

EXHIBIT NUMBER: :34

File Name: _____

Presentation to the Clean Environment Commission
Re: Sandilands Water Supply Development November
7 & 9, 2006

Date: _____

Received by: Jss' (Comm) (on Secretary)

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Mr. Chairman - Terry Sargeant
Members of the Commission - Gisele Funk
- Ken Gibbons
- Ian Halket

Participants, Attendees

On behalf of the City of Winkler, a member of the Pembina Valley Water Cooperative, I would like to introduce Councillor for the City of Winkler and appointee to the Winkler

Aquifer Management Board, Ron Neufeld, as attending the proceedings today.

I am Bill Zacharias, Director of Planning & Engineering for the City of Winkler and wish to offer a brief presentation in support of the Pembina Valley Water Cooperative's

application for water rights from the Sandilands Aquifer.

A. Background

The City of Winkler is 1 of 18 member municipalities of the Pembina Valley Water Cooperative (PVWC). The city is celebrating 100 years of incorporation and within the past century has grown from a small railroad siding to a regional service centre. Its population growth at 3% per annum is among the highest in Manitoba communities.

Water, vital to this growth, is obtained from the Winkler Aquifer and the Pembina Valley Water Cooperative. Water supports residential growth, education and medical services, recreation and cultural services, commercial and industrial development. Under present agreements Winkler supplements up to 40% of its water supply from the Pembina Valley Water Cooperative and the remainder is drawn from the Winkler Aquifer.

B. The Winkler Aquifer

The Winkler Aquifer may be described as a water bearing deposit of sand and gravel. It is approximately 17 miles long and varies from 1 to 3 miles wide. Current studies indicate that its recharge is approximately 337 acre/ft per annum fresh water and 230 acre/feet per annum salt water. It is estimated to contain 170,000 acre/feet of fresh water and 400,000 acre feet of salt water.

Water quality in the Winkler Aquifer varies with location and has decreased somewhat over the past 40 years. In general the aquifers fresh water quality deteriorates with depth.

At the present time it has been determined that the sustainable yield of the Winkler Aquifer is 337 acre/feet per year and Winkler's present demand is 900 acre/feet per year.
(9000 pop x 74 gpd x 365 d/yr)
(335 lpd)

The City of Winkler, together with the Province of Manitoba recognized that the community's growth and water demand exceeded the Aquifers sustainable yield in the late 1980's. Government and City officials began Round Table discussions with all stakeholders to strategize a long term management plan for the Aquifer and to develop supplementary water supply sources for the community.

c. Water Use Strategy & Licencing

The Round Table and City officials determined that an Aquifer water use reduction plan would be required. In addition to Winkler's reliance on the aquifer, 10 other user groups were identified as dependent on the aquifer, many without licence and others with licence granted after the City of Winkler's proprietary licence. It was determined and agreed that with cooperative actions of the Provincial officials, City officials and stakeholders an Aquifer Management Board be established to develop initiatives to:

- 1) Reduce the reliance on the Aquifer;
- 2) enhance the aquifer's natural recharge;
- 3) Encourage water conservation;
- 4) implement an Aquifer protection plan;
- 5) establish a dedicated aquifer water quality monitoring plan;

- 6) Manage pollution risks; and,
- 7) Seek public input and acceptance of an aquifer management plan.

D. Winkler Aquifer Management Plan

In 1997 a board was established which continues to function to this time. The Winkler Aquifer Management Board's executive committee comprised of government officials, technical advisors, stakeholders and citizens at large, meets regularly and holds a public annual general meeting.

Their mandate is and remains to be proactive in accomplishing the initiatives set out in the Winkler Aquifer Management Plan.

- 1) We are making good progress in reducing our reliance on the Aquifer from 976 acre feet to 555 acre feet in the past 8 years, further reductions to the sustainable yield will be made possible with supplementary supply from the Pembina Valley Water Cooperative. The Aquifer Management Board has successfully negotiated the elimination and/or reduction of several water use licences over the past several years. Supplementary water supplies were required to replace some of these reductions.
- 2) The enhancement of the natural recharge has been made by additional snow catch plantings and by restricting spring runoff flow from the primary recharge area.
- 3) The City of Winkler has encouraged water conservation by regulating lawn watering, encouraging low flow bath and kitchen facilities installations and most effectively increasing water rates to our customers. Large volume water use industries are not

- 4) Implementation of an Aquifer protection plan has included the discontinuation of asphalt production in the recharge area; it monitors aggregate quarry operations and high intensity livestock operations and registers the installation of geothermal heat systems in the aquifer area.
- 5) A dedicated aquifer monitoring Plan is now coordinated by Provincial agencies and shared with stakeholders. Aquifer levels and water quality reports are gathered regularly for judicious future management.
- 6) Management of Pollution risks remains as a constant watch and vigil of the Aquifer Management Board. The recharge and aquifer area is posted with signs identifying the area as being underlain by an aquifer.
- 7) The Winkler Aquifer Management Plan emphasized Open House meetings for public input. This served as an excellent forum to hear suggestions, address concerns and disseminate facts from fiction.

In conclusion, the Province of Manitoba, City of Winkler and Pembina Valley Water Cooperative have cooperatively worked toward the management of water supply resources and aquifer management. It is Manitobans working together to build a stronger Manitoba.

Thank you for your time.