SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Town of Churchill

PROPOSAL NAME: Town of Churchill – Churchill River

Water Withdrawal

CLASS OF DEVELOPMENT: Two

TYPE OF DEVELOPMENT: Water Development and Control –

Water Withdrawal

CLIENT FILE NO.: 4570.00

OVERVIEW:

The Proposal was received on October 30, 2000. It was dated October 25, 2000. The advertisement of the proposal was as follows:

"A Proposal has been filed by the Town of Churchill for the continued operation of the Town's water supply system, including the withdrawal of water from the Churchill River for municipal purposes. The system is being transferred from Manitoba Hydro to the Town. No changes in the operation of the system are proposed. Current water withdrawals for the system at the CR-30 pumphouse on the Churchill River range from 156,000 Imperial gallons per day to 306,000 IGPD. This is equivalent to between 260 and 500 cubic decametres per year, which is within the maximum amount of 863 dam³/year authorized by a Water Rights Licence for the system."

The Proposal was advertised in the Thompson Nickel Belt News on Monday, November 13, 2000. It was placed in the Main, Centennial and Churchill Public Library public registries. The Proposal was distributed to TAC members on November 7, 2000. The closing date for comments from members of the public and TAC members was December 9, 2000.

COMMENTS FROM THE PUBLIC:

No public comments were received.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

<u>Manitoba Conservation - Northern Region</u> - No objections. No adverse impacts since the development is pre-existing.

<u>Manitoba Conservation - Water Quality Management</u> - Few concerns. This is an established facility being transferred from Manitoba Hydro to the Town of Churchill. Potential environmental problems such as the above ground fuel storage tanks were removed and old piping has been replaced. Also, wastewater from sinks and blowdown water is now taken to the Churchill sewage lagoon and not discharged to the river. If an

environment officer has not inspected the site since these improvements were made in 1999, a site inspection may be required, but the remedial action appears to be appropriate.

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<u>Manitoba Conservation - Policy Coordination</u> - The proposal does not address the screening of the river intake. The intake should be screened, if it is not already, and the size of the screen mesh should comply with the DFO guidelines. DFO and regional staff should review this aspect of the proposal.

Disposition:

Additional information was requested to address this comment.

Historic Resources Branch - No concerns.

Mines Branch - No concerns.

<u>Highway Planning Branch</u> - No concerns.

<u>Community Planning Services</u> - No land use or development concerns.

Medical Officer of Health - Environment - No comments.

<u>Canadian Environmental Assessment Agency</u> - The application of the Canadian Environmental Assessment Act with respect to this project will not likely be required. DFO is requesting information on the intake structure's end-of-pipe screen prior to making their determination. (No other federal department indicated an interest in participating in the provincial assessment of the proposal.)

<u>Department of Fisheries and Oceans</u> - There is insufficient information to assess the potential impact of the project on fish. Information is requested on the intake structure's end-of-pipe screen. Sufficient information should be provided to confirm that the fish screen conforms to the "Freshwater Intake End-of Pipe Fish Screen Guideline, DFO, 1995."

Disposition:

Additional information was requested to address this comment.

ADDITIONAL INFORMATION:

Additional information concerning the intake pipe's fish screen was requested on December 12, 2000. The following information was provided by the Proponent's consultants on December 15, 2000:

We have reviewed the intake design for the 25 year old CR30 Pumphouse and have calculated the entrance velocities for the intake.

The intake design uses a 16 inch pipe that butts into a 4 ft diameter concrete sewer pipe that stands vertically. On top of the sewer pipe is 3/4 inch tubing on 3" centres. During the winter hot water is pumped through the tubing to prevent freezing of the intake.

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Based on the above dimensions the effective opening is calculated to be approx. 8.4 sq. ft. The maximum flow rate has shown on page 3-2 of the EAPF is 306,000 imp gals/day or approximately 250 US gpm. For this flow rate, end-of-pipe fish guidelines require that the minimum size opening for anguilliform fish species be 4.5 sq ft, therefore the intake velocities are about 1/2 of the maximum permitted.

We feel if there was a requirement to install a fine mesh screen i.e. in the range of 0.1 inch that this would be extremely problematic for Churchill. If the mesh was above the grating it would likely freeze in the winter, if it was downstream of the heat grating it would be very difficult to maintain and could potentially clog over time. In both cases if this developed there would be a loss of the Town's water supply.

This information was forwarded to Fisheries Branch and DFO staff for review. DFO indicated that further information on the intake configuration would be sought, and that additional requirements could be necessary pursuant to the Fisheries Act.

PUBLIC HEARING:

As no public concerns were identified, a public hearing is not recommended.

RECOMMENDATION:

The possible requirement for improved intake screening is the only outstanding concern. This requirement may be pursued by DFO under the Fisheries Act. 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. The Draft Licence should not be finalized until DFO requirements are satisfied. Once finalized, enforcement of the Licence should be assigned to the Northern Region.

PREPARED BY:

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