### SUMMARY OF COMMENTS/RECOMMENDATIONS

**PROPOINENT:**
Town of Virden

**PROPOSAL NAME:**
Town of Virden Water Treatment Plant

**CLASS OF DEVELOPMENT:**
1

**TYPE OF DEVELOPMENT:**
Water Treatment Plant (wastewater)

**CLIENT FILE NO.:**
4220.00

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### OVERVIEW:

On November 14, 1996, the Department received a Proposal dated November 13, 1996, compiled by Reid Crowther & Partners Ltd. The Proponent proposes to develop a water treatment plant to be located on Lot 16, Block B, Plan 210 in the N1/2 22-10-26 WPM, which is currently used for the Town's water storage and distribution pumping facility. The proposed treatment process train is ozone, greensand filtration followed by membrane filtration. The proposal is for the disposal of 115 cubic metres per day of filter backwash water and, 0.25 ML/d of membrane reject water by direct discharge to Gopher Creek.

The Department, on December 24, 1996, placed copies of the Proposal in the Public Registries located at Building 2, 139 Tuxedo Avenue; the Centennial Public Library; and the Border Regional Library 312 12th Avenue S., Virden and provided copies of the Proposal to the Interdepartmental Planning Board, the Canadian Environmental Assessment Agency and TAC members. As well, the Department placed public notification of the Proposal in the Virden Empire Advance on Tuesday December 24, 1996. The newspaper and TAC notification invited responses until January 15, 1997.

### COMMENTS FROM THE PUBLIC:

No comment was received from members of the public in response to the notification given. The Town of Virden has kept downstream users apprised of its intentions with regards to potential discharges to Gopher Creek. In response to this consultative approach by the Town, one letter was forwarded to the Minister of Environment opposing the proposed discharge to Gopher Creek. The concern was related to the potential degradation of the water quality downstream.

**Disposition:**
This concern can be addressed as licence conditions. A licence condition can require the routine monitoring of a limited number of water quality parameters between the outfall and the first withdrawal point to ensure quality in Gopher Creek remains acceptable. This was discussed with the Water Quality Section and they concurred that this would address the concern.

### COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

**Highways**

- no objections to this development.
• request submission of design details for all work within Departmental right-of-ways, in particular with regards to Highway traffic control standards, pipeline crossings of PTHs and returning of rights-of-way to an acceptable condition.

Disposition:
This concern can be addressed as a licence condition.

Natural Resources

• the backwash water from the plant contains a number of undesirable elements such as chlorine and arsenic. The levels of these elements in the filter backwash water should be assessed to determine if they comply with the Surface Water Quality Objectives and if they will have any impacts on fish in the Assiniboine River.

Disposition:
This concern can be addressed as a licence condition.

Historic Resources

• no concerns.

Urban Affairs

• no comment.

Rural Development

• no concerns from a land use perspective.
• though outside of their direct area of concern, they question whether the ecology of Gopher Creek will be unduly adversely affected by this daily contaminant load. If this is a potential problem, further mitigating measures should be considered to dilute or stop these chemicals from entering Gopher Creek.

Disposition:
The monitoring of water quality parameters downstream of the discharge location will determine whether further mitigating measures are needed.

Health

• Health concerns include:
  - adherance to the Guidelines for Canadian Drinking Water Quality;
  - monitoring of Gopher Creek should be considered to determine the environmental impact of backwash discharge from the water treatment process.
  • proper storage and containment of diesel fuel.

Disposition:
These concerns can be addressed as licence conditions.

**Environment-Operations Division**

- no comments.

**Environment-Water Quality Management**

- no comments.

**Canadian Environmental Assessment Agency**

- application of the *Canadian Environmental Assessment Act* will be required.

**RECOMMENDATION:**

The attached draft Licence be issued. Enforcement should be retained by the Approvals Branch until all submissions are made.

**PREPARED BY:**

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