

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Town of Roblin
PROPOSAL NAME: Town of Roblin Tertiary Wastewater Treatment Demonstration Project
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: Wastewater Treatment System - Constructed Wetland
CLIENT FILE NO.: 107.40

OVERVIEW:

On July 22, 1996, the Department received a Proposal from the Town of Roblin dated July 15, 1996, to develop 80 acres of land located east of the existing sewage treatment lagoon system located in the East 1/2 of the Southwest quarter of Section 28, Township 25, Range 28 WPM. The Proponent proposed that 20 acres be used for irrigation of hybrid poplars with lagoon effluent on an experimental basis, 40 acres be seeded with alfalfa brome mix and irrigated with lagoon effluent and 20 acres be developed into wetlands for effluent polishing before final discharge to the Shell River.

The Department, on August 30, 1996, placed copies of the Proposal in the Public Registries at Building 2, 139 Tuxedo Avenue, the Centennial Public Library; and the Town of Roblin Municipal Office. The Department, on August 30, 1996, also circulated the proposal to the Technical Advisory Committee members and provided a copy to the Director and Provincial Liaison for the Canadian Environmental Assessment Agency. As well, the Department placed public notification of the Proposal in the Roblin Review on Tuesday, September 10, 1996. The newspaper and TAC notification invited responses by October 9, 1996.

COMMENTS FROM THE PUBLIC ON JULY 15, 1996 PROPOSAL:

William Bodnariuk

- The water quality in the Shell River would be adversely affected.

Agnes Burgess

- There are better ways.

George Bulezuk

- The Shell River flows through my property and the water quality of the water for livestock will be impaired.

Peter and Margaret Burla

- The water quality in the Shell River would be adversely affected.

Dwayne Burla

- The water quality in the Shell River would be adversely affected.

Doreen Carnesh

- Continue to do what is done now and not discharge to the Shell River.

Ron Cockerill

- Proposal is insufficient.

Mabel and William Cranwell

- The increase of water in the lakes would give us less land for agriculture; and
- It will affect the quality of water for livestock.

James Daneliuk

- The water quality in the Shell River would be adversely affected.

William De la Mare

- The increase of water in the lakes would give us less land for agriculture.
- It will affect the quality of water for livestock; and
- There has been no consultation by the Town of Roblin with me.

Nicholas Derkach

- Against dumping garbage into the Shell River

Judith Donaldson

- Irrigation of agricultural land would be a better solution.

Geraldine Edel

- Objects to sewage being dumped into the Shell River.

Herman Edel

- Objects to the proposal.

Harold Fingas, President, Inglis and Area Lion's Club

- Concerned of the impact on the use of the recreational area on the Shell River when people become aware of the proposal.

Gela Stach-Gaber

- Effluent should be used to irrigate agricultural land; and
- Without an environmental hearing to have all the facts presented, it is difficult for the public to become fully informed.

Witney and Ava Gaber

- Object to dumping effluent into the Shell River.

Devron Gaber

- The pollution of the river will negatively affect the wildlife and detract substantially from the pleasure residents of the valley and area derive from living near a body of water that is free from effluent.

Byron Gaber, President, Save the Shell Group Inc.

- Is the area properly zoned?
- No previous studies other than soil analysis;
- The proposal has insufficient information on the use of effluent discharged into wetlands, growing hybrid poplars, effluent discharge quality or quantities, rate of flow on the wetlands project or poplar project or irrigation project, or the existing irrigation project;
- 20 acres wetland is undersized;
- Statement on impact are not substantiated with studies;
- No information available on the wetland site to determine whether there will be contamination of the ground water; and
- there are two recreational areas downstream from the discharge site.

Austin and Margaret Goods

- The Shell River is already green as manure and has no fish in it during July and August.

Harvey Hackman

- We are not in favour of dumping sewage into the Shell River; and
- Why can the effluent not be put onto agricultural lands?

Katie Halwas

- objects to effluent going into the Shell River.

A. Gorden Jory

- The pollution caused will be negative for agriculture, recreation and establishment of acreages to build homes; and
- The people should be consulted and listened to.

Woody Langford

- Requests an extension to response period due to harvesting.

Clarence and Joyce Lazaruk

- The time the public to react is very short;
- The Shell River is used for swimming at Lion's Park;
- Will the proposal result in contamination of well water close to and below the level of the river bed?
- would like to see the river maintained in it's natural state;
- The proposal is not detailed and has no technical support;
- What has happened to the current arrangement of irrigation of three quarters of alfalfa?
- Can a 20 acres wetland handle 75,000,000 gallons of effluent and purify it to a suitable level?
- How long does effluent have to sit in the wetland before it's ready for discharge? and
- Will the wetland be a glorified ditch, a way of masking direct discharge into the Shell?

E. A. Mench

- Opposed to dumping effluent into the Shell River

Earl Michelson

- Opposed to discharge to the Shell River

John and Eveleen Nevistiuk

- There have been insufficient studies done on the project;
- 20 acres wetland is too small to handle all of the Town's effluent;
- There have been no studies on how the effluent will affect the Shell River; and
- The ground water will be polluted.

Eric Nernberg

- The Shell River flows through my property and the water quality of the water for livestock will be impaired.

George Pameruk

- The Town of Roblin should not have the right to dump effluent into the river which will directly affect me;
- Uses the river to water cattle; and
- What are the effects on wildlife, fish and other inhabitants of the river?

Nick Prokopetz

- Opposed to any discharge to the Shell River

Theresa Prokopetz

- Opposed to any discharge to the Shell River

Don and Freda Robin

- The River is used for cattle watering and swimming; and
- Why were there no public hearings.

Rural Municipality of Russell

- Request an extension to time for submission of comments.

Rural Municipality of Shellmouth

- It is not in the best interest of downstream rate payers;
- Possible detrimental effects on wildlife based on the Shell River; and
- Possible future detrimental effects on tourism and recreation.

Joan Smith

- Against the discharge of any effluent into the Shell River; and
- objects to proposal

Erwin Stelter

- The quality of water may become unsuitable for use by livestock; and
- Opposed to any discharge to the Shell River

Elizabeth A Zachedniak

- Approval should not be granted without proper environmental hearings and considerations;
- How will the effluent affect the fish and wildlife in the Shell River and the Lake of the Prairies; and
- Why cannot the existing irrigation system be used?

Garry Zimmer

- Opposed to any discharge to the Shell River

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE ON JULY 15, 1996 PROPOSAL:

Highways:

- No objection but proposal does not provide sufficient details on the construction of the wetland area, nor operating procedures of the tree program; and
- Details of proposed access and traffic volumes should also be given.

Natural Resources:

- No concerns with proposal proceeding

Historic Resources:

- no concerns.

Health:

- Insufficient information: possibility of aerosolized spray coming in contact with people;
- impact on ground water;
- impact on the Shell River, fish and aquatic life affected; and
- impact on people, farms, and cattle use of the Shell River.

Rural Development:

- no planning concerns.

Environment-Operations Division:

- Proposal is incomplete and should include information on: construction of wetlands area, and control measures in place for effluent discharge, identification of the discharge route to the Shell River, sampling protocol to be implemented to monitor discharge quality into the Shell River, baseline groundwater sampling to be conducted on the proposed development.

Environment-Water Quality Management:

- proposal has a number of information deficiencies: detailed design of wetlands, details of operation of wetland, expected wetland treatment efficiencies, anticipated volume of effluent being discharged, calculated impacts of discharge on receiving water, description of monitoring plans.

Environment-Terrestrial Quality Management:

Chloride concentrations in the soil profiles are very high. If the chloride concentration in the effluent is high, this would exacerbate the soil chloride levels. The proposal is not advisable. If soil application does occur, soil chemistry for chlorides should occur on an annual basis at least 10 locations, with samples taken from the 0 to 10 cm and 10 to 30 cm depths.

Canadian Environmental Assessment Agency:

- an environmental assessment under *The Canadian Environmental Assessment Act* will be conducted by Western Economic Development

Copies of the Public and Technical Advisory Committee responses were placed in the Public Registries on July 29, 1997.

Town of Roblin:

The Town of Roblin, on November 14, 1996, requested that the Proposal submitted on July 15, 1996, be put on hold until an assessment of the water and sewer audit has been completed. By letter dated May 13, 1997, the Town, advised Manitoba Environment that the proposed engineered wetland as stated in the Proposal of July 15, 1996, will result in a net positive environmental affect, and requested that the submission be reviewed pursuant to Section 14 of the Environment Act.

By letter dated August 18, 1997, The Town of Roblin notified the Director of a proposal to alter the operation of the licensed wastewater treatment lagoon. The Town submitted a revised alteration which includes the existing wastewater treatment lagoon and effluent irrigation system, and a 40-acre engineered wetland instead of a 20-acre wetland. The remaining 40 acres will be planted with hybrid poplar trees and receive effluent from cells 3 and 4 of the engineered wetland. Any effluent that leaves the site would be discharged through a chain of pot holes and lakes east of the site before entering the Shell River. The revised alteration predicts that effluent would not leave the site during 70% of the years of operation. The Town provided a Design and Operations Report, on August 22, 1997, and an Initial Environmental Assessment on August 27, 1997, in support of the revised alteration. These documents included activities taken to incorporate the opinions of local stakeholders in the review of options.

On August 29, 1997, The Town notified the Director of a further alteration to their letter of August 18, 1997. The Town now proposed that the engineered wetland and hybrid poplar plantation would be operated in such manner that effluent would be allowed to enter the natural marsh on the Town owned property but would not enter the chain of pot holes and lakes to the east of the site. Any flow in excess of the capacity of the engineered wetland, the poplar plantation and the natural marsh, would be discharged to

the municipal ditch north of and adjoining PR 583 and flow to the Shell River. The Town requested that in the event of such excess flows the discharge be considered an “emergency” in consideration of Clause 11 of Environment Act Licence No. 1880.

TetrES Consultants Inc., on September 8, 1997, submitted an Addendum to the Initial Environmental Assessment on behalf of the Town of Roblin. The information in the addendum supplements the Initial Environmental Assessment (IEA) in part, and also modifies and changes portions of the IEA and the Design and Operations Report filed with Manitoba Environment on August 22, 1997 in relation to a communication from the Town of Roblin to Manitoba Environment dated 29, 1997. In this letter the Mayor of The Town of Roblin gave a commitment of a zero discharge operation of the proposed wetland.

The revised definition of the demonstration project included the following:

- there will be no outlets constructed for discharges from the wetland;
- treatment of flows from the wetland, including diverted flows from streams otherwise intended for irrigation on land owned by the Town, to achieve final effluent concentration for total phosphorous and total nitrogen of 0.14 mg/l and 0.34 mg/l, respectively;
- discharge of tertiary effluent from the final treatment cell (Cell 4) in any years in which the cumulative wastewater management capacity of the Town’s infrastructure and assets is exceeded;
- discharge of tertiary effluent to the municipal ditch adjoining and north of Provincial Road No. 583 for conveyance to the Shell River; and
- water quality characteristics of any such discharged effluent will satisfy prescriptions in Licence No. 1880.

On September 18, 1997, TetrES Consultants Inc., on behalf of the Proponents, informed Manitoba Environment of an allowance for the potential of a dual discharge route with the input of the opinions of the landowners along the eastern chain of pot holes and lakes eventually reaching the Shell River, and a direct discharge along PR 583 leading to the Shell River.

The proposal considered, therefore consisted of the following:

- (a) The discharge from the engineered wetlands to Lake “C” in wet years (less than 4% of the time). This proposal may include the following:
 - monitoring the lake to determine if there is an increase in algal growth due to phosphorous loading greater than the background for wetlands;
 - diversion of the effluent to the municipal drain; and treatment of the lake to reduce algal growth.
- (b) Implementing measures to mitigate a buildup of chlorides in the downstream lakes if they are used by adjoining land owners for irrigation. Such measures include:
 - reduction of salt use in water softeners in Roblin;
 - diversion of the effluent to the municipal drain; and

- continuing liaison with the downstream landowners.
- (c) Limiting discharge only to Lake B on the Town's property, and, if necessary, make additional discharge to the ditch along PR 583. A decision on an eventual route would be made at a later date after more consultation has taken place with land owners along the eastern chain of pot holes and lakes.

Save The Shell Group

The Save The Shell Group submitted, on September 1, 1997, a response to the Town of Roblin's proposal to discharge effluent through the chain of pot holes and lakes and eventual discharge to the Shell River. The position of the Group is "Zero discharge to the Shell River. There are better alternatives". The Group requests that the Town advertise their intent in both community newspapers, the Roblin Herald and the Russell Banner; that the timing of these advertisements not coincide with harvest or spring seeding; that the general public be given an adequate length of time to respond and that they first be given an opportunity to review the proposal in detail. The Group also requested that if the response to this advertisement is considerable, that a Clean Environment Commission hearing be convened. The response included 19 letters of support for the Group's position. Three land owners east of the site through which the effluent would pass via the chain of pot holes and lakes provided letters of support of the Group's position.

Letters of support cite the following objections to the discharge through the chain of pot holes and lakes to the Shell River:

- Increase of water in the lakes would result in less land for agricultural use;
- It would effect the quality of the water for livestock;
- Concerned about seepage and present level of lakes;
- No consultation between Town and land owner;
- Concern that the quality of the water in the Shell River may become unsuitable for use by livestock if direct discharge is permitted;
- River is used for swimming, canoeing, and the banks for hiking and bird watching;
- River used for irrigation;
- Plan should have considerably more public input and review in order to properly assess the environmental impact of any plan to discharge sewage into this river, whether through a wetland or by other means;
- Water used for water supply;
- Assessippi Beach located downstream and used for swimming;
- The Advisory Committee procedures gave the appearance that there was no opposition; and
- Any plan to discharge sewage into this river by any means should require considerable public consultation prior to approval, in order that the environmental impact on all parties affected could be more appropriately assessed.

Disposition of Public Concerns:

The proponent was requested to and submitted an assessment of the alteration on the uses made of the Shell River.

The proponent was requested to consult with the public on the proposed alteration.

DISCUSSION:

The Proponent formed a citizens committee to advise the Town Council on the options for the disposal route. Although the committee appeared to reach consensus to accept the option of discharging from the engineered wetland to the chain of pot holes and lakes to the east of the site, the affected land owners and the Save the Shell Group objected to this option.

The following are the Public areas of concern regarding the potential impairment of the water quality in the Shell River:

- livestock watering;
- primary recreation;
- secondary recreation;
- drinking water; and
- crop irrigation.

The environmental impact assessment prepared by the Consultants for the Town of Roblin has considered all the uses of the Shell River. The Consultants have indicated that the environmental effects of the proposed alteration are insignificant.. The proposal, however, is a demonstration project and the final operating details will only be available after obtaining actual operating experience. As well, the information provided indicates that the seepage from the existing wastewater treatment lagoon system flows to a chain of pot holes and lakes west of the development.

PUBLIC HEARING:

A public hearing is not recommended.

POSITION OF ENVIRONMENTAL APPROVALS BRANCH:

The Environmental Approvals Branch has considered the proposed alteration to be minor and is prepared to approve the alteration pursuant to Section 14(2) of The Environment Act.

RECOMMENDATION:

As a result of the position of the Branch, the following recommendations are made:

1. Environment Act Licence No. 1880 should be revised in accordance with the limits, terms and conditions of any Licence issued for this Development.
2. A draft Licence should be issued to the Proponent for comments.

ADDITIONAL COMMENTS

Subsequent to the receipt of comments from the Proponent on the draft Licence, a Stage 1 Construction Licence was issued to the Licencee, The Town of Roblin.

A draft Stage 2 Operating Licence was submitted to the Proponent for comments. Subsequently, several meetings were held between the Consultant to the Town of Roblin and representatives of Manitoba Environment to review the draft Stage 2 Operating Licence. After several drafts of the Stage 2 Operating Licence were prepared by Manitoba Environment, The Town of Roblin and the Consultant to the Town of Roblin agreed to the final draft dated October 6, 1998.

RECOMMENDATION:

1. A Stage 2 Operating Licence should be issued to the Town of Roblin.
2. Enforcement of the Stage 2 Operating Licence should be assigned to the Approvals Branch until all sampling results and data required in the Licence are received and the operating details and monitoring program are approved by the Director.
3. The Consultants to the Town of Roblin should provide detailed drawings and specifications to the Director for the construction of the Development.

PREPARED BY

Charles Conyette, P. Eng.
Telephone: (204) 945-7065
Fax: (204) 945-5229
E-mail Address: cconyette@environment.gov.mb.ca