
File No. WPCF 30-4

March 31, 2020

Director
Environmental Approvals Branch
Manitoba Sustainable Development
1007 Century Street
Winnipeg, Manitoba
R3H 0W4

Re: Notice of Alteration for removal and disposal of contents from anaerobic digester

Dear Director:

The City of Portage la Prairie is submitting a Notices of Minor Alteration regarding the removal and disposal of contents from the anaerobic digester located at the Water Pollution Control Facility (WPCF). The digester, which is identified in the Environment Act License 2543 R as the anaerobic WAS digester, stabilizes residual solids that are generated as part of the wastewater treatment process. Solids are processed in the anaerobic WAS digester then placed in storage before land applying as biosolids. The mixers in the anaerobic WAS digester failed and solids have accumulated in the tank. This accumulation of solids has reduced the overall capacity and in turn has reduced the residence time, therefore the digester is not able to provide a 30-day residence time as required in Clause 2, EAL 1907 or as identified in EAL 2543 R, section 17. The City has applied for Notice of Alterations to allow an equivalent digestion process to be utilized and maintain license compliance.

In the summer of 2020, the City intends to clean out the contents of the digester and install two chopper pumps to assist in mixing of the digester solids once it is brought back online. The long-term plan to remedy this situation includes refurbishing the digester with externally located mixing equipment. This is included in the Nutrient Reduction upgrade for the wastewater facility which also includes a second anaerobic digester. The current timeline for the construction and operation of the new anaerobic digester is in 2022.

To remove the contents, the City will hire a professional contractor who specialized in digester cleaning to complete the scope of work. The digester contains approximately 3400m³ of material. It is estimated that the top 2400 m³ can be slurried with either potable water or treated effluent and pumped overland to the Bulk Volume Fermenter (BVF) as the BVF is no longer being used for pre-treatment of industrial wastewater and is available for use. This material will be screened prior to being pumped to remove rags, grease, plastic and hair that may be contained within the digester. The screening unit uses a No. 6 mesh followed by a press auger before disposal into waste bins. The

material in the bin will meet the Portage Regional Landfill license 3278 that requires solid waste to have a slump of less than 150 mm using the Canadian Standards Association Slump test method A23.2-5C.

As the digester is drawn down, the contents will be analysed for organic content. It is expected that the inorganic content will increase toward the bottom of the digester as sand and debris settled out over time. The remaining 1000 m3 of material will be conveyed to first to the fine filter and then to the sand separation unit that is capable of screening to 105 microns. This will remove any sand and grit that is contained within the material. The liquid side stream and organics will be pumped to the BVF. The sand filter will be implemented sooner as required.

The debris collected from screening will be stored in waste bins and then transported to the Portage Regional landfill for disposal under EAL 1907, 1b. This practice is consistent with the disposal of screenings from the bar screen and grit removal system that is already in use at the WPCF as identified in the Environment Act License 2543 R, Section 48c.

The timeframe for this work is estimated at twenty days with an anticipated start date of June 1, 2020. However, considering the travel restrictions and work force reductions due to Covid-19, the start date is expected to be moved. The City will require five days for shutdown and isolation of the digester prior to contractor arrival. An additional ten days is required to install the pumps. During these twenty days, the digester will be offline. The waste activated sludge from the secondary system will be held within the Sequencing Batch Reactors if possible. When wasting of excess solids is required, it will be directed to the BVF for treatment and storage until land application. There is no other interruption to wastewater treatment expected and effluent quality will not be impacted.

The City of Portage la Prairie is requesting a notice of alteration for the suspension of use of the anaerobic digester for cleaning out purposes as well as the disposal of screened grit material in the Portage regional landfill beginning June 1, 2020 until September 30, 2020. Alternatively, the City would request a suspension of license for up to sixty days to commence one week prior to the date that the contractor is able to begin work.

If you have any questions or require any additional information, please contact me at (204) 239-8359.

Regards,




Karly Friesen
Director of Utility

Cc: Nathan Peto, City of Portage la Prairie
Robert Boswick, Manitoba Conservation and Climate
Jay Rackham, Manitoba Conservation and Climate
Tyler Kneeshaw, Manitoba Conservation and Climate

Notice of Alteration Form



Client File No. :	Environment Act Licence No. : 2543R/1907
Legal name of the Licencee: City of Portage la Prairie	
Name of the development: Water Pollution Control Facility	
Category and Type of development per Classes of Development Regulation: Waste Treatment and Disposal <input type="button" value="v"/> <SELECT>	
Licencee Contact Person: Karly Friesen Mailing address of the Licencee: 97 Saskatchewan Ave E City: Portage la Prairie Province: Manitoba Postal Code: R1N 0L8 Phone Number: (204) 239-8359 Fax: Email: kfriesen@city-plap.com	
Name of proponent contact person for purposes of the environmental assessment (e.g. consultant):	
Phone:	Mailing address:
Fax:	
Email address:	
Short Description of Alteration (max 90 characters): Anaerobic digester to be taken offline, cleaned out & contents disposed of onsite/landfill	
Alteration fee attached: Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>	
If No, please explain: MINOR NOA	
Date: 31/3/20	Signature:  Printed name: Karly Friesen
<p>A complete Notice of Alteration (NoA) consists of the following components:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Cover letter <input checked="" type="checkbox"/> Notice of Alteration Form <input checked="" type="checkbox"/> 2 hard copies and 1 electronic copy of the NoA detailed report (see "Information Bulletin - Alteration to Developments with Environment Act Licences") <input type="checkbox"/> \$500 Application fee, if applicable (Cheque, payable to the Minister of Finance) 	
<p>Submit the complete NoA to:</p> <p>Director Environmental Approvals Branch Manitoba Sustainable Development 1007 Century Street Winnipeg, Manitoba R3H 0W4</p> <p>For more information:</p> <p>Phone: (204) 945-8321 Fax: (204) 945-5229 http://www.gov.mb.ca/sd/eal</p>	
<p>Note: Per Section 14(3) of the Environment Act, Major Notices of Alteration must be filed through submission of an Environment Act Proposal Form (see "Information Bulletin – Environment Act Proposal Report Guidelines")</p>	