

Environment Act Licence

Manitoba
Environment



Licence No. 1769

Issue Date MARCH 21, 1994

In accordance with the Manitoba Environment Act (C.C.S.M. c. E125)

THIS LICENCE IS ISSUED TO:

Bristol Aerospace Limited: "the Licencee"

for the construction and operation of the Development being a groundwater remediation facility at the Licencee's Rockwood Propellant Plant in Sections 18, 19 and 20-13-3E in the Rural Municipality of Rockwood subject to the following specifications, limits, terms and conditions:

Specifications, Limits, Terms and Conditions

1. The Licencee shall construct the Development in accordance with the recommended alternative (Groundwater Containment) contained in The Environment Act Proposal dated September 23, 1993 and the supporting documents "Proposed Remedial Plan", "Groundwater Flow Regime Volume 1" and "Groundwater Flow Regime Appendices, Volume 2", all dated September, 1993 and prepared for the Licencee by UMA Engineering Limited and Conestoga-Rovers and Associates.
2. The Licencee shall, prior to the commencement of operation of the Development, receive the approval of the Director for a monitoring program for groundwater levels and volatile organic compound concentrations. The monitoring program shall include source and plume monitoring, and shall be developed in consultation with staff from Manitoba Environment and Manitoba Natural Resources.
3. The Licencee shall develop a plan to ensure that residual contaminant levels of water treated by the Development are within the limits specified by this Licence prior to the release of the water from the Licencee's property at the following times:
 - a) during the initial startup of operation of the Development; and
 - b) during startups of treatment following any suspensions of operation which have exceeded 28 days.

The Licencee shall receive the approval of the Director for this plan prior to the commencement of operation of the Development.

4. The Licencee shall submit operating reports on the Development to the Director at such times and include such information as determined by the Director. At a minimum, the reports shall include data respecting the volume of contaminated water pumped during the month, the times of operation, the times operation was suspended, and the volume and type of surfactant used.

5. The Licencee shall operate the Development to ensure that the concentration of trichloroethylene (TCE) in the treated water discharged from the Development does not exceed 20 micrograms per litre, and that the concentration of 1,1,1-trichloroethane (TCA) in the treated water discharged from the Development does not exceed 150 micrograms per litre. These concentrations shall be measured using sampling methods and analytical procedures approved by the Director. Concentrations shall be measured at the point where the discharged water leaves the Licencee's property and reported at such times and include such information as determined by the Director.
6. The Licencee shall operate the Development to ensure that the mean monthly emissions of TCE and TCA in the air discharged from the air stripping tower do not exceed 0.35 grams per second and 6.00 grams per second, respectively. These concentrations shall be measured using sampling methods and analytical procedures approved by the Director. Concentrations shall be reported at such times and include such information as determined by the Director.
7. The Licencee shall monitor concentrations of TCE and TCA in the drainage system on the south side of the point where the discharged water passes under PTH 67 and immediately downstream of the junction of the Steele Drain and Wavey Creek in S 11-14-2E. These concentrations shall be measured using sampling methods and analytical procedures approved by the Director. Reports on this monitoring shall be provided at such times and include such information as determined by the Director.
8. The Licencee shall monitor the following surface water quality parameters using sampling methods and analytical procedures approved by the Director:

pH	(pH units)
Conductivity	(microsiemens per centimetre)
Sodium	(milligrams per litre mg/L)
Calcium	(mg/L)
Magnesium	(mg/L)
Nitrate and Nitrite	(mg/L)
Sulphates	(mg/L)
Iron	(mg/L)
Hardness	(mg/L)
Total Dissolved Solids	(mg/L)

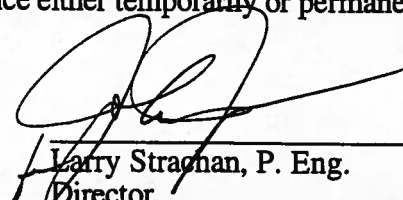
Water quality parameters may be added or deleted as determined by the Director. Water quality parameters shall be monitored where the discharged water leaves the Licencee's property, at the south side of the point where the discharged water passes under PTH 67 and immediately downstream of the junction of the Steele Drain and Wavey Creek in S 11-14-2E. Reports on this monitoring shall be provided at such times and include such information as determined by the Director.

9. The Licencee may suspend operation of the Development for a period up to one week for the purposes of maintenance, repair or the installation of equipment without providing prior notice to the Director.

10. The Licencee shall suspend operation of the Development or discharges of water into the surface drainage system upon receipt of a written or facsimile directive from the Director. Discharges of water shall not recommence until authorized by the Director in writing or by facsimile. During periods when discharges are suspended due to high runoff in the surface drainage system beyond the limits of the Licencee's property, the Licencee may store treated water in onsite ponds for later release or temporarily suspend operation of the Development.
11. The Licencee shall appoint one representative to an Operating Advisory Committee which will provide the Director with advice respecting temporary suspensions of operation as well as drainage system maintenance and ice management in the downstream drainage system. The composition of the Committee and its Terms of Reference shall be as described in Schedule A.
12. The Licencee shall evaluate the effectiveness of the Development at such times and include such information as may be reasonably specified by the Director.
13. The Licencee shall provide satisfactory evidence of financial security within 30 days of the date of this Licence or such other period as approved by the Director. Thereafter, the Licencee shall provide satisfactory evidence of annual renewals of this financial security, if applicable, for the duration of the Development. The financial security shall at all times be in a form and amount satisfactory to the Director such as to secure the costs of the continued operation of the Development. The Director may order forfeiture of the security, either in whole or in part, by giving written notice to that effect to the Licencee and the company underwriting the financial security, listing the terms of the Licence that the Licencee has failed to fulfill in whole or in part. The Licencee, or its financial security underwriters, shall within 60 days from the receipt of this written notice, comply with the terms of the Licence to the satisfaction of the Director. Failure to do so will result in the forfeiture of the security.
14. The Licencee shall ensure that all waste oil products generated by the machinery used in the construction and operation of the Development are collected and disposed of in accordance with applicable Manitoba Environment and legislative requirements.
15. The Licencee shall ensure that fuel storage areas established for the construction and operation of the Development comply with the requirements of *Manitoba Regulation 97/88R* respecting *Storage and Handling of Gasoline and Associated Products*.

Revocation

If, in the opinion of the Director, the Licencee has exceeded or is exceeding the limits, or has not complied or is not complying with the specifications, terms or conditions set out herein, the Director may revoke this Licence either temporarily or permanently.



Larry Strachan, P. Eng.
Director,
Environment Act

Schedule A

Operating Advisory Committee

Representation

The Operating Advisory Committee for the Bristol Aerospace Rockwood Propellant Plant Groundwater Remediation Facility shall consist of the following representatives:

Manitoba Environment (Eastern-Interlake Region) Chair

Bristol Aerospace

Rural Municipality of Rockwood

Manitoba Natural Resources

Local Representatives - 2 members, appointed by the Rural Municipality of Rockwood
(One member to be a resident near the facility and the other to be a downstream landowner.)

Terms of Reference

The Committee shall meet as required by construction and operational activities, but not less frequently than three times during the first year following the beginning of construction of the facility. Following the first year, meeting frequency is to be determined by the Committee.

The Committee shall provide advice to the Licencee and the Director respecting the following:

- 1) Guidelines and a procedure for the temporary suspension of operation of the Development.
- 2) Recommendations on drainage system maintenance between the edge of the Licencee's property and Wavey Creek.
- 3) Recommendations on ice and snow management between the edge of the Licencee's property and Wavey Creek.
- 4) Recommendations concerning the resolution of any disputes arising from the operation of the Development on the downstream drainage system.