



## Conservation

Environmental Operations / Central Region  
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December 23, 2011

Portage la Prairie Consumer Co-operative Ltd.  
Box 170  
Portage la Prairie, MB R1N 3B3

Attention: Mr. Kevin Dales, General Manager

Dear Mr. Dales:

**Re: 2011 Groundwater Monitoring Program  
Bulk Fertilizer Plant, TransCanada Highway 1  
Austin, Manitoba**

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This will acknowledge receipt of the report titled *2011 Groundwater Monitoring Program Bulk Fertilizer Plant, TransCanada Highway 1, Austin, Manitoba* prepared by AMEC Environment & Infrastructure for Portage la Prairie Consumer Co-operative Ltd. and dated November 25, 2011. The monitoring program was described in the report as follows:

- The program included the monitoring of thirteen (13) groundwater monitoring wells for determination of groundwater levels, monitoring of field parameters using low flow sampling procedures, and collection of groundwater samples for laboratory analysis. The completion of a hydraulic conductivity test was conducted on one monitoring well.
- Groundwater levels measured in the monitoring wells ranged between 1.52 m below ground level (bgl) in TH24 and 3.0 m bgl in TH6. Groundwater flow direction based on the monitoring program was indeterminate.
- Field parameters in the new monitoring wells measured during the groundwater monitoring event are summarized as follows: ORP levels ranged from 3.7 mV (TH3) to 259.2 mV (TH1). DO levels ranged from 0.12 mg/L (TH3) to 0.88 mg/L (TH7). EC values ranged from 714  $\mu$ S/cm (TH7) to 9235  $\mu$ S/cm (TH1). pH values ranged from 5.46 (TH1) to 6.93 (TH7).
- Eleven (11) groundwater samples, including one field duplicate, were submitted for laboratory analysis for general nutrient parameters.
- Concentrations of nitrate-nitrogen above maximum acceptable concentrations for drinking water guidelines were observed in TH1, TH3, TH5, TH9, TH13, and TH14. Concentrations of nitrite-nitrogen above maximum acceptable concentrations for drinking water guidelines were observed in TH1, TH5, and TH14. Nitrate-nitrogen, nitrite-nitrogen, and ammonia concentrations appear to

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be increasing across the Site when compared to previous monitoring results, most notably in TH1, TH5, TH9, TH13 and TH14. The increase is likely occurring from minor spills associated with the loading and unloading activities of fertilizers at the Site.

- A CCME NCSCS score of 44.6 was generated for the Site classifying the site as a Class N – Not a Priority for Action

Manitoba Conservation concurs with the finding of the report *2011 Groundwater Monitoring Program Bulk Fertilizer Plant, TransCanada Highway 1, Austin, Manitoba*. Please forward copies of future monitoring report for this site to our Portage la Prairie office.

It should be noted that the position of Manitoba Conservation as stated in this letter is based upon the information provided by Portage la Prairie Consumer Co-operative Ltd. and AMEC Environment & Infrastructure and relates only to matters within the scope of the investigation conducted by AMEC. No additional site monitoring was performed by Manitoba Conservation.

Should you have further questions regarding this matter, please contact this office at 239-3608.

Yours truly,



Raymond Reichelt, P. Geo.  
Environment Officer  
Manitoba Conservation

c. Karen Timlick, AMEC