

Environmental Stewardship Division
Environmental Approvals Branch
1007 Century Street, Winnipeg MB R3H 0W4
T 204 945-8321 F 204 945-5229

CLIENT FILE NO.: 3398.00

June 21, 2019

Sheena Porco
Environmental Operations Specialist
Magellan Aerospace Corporation.
PO Box 874 STN Main
Winnipeg, MB R3C 2S4
Email: sheena.porco@magellan.aero

Dear Ms. Porco:

Enclosed is Environment Act Licence No. 1930 RR dated June 21, 2019, issued to Magellan Aerospace Ltd., for the continued operation of the Development being a rocket propellant production plant located at a land described as Attachment A in the Rural Municipality of Rockwood, Manitoba in accordance with the Proposal dated March 4, 1993, the Notice of Alteration provided on November 5, 2013, October 9, 2018, and additional information provided on January 2, 2019 and March 6, 2019.

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

For further information on the administration and application of the Licence, please feel free to contact Eshetu Beshada at (204) 945-7023. For operational issues please contact Tyler Kneeshaw, Environment Officer at 204-239-3608.

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

Yours truly,

“original signed by”

Cordella Friesen
Director
The Environment Act

c: Scott Davies/Yvonne Hawryliuk, Environmental Compliance and Enforcement
Siobhan Burland Ross, Environmental Approvals
Public Registries

NOTE: Confirmation of Receipt of this Licence No. 1930 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 July 26, 2019.

LICENCE

Licence No. / Licence n°	<u>1930 RR</u>
Issue Date / Date de délivrance:	<u>November 23, 1994</u>
Revised Date :	<u>June 25, 2014</u>
Revised Date :	<u>June 21, 2019</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 Sections 11(1) and 14(2) / Conformément au Paragraphes 11(1) et 14(2)

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

MAGELLAN AEROSPACE LTD.; "the Licencee"

for the continued operation of the Development being a rocket propellant production plant located at a land described as Attachment A in the Rural Municipality of Rockwood, Manitoba in accordance with the Proposal dated March 4, 1993, the Notice of Alteration provided on November 5, 2013, October 9, 2018, and additional information provided on January 2, 2019 and March 6, 2019, and subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence;

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

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

"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 the Regulations thereunder;

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

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

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

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

"explosive waste" means those solvent/propellant waste mixture containing greater than 1% ammonium perchlorate;

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

"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;

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

"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;

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

"solid waste" means solid waste as defined in Manitoba Regulation 37/2016, or any future amendments thereto, respecting waste disposal grounds, excluding waste rock;

"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; and

"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.

GENERAL TERMS AND CONDITIONS

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

1. The Licencee shall implement a high standard of equipment maintenance and good housekeeping and operational practices with respect to the Development, at all times.
2. The Licencee shall reduce the production and dissemination of wastes by initiating and maintaining waste reduction and waste recycling programs.
3. The Licencee shall submit all information required to be provided to the Director or Environment Officer under this Licence, in written and electronic format, in such form (including number of copies), and of such content as may be required by the Director or Environment Officer, and each submission shall be clearly labelled with the Licence Number and Client File Number associated with this Licence.
4. 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.
5. 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 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.
6. 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 or Environment Officer within 14 days of appointment and any subsequent appointment.

SPECIFICATIONS, LIMITS, TERMS, AND CONDITIONS

Respecting Air Emissions – Limits

7. The Licencee shall not cause or permit a noise nuisance to be created as a result of the construction, operation, or alteration of the development, and shall take such steps as the Director may require to eliminate or mitigate a noise nuisance.
8. 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 Ambient Air Monitoring

9. 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.
10. The Licencee shall implement the program approved pursuant to Clause 9 of this Licence within a timeframe determined by the Director.
11. The Licencee shall submit a report, for the approval of the Director, of the completed sampling and analysis plan approved pursuant to Clause 9 of this Licence, within 60 days of 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) results and conclusions of the QA/QC program; and
 - v) other issues as may be determined by the Director.

Respecting Chemical Storage and Spill Containment

12. The Licencee shall provide containment for all vessels containing chemicals in each area of the Development where the chemicals are stored, loaded, transferred, used or otherwise handled, in compliance with the current Manitoba Fire Code (Manitoba Regulation 155/2011), or any future amendment thereof, such that any product leakage or spillage and any contaminated liquid generated is contained within the Development and contamination of groundwater and surface water is prevented.
13. The Licencee shall, in a manner approved by the Director, remove and dispose of all spilled dangerous goods.
14. The Licencee shall prepare and maintain a chemical management plan that includes handling and storage of the chemicals utilized at the Development and shall be kept at the Development and available for review upon request by an Environment Officer.

Respecting Dangerous Goods and Hazardous Wastes

15. 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.
16. The Licencee shall not receive at the Development any hazardous waste from any generator off site of the Development.
17. The Licencee shall provide training to staff for proper handling and disposal of dangerous goods or hazardous waste and shall maintain a record of that training. The record shall be kept at the Development and shall be available upon request for inspection by an Environment Officer.

Respecting Wastewater

18. The Licencee shall not discharge wastewater beyond the boundaries of the Development except any discharge which is directed to an approved wastewater collection system.
19. The Licencee shall prevent the seepage or surface flow of any liquid waste contaminated with perchlorate from the burning operation from entering any land or body of water off the site of the said operation.

Respecting Explosive Waste Disposal

20. The Licencee shall prepare, within 90 days of the date of issuance of this Licence, and maintain an explosive waste management plan acceptable to the Director.
21. Notwithstanding Clause 16, the Licencee shall receive from customers only products manufactured and sold by Magellan Aerospace Ltd. for proper disposal or recycling at the facility.
22. The Licencee shall maintain an inventory of the explosive waste received from customers which shall be kept at the Development and available for review upon request by an Environment Officer.

Respecting Solid Waste

23. The Licencee 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 pursuant to Manitoba Regulation 37/2016 or any future amendment thereof, or a Licence issued pursuant to The Environment Act.

24. The Licencee shall handle all solid waste generated at the Development such that any contamination at the Development because of this material is prevented.
25. The Licencee shall direct all recyclable materials generated at the Development to an approved recycling facility.
26. The Licencee shall handle asbestos containing waste in accordance with Manitoba Workplace Health and Safety guidelines.

Respecting Burning

27. The Licencee shall use the burn area only for explosive contaminated materials.
28. The Licencee shall dispose of all burn residues and ashes pursuant to Clause 15 and 23 of this Licence.
29. The Licencee shall follow the burn procedure submitted and approved to dispose all explosive contaminated materials.

Respecting Emergencies

30. 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.
31. The Licencee shall, following the reporting of an event pursuant to Clause 30:
 - 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.
32. The Licencee 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

33. Within one year prior to imminent closure of the Development, the Licencee shall submit, for the approval of the Director, a formal detailed Closure and Post Closure Plan for the Development.
34. The Licencee shall implement and maintain the approved Closure and Post Closure Plan.

REVIEW AND REVOCATION

- A. This Licence replaces Licence No. 1930 R which 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 set out in this Licence, the Director may require the filing of a new proposal pursuant to The Environment Act.

“original signed by”

Cordella Friesen
Director
The Environment Act

Client File No.: 3398.00

**APPENDIX A
TO ENVIRONMENT ACT LICENCE NO. 1930 RR**

SITE DESCRIPTION/CHARACTERIZATION

1. Legal Description

As per the Certificates of Title provided in Attachment 2, Magellan Aerospace Limited is the registered owner of the following described land:

Title Number B 32700: The South half of-Section Seventeen, all of Sections Eighteen and Nineteen and the North West Quarter and the West half of the North East Quarter of Section Twenty, all in the Thirteenth Township and Third Range, East of the Principal Meridian, in Manitoba, excepting out of said Section Nineteen all that portion thereof taken for a Public Road as same is shown bordered pink on a plan deposited in the Winnipeg Land Titles Office as No. 8589, and also excepting out of the South West Quarter of said Section Eighteen all that portion thereof taken for rights of way for power transmission lines as same are shown bordered red and green respectively on a plan registered in the said office as No. 8268.

Title Number B 32701: The East half of Section Twenty-four in the Thirteenth Township and Second Range, East of the Principal Meridian, in Manitoba, excepting out of the Southeast Quarter of said Section all that portion thereof taken for Public Road as same is shown bordered pink on a plan deposited in the Winnipeg Land Titles Office as No. 8589. The Southwest Quarter of Section Twenty-nine, the South half of Section Thirty, and the South half of the North half of said Section Thirty in the Thirteenth Township and the Third Range, East of the Principal Meridian, in Manitoba.

Title Number B 32702: The Southwest Quarter of Section Twenty in the Thirteenth Township and Third Range, East of the Principal Meridian, in Manitoba, excepting there out the most Southerly Eight Hundred and Twenty-five feet in depth thereof.

Title Number 1001616: N ½ section 17-13-3 EPM, SE ¼ 20-13-3 EPM, E ½ of NE ¼ 20-13-3 EPM, and SLY 825 feet of the SW ¼ 20-13-3 EPM.

2. Land Use and Zoning

Magellan Aerospace Limited

The Bristol Aerospace Limited Rockwood plant site occupies 5½ Sections of land, or approximately 1,425 hectares in Township 13, Range 2 EPM and Township 13, Range 3 EPM in the R. M. of Rockwood; of which approximately 1,182 hectares are designated as "Special Industrial Zone" (MS).

The "MS" zoning designation as described in the R. M. of Rockwood Zoning By-Law provides for the development of a range of industrial uses where safety factors and nuisance factors must be considered, and specific site requirements must be maintained. "MS" uses are, wherever practical, to be located as far as possible from residential zones, and in such a way as to minimize any detrimental effect on other uses of land.

Permitted uses in a Special Industrial Zone include: "accessory use; building and structures; brick and concrete manufacturing plants, including concrete products, concrete and cement batching plants; Laboratories testing and research facilities, and manufacturing (b)"¹.

¹ R. M. of Rockwood Zoning By-Law No. 14-85