

Memorandum

Date: August 10, 2015

File: 2708.20

To: Tania Steele Licensing Clerk Environmental Approvals Branch 123 Main Street Ste. 160 Union Station Winnipeg, Mb R3C 1A5

From: Rob Boswick, P. Eng. Environmental Engineer Environmental Approvals Branch 123 Main Street Ste. 160 Union Station Winnipeg, Mb R3C 1A5

Subject: City of Winkler – Wastewater Treatment Facility – EAP Material to Public Registries

Please distribute the attached material pertaining to the City of Winkler – Wastewater Treatment Facility Environment Act Proposal review to the appropriate Public Registries.

Attached are:

- 1. Letter (2 pages) from Environmental Approvals Branch Manitoba Conservation and Water Stewardship to AECOM, dated July 3, 2015;
- 2. Memorandum (2 pages) from Water Science and Management Branch Manitoba Conservation and Water Stewardship, dated July 7, 2014;
- 3. Email message (1 page) from Office of Drinking Water Manitoba Conservation and Water Stewardship, dated July 4, 2014;
- 4. Memorandum (1 page) from Air Quality Environmental Programs and Strategies Manitoba Conservation and Water Stewardship, dated June 27, 2014;
- 5. Email message (2 pages) from Office of the Fire Commissioner, dated June 19, 2014;
- 6. Email message (1 page) from Crown Land Programs and Policy Manager Manitoba Conservation and Water Stewardship, dated July 3, 2014;
- 7. Email message (2 pages) from Parks and Protected Spaces Branch Manitoba Conservation and Water Stewardship, dated June 23, 2014;
- 8. Email message (1 page) from Wildlife Branch Manitoba Conservation and Water Stewardship, dated June 11, 2014;
- 9. Letter (1 page) from Environmental Services Section, Highway Planning and Design Branch – Manitoba Infrastructure and Transportation, dated June 9, 2014;
- 10. Email message (1 page) from Lands Branch Manitoba Conservation and Water Stewardship, dated June 3, 2014;
- 11. Email message (1 page) from Water Control Works and Drainage Licensing Section Manitoba Conservation and Water Stewardship, dated June 3, 2014; and
- 12. Email message (1 page) from Water Use Licensing Section Manitoba Conservation and Water Stewardship, dated June 3, 2014.

There are a total of <u>16 pages</u> attached to this memo.

Thank you,

Rob Bronch

Rob Boswick Attachments



Conservation and Water Stewardship Environmental Stewardship Division Environmental Approvals Branch 123 Main Street, Suite 160, Winnipeg, Manitoba R3C 1A5 T 204 945-8321 F 204 945-5229 www.gov.mb.ca/conservation/eal

File: 2708.20

July 3, 2015

Paul Barsalou, P.Eng. AECOM 99 Commerce Drive Winnipeg, MB R3P 0Y7

Dear Mr. Barsalou:

Re: City of Winkler - Wastewater Treatment Facility - Environment Act Proposal

The initial review of the Environment Act Proposal (EAP) for the City of Winkler Wastewater Treatment Facility resulted in several comments and requests for additional information.

Please respond to the comments and requests from the Technical Advisory Committee presented in the attached items being:

- 1. Memorandum from Water Science and Management Branch Manitoba Conservation and Water Stewardship, dated July 7, 2014;
- 2. Email message from Office of Drinking Water Manitoba Conservation and Water Stewardship, dated July 4, 2014;
- 3. Memorandum from Air Quality Environmental Programs & Strategies Manitoba Conservation and Water Stewardship, dated June 27, 2014; and
- 4. Email message from Office of the Fire Commissioner, dated June 19, 2014.

In addition, please provide supplementary information regarding specific characteristics of the sludge contained in the existing aerated cells and proposed methods of handling and disposing of this sludge as a component of this EAP. Finally, please provide an indication of planned completion dates respecting all identified components of Phase I and Phase II discussed in the EAP. Please address and resp. It to the comments and requests for adappendix bound information. Resulting responses that are specifically pertinent to the EAP review are to be directed through Manitoba Conservation and Water Stewardship's Environmental Approvals Branch. The EAP review process will continue upon receipt of your responses.

If you have any questions or would like to discuss these items, please contact me at 204-945-6030.

Yours truly,

Robert Bornel

Robert Boswick, P. Eng. Environmental Engineer

Attachments

c: Dave Burgess, City Manager – City of Winkler
 Don Labossiere, Director – Environmental Compliance and Enforcement, Manitoba
 Conservation and Water Stewardship
 Public Registries



DATE: July 7, 2014

- TO: Robert Boswick Environmental Approvals Branch 160-123 Main Street, Winnipeg, MB R3C 1A5
- Cc Elaine Page Nicole Armstrong

Memorandum

FROM: Joy Kennedy Water Quality Management Section Water Science and Management Branch 160-123 Main Street, Winnipeg, MB R3C 1A5

> TELEPHONE: 945-7908 FACSIMILE: 948-2357 EMAIL: joy.kennedy@gov.mb.ca

SUBJECT: ENVIRONMENT ACT PROPOSAL FILE: 2708.02 CITY OF WINKLER WASTEWATER TREATMENT FACILITY

- The Manitoba Water Quality Standards, Objectives and Guidelines includes a Water Quality Standard that requires the Proponent to use the best practical technology for the beneficial reuse of valuable resources such as nutrients, organic matter and energy contained within municipal biosolids and sludge.
 - How will the Proponent use the Biological Nutrient Removal (BNR) process for the beneficial reuse of valuable resources such as nutrients, organic matter and energy contained within municipal biosolids and sludge?

One of the benefits of Biological Nutrient Removal (BNR) processes is that they can effectively reduce both nitrogen and phosphorus while producing sludge that can be stabilized for reuse. The phosphorous in sludge is a more accessible resource when it is not bound to alum or ferric.

- Can the Proponent handle the sludge in a way that does not require adding alum or ferric to the sludge at the Primary Sludge Pump Station?
- Can the Proponent operate the BNR facility such that adding alum or Ferric to the mixing box or Primary Sedimentation Tank prior to the BNR process is not necessary?
- The Proponent describes that chemical dosing of the Biological Nutrient Removal (BNR) plant effluent will be used to polish the product water. The Proponent describes that chemical dosing will be automatic based on flow rate, that the ferric chloride dosage can be calibrated by studying phosphorous trends, and an on-line analyser will signal controls for ferric or alum dosing rate (page 44). The Proposal also describes that the dosage of ferric or alum will be manually adjusted by monitoring the phosphorus concentration over time (page 51). Can the Proponent please clarify if chemical dosing will be automated or manually adjusted based on total phosphorous?

- The following effluent standards should be in place for the City of Winkler wastewater treatment facility as per the *Manitoba Water Quality Standards, Objectives and Guidelines Regulation* (196/2011).
 - CBOD 25 mg/L,
 - BOD 25 mg/L,
 - TSS 25 mg/L,
 - Fecal Coliforms or Escherichia coli 200 MPN / 100mL,
 - Total phosphorus <1 mg/L,
 - Total nitrogen < 15 mg/L,
 - Ammonia concentrations as outlined in Table 1 of Manitoba Water Quality Standards, Objectives, and Guidelines using Equations 1 & 4 and based on effluent pH and temperature.
 - Please note, equations 1 through 6 would need to be met depending on the averaging period.
- The Water Quality Management Section recommends the Proponent be required to monitor effluent at the discharge point into Deadhorse Creek.
 - The Proponent should continuously measure and record the daily volume of the wastewater discharge from the wastewater lagoons to Deadhorse Creek.
 - The Proponent should collect and analyse daily 24 hour flow proportional composite samples for cBOD, total suspended solids (TSS), total dissolved solids (TDS), total nitrogen, total phosphorous, ortho phosphorus, pH, and total ammonia nitrogen.
 - Fecal Coliforms or *Escherichia coli* grab samples should be collected at the discharge point to Deadhorse Creek.
- The Water Quality Management Section recommends the Proponent be required to monitor upstream and downstream of the discharge point to Deadhorse Creek for a period of three (3) years during the ice free season. Samples should be collected and analysed for total nitrogen, total phosphorous, total ammonia, pH, temperature, TKN, TSS and TDS.
- The Water Quality Management Section is concerned with any discharges that have the potential to impact the aquatic environment and/or restrict present and future uses of the water. Therefore it is recommended that the license require the proponent to actively participate in any future watershed based management study, plan/or nutrient reduction program, approved by the Director.

Joy Kennedy

From:Stibbard, James (CWS)Sent:July-04-14 2:19 PMTo:Boswick, Robert (CWS)Subject:Re: 2708.20 City of Winkler New WW Treatment Plant EAP

Robert,

The following points are noted respecting the above EAP:

Section 8.4 of the EAP notes the treated effluent return to the environment will be to Dead Horse Creek, which flows
into the Plum River. The Plum River flows into the Red River upstream of the raw water intake for the Morris Regional
Water Treatment Plant. Office of Drinking Water recommends that a requirement be included in the EA Licence that
contact information for the Morris Regional Water Treatment Plant be included in the emergency response plans for
the new Winkler WWTP with an instruction that, in the event of a major spill of partially treated or untreated
wastewater or sludge from the WWTP into Dead Horse Creek, the Morris Regional Water Treatment Plant operators be
notified.

This Section also notes that at some future point, treated water from the WWTP might be injected into the ground for aquifer recharge. Office of Drinking Water recommends the implications of such recharge on domestic water uses of the aquifer be carefully studied before any such recharge be licenced.

• Section 11 of the EAP notes that potable water will be piped into the new WWTP. Requirements of *The Manitoba Plumbing Code* respecting protection of potable water supplies from cross-connection and backflow/backsyphonage should be adhered to in the building plumbing systems.

Apart from these points, Office of Drinking Water has no other concerns with this EAP or the proposed development. If you have any questions, please call. Regards,

James Stibbard P. Eng.

Approvals Engineer Office of Drinking Water 1007 Century Street Winnipeg MB R3H 0W4 phone: (204) 945-5949 fax: (204) 945-1365 email: James.Stibbard@gov.mb.ca website: www.manitoba.ca/drinkingwater

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Memorandum

DATE: 27 June, 2014

- TO: Robert Boswick Environmental Approvals Conservation and Water Stewardship 160-123 Main Street, Winnipeg
- FROM: Muntaseer Ibn Azkar Air Quality–Environmental Programs & Strategies Conservation and Water Stewardship 1007 Century Street, Winnipeg

SUBJECT: City of Winkler Waste Water Treatment Facility (File 2708.20)

Air Quality Section has reviewed the above proposal and provides the following comments:

- While the proposal did not mention about dust and particulate emissions, it is expected that appropriate control measures will be undertaken to minimize dust and particulate matter emissions during construction works.
- Air Quality Section suggests that the EA Clause regarding odour nuisance be included in the licence.

From: Sent: To: Subject: Kubish, Cheryl (OFC) June-19-14 12:14 PM Boswick, Robert (CWS) RE: Request for comments - City of Winkler Wastewater Treatment Facility File: 2708.20

At this time, the Office of the Fire Commissioner (OFC) will require the proponent to obtain a valid building permit from the Building Code authority, the MSTW Planning District at 180-5th Street in Morden. Prior to any occupancy of this new facility, the proponent shall also obtain a valid Occupancy Permit from the MSTW Planning District. The proponent shall also submit a fire safety plan, with respect to Section 2.8 of the Manitoba Fire Code, to the Winkler Fire Department.

Cheryl Kubish Administrative Assistant Office of the Fire Commissioner 508-401 York Avenue Winnipeg MB R3C 0P8 Phone: 945-3328 Fax: 948-2089

E-Mail address: Cheryl.Kubish@gov.mb.ca

From: Steele, Tania (CWS)

Sent: June-03-14 10:55 AM

To: Salvano, Esther (MAFRI); Kaita, Adara (CWS); Labossiere, Don (CWS); Molod, Rommel (CWS); Streich, Laurie (CWS); Firlotte, Nicole (CWS); Boissonneault, Caroline (CWS); Kelly, Jason (CWS); Keenan, Phil (CWS); Missyabit, Ron (CWS); Page, Elaine (CWS); Phipps, Graham (CWS); Janusz, Laureen R (CWS); Stibbard, James (CWS); Matthews, Rob (CWS); Reimer, Geoff P (CWS); +WPG574 - HRB (TCHSCP); Cunningham, Neil (CWS); Roberecki, Susan (HHLS); Peck, Angela (HHLS); Allum, Brad (MIT); +WPG969 - MIT Environmental Services Section (MIT); Schafer, Dave (OFC); Kubish, Cheryl (OFC); Nedotiafko, Rob (CWS); +MOR975 - Morden CRP (MMG); Sobkowich, Dale (CWS)

Subject: Request for comments - City of Winkler Wastewater Treatment Facility File: 2708.20

Your review and comments would be appreciated for the attached Proposal submitted pursuant to *The Environment Act:*

http://www.gov.mb.ca/conservation/eal/registries/2708.2winkler/index.html

The contact person assigned to co-ordinate review and assessment of the Proposal is: Robert Boswick 204-945-6030.

Email replies are programmed to automatically deliver to <u>robert.boswick@gov.mb.ca</u>

Please indicate to the contact person if you are unable to review the proposal. A non-reply will be considered as indicating your department has reviewed the proposal and has no concerns.

Any comments you have on the Proposal should be emailed by July 7, 2014.

No hard copies will be provided

Thank you.

Sent on behalf of:

Robert Boswick, P.Eng. Environmental Engineer Manitoba Conservation and Water Stewardship REGULAR MAIL - 160-123 Main Street (BOX 80), Winnipeg MB R3C 1A5 COURIERS - 2nd Floor 123 Main Street, Winnipeg MB R3C 1A5 e-mail: robert.boswick@gov.mb.ca Ph. (204) 945-6030 Cellular (204) 918-5853 FAX: (204) 945-5229 61

From: Sent: To: Subject: Kaita, Adara (CWS) on behalf of +WPG1212 - Conservation_Circulars (CWS) July-03-14 11:37 AM Boswick, Robert (CWS) EA Proposal - City of Winkler - Wastewater Treatment Facility - File: 2708.20

Hello Robert,

The Lands Branch has no concerns as no Crown Lands are impacted by the proposal.

Thank you for the opportunity to review.

Adara Kaita

Crown Land Programs and Policy Manager Lands Branch | Conservation and Water Stewardship Box 25, 200 Saulteaux Crescent | Winnipeg, MB R3J 3W3 Cell: (204) 945-6301 | F: (204) 948-2197

From: Sent: To: Subject: Kelly, Jason (CWS) June-23-14 9:12 AM Boswick, Robert (CWS) RE: Request for comments - City of Winkler Wastewater Treatment Facility File: 2708.20

Parks and Protected Spaces Branch has reviewed Request for comments - City of Winkler Wastewater Treatment Facility File: 2708.20. The Branch has no comments or concerns to offer as it does not affect any provincial parks, park reserves, ecological reserves, proposed protected areas, or areas of special interest.

Jason Kelly, M.N.R.M. Ecological Reserves and Protected Areas Specialist Parks and Protected Spaces Branch Consiervation and Water Stewardship Box 5 3, 200 Saulteaux Cres Winnipeg, MB R3J 3W3

Phone: 204-945-4148 Cell: Fax: 204-945-0012

Email: Jason.Kelly@gov.mb.ca

From: Steele, Tania (CWS)

Sent: June-03-14 10:55 AM To: Salvano, Esther (MAFRI); Kaita, Adara (CWS); Labossiere, Don (CWS); Molod, Rommel (CWS); Streich, Laurie (CWS); Firlotte, Nicole (CWS); Boissonneault, Caroline (CWS); Kelly, Jason (CWS); Keenan, Phil (CWS); Missyabit, Ron (CWS); Page, Elaine (CWS); Phipps, Graham (CWS); Janusz, Laureen R (CWS); Stibbard, James (CWS); Matthews, Rob (CWS); Reimer, Geoff P (CWS); +WPG574 - HRB (TCHSCP); Cunningham, Neil (CWS); Roberecki, Susan (HHLS); Peck, Angela (HHLS); Allum, Brad (MIT); +WPG969 - MIT Environmental Services Section (MIT); Schafer, Dave (OFC); Kubish, Cheryl (OFC); Nedotiafko, Rob (CWS); +MOR975 - Morden CRP (MMG); Sobkowich, Dale (CWS)

Subject: Request for comments - City of Winkler Wastewater Treatment Facility File: 2708.20

Your review and comments would be appreciated for the attached Proposal submitted pursuant to *The Environment* Act:

http://www.gov.mb.ca/conservation/eal/registries/2708.2winkler/index.html

The contact person assigned to co-ordinate review and assessment of the Proposal is: Robert Boswick 204-945-6030.

Email replies are programmed to automatically deliver to robert.boswick@gov.mb.ca

Please indicate to the contact person if you are unable to review the proposal. A non-reply will be considered as indicating your department has reviewed the proposal and has no concerns.

Any comments you have on the Proposal should be emailed by July 7, 2014.

**No hard copies will be provided **

Thank you.

Sent on behalf of:

Robert Boswick, P.Eng.Environmental EngineerManitoba Conservation and Water StewardshipREGULAR MAIL - 160-123 Main Street (BOX 80), Winnipeg MB R3C 1A5COURIERS - 2nd Floor 123 Main Street, Winnipeg MB R3C 1A5e-mail: robert.boswick@gov.mb.caPh. (204) 945-6030Cellular (204) 918-5853FAX: (204) 945-5229

2

From:	Boissonneault, Caroline (CWS)
Sent:	June-11-14 1:18 PM
То:	Boswick, Robert (CWS)
Subject:	Emailing: Request for comments - City of Winkler Wastewater Treatment Facility File 2708.20
Attachments:	Request for comments - City of Winkler Wastewater Treatment Facility File: 2708.20

Hello:

Wildlife Branch does not have any concerns with this proposal pursuant to the Environment Act. Thank you. Caroline Boissonneault Conservation and Water Stewardship Wildlife Branch Tel.: 204-945-6810 Caroline.boissonneault@gov.mb.ca

Your message is ready to be sent with the following file or link attachments:

Request for comments - City of Winkler Wastewater Treatment Facility File 2708.20

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Infrastructure and Transportation

Highway Planning and Design Branch Environmental Services Section 1420 – 215 Garry St., Winnipeg, MB R3C 3P3 T (204) 619-4359 F (204) 945-0593

June 9, 2014

Tracey Braun, M. Sc. Director, Environmental Approvals Branch Manitoba Conservation and Water Stewardship 123 Main St., Suite 160 Winnipeg, MB R3C 1A5

RE: City of Winkler WWT Facility Client File No. 2708.20

Dear Ms. Braun:

MIT has reviewed the proposal under the Environment Act noted above and we do not have any concern.

Thank you very much for providing us the opportunity to review the proposal.

Sincerely,

ti

Ryan Coulter, M. Sc., P. Eng. Manager of Environmental Services



From: Sent: To: Subject: Sobkowich, Dale (CWS) June-03-14 11:07 AM Boswick, Robert (CWS) RE: Request for comments - City of Winkler Wastewater Treatment Facility File: 2708.20

Land Management & Planning Section has no comment as no Crown lands are impacted by the proposal.

Dale Sobkowich Lands Branch

From: Steele, Tania (CWS) Sent: June-03-14 10:55 AM

To: Salvano, Esther (MAFRI); Kaita, Adara (CWS); Labossiere, Don (CWS); Molod, Rommel (CWS); Streich, Laurie (CWS); Firlotte, Nicole (CWS); Boissonneault, Caroline (CWS); Kelly, Jason (CWS); Keenan, Phil (CWS); Missyabit, Ron (CWS); Page, Elaine (CWS); Phipps, Graham (CWS); Janusz, Laureen R (CWS); Stibbard, James (CWS); Matthews, Rob (CWS); Reimer, Geoff P (CWS); +WPG574 - HRB (TCHSCP); Cunningham, Neil (CWS); Roberecki, Susan (HHLS); Peck, Angela (HHLS); Allum, Brad (MIT); +WPG969 - MIT Environmental Services Section (MIT); Schafer, Dave (OFC); Kubish, Cheryl (OFC); Nedotiafko, Rob (CWS); +MOR975 - Morden CRP (MMG); Sobkowich, Dale (CWS)

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Sent on behalf of:

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From: Sent: To: Subject: Roberts, Dan (CWS) June-03-14 1:02 PM Boswick, Robert (CWS) Request for comments - City of Winkler Wastewater Treatment Facility File: 2708.20

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On behalf of the Water Control Works and Drainage Licensing Section, there are no concerns.

Dan Roberts

Water Resource Officer Water Control Works and Drainage Licensing Section Conservation and Water Stewardship Box 640, 201 Fourth Ave. S., Swan River, MB R0L 1Z0 Cell: (204) 281-2122, Fax: 734-3733

Boswick, Robert	(CWS)
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From: Sent: To: Subject: Matthews, Rob (CWS) June-03-14 12:03 PM Boswick, Robert (CWS) RE: Request for comments - City of Winkler Wastewater Treatment Facility File: 2708.20 A ... 3

No concerns.

Water Use Licensing Section

From: Steele, Tania (CWS) Sent: June-03-14 10:55 AM

To: Salvano, Esther (MAFRI); Kaita, Adara (CWS); Labossiere, Don (CWS); Molod, Rommel (CWS); Streich, Laurie (CWS); Firlotte, Nicole (CWS); Boissonneault, Caroline (CWS); Kelly, Jason (CWS); Keenan, Phil (CWS); Missyabit, Ron (CWS); Page, Elaine (CWS); Phipps, Graham (CWS); Janusz, Laureen R (CWS); Stibbard, James (CWS); Matthews, Rob (CWS); Reimer, Geoff P (CWS); +WPG574 - HRB (TCHSCP); Cunningham, Neil (CWS); Roberecki, Susan (HHLS); Peck, Angela (HHLS); Allum, Brad (MIT); +WPG969 - MIT Environmental Services Section (MIT); Schafer, Dave (OFC); Kubish, Cheryl (OFC); Nedotiafko, Rob (CWS); +MOR975 - Morden CRP (MMG); Sobkowich, Dale (CWS) **Cc:** Boswick, Robert (CWS)

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