

May 21, 2015



Conservation and Water Stewardship  
Environmental Approvals Branch  
160-123 Main Street (Box 80)  
Winnipeg, Manitoba  
R3C 1A5

Attention Mr. Bereket Assefa, Ph.D., P.Eng.  
Senior Environmental Engineer, Municipal and Industrial Section

**RE: Town of Winnipeg Beach, File 74.30, Lagoon Upgrade EAP  
Additional Information Request #2**

Dear Mr. Assefa:

Thank you for your timely review of the Winnipeg Beach Lagoon Upgrade EAP. We have reviewed your email request for additional information and have provided responses for the questions in the attached document.

If you have any further questions please do not hesitate to contact the undersigned at 204-453-2301, or by email at [fzurzolo@dillon.ca](mailto:fzurzolo@dillon.ca).

Yours sincerely,

**DILLON CONSULTING LIMITED**

A handwritten signature in blue ink, appearing to read "F Zurzolo", written over a light blue circular stamp.

Francesco Zurzolo, E.I.T., M.Sc.

FMZ/knp

*Attachments: 13-8588 - Winnipeg Beach Lagoon Upgrades EAP - Response to  
Additional Information Request#2*

Our File: 13-8588

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## 13-8588 – Winnipeg Beach Lagoon Upgrades EAP Response to Additional Information Request #2

**Question 1:** *[Please provide a] clear schematic drawing (without aerial photo, legible annotations, etc.) of the entire wastewater treatment lagoon system as proposed to be upgraded, for inclusion in the licence*

**Response 1:** This has been emailed to you.

**Question 2:** *[Confirm] Depth of operation of each of the five cells of the lagoon.*

**Response 2:** The depths of operation of the five lagoon cells are as follow:

- Cell 1N - 1.65m
- Cell 2N - 1.65m
- Cell 1S - 1.6m
- Cell 2S - 1.9m
- Cell 3S - 1.9m

Please notice that these depths refer to the maximum water depths of the cells and do not include the 1 m of freeboard that exists at each of these cells.

**Question 3:** *[Please provide] confirmation of the proposed location(s) and number of discharge points (a drawing identifying the discharge routes and points will be helpful for increased clarity).*

**Response 3:** A sketch indicating the existing discharge points and the proposed discharge point is attached to this letter.

**Question 4:** *[Please provide an] explanation regarding system operation of the north lagoon cells as stated in Section 4.5 of the EAP relative to that provided for the south cells explained in Section 5.1 of the EAP, including but not limited to:*

- *Whether treated or untreated wastewater will be directed to the two cells north of Kernstead Road.*
- *Type of treatment to be provided to achieve the desired discharge effluent quality, if untreated wastewater will be directed to the north cells.*
- *Discharge management from the north cells.*
- *Effluent sampling and monitoring from the north cells.*
- *The impact of discharge from the north cells on the average daily discharge flow from the south cell.*

**Response 4:** Further to our previous discussion:

- We will use the north cells for treated water storage.
- No untreated wastewater will be directed to the North Cells. All raw wastewater will enter Cell 1S and flow through the south lagoon system and the P reduction and disinfection unit processes. During regular operation, treated water leaving the UV disinfection unit will be discharged directly to the discharge ditch. However, in the event that the discharge route is blocked or otherwise unavailable (e.g., ice cover) the treated water can then be directed to the north lagoon cells for storage until the discharge route becomes functional again.

- Discharge from the north cells will be on a bulk discharge basis during the licensed discharge period (proposed as April 01-Oct 31 in the EAP).
- Effluent will not be sampled from the north cells as the cells will contain treated water only. The only proposed compliance point of the system is at the UV outlet as described in the EAP.
- Release of stored water from the north cells will not impact the average daily discharge flow rate of the treatment system.

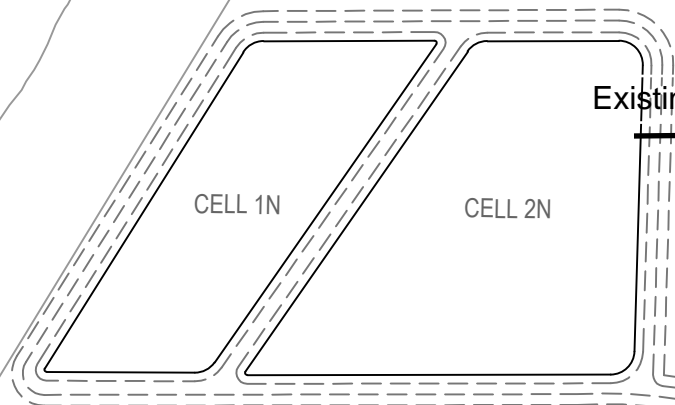
**Question 5:** *[Indicate] whether or not there is fence around each series of cells located north and south of Kernstead Road*

**Response 5:** There are fences and gates along the Kernstead Road frontage of the south lagoon. Access to the south lagoon from the other sides is prevented by brush, deep ditches, and swamp. It is our opinion that access to the south lagoon is sufficiently restricted to satisfy safety and security concerns at the site.

Access to the North lagoon is prevented by a locked gate at the approach and by ditches and brush on the other sides. Access to the North lagoon is moderately restricted by these features. Since treated water will be stored in the North cells on an infrequent basis, the locked gate may be considered an adequate restriction to site access.



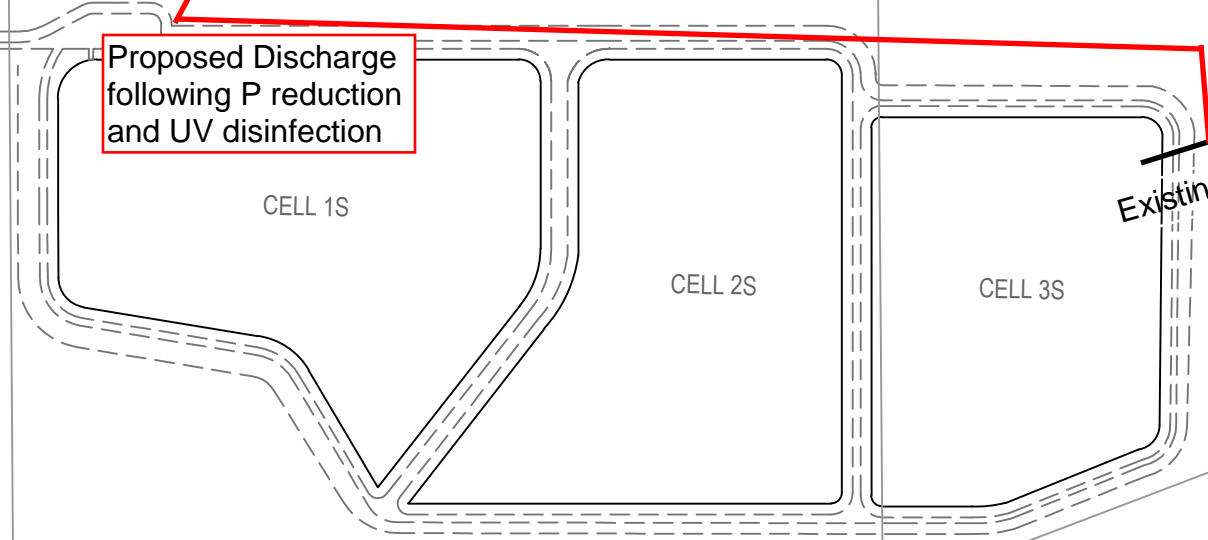
LAKE WINNIPEG



Existing Discharge

Proposed Discharge following P reduction and UV disinfection

KERNSTEAD ROAD



Existing Discharge

RAILWAY

HIGHWAY #9

