#### SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Village of Notre Dame de Lourdes PROPOSAL NAME: Notre Dame Water Plant Upgrade

CLASS OF DEVELOPMENT: One

**TYPE OF DEVELOPMENT:** Waste Disposal - Water Treatment Plants

(Wastewater)

**CLIENT FILE NO.:** 4246.00

#### **OVERVIEW:**

The Proposal was received on March 3, 1997. It was dated February 26, 1997. The advertisement of the proposal was as follows:

"A proposal filed by J. R. Cousin Consultants Ltd. on behalf of the Village of Notre Dame de Lourdes for the expansion and upgrading of the existing water treatment plant located at 23 Grandin St. N. (Parcel A, Plan 1200 - SW 1/4 1-7-9 WPM) within the Village. The proposed improvements to the treatment process train include additional greensand filtration followed by membrane filtration of a portion of the flow. The proposed disposal of filter backwash and membrane reject water is by discharge to a marsh area located to the north on the SE 1/4 of 1-7-9 WPM. Flows from the marsh discharge to the headwaters of an unnamed creek which flows to the Boyne River."

The Proposal was advertised in the Carman Times on Monday, April 14, 1997. It was placed in the Main, Centennial, South Central Regional Library (Morden) and Village of Notre Dame de Lourdes public registries. The Proposal was distributed to TAC members on April 10, 1997. The closing date for comments from members of the public and TAC members was May 7, 1997.

#### **COMMENTS FROM THE PUBLIC:**

<u>Bill Harrison</u> Concerns - would like a public hearing. Wants hearing to find out more about the impact of the operation on the area. Worried about dumping arsenic on the surface in high concentrations. The proposed method of treatment is perhaps the cheapest solution to the arsenic problem, but not necessarily the safest. There was an earlier proposal to obtain arsenic free water from the Rathwell area - this would avoid poisoning other waters. Sections 2.8.2 to 2.8.6 are particularily questionable - the report seems more based on opinion than fact.

## Disposition:

The arsenic concentrations in the reject water and backwash water are below drinking water guidelines for livestock use. As noted in the Proposal, further mixing will

also occur within the marsh area which is proposed as the disposal area. A monitoring program can be specified as a licence condition to ensure that arsenic and other treatment residues remain within projected concentrations. A letter explaining this information in more detail should be sent to the writer along with a copy of the final licence.

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## COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

<u>Manitoba Environment - South-Central Region</u> Sampling of the water in the discharge area should be done periodically to ensure parameters specified in the proposal are within projected levels.

## Disposition:

This comment can be addressed as a licence condition.

Manitoba Environment - Water Quality Management It is somewhat unclear as to what effects the discharge to the wetland area would have to the environment. If this area is a recharge site for the aquifer, is there potential for this discharge to deteriorate water quality? The proposal indicates that in the case of operational problems in the winter, water can be diverted to the lagoon. Will the wetland area be capable of holding the volume of discharge water over the winter months? Will the discharge spread beyond the wetland area and have an impact on cropland? Will salts spread outside of the marsh area and affect surrounding crop land? The proposal states that livestock will be watering downstream of the discharge area. The projected reject water is very close to the livestock guidelines for total dissolved solids. What level of confidence does the proponent have that the reject water will not significantly exceed 3000 mg/L? A number of options are discussed in the proposal. One of these is a water conservation program. Although the conservation program would not seem to meet their total storage requirements, it may still make sense to pursue this option. This should allow a significant portion of the backwash water and reject water to be diverted to the lagoon instead of the wetland area. If the wetland disposal option is selected, soil monitoring, groundwater monitoring and surface water monitoring might be considered to ensure this disposal option is not significantly impacting the environment or downstream uses.

#### Disposition:

Additional information addressing groundwater in the vicinity of the proposed discharge area was prepared by PFRA and provided by the Proponent's consultant. This information indicates that groundwater contamination from the proposed disposal area is very unlikely. Calculations addressing ice storage volumes indicate that icing may be a concern adjacent to the plant effluent discharge point. This concern can be addressed as a licence condition through monitoring and the preparation of a remediation plan. Monitoring can also be specified to ensure that salinity does not occur on adjacent

farmland and that the Development does not impair the use of the marsh area as a water supply for livestock. Water conservation is now a standard consideration in projects involving municipal water supplies; additional effort in this area will be required as a licence condition.

## **<u>Historic Resources Branch</u>** No concerns.

<u>Community Economic Development Services</u> The property is designated "Commercial" in the Development Plan and is zoned "GC" General Commercial in the Zoning By-law. There are no subdivisions in process in this area of the Village.

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<u>Medical Officer of Health - Portage la Prairie</u> Health supports the water treatment upgrade to provide water within the parameters of the Canadian Drinking Water Quality Guidelines.

### Natural Resources No additional comments.

<u>Canadian Environmental Assessment Agency</u> PFRA has provided notification that an environmental assessment under The Canadian Environmental Assessment Act may be conducted.

#### **PUBLIC HEARING:**

Only one public concern was identified, and the concern can be readily addressed. Therefore, a public hearing is not recommended.

## **RECOMMENDATION:**

All comments received on the Proposal can be addressed as licence conditions. Therefore, it is recommended that the Development be licensed under The Environment Act subject to the limits, terms and conditions as described on the attached Draft Environment Act Licence. It is further recommended that enforcement of the Licence be assigned to the South-Central Region.

# PREPARED BY:

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