

Keewatin Regional Health Board



ᑭᑭᑦᑲᑦᑲᑦ ᑲᑦᑲᑦᑲᑦ ᑲᑦᑲᑦᑲᑦ ᑲᑦᑲᑦᑲᑦ

Keewatin Regional Health Board
Box 298, Rankin Inlet, N.W.T. X0C 0G0
1(819) 643-2171/2282 • Fax 643-2409

Box 298 Rankin Inlet, N.W.T.

February 2, 1998

Mr. Dionne Filiatrault
Technical Advisor, NWB
Gjoa Haven, NT
X0E 1J0

RECEIVED
FEB 02 1998

Subject: Improvements to Water Intake and Pump House - Baker Lake, NT

Being new to this job, I have not yet had the opportunity to visit Baker Lake. This may limit my input on this matter. However, after reading the engineers' report I feel there are a few areas that require further discussion:

1. It was stated that the piped distribution system makes up only 3.5% of all water used. For this reason the trucked system will receive priority. My concern here lies in the potential for water shortages at the hospital and group home. On an above average day of water consumption the 4500L in the storage tank could easily be consumed. Also, as the population grows, a greater demand will be placed on the piped distribution system. Therefore, I feel an additional storage tank will be required.
2. Pumping water directly into the trucks will decrease the amount of time the chlorine is in contact with the water prior to consumption. This may require higher doses of chlorine being added to the water to ensure the removal of pathogens. This could result in an aesthetic concern by consumers. Nonetheless, the chlorine equipment shall have a minimum feed capacity of 50% greater than the highest dosage required to provide a free chlorine residual.
3. During periods of high turbidity chlorine has a greater affinity for sand and silt than it has for disease causing agents. This may result in the consumption of pathogens. I, therefore, recommend that the initial design be modified to include the addition of a sand filter to decrease turbidity prior to treatment and to remove pathogens that are resistant to chlorine.

I look forward to visiting Baker Lake and I hope I have the opportunity to see the water treatment plant soon.

Sincerely,

Bill Rideout

Bill Rideout
Environmental Health Officer