

Reviewer Comments and Proponent Responses

Project: Town of Fort Smith - municipal Water Licence – 2021 and 2022 Annual Reports
Board: Mackenzie Valley Land and Water Board
Proponent: Town of Fort Smith

File Number: MV2011L3-0001
Review Comments Due: June 24, 2024
Proponent Responses Due: July 30, 2024

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response	Board Decision
MVLWB - Erica Janes					
1	2021 Annual Report, Section (b)	Board staff note that several months in Table 2 (monthly volumes of sewage effluent discharged) were averaged due to no testing being done.	Why were no volumes of sewage effluent discharge recorded during these months? What steps has the Town taken to ensure that sewage effluent volumes are recorded each month?	These are recorded by hand and require 2 staff for safety reasons to be on. They get missed for a variety of reasons the above statement being one of those reasons. It is deceiving but certain days of testing were missed not the entire month.	Noted; acceptable response.
2	2021 and 2022 Annual Reports, Section (f)	This section states that all inspections of dams, berms, dykes and control structures "have passed" (2021) or have "no issues" (2022)	Please detail the nature and frequency of inspections that the Town conducts for dams, berms, dykes and control structures.	Towns berms and dykes and control surfaces are visually inspected daily and recorded in the day timer. Daily weir dips are also done at this time.	Noted; acceptable response.
3	2022 Annual Report, Section (i)	This section asks for updates or revisions to the SDF O&M Plan and the SWDF O&M Plan, and the Town states they are unaware of any updates. In the correspondence from the Town attached to the review (dated May 13, 2024), the Town indicates that an update to the SDF O&M Plan respecting sludge criteria and end use, will be submitted within the month.	Please indicate when the Town plans to submit the revised SDF O&M Plan.	The plan for the sludge has been updated in the lagoon liner scope of work, which has been provided to the mvlwb.	The Board notes that the Town's submitted Modification for the Sewage Disposal Facilities (Jun9_22) details sludge management practices in Appendix B. However, the Board requirement for an updated SDF O&M Plan to include sludge management criteria and end use, has not been received. The Board requires the Town to submit the revised SDF O&M Plan, including sludge management criteria and end use, by December 31, 2024.
4	Groundwater Monitoring and Protection Program,	Board staff note the requirement for a report summarizing the results of monitoring completed under the Groundwater Monitoring and Protection	Was the Town able to collect groundwater data from 2019-2023? If not, why?	Yes these results were submitted with the yearly water licence for each of the years in question.	The Board notes that the last submitted Groundwater Monitoring and Protection Program Report (required by Part D, Condition 12 and Schedule 2, Condition 2 of the Licence) was in 2018. Following a public review, the

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	Groundwater Monitoring Data	Program as per Part D, Condition 12 of the Licence. The last report received was 2018.			<p>Board required revisions to the GMPP (July 28, 2020), which have not yet been submitted. Annual Reports submitted from 2019 to 2023 do not include the reporting requirements for the annual Groundwater Monitoring and Protection Program Report; groundwater sampling does not appear to follow the approved GMPP, and the data provided to date is inconsistent with respect to sampling locations and parameters (2019 AR: September and June sampling events at SNP 567-4, no discussion or GW reporting; 2020 AR: June sampling event at SNP 567-4 and various boreholes, no discussion or GW reporting; 2021AR: June and November sampling of SNP 567-4, no discussion; 2022 AR: sampling events at SNP 567-4 and various boreholes, no discussion).</p> <p>The Town is required to submit groundwater reporting on May 1 annually (Part D, Condition 12 of the Licence); the original Reasons for Decision at issuance do not explain this date; The Board believes there are no problems with the Town submitting groundwater data with the Annual Water Licence Report. In order to encourage the Town to fulfill the groundwater monitoring and reporting requirements, the Board requires the Town to:</p> <ul style="list-style-type: none"> • include groundwater analytical results in all future annual reports, in accordance with Schedule 1(q) of the Licence; • Include this requirement in a revised version of the annual reporting template provided by Board staff; and • Encourages the Town to address the requirements of Schedule 2, Condition 2 in annual reporting.

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5	Groundwater Monitoring and Protection Program, Groundwater Monitoring Data	As above.	In lieu of reports from 2019-2022, does the Town have any current groundwater monitoring data available?	Yes these results were submitted with the yearly water licence for each of the years in question.	See Comment ID MVLWB 4 above.
GNWT - Environment and Climate Change - Environmental Regulatory Analyst					
1	GNWT-ECC Cover Letter	<p>The Department of Environment and Climate Change, Government of the Northwest Territories has reviewed the application at reference based on its mandated responsibilities under the Waters Act and has provided comments and recommendations for consideration of the Mackenzie Valley Land and Water Board.</p> <p>For any technical questions, please contact Bryana Matthews, Regulatory and Science Advisor with the Regulatory and Permitting Division at Bryana_Matthews@gov.nt.ca.</p> <p>Should you have any general questions or concerns, please do not hesitate to contact gnwt_ea@gov.nt.ca.</p>	N/A	N/A	Noted.
2	EQC Exceedance	Annex A of the 2021 Annual Report includes a table with the SNP results from SNP 567-2 (Sewage Disposal Facilities point of discharge). GNWT-ECC notes that the sample on May 2nd	GNWT-ECC recommends that the Town of Fort Smith discuss whether there is any reason for this exceedance as it is much higher than the	.The reason for this exceedance is unknown at this time and our ability to track down the issue is limited as, to much time now has passed. Going forward any	Acceptable response. The Town is reminded of these requirements in the Board's letter.

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		included a TSS concentration of 293 mg/L whereas the EQC is 200 mg/L.	other sampling results in 2021. GNWT-ECC recommends that the Town of Fort Smith ensure any exceedance of EQC, being an unauthorized discharge, be reported under part h of future Annual Reports and that condition F.4 of the licence is followed.	exceedance will be reported under part h.	
3	SNP Results 567-4	Annex A of the 2021 Annual Report includes a table with SNP results from 567-6 (the Slave River, approx. 3m downstream from the SDF outlet), which includes iron concentrations of 1,650 mg/L and 1,940 mg/L. According to the lab reports, it appears that these values should be in µg/L instead of mg/L. The same error is also noted in the 2022 Annual Report.	GNWT-ECC recommends that the Town of Fort Smith confirm the iron concentrations in Table 2 of Appendix A in the 2021 and 2022 Annual Reports.	The water licence for sample station 567-4 is asking for the result in mgl. If this is what the question is referring to? The result from the lab are in ugl but the licence is, in fact, asking for it in mgl. Looks like I may have missed this and reported it in ugl.	The Board notes the error in units for Table 2 in the Annual Report Template. A corrected version of the template will be provided to the Town.
4	Modifications	Bullet e) of the 2022 Annual Report is meant to describe modifications and/or major maintenance work carried out on the Water Supply Facilities and Waste Disposal Facilities and all associated structures. The Town of Fort Smith has indicated there were modifications but it does not have access to the as-builts.	GNWT-ECC recommends that the Town of Fort Smith provide further details regarding the modifications and/or major maintenance work conducted in 2022, to better fulfill the requirements of bullet e). GNWT-ECC recommends that the Town of Fort Smith clarify if the as-builts will be available in the future.	Still haven't received the as builts. Will provide when received.	Noted. The Board reminds the Town: <ul style="list-style-type: none"> To provide fulsome descriptions of modifications and/or major maintenance work carried out; and to provide As-Built drawings in accordance with Part H, Condition 3 of the Licence.

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5	Summary of Sludge Management Activities	Bullet l) of the 2022 Annual Report is meant to summarize sludge management activities, if any. GNWT-ECC notes that this section was left blank.	GNWT-ECC recommends that the Town of Fort Smith provide a summary of sludge management activities, if any, that occurred in 2022. If none, text should be added stating this.	Sludge from cell 1 was removed and placed in a drying bag adjacent to cell 2. Cell 1 was damaged during this process and has been offline ever since. Plans for repair this year.	Noted. The Board reminds the Town to complete each section of the annual reporting template with as much information as possible.
6	SNP comparison to EQC	Bullet m) of the 2022 Annual Report is meant to compare SNP data to Water Licence regulated limits and sampling and analysis requirements. It appears that the Town of Fort Smith was unclear about this requirement, however Table 1 in Annex A includes a table comparing SNP data to EQC, fulfilling bullet m).	GNWT-ECC recommends that future Annual Reports include a reference under bullet m) to the table in the Annex that compares SNP 567-2 data to EQC.	Noted.	Noted. A revised version of the template will be provided to the Town.
Fisheries and Oceans Canada (DFO) - Ms. Anna-Maija LaFlamme					
1		The Town of Fort Smith: Municipal Water Licence, 2021 and 2022 Annual Reports outline the water withdrawal activities for the duration of the project which have the potential to impact fish and fish habitat. Direct fish mortality can occur during pumping activities through entrainment/impingement. Entrainment occurs when a fish is drawn into a water intake and cannot escape. Impingement occurs when a fish is held in contact with the intake screen and is unable to free itself. DFO developed a code of practice to provide national guidance on the design, installation and	This comment is an acknowledgement of the review of the MV2011L3-001, Town of Fort Smith: Municipal Water Licence, 2021 and 2022 Annual Reports. In order to comply with the Fisheries Act, it is recommended that the Proponent follow DFO's protective measures for fish and fish habitat and standard codes of practice which can be found on DFO's website (https://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html and <a 495="" 80="" 917="" 938"="" data-label="Page-Footer" href="https://www.dfo-mpo.gc.ca/pnw-</td> <td>Noted. We are working with engineering groups in order to make the upgrades compliant with DFO requirements. This project is at this moment stalled and has been re-tendered.</td> <td>Noted.</td> </tr> </tbody> </table> </div> <div data-bbox="> <p>MV2011L3-0001 – Tow of Fort Smith – 2021 and 2022 Annual Water Licence Reports</p> 		

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		<p>maintenance of small end-of-pipe water intake fish screens to prevent entrainment and impingement of fish. This code of practice is for small-scale water intakes (e.g. irrigation, construction, municipal and private water supplies, mining exploration) where the water intake flow rate is up to 0.150 m³/s, or 150 litres per second (L/s). In addition, excessive amounts of water withdrawn from ice-covered waterbodies can impact fish through oxygen depletion, loss of over-wintering habitat and/or reductions in littoral habitat.</p>	<p>ppe/practice-pratique-eng.html). The proponent should review and implement any relevant DFO's protective measures for fish and fish habitat and standard codes of practice (https://www.dfo-mpo.gc.ca/pnw-ppe/measure-mesures-eng.html and https://www.dfo-mpo.gc.ca/pnw-ppe/practice-pratique-eng.html) and respect the NWT in-water works restricted activity timing windows (https://www.dfo-mpo.gc.ca/pnw-ppe/timing-periodes/nwt-eng.html). By doing so, works, undertaking or activities where impacts to fish and fish habitat can be avoided. The Proponent should refer to DFO's Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater available at https://www.dfo-mpo.gc.ca/pnw-ppe/codes/screen-ecran-eng.html when using fish screens, if water intake flow rate is up to 0.150 m³/s, or 150 litres per second (L/s). The proponent should also follow the Framework for</p>		

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			<p>Assessing the Ecological Flow Requirements to Support Fisheries In Canada and the DFO Protocol for Winter Water Withdrawal in the NWT (2010).</p> <p>Based on the information that was submitted, DFO recommends the proponent to complete and submit a request for review form (https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-004-eng.html) as the application meets the criteria for a site specific review (e.g., will occur during the Restricted Activity period), as described on DFO's website (https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-003-eng.html).</p> <p>It is also the proponent's Duty to Notify DFO if they have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to (http://www.dfo-mpo.gc.ca/pnw-ppe/CONTACT-eng.html).</p>		



June 24th, 2024

Erica Janes
Regulatory Specialist
Mackenzie Valley Land and Water Board
Box 2130, 4922-48th Street
Yellowknife NT, X1A 2P6

Dear Erica Janes,

RE: Town of Fort Smith - municipal Water Licence 2021 and 2022 Annual Reports

The Department of Environment and Climate Change, Government of the Northwest Territories has reviewed the application at reference based on its mandated responsibilities under the *Waters Act* and has provided comments and recommendations for consideration of the Mackenzie Valley Land and Water Board.

For any technical questions, please contact Bryana Matthews, Regulatory and Science Advisor with the Regulatory and Permitting Division at Bryana_Matthews@gov.nt.ca.

Should you have any general questions or concerns, please do not hesitate to contact gnwt_ea@gov.nt.ca.

Sincerely,

Shakita Jensen
Environmental Regulatory Analyst
Environment Impact Assessment
Department of Environment and Climate Change