

Subject: The Town of The Pas Wastewater Treatment Lagoon

File: 144.40

The attached material can be placed in the public registries for the above project

Public Comments on the Environment Act Proposal:

No public comments were received during the public comment period.

No.	Technical Advisory Committee Member	Response Provided	Date Received
1	Manitoba Sustainable Development –		
	<ul style="list-style-type: none"> • Compliance and Enforcement Branch • Climate Change and Air Quality Branch • Wildlife and Fisheries Branch • Parks and Protected Spaces Branch • Forestry and Peatlands Branch • Indigenous Relations Branch • Lands Branch • Water Quality Management Section • Groundwater Management Section • Office of Drinking Water • Water Use Licensing Section • Water Control Works Licensing Section • Regional Services Branch 	<p>No response</p> <p>No response</p> <p>No concerns</p> <p>No concerns</p> <p>No concerns</p> <p>No response</p> <p>No concerns</p> <p>Yes</p> <p>No response</p> <p>No concerns</p> <p>No response</p> <p>No response</p> <p>No response</p>	<p>May 2, 2018</p> <p>April 23, 2018</p> <p>May 14, 2018</p> <p>May 30, 2018</p> <p>June 1, 2018</p> <p>April 23, 2018</p>
2	Manitoba Sport, Culture, and Heritage – Heritage Branch	No response	
3	Manitoba Growth, Enterprise and Trade –		
	<ul style="list-style-type: none"> • Energy Development Branch • Petroleum Branch • Office of Fire Commissioner • Work Place Safety & Health 	<p>No response</p> <p>No response</p> <p>No response</p> <p>No response</p>	
4	Manitoba Infrastructure –		
	<ul style="list-style-type: none"> • Highway Planning and Design Branch 	No concerns	May 23, 2018
5	Manitoba Indigenous and Municipal Relations	No response	
6	Manitoba Health, Seniors and Active Living – Environmental Health Unit	No response	

Dey, Asit (SD)

From: Kelly, Jason (SD)
Sent: April-23-18 8:15 AM
To: Dey, Asit (SD)
Subject: RE: Request for review/comment - The Town of The Pas Wastewater Treatment Lagoon-
File: 144.40

Follow Up Flag: Follow up
Flag Status: Flagged

No comments or concerns.

Dey, Asit (SD)

From: Vitt, Cory (SD)
Sent: April-23-18 8:35 AM
To: Dey, Asit (SD)
Subject: RE: Request for review/comment - The Town of The Pas Wastewater Treatment Lagoon-
File: 144.40

Follow Up Flag: Follow up
Flag Status: Flagged

No concerns.
Office of Drinking Water (ODW)

Cory Vitt, M.Eng. P.Eng.

Approvals Engineer
Office of Drinking Water
Manitoba Sustainable Development
1007 Century Street
Winnipeg, Manitoba R3H 0W4
Phone: 204-806-1363
Fax: 204-945-1365
Email: Cory.Vitt@gov.mb.ca
Website: www.manitoba.ca/drinkingwater

Dey, Asit (SD)

From: Kiss, Brian (SD)
Sent: May-02-18 3:08 PM
To: Dey, Asit (SD)
Subject: RE: Request for review/comment - The Town of The Pas Wastewater Treatment Lagoon-
File: 144.40

Follow Up Flag: Follow up
Flag Status: Flagged

No wildlife related concerns.

-Brian Kiss

Dey, Asit (SD)

From: Epp, Jane (SD)
Sent: May-14-18 2:56 PM
To: Dey, Asit (SD)
Subject: RE: Request for review/comment - The Town of The Pas Wastewater Treatment Lagoon-
File: 144.40

Follow Up Flag: Follow up
Flag Status: Flagged

Forestry and Peatlands has no concerns with this project.

Preference would be for the timber harvested in a manner in enable market use or left for firewood.

Jane Epp

Forestry and Peatlands Branch
Water Stewardship and Biodiversity Division, Sustainable Development
200 Saulteaux Crescent, Box 70
Winnipeg, MB R3J 3W3
MOBILE COMMUNICATIONS 204-794-8545
Fax: 1-204-948-2671
email: jane.epp@gov.mb.ca

Dey, Asit (SD)

From: +WPG969 - MIT Environmental Services Section (MI)
Sent: May-23-18 8:49 AM
To: Dey, Asit (SD)
Subject: RE: Request for review/comment - The Town of The Pas Wastewater Treatment Lagoon-
File: 144.40

Follow Up Flag: Follow up
Flag Status: Flagged

No concern. Thank you for the opportunity to review.

Dey, Asit (SD)

From: +WPG1212 - Conservation_Circulars (SD)
Sent: May-30-18 8:03 AM
To: Dey, Asit (SD)
Subject: RE: Request for review/comment - The Town of The Pas Wastewater Treatment Lagoon- File: 144.40

Follow Up Flag: Follow up
Flag Status: Flagged

Good morning Asit

Lands Branch SD has no concern as regards The Town of The Pas Wastewater Treatment Lagoon- File: 144.40

Thank you for the opportunity to review

Winifred Frias

Crown Land Programs Administrator
Lands Branch
Department of Sustainable Development
200 Saulteaux Crescent, Box 25
Winnipeg, Manitoba R3J 3W3 CANADA
Phone: (204) 945-4524
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Please consider the environment before printing this e-mail

DATE: June 1, 2018

TO: Asit Dey
Environmental Approvals Branch
160-123 Main Street, Winnipeg, MB
R3C 1A5

FROM: Joy Kennedy
Water Quality Management Section
Manitoba Sustainable Development
Box 14, 200 Saulteaux Crescent
Winnipeg, Manitoba R3J 3W3

cc. Elaine Page, Brian Wiebe

PHONE NO.: 204-945-7908

SUBJECT: NOTICE OF ALTERATION OF ENVIRONMENT ACT PROPOSAL FILE: 144.4 THE TOWN OF THE PAS WASTEWATER TREATMENT LAGOON

- The following effluent standards should be in place for The Pas wastewater treatment lagoon as per the *Manitoba Water Quality Standards, Objectives and Guidelines Regulation* (196/2011).
 - BOD5 25 mg/L,
 - TSS 25 mg/L,
 - Total Phosphorus <1 mg/L,
 - Fecal Coliforms or *Escherichia coli* 200 organisms / 100mL
 - Total Ammonia mg/L, as outlined in Table 1 of Manitoba Water Quality Standards, Objectives, and Guidelines using Equations 3 & 6 and based on effluent pH.
- Water Quality Management Section recommends the proponent be required to collect a bioassay sample of the effluent for testing the sample at 100 percent concentration for acute lethality to trout (EPS 1/RM/13 Second Edition – December 2000).
- The Water Quality Management Section recommends effluent monitoring as would be required of a medium (>2,500 – 17,500 m³/day) sized wastewater treatment plant, rather than as a waste water treatment lagoon, as the facility will function as a wastewater treatment plant. Additionally, the Water Quality Management Section recommends weekly sampling for total ammonia.
- Can the proponent provide information on other water uses of Grace Lake?
- Can the proponent demonstrate that the volume of the mixing zone does not exceed 10% of volume of those portions of the receiving waters available for mixing or a 100 m in radius, whichever is less?
- The Proposal indicates alum is the proposed method of phosphorus removal using an alum addition system into the gravity sewer system upstream. Can the proponent indicate where in the gravity sewer system ALUM will be added? Can the proponent describe how the ALUM dosage would be determined?
- Maps from detailed soil reports indicate the proposed system located on NW 2-56-26e is a nutrient management zone N4. Under 14(1) of the *Nutrient Management Regulation* (62/2008) a wastewater system cannot be located in a Zone N4. The proponent should obtain services of pedologist. Attached is the most recent listing of pedologists. If the pedologist reports the site is confirmed to be a Zone N4 and the Proponent still wants to locate wastewater treatment and disposal system in this location, Proponent will need to apply in writing to the Director of the Water Science and Watershed Management Branch, Box 14, 200 Saulteaux Cres, Winnipeg, Manitoba, R3J 3W3 for authorization.
- Sludge application rate calculations were made using an incorrect phosphorus test, as a result the application rates are too high. The Proponent has used the Olsen-P test on sludge as available phosphorus, this test is for soil and provides an index of the likelihood of crop response to phosphorus fertilizer. It is not appropriate for biosolids and even in soils it does not measure plant available P. The Proponent should estimate plant available P in the biosolids as a percentage of total phosphorus (total phosphorus is under “Metals in Soil by CRC ICPMS” in the lab analysis they provided)..They reference an EPA 1995 publication which suggests 50% of total P is plant available

and using this 50% estimate and an application rate of 2x crop P removal for canola of 74 kg P₂O₅/ha (2x37 kg/ha - Tabel 2.4 in the proposal), the correct primary cell rate is 7.5 dry tonnes/ha and the dewatering cell rate is 10.6 dry tonnes/ha. Please note, sludge application is not permitted on land with a soil test which is above 60 ppm Olsen-P in the top 15 cm.

- The proponent has indicated that no soil classification of the soils was available for the land parcels proposed for land application of sludge. With a list of legal land descriptions, this office can provide Agriculture Capability for Nutrient Management Zone information for most fields around The Pas.
- Further, the *Nutrient Management Regulation (62/2008)* requires setbacks as Nutrient Buffer Zones when applying nutrients.
 - A groundwater feature 15m,
 - a wetland, bog, marsh or swamp other than a major wetland bog, marsh or swam setback distance between the water's edge and the high water mark.
 - A lake or reservoir designated as vulnerable setback distance 30m
 - A lake or reservoir, not designated as vulnerable setback distance 15m
 - A river, creek or stream designated as vulnerable setback distance 15m
 - A river, creek or stream not designated as vulnerable, a 3rd order drain or higher, a major wetland, bog, marsh or swamp, a constructed retention pond setback distance 3m.
- The total area of the setbacks, due to the Nutrient Buffer Zones mentioned above, should be excluded from the land base calculations when determining the area of land necessary for land application. Class 6 and 7 soils are Nutrient Management Zone N4 and no nutrients should be applied to this soil as per the *Nutrient Management Regulation (62/2008)*. The total area of Class 6 soils Zone N4 must be excluded from the land base calculations used to determine the area of land necessary.
- Additionally, the *Nutrient Management Regulation (62/2008)* requires that no person shall apply nutrients to fields between November 10 of one year and April 10 of the following year.
- 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.

Sincerely,

Joy Kennedy

Pedologists

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