste Disposal Grounds*, or any future amendment thereof, or a Licence issued pursuant to *The Environment Act*.
15. The Licencee shall, during construction of the Development, operate, maintain and store all materials and equipment in a manner that prevents any deleterious substances (fuel, oil, grease, hydraulic fluids, coolant, paint, uncured concrete and concrete wash water, etc.) from entering watercourses, and have an emergency spill kit for in-water use available on site during construction.

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

16. The Licencee shall not emit from the Development:
  - a) particulate matter in air emissions that:
    - i) exceeds 0.23 grams per dry standard cubic metre calculated at 25 degrees Celsius and 760 millimetres of mercury, corrected to 12 percent carbon dioxide for processes involving combustion, from any point source of the Development;
    - ii) exhibits a visible plume with an opacity of greater than 5 percent at any point beyond the property line of the Development; or
    - iii) results in the deposition of visible particulate residue at any time beyond the property line of the Development; or
  - b) particulate matter from any point source with an opacity that equals or exceeds:
    - i) 20 percent as the average of any 24 consecutive opacity observations taken at 15 second intervals;
    - ii) 20 percent for more than 16 individual opacity observations within any 1 hour period; or
    - iii) 40 percent for any individual opacity observation.
17. The Licencee shall not emit total chromium at any time from any point source(s) of the Development, in excess of 0.03 milligrams per dry standard cubic metre calculated at 25 degrees Celsius and 760 millimetres of mercury.

18. The Licencee, notwithstanding Clause 17, shall not emit any one or more of the following pollutants from any part or process of the Development such that the concentration of any pollutant, 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:

<b>Pollutant</b>	<b>Period of Measurement</b>	<b>Limit</b>
Cadmium	Yearly average	0.05 µg/m <sup>3</sup>
Chromium	Yearly average	0.001 µg/m <sup>3</sup>
Chromic Acid	One (1) hour average	4.5 µg/m <sup>3</sup>
Hydrogen chloride	Yearly average	7.0 µg/m <sup>3</sup>
Hydrogen chloride	One (1) hour average	3000.0 µg/m <sup>3</sup>
Hydrogen cyanide	Yearly average	3.0 µg/m <sup>3</sup>
Hydrogen cyanide	One (1) hour average	40.0 µg/m <sup>3</sup>
Sulphuric acid mist	One (1) hour average	100.0 µg/m <sup>3</sup>

19. The Licencee shall not cause or permit a noise nuisance to be created as a result of the construction, operation or alteration of the Development, and shall take such steps as the Director may specify to eliminate or mitigate a noise nuisance.
20. The Licencee shall not cause or permit an odour nuisance to be created as a result of the construction, operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate an odour nuisance.

**Respecting the Operation of Boilers and Heaters**

21. The Licencee shall operate new or upgraded boilers or heaters, in compliance with the appropriate emission limits for nitrogen oxides and carbon monoxide contained in the most recent edition of the Canadian Council of Ministers of the Environment publication entitled "*National Emission Guideline For Commercial/Industrial Boilers And Heaters – Initiative N306*".

**Respecting Control of Point Source and Fugitive Emissions**

22. The Licencee shall control, capture and direct any airborne pollutants created by activity at the Development and containing particulate matter or total chromium to an air pollution control device(s) which provides sufficient treatment such that the particulate matter or total chromium are not emitted from the Development in exceedance of limits contained in this Licence.

**Respecting Air Pollution Control Devices**

23. The Licencee shall submit for the Director's approval, within 90 days of the issuance of this Licence, a standard operating procedural manual and a maintenance schedule for each air pollution control device based on the manufacturer's specifications and recommendations.

24. The Licencee shall not engage in those activities at the Development restricted by Clause 22 of this Licence unless:

- a) the operating and maintenance measures and status of the device are in full compliance with the approved procedures and timetables;
- b) all discharges of treated emissions from the air pollution control devices are immediately directed to a stack; and
- c) 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 health or environmental impact beyond the boundaries of the Development.

25. The Licencee shall maintain a log book of the most recent 24 month period to record any maintenance or breakdown of any air pollution control device. The log book shall be kept at the Development and shall be available upon request for inspection by an Environment Officer. The log book shall record, at minimum, the following information:

- a) identification of the air pollution control device and the process(s) it serves;
- b) time/date of log entry; and
- c) nature of maintenance/event.

26. The Licencee shall handle, store and dispose of all liquids, sludges and solid wastes collected by the air pollution control equipment in a manner suitable to their characterization as type of waste or dangerous good.

**Respecting the Hard Chrome Electroplating Facility**

27. The Licencee shall operate each tank in the hard chrome electroplating process which contains chromic acid and to which a fume suppressant has been added, as follows:

- a) where the fume suppressant acts primarily as a wetting agent:
    - i) maintain the surface tension of each tank to not greater than 40 dynes/cm at all times during the application of an electric current; and
    - ii) conduct a surface tension monitoring program as described in Schedule A - Part I; or
  - b) where the fume suppressant acts primarily as a foam blanket:
    - i) maintain the foam blanket thickness of each tank at all times to not less than 2.54 cm during application of an electric current; and
    - ii) conduct a foam blanket thickness monitoring program as described in Schedule A - Part II.
28. The Licencee shall operate the hard chrome electroplating process such that all tank(s) containing chromic acid and having an electrical current applied to them have a non-resettable totalling device, apparatus or other means, acceptable to the Director, which measures and records the accumulated applied current (as amperes).
29. The Licencee shall operate the hard chrome electroplating process such that all tank(s) containing chromic acid and having an electrical current applied to them have a non-resettable totalling device, apparatus or other means, acceptable to the Director, which records, to the nearest hour, the accumulated time during which current is applied.
30. The Licencee shall operate the hard chrome electroplating process such that within any period of 12 consecutive months, the total cumulative electric current, expressed as amperes, of all tank(s) in operation and containing chromic acid multiplied by the number of hours of application of electric current to these tanks, does not exceed an integer value of 8,000,000, where the integer value is calculated by:
- {total current (A)} multiplied by {hours of applied current}
31. The Licencee shall operate the hard chrome electroplating process such that emissions to the air from all tank(s) which contain chromic acid and to which an electrical current is applied are controlled and collected by an emissions collection system, and are subsequently, but prior to discharge from the facility, directed to and treated by an appropriate pollution control device having a rated removal efficiency of 99.9% for the following pollutant(s):
- a) Chromic Acid; and
  - b) Total Chromium.

### **Respecting Air Emissions – Sampling, Analysis, Reporting**

32. The Licencee, upon written request from the Director, 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.
33. The Licencee, upon a written request from the Director, shall submit a detailed plan for any area of the Development 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.
34. 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.
35. The Licencee shall arrange the scheduling of the sampling program, referred to in Clause 33 of this Licence, such that a representative of Manitoba Conservation is available to monitor and audit the implementation of the sampling program.
36. The Licencee, within a timeframe to be determined by the Director, shall complete the sampling of emissions according to the approved plan submitted pursuant to Clause 33 of this Licence.
37. The Licencee, within 60 days of the receipt of the analytical results of the sampling plan pursuant to Clause 33 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.

38. The Licencee, upon the written request of and in a timeframe stipulated by the Director, shall comply with any air emission or ambient air quality criteria specified by the Director for any pollutant of concern to the Director which has been identified pursuant to Clauses 1 or 33 of this Licence.

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

39. The Licencee shall submit, upon the written request and for the approval of the Director, a program for:

- a) the sampling, analysis and reporting of levels of pollutants, as determined by the Director, at a selected location(s) beyond the property boundaries of the Development; and
- b) the location, installation and operation of a meteorological monitoring station.

40. The Licencee shall:

- a) implement the approved program submitted pursuant to Clause 39 of this Licence within a timeframe stipulated by the Director; and
- b) submit a report within 60 days of the receipt of the analytical results of the sampling plan pursuant to Clause 39 of this Licence for the approval of the Director containing at minimum:
  - i) the raw data collected;
  - ii) a discussion of the sampling and analytical portions of the program including any anomalies of sampling and analysis; and
  - iii) a discussion of the significance of the data gathered with specific attention to:
    - A) the significance for potential acute and chronic impacts to health or environment from exposure to concentrations of the compounds detected;
    - B) the need for risk assessment of the impact of emissions;
    - C) the need for the establishment of ambient air monitoring stations;
    - D) results and conclusions of the QA/QC program; and
    - E) other issues as may be determined by the Director.

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

41. The Licencee shall comply with all the applicable requirements of:

- a) Manitoba Regulation 188/2001, or any future amendment thereof, respecting the *Storage and Handling of Petroleum Products and Allied Products*;
- b) The Dangerous Goods Handling and Transportation Act, and regulations issued thereunder, respecting the handling, transport, storage and disposal of any dangerous goods brought onto or generated at the Development; and
- c) the Office of the Fire Commissioner – Province of Manitoba.

42. The Licencee shall provide containment for all vessels containing chemicals and in each area of the development where the chemicals are stored, loaded, transferred, used or otherwise handled, in compliance with the National Fire Code of Canada (1995), or any future amendment thereof such that any product leakage or spillage and any contaminated liquid generated is contained within the Development and contamination of groundwater is prevented.
43. The Licencee shall, in a manner approved by the Director, remove and dispose of all spilled dangerous goods.

#### **Respecting Solid Waste**

44. The Licencee shall minimize the generation of domestic solid waste and maximize, wherever possible, the collection and recycling of recyclable wastes generated through the operation of the Development.
45. The Licencee shall not deposit domestic solid waste into the environment except into a waste disposal ground operating under the authority of a Licence issued pursuant to *The Environment Act*.

#### **Respecting Sanitary Waste Disposal**

46. The Licencee shall discharge sanitary wastes only to a sewerage system.

#### **Respecting Waste Water**

47. The Licencee shall collect all waste waters including but not limited to plate rinses, spent solutions, backwashes, drag-outs, scrubber washes, sludges, etc. which are generated by any processes associated with electroplating, and:
- a) treat the waste waters by means of a waste water treatment system prior to discharge to a sewage disposal system; or
  - b) dispose of the waste waters according to the provisions of *The Dangerous Goods Handling and Transportation Act*, C.C.S.M., c. D12.

#### **Respecting Record Keeping**

48. The Licencee shall compile, maintain and keep onsite and available for inspection by an Environment Officer, monthly records containing data from the latest 24 month period including:
- a) the maximum cumulative potential rectifier capacity available to those tanks containing chromic acid in the hard chrome plating facility;
  - b) total hours of application of current to tank(s) containing chromic acid in the hard chrome plating facility for the current month and the accumulated previous consecutive 12 month period;

- c) total ampere consumption (as amperes) of tank(s) in the hard chrome plating facility containing chromic acid for the current month and the accumulated previous consecutive 12 month period;
- d) all instances of exceedance of surface tension and foam blanket thickness stating time, date and measured value; and
- e) volume per week of liquid produced by the wastewater system and discharged to sewer.

49. The Licencee shall have the monthly data prepared in Clause 48 of this Licence, available for review not later than 15 days from that month's end and submit the reports to the Director upon request.

### **Respecting Financial Assurance**

50. The Licencee, within 90 days of the issuance of this Licence, shall post with the Manitoba Department of Conservation in the amount of \$100,000 Cdn:
- a) a permit bond issued by a surety company licenced to do business in the Province of Manitoba;
  - b) an irrevocable letter of credit; or
  - c) another acceptable security satisfactory to the Director.

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

51. The Licencee shall, within 90 days of the issuance of this Licence, provide to the Director confirmation of Environmental Impairment Liability insurance providing coverage subject to a minimum limit of \$1,000,000 Cdn per occurrence or claim, including coverage for gradual, and sudden and accidental pollution. Coverage to include on-site and off-site clean up costs, and be placed with insurers satisfactory to the Province of Manitoba. The Province of Manitoba is to be added as an Additional Insured on the policy. The policy shall contain a clause stating that the Insurer will give Manitoba 60 days prior written notice in case of a reduction in coverage or policy cancellation.



**REVIEW AND REVOCATION**

- A. Environment Act Licence No. 2616 R is hereby rescinded.
- B. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- C. If, in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Director may require the filing of a new Proposal pursuant to Section 10 of *The Environment Act*.

*“original signed by”*

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

**Client File No.: 4970.00**

## Schedule A to Environment Act Licence No. 2616 RR

### Monitoring Schedule

#### Part I

Where a wetting agent serves as the principal fume suppressant, the following protocols for monitoring the surface tension of the tanks shall be implemented:

1. During any of the following listed conditions, the measuring and recording of the surface tension using an approved device and/or methodology shall be made at four (4) hour intervals:
  - i) first addition of the wetting agent to the tank;
  - ii) every new tank solution;
  - iii) until 12 hour period of operation (3 consecutive samples with 4 hours sampling frequency) has passed without an exceedance.
2. When the conditions of Number 1 of Part I have been satisfied, the measuring and recording of the surface tension using an approved device and/or methodology shall be made at twenty-four (24) hour intervals until any exceedance occurs.
3. If Number 2 of Part I of the Schedule has resulted in an exceedance, the monitoring frequency shall revert to Number 1 of Part I.

#### Part II

Where a foaming agent serves as the principal fume suppressant, the following protocols for monitoring the foam blanket thickness of the tanks shall be implemented:

1. During any of the following listed conditions, the measuring and recording of the foam blanket thickness shall be made at one (1) hour intervals:
  - i) first addition of the foaming agent to the tank.
  - ii) every new tank solution.
  - iii) until a forty hour period of operation (40 consecutive samples with a 1 hour sampling frequency) has passed without an exceedance.
2. When the conditions of Number 1 of Part II have been satisfied, the measuring and recording of the foam blanket thickness shall be made at four (4) hour intervals until a further forty hour period of operation (10 consecutive samples with an 4 hour sampling frequency) has passed without an exceedance.
3. When the conditions of Number 2 of Part II have been satisfied, the measuring and recording of the foam blanket thickness shall be made at eight (8) hour intervals until any exceedance occurs.
4. If Number 2 or 3 of Part II of this Schedule has resulted in an exceedance, the monitoring frequency shall revert to Number 1 of Part II.