



April 10, 2015

Manitoba Conservation and Water Stewardship
Environmental Approvals
123 Main Street, Suite 160
Winnipeg, Manitoba
R3C 1A5

Attention: Siobhan Burland Ross, M.Eng., P.Eng.
Manager: Municipal, Industrial and Hazardous Waste Section

**RE: Request for Minor Licence Alteration – Production Increase
Environmental Act Licence No. 2619RRR
Canexus Limited – Brandon Sodium Chlorate Plant**

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Dear Ms. Siobhan Burland Ross:

On behalf of Canexus Limited (Canexus) and by way of this letter, Dillon Consulting Limited (Dillon) is requesting a Minor Alteration to the Canexus Brandon facility's Environmental Act Licence No. 2619RRR (the Licence). Specifically, the request relates to the production limit of 310,000 metric tonnes (MT) and the Terms and Conditions Item No. 33 of the Licence, "Respecting the Rate of Production at this Development". The new requested annual production rate is 325,000 MT, representing a 4.6% increase. Canexus issued a similar request in 2012 asking for a production rate increase from 299,500 MT to the current 310,000 MT limit, or a 3.5% increase.

The projected production volume for 2015 is 316,000 MT. The table below lists the total plant production volumes for the past five years and the projected volumes for the next three years.

Table 1: Canexus Brandon Production Rates 2010 – 2017 (projected)

Year	Production Rate (MT)
2010	301,575
2011	301,580
2012	302,245
2013	297,444
2014	308,450
2015	316,000 (projected)
2016	320,000 (projected)
2017	322,000 (projected)

The requested increase is not the result of the addition of new production equipment or facilities, meaning that no additional cell lines or crystallizers have been added to increase the production volume of this facility. As presented below, only one physical equipment alteration has occurred that has improved site reliability and productivity.

- Addition of a Dual Brine Filtration System. A project was completed in 2014 to “twin” a filtration system for the production of brine that is fed into the electrolysis process. This has resulted in feed stock reliability improvement by ensuring that the brine strength and flow is maintained at a consistent level, which in turn results in steady production of sodium chlorate.

Additionally, the Canexus plant has gone through an optimization of operational and maintenance practices that have significantly impacted production up-time. These practices are identified below.

- Improvements to the operation of the four sodium chlorate crystallizers.
- Maintaining a constant and uninterrupted vacuum on the crystallizers to use the full potential of these units.
- Focus on training in the operation of equipment to improve performance, understanding and troubleshooting.
- Improved and increased frequency of maintenance activities, i.e., short plant outages to inspect, clean, repair and replace equipment have resulted in more efficient operation of equipment (i.e., crystallizer “boil outs”), that in turn have improved site production capacity.

The potential to use the full 223 Mega Volt Amperes (MVA) of incoming power will continue to be evaluated for the Brandon site. Moving to the 223 MVA would require the construction of additional production facilities and equipment. Canexus will ensure that if and when these projects are internally approved, a timely Notice of Alteration will be submitted to Manitoba Conservation and Water Stewardship (MCWS).

Canexus would also like to make one additional request to revise Terms and Conditions Item No. 12 of the License. This condition requests that each flow meter be calibrated and tagged with the date of calibration and serial number on the meter. Canexus is currently meeting this request; however, it is not standard practice in terms of their site maintenance. Canexus operates an automated maintenance system to track and document such calibration for all meters and instruments on-site. It is thus requested, if possible, to revise this condition to reflect Canexus' current maintenance practices. This was discussed with Peter Crocker and Kristy Forrestall of MCWS during a January 2014 inspection of the facility where they found that the meter did not have the appropriate calibration tag. Canexus quickly complied by affixing a calibration tag, and

then demonstrated that with their maintenance system, the meter is calibrated annually and documented in their system. Please refer to the inspection letter dated January 29, 2014 by Kristy Forrestall.

Summary

In summary, Dillon, on behalf of Canexus, is requesting a Minor Alteration to Canexus' Environmental Act Licence No. 2619RRR for an annual production rate increase of 325,000 MT. This will capture their projected 2015 production rate of 316,000 MT and future process optimization improvements over the next three years. Any future expansions that are projected to result in annual production above the 325,000 MT limit will be discussed with MCWS, and will not proceed until approval is obtained.

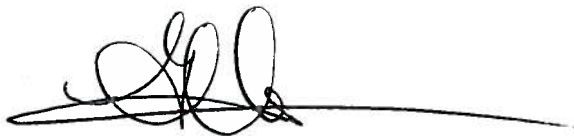
This Licence amendment will not change Canexus' current commitment to their Responsible Care practices. The Canexus Brandon facility will continue to closely monitor site performance and continue with their annual environmental monitoring programs to ensure compliance is met.

Please feel free to contact the undersigned with any questions or requests for additional information or documentation.

Thank you for your consideration of this request, and we look forward to hearing from you soon.

Yours sincerely,

DILLON CONSULTING LIMITED



Graham Carlyle
Project Manager



Dennis Heinrichs, M.Sc., P.Eng.
Senior Environmental Engineer

GC/bk

cc: *Mr. Peter Crocker, Manitoba Conservation and Water Stewardship*
Mr. Colin Welch, Canexus Limited

Our file: 15-1850