



May 4, 2016

Ms. Jennifer Winsor  
Environmental Engineer  
Manitoba Conservation  
Environmental Assessment and Licensing Branch  
169-123 Main Street  
Winnipeg, Manitoba  
R3C 1A5

Dear Ms. Winsor;

**Re: Use of Antiscalent in Reverse Osmosis System Water Treatment System**

In October of 2008 Canexus requested permission to use an antiscalent in a new Reverse Osmosis (RO) system. As part of the treatment process, residuals of the antiscalent will be present in the RO reject water and which is disposed of into the deep injection well system. In a letter from Manitoba Conservation dated Nov 6, 2008 approval was granted by the Environmental Assessment and Licensing Branch (see attachment) to use an antiscalent. In February of 2012 MB Conservation was informed by Canexus that the selected product would be Hypersperse MDC150 supplied by GE Water & Process Technologies.

As of May 2, 2016 our supplier has informed us that they are discontinuing the production of Hypersperse MDC150 and are now recommending a new product Hypersperse MDC714. This product is very similar in composition and is non-hazardous based on the attached MSDS and Product Fact Sheet.

The new Hypersperse MDC714 will be fed at a lower concentration, which will result in a reduction in chemical consumption. The approval in 2008 was based on the contribution of Phosphorus (as P) in the deep injection reject water. Based on the information from GE W&PT there will be little change in the contribution of Phosphorus. The table below provides the information provided in 2008 and the new contribution of P from MDC714.



	RO Treated Permeate to Plant	RO Reject Flow Reject Water to Deep Well	RO Antiscalent Addition	RO Antiscalent "P" Contribution
2012-2016 RO System with MDC150	525 GPM	175 GPM (max)	19 kgs/day	0.82 kgs/day
2016 RO SYSTEM with MDC714	525 GPM	175 GPM (max)	8.5 kgs/day	0.79 kgs/day

Our local GE sales representative has request a product extension while we await Manitoba Conservations feedback on this potential change.

The MSDS and Product Fact Sheet are attached for your information.

Please let us know if you have any concerns with this change and if any additional approval requirements are necessary.

Please feel free to contact me if you have any questions at 204-725-5304.

Sincerely,

Colin Welch  
Responsible Care Manager  
Canexus Corporation  
Brandon, Manitoba

Dale Bossons  
Director of Chlorate Manufacturing  
Canexus Corporation  
Brandon MB

cc. Peter Crocker – MB Conservation - Brandon