Manitoba



EDVICEOUNEUX

FAXED

Environmental Management

Conservation

123 Main Street, Suite 160 Winnipeg MB R3C 1A5 CANADA

Fax: (204) 945-5229

Internet: http://www.gov.mb.ca/environ

January 7, 2000

Blair Geisel, Manager Central Manitoba Resource Management Limited PO Box 1265 Portage la Prairie MB R1N 3J9

CLIENT FILE NO.: 4472.00

JODA

Dear Mr. Geisel:

Enclosed is Environment Act Licence No. 2437 dated January 7, 2000 issued in accordance with the Manitoba Environment Act to Central Manitoba Resource Management Limited in connection with the construction and operation of the Development being an irrigation system located West of the Assiniboine River adjacent to Provincial Road 305 in the Rural Municipalities of Portage la Prairie, South Norfolk and Grey, in accordance with the Proposal filed under The Environment Act dated August 11, 1999.

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.

For further information on the administration and application of the Licence, please feel free to contact Walter Keryluk at 239-3187.

> Yours truly, City of the second

Larry Strachan, P. Eng. Director **Environment Act**

Enc.

c: L. MacCallum, Regional Director, South-Central Region, Conservation W. Keryluk, Environment Officer, South-Central Region, Conservation (FAXED) Centennial Public Library/Manitoba Eco-Network/Portage Plains Regional Library R.M.'s of Portage la Prairie/South Norfolk/Grey

G. McPhail, KGS Group (FAXED)

D. Menon, Manitoba Water Services Board (FAXED)

NOTE: Confirmation of Receipt of this Licence (by the Licencee only) is required by the Director of Approvals. Please acknowledge receipt by signing in the space provided below and faxing back to the Department by January 14, 2000.

On behalf of Central Manitoba Resource Management Limited

Date



Environment Act Licence Loi sur l'environnement Licence



IN ACCORDANCE WITH THE MANITOBA ENVIRONMENT ACT (C.C.S.M. c. E125) THIS LICENCE IS ISSUED PURSUANT TO SECTION 11(1) TO:

CENTRAL MANITOBA RESOURCE MANAGEMENT LIMITED: "the Licencee"

for the construction and operation of the Development being an irrigation system located West of the Assiniboine River adjacent to Provincial Road 305 in the Rural Municipalities of Portage la Prairie, South Norfolk and Grey, in accordance with the Proposal filed under The Environment Act dated August 11, 1999, and subject to the following specifications, limits, terms and conditions:

GENERAL TERMS AND CONDITIONS

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

- 1. The Licencee shall ensure that all used oil products and other regulated hazardous wastes generated by the machinery used in the construction and operation of the Development are collected and disposed of in accordance with applicable Manitoba Conservation and legislation requirements.
- 2. The Licencee shall revegetate areas disturbed by the construction of the Development with a mixture of native or introduced grasses or legumes. These areas shall be revegetated as quickly as possible following construction to prevent soil erosion and the establishment of noxious weeds. Native species shall be used to revegetate areas where native species existed prior to construction.
- 3. The Licencee shall:
 - a) prepare "As Constructed" drawings for the Development and shall label the drawings "As Constructed"; and
 - b) provide to the Director, within three months of the completion of construction of the Development, two sets of "As Constructed" drawings.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Project Scope

4. The Licencee shall, unless otherwise approved by the Director in writing, construct the water diversion and management works and irrigate the land as described on the following plan attached to this Licence:

"Fairholm Colony Irrigation Project Site Plan and Irrigation Area, June 1999, Figure 1"

Proposed amendments to this plan must be submitted to the Director for approval with the nature and purpose of the amendments noted on the plans.

Construction

- 5. The Licencee shall provide notification to the Environment Officer responsible for the administration of this Licence not less than two weeks prior to beginning construction of the Development of the intended starting date of construction and the name of the contractor responsible for the construction.
- 6. The Licencee shall, prior to beginning construction of the Development, obtain, if necessary, a Utility Agreement with Manitoba Highways and Government Services respecting the installation of pipelines in provincial road rights-of-way.
- 7. The Licencee shall, prior to the construction of tile drainage facilities in connection with the Development, obtain a Water Rights Licence from the Water Resources Branch of Manitoba Conservation.
- 8. The Licencee shall ensure that fuel storage areas, established for the construction of the Development:
 - a) are located a minimum distance of 100 metres from any waterbody; and
 - b) comply with the requirements of Manitoba Regulation 97/88R respecting Storage and Handling of Gasoline and Associated Products.
- 9. The Licencee shall not undertake instream construction activities in connection with the Development between April 1 and June 15 of any year.
- 10. The Licencee shall not undertake instream construction activities in connection with the Development during periods of high streamflow.
- 11. The Licencee shall, immediately following construction of the water intake facilities associated with the Development, stabilize the riverbank to prevent erosion and sedimentation into the Assiniboine River.
- 12. The Licencee shall ensure that buried pipelines which are installed on cultivated land or land in its natural state are installed in accordance with the methodology illustrated in Figures 2 to 4, attached to this Licence. These procedures do not apply when a plough or a continuous trencher is used to install a pipeline.

Operation - Matters Respecting Water Management and Water Quality Protection

- 13. The Licencee shall, during operation of the Development, take all precautions necessary to prevent fuel from entering any waterbody. Diesel pump units, other than tractors, shall be placed on drip trays and fuel tanks shall be double walled or contained in larger non drainable containers. Fuel spills in excess of 100 litres shall be immediately reported to an Environment Officer.
- 14. The Licencee shall ensure that pump intakes associated with the Development are screened in accordance with the Department of Fisheries and Oceans publication "Freshwater Intake End-of-Pipe Fish Screen Guideline" (March, 1995). Final screen designs shall be approved by the Department of Fisheries and Oceans prior to the operation of the Development. Alterations in screen design required by any future changes in the pumping period shall also be approved by the Department of Fisheries and Oceans prior to any changes in the operation of the Development.
- 15. The Licencee shall ensure that a minimum instream flow is maintained below the diversion point of the Development in NW 35-9-8W at all times while water is being diverted into the Development. The minimum instream flow at the diversion point shall be as determined by Manitoba Conservation and specified in a Water Rights Licence issued for the Development.
- 16. The Licencee shall immediately cease diverting water from the Assiniboine River or reduce the diversion rate if the minimum instream flow provided for in Clause 15 of this Licence is not equalled or exceeded.
- 17. The Licencee shall, on a daily basis while irrigation is occurring from the Development, record volumes of water pumped, and durations of pumping. A report on this information shall be provided, by March 1 of the following year, to the Environment Officer responsible for the administration of this Licence, the Environmental Approvals Branch, and the Water Resources Branch of Manitoba Conservation. The report shall be provided in the format shown in Table 1, attached to this Licence.
- 18. The Licencee shall ensure that backflow prevention devices are installed and are operational at all times when fertilizer or crop protection products are applied through the irrigation systems of the Development.
- The Licencee shall, by March 31, 2000, provide for the approval of the Director, a procedure for the draining and flushing of the irrigation systems of the Development following the transport of manure slurry.
- 20. The Licencee shall ensure that backflow prevention devices are installed and are operational at all times when the irrigation systems of the Development are drained and flushed following the use of the systems for the transport of manure slurry. Liquid from the draining and flushing operations shall not be allowed to flow by pipe or over land to any surface water body.

Operation - Matters Respecting Land Management and Soil Quality Protection

- 21. The Licencee shall ensure that irrigation does not occur, with water diverted by the Development, on a land parcel other than a land parcel identified in the Environment Act Proposal, dated August 11, 1999.
- 22. The Licencee shall implement agronomic practices described in the following documents:

a) Appendix A of the Environment Act Proposal, dated August 11, 1999, concerning field specific practices; and

b) The Annex to the Environment Act Proposal titled "Best Management Practices Manual 1999", concerning general agronomic practices.

Practices described in the above noted Annex shall be implemented upon receiving the approval of the Director relative to these Best Management Practices. These practices shall be implemented relative to the specific requirements of Appendix A of the Proposal, and their implementation shall be in keeping with future updates of the Best Management Practices Manual.

- 23. The Licencee shall maintain grassed buffer strips at the points where field drains within the area of the Development exit into a provincial or municipal drainage system.
- The Licencee shall, by March 31, 2000, provide a manure management plan for the land parcels of the Development. The plan shall include information on the application rate and the method of operation of the irrigation systems to accommodate manure transport.
- 25. The Licencee shall not apply manure to lands of the Development in excess of values specified in *Manitoba Regulation 42/98* respecting *Livestock Manure and Mortalities Management*.

Monitoring

- 26. The Licencee shall provide a listing of annual groundwater, surface water and soil monitoring activities to be carried out for the Development. The plan shall include a monitoring schedule, and shall be provided to the Director for approval by March 31, 2000.
- 27. The Licencee shall, on an annual basis, undertake the monitoring plan approved by Clause 26 of this Licence. A report summarizing the monitoring results for the previous year shall be submitted to the Director by March 1 of each year.
- 28. The Licencee shall, on an annual basis following the spring runoff period, undertake an inspection of the Assiniboine River pump pad and access ramp, and the riverbank adjacent to these works. Any required maintenance identified by the inspection shall be undertaken as soon as possible. Instream maintenance shall not be undertaken prior to June 15 of any year.

Central Manitoba Resource Management Limited Licence No. 2437 Page 5 of 5

REVIEW AND REVOCATION

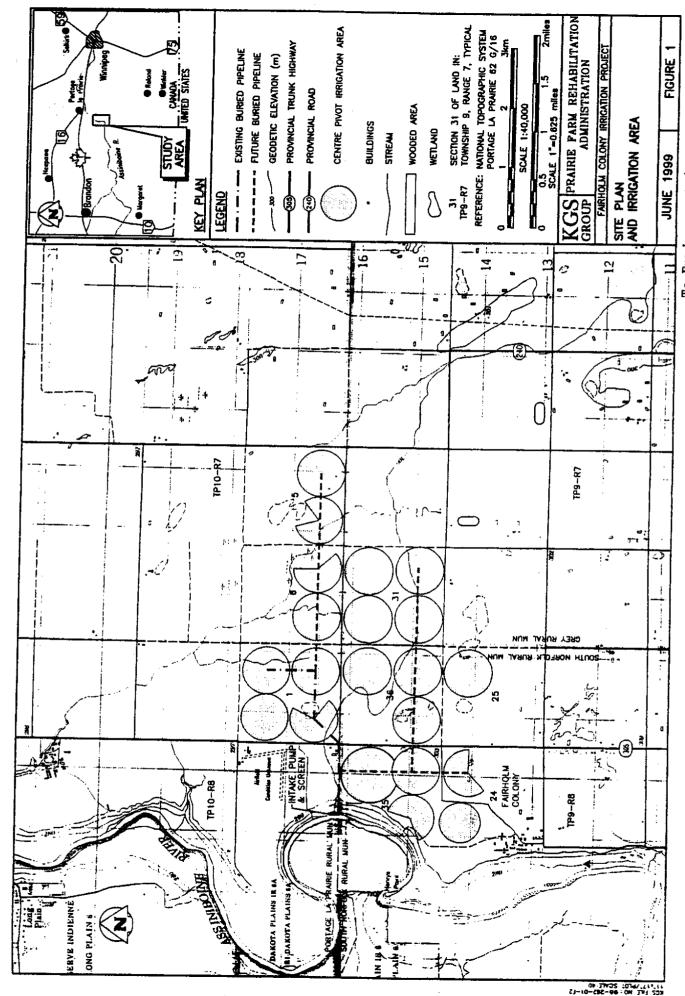
- A. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- B. If construction of the development has not commenced 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 of this Licence, the Director may require the filing of a new proposal pursuant to Section 11 of The Environment Act.

Larry Strachan, P. Eng.

Director

Environment Act

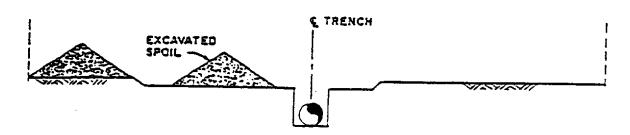
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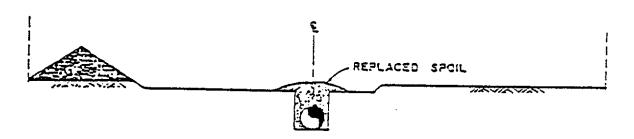
To Environment Act Licence No. 2437



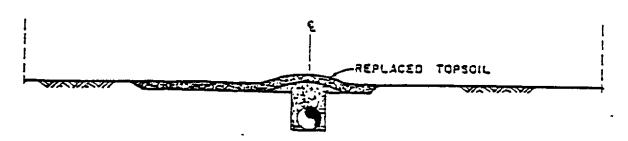
L TOPSOIL STRIPPED



2. TRENCH EXCAVATED



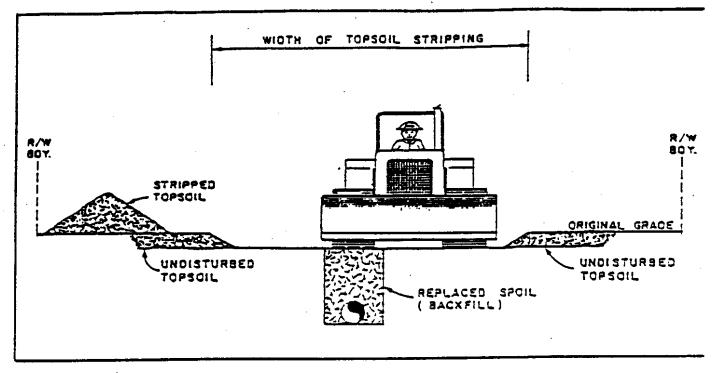
3. TRENCH BACKFILLED



4. TOPSOIL REPLACED

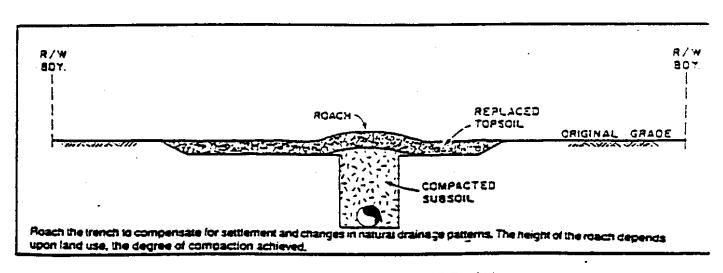
SEQUENCE OF TOPSOIL HANDLING

Figure 2



COMPACTION OF EACKFILL

Figure 3



ROACHING THE TRENCH

Figure 4

Table 1 To Environment Act Licence No. 2437

	Central Manitob	a Resource Manag	ement Limited	T
· · · · · · · · · · · · · · · · · · ·		- Acada Co Manag	Jement Emited	
	Fairholm Colony Irrigation Project			
	Annual Water Use Report			
Intake Loc.:	NW 35-9-8W	Year:		
D].		3	
Pump Capacity:	T		m ³ /s or cfs	
Minimum Instrea	am Flow:	Monitoring Point		
		Flow (m ³ /s)		
	1		pstream or downstream) of	
		intake location.	<u> </u>	
Conversions:	1 acre (ac.) = 0.405 hectares (ha.) 1 ha. = 2.471 ac.			
	1 acre-foot (acft.) = 1.233 cubic decametres (dam³) 1 dam³ = 0.811 acft.			
	1 cubic foot per second (cfs) = 0.0283 cubic metres per second (m³/s)			
	$1 \text{ m}^3/\text{s} = 35.31 \text{ cfs}$			
	1 imperial gallon per minute (IGPM) = 0.000076 m ³ /s			
	1 US gallon per minute (USGPM) = 0.000063 m ³ /s			
Date	Pumping Rate	Duration	Volume Pumped	Flow at Monitoring Point
	m³/s	hours	dam ³	m³/s
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