

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOSER: Town of Lac du Bonnet
PROPOSAL NAME: Water Treatment Plant Upgrade

CLASS OF DEVELOPMENT: One
TYPE OF DEVELOPMENT: Waste Disposal - Water Treatment Plants
(Wastewater)

CLIENT FILE NO.: 4790.00

OVERVIEW:

The Proposal was received on March 27, 2002. It was dated March 22, 2002. The advertisement of the proposal was as follows:

“A Proposal has been filed by J. R. Cousin Consultants Ltd. on behalf of the Town of Lac du Bonnet for the construction and operation of upgraded water treatment facilities. The town’s existing water treatment plant would be expanded and new clarification and filtration equipment would be installed. Additional reservoir capacity would be provided, and raw water pumping facilities would be upgraded. The capacity of the new plant would be 21 litres per second, intended to accommodate the Town’s demands to the year 2021. The plant would continue to withdraw water from Lac du Bonnet, and wastewater from the plant would continue to be discharged to the Town’s sewer system. A discharge line to the lake is proposed in the future. Construction of the project is proposed to begin in the summer of 2002.”

The Proposal was advertised in the Lac du Bonnet Leader on Monday, May 20, 2002. It was placed in the Main, Centennial, Brokenhead River Regional Library (Beausejour) and Library Allard (St. Georges) public registries. It was also placed in the Town of Lac du Bonnet office as a public registry. The Proposal was distributed to TAC members on May 13, 2002. The closing date for comments from members of the public and TAC members was June 3, 2002.

COMMENTS FROM THE PUBLIC:

Ted Mathers

1. Page 2, section 2.2 Project components – treatment system - actiflo unit – sand medium – two 13 square metre sand filters – would you clarify if this is 2 trains of approximately 140 square feet each? April 2000 report of JR Cousin indicates Actiflo package plants filtration rates range from four to eight USGPM per square foot.

2. Filter run time is to be 19 hours a day – what would the daily output of these units be – would they be properly sized for the Town of Lac du Bonnet (present and future?)
3. Page 5 Section 4.1 Water Quality No additional use above the current system. Page 3 indicates an estimated 60 m³/day for backwash. (13200 IG) Current WTP records show a backwash average daily use of 5022 IG (August 2001) and 4845 IG (March 2002). This is a large increase of wasting treated water.
4. File 4492.00 Cambrian Stone November 1999 page 14 indicates that the proposed tile plant would receive services from the Town infrastructure. Page 30 indicates without recycling water an eight hour shift would use 2.4 million litres. (527925 IG)
5. Preliminary report JR Cousin indicates that the proposed tile plant would create 220 new jobs increasing in stage 2 year 2012 to 360 employees. This plant is no longer interested in locating in Lac du Bonnet.
6. There has never been any thought to conservation of water in the Town.
7. There seems to have been no effort to look at the meter readings and a) balance the present plant and b) determine if the meters were correct and if so, have we any water loss in any of the areas.
8. Table 1 indicates a population of 1102 in year 2002 – probably less now. The table uses a growth rate of 1% per year. History shows a growth rate of less than 0.5%.
9. There appears to be no use of the information in the RDI report series 2000-1 by Dr. Richard Rounds. The report indicates some dramatic changes in the rural area of Manitoba away from the capital region.
10. There appears to be no use of Stats Canada long range population projections.
11. There appears to be no use of the latest population statistics by Stats Canada.
12. All the projections for the area indicate a dramatic drop in the youth population, a rise in the older sector and an overall drop in population. Projected 2001 of 16,081 falling in the next 20 years to 12,740. The projected 16,081 was not reached – has the trend downward started?
13. There have been many population projections for Lac du Bonnet in the past and none have been achieved. Why will it be different now when all indicators point to the opposite? 1972 – Wardrop – 1500 1992 – JR Cousin – 3.5% growth
14. It has been indicated that the water lines will be cleaned with a foam swab after the new plant is constructed. Would it not serve us well if we tried to clean our corroded 4 and 6 inch lines first – just in case we may have to change all the 4 inch as they had to do in Walkerton (5 km). It does not make much sense to put clean water in dirty pipes.
15. 1972 report by Wardrop recommends that the water lines be upgraded on a planned program.
16. It is strange that inferior pipes in 1972 that were old then are still in use today and a water plant built in 1976 has to be changed now.
17. The reports for this new treatment plant are all using population equivalent numbers – has any effort been taken to look at the actual water used in the schools and business community?

18. Has there been any thought given to the financial impact to the town if the water lines have to be done immediately following the completion of the water treatment plant?
19. Is the taxpayer getting a good return on his investment?
20. Can the Class 3 fire flow of 60 l/s for two hours be feasible within our present system? Can the desired flow be achieved at a residual pressure at the hydrant of 20 psi on a six inch line approximately 7500 feet or a four inch line approximately 5000 feet?
21. Information obtained through Freedom of Information indicates that the current plant can operate from 0 USGPD to approximately 300,000 USGPD and at a turbidity of less than 1 – August 2001 daily reports. Flow of 208 USGPM 24 hours.
22. Level 1 Volume B Page 6-32 A gravity filters, indicate a flow of 2-8 GPM per square foot but the normal range is 3 or 4 GPM/square foot.
23. Information for March 2002 indicates a raw water volume of approximately 121,500 USGPD processed. Flow of 84 USGPM, 24 hours.
24. Discussion with US Filter of Sturebridge Mass. indicates that at the flows we have, a Trimite 175 packaged plant may be sufficient for our needs present and future. Discussions also indicate that we may have to change chemical additions as compared to a larger filter.

(25 pages of supporting material provided.)

Disposition:

These comments relate to equipment selection and plant sizing. Additional information on plant sizing was obtained through discussion with the Manitoba Water Services Board. The required sizing is satisfactory for the equipment chosen.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Manitoba Conservation – Sustainable Resource Management

The proponent is requesting approval to discharge water treatment plant sludge and backwash discharge to the Winnipeg River when additional storage is required in the lagoon. This backwash and sludge will contain significant quantities of aluminum (alum) and polymer, as well as a small quantity of chlorine. Even though it is recognized that the dilution capabilities of the Winnipeg River are significant, it is recommended that the sludge and backwash continue to be discharged only to the lagoon.

Disturbance of the lake shore and bottom should be minimized and temporary and permanent silt and erosion control measures such as silt fences, erosion control blankets, seeding, riprap, etc. should be used as required.

Disposition:

The comment concerning the discharge of wastewater to the Town's lagoon can be accommodated in the near term by providing approval for only this discharge route. The

approval of an alternative wastewater disposal route to the lake would require further assessment in the future.

Historic Resources Branch No concerns.

Highway Planning and Design Branch Manitoba Transportation and Government Services has no major objections to this proposal. However, traffic operational concerns have been expressed within the Department in relation to the proposed widening of the access road onto Provincial Road 502. Consideration should be given to narrowing the proposed access by means of a swale or curbing. Attached are comments and a sketch previously submitted to the Manitoba Water Services Board (March 12, 2002) regarding this issue.

Disposition:

This information was forwarded to the Applicant's consultant for information.

Soils and Crops Branch No concerns.

Canadian Environmental Assessment Agency An environmental assessment under the Canadian Environmental Assessment Act will be required by federal officials with respect to the project. (The Responsible Authority is Western Economic Diversification, represented by PFRA.) Environment Canada and Health Canada have offered to provide specialist advice.

PUBLIC HEARING:

As no requests for a public hearing were received, a public hearing is not recommended.

RECOMMENDATION:

Since the initiation of the assessment process for this project, the Environmental Approvals Branch has decided not to issue separate licences for the discharge of wastewater from water treatment plants when the wastewater is to be discharged to a licenced wastewater treatment facility. Since the wastewater from this Proposal is to be discharged for the foreseeable future to the Town's wastewater treatment lagoon, an Environment Act Licence will not be required for the project. A new Environment Act Proposal should be filed in the future if the Town wishes to change the discharge from the wastewater treatment lagoon to Lac du Bonnet. The attached letter has been drafted to the Town and its consultant explaining the situation, and providing construction and operating suggestions equivalent to licence conditions.

PREPARED BY:

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Environmental Approvals - Environmental Land Use Approvals
July 19, 2002
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July 21, 2002

Ms. Colleen Johnson
Chief Administrative Officer
Town of Lac du Bonnet
Box 339
Lac du Bonnet MB R0E 1A0

Dear Ms. Johnson:

Re: Lac du Bonnet Water Treatment Plant (File: 4790.00)

This is further to your Environment Act Proposal of March 22, 2002, prepared by J. R. Cousin Consultants Ltd., and my letter of May 13, 2002 concerning our assessment of the Proposal. During the assessment process, we determined that separate Environment Act licencing should not be required for water treatment plants which discharge their process wastewater to a wastewater treatment facility which is already licenced pursuant to The Environment Act. Accordingly, we have decided that environmental assessment and licencing is not required for your project provided that you continue to discharge water treatment plant wastewater to the Town's wastewater treatment lagoon. The application fee of \$250 will be refunded separately to J. R. Cousin Consultants Ltd.

In the future, should hydraulic capacity limitations at the wastewater treatment lagoon require that consideration again be given to an alternative discharge location such as Lac du Bonnet, I request that a new Environment Act Proposal be filed to address the situation which exists at that time.

I also draw your attention to the following matters that pertain to the construction of water treatment plants:

1. Prior to the alterations in the treatment equipment of the plant, approval is required pursuant to The Public Health Act for final plans for the facility.
2. The design, construction and operation of the water supply system must be in accordance with Manitoba Regulations under The Public Health Act and all operating requirements as recommended by Manitoba Conservation.
3. The operation of the plant must be carried out by individuals properly trained or qualified to do so.
4. All used oil products and other regulated hazardous wastes generated by the machinery used in the construction and operation of the plant must be collected and disposed of in accordance with applicable Manitoba Conservation and legislation requirements.
5. The Eastern Region of Manitoba Conservation should be notified not less than two weeks prior to beginning construction of the Development. The notification should include the intended starting date of construction and the name of the contractor responsible for the construction.
6. Non-reusable demolition and construction debris from the plant must be disposed of at a waste disposal ground operating under the authority of a permit issued under ***Manitoba Regulation 150/91*** respecting ***Waste Disposal Grounds***.
7. During construction and operation of the plant, spills of fuels or other contaminants must be reported to an Environment Officer in accordance with the requirements of ***Manitoba Regulation 439/87*** respecting ***Environmental Accident Reporting***.
8. Fuel storage and equipment servicing areas established for the construction and operation of the project must be located a minimum distance of 100 metres from any waterbody, and comply with the requirements of ***Manitoba Regulation 188/2001*** respecting ***Storage and Handling of Petroleum Products and Allied Products***.
9. Water withdrawn for the plant must be diverted in accordance with a Water Rights Licence issued for the project.

We appreciate the opportunity to review this information.

Yours truly,

Larry Strachan, P. Eng.
Director
Environmental Approvals

- c. Elise Boisjoli, J. R. Cousin Consultants Ltd.
Pat McGarry, PFRA
Real Lambert, Canada-Manitoba Infrastructure Program
Dave Shwaluk, MWSB
Bob Cameron, Eastern Region, Lac du Bonnet
Don Rocan, Office of Drinking Water
Ray Bodnaruk, Water Branch
Public Registries
Ted Mathers