



**Niagara  Region**

REGIONAL MUNICIPALITY OF NIAGARA  
SOUTH NIAGARA FALLS WASTEWATER SOLUTIONS

# V4.9 – Public Review Period Consultation

## 1.0 Public Review Period Consultation Summary and Records

The Regional Municipality of Niagara filed the South Niagara Falls Wastewater Solutions Schedule C Municipal Class Environmental Assessment (EA) Environmental Study Report (ESR) for the 45-day public review period from August 11 to September 26, 2022. All comments received and revisions to the ESR were tracked in the summary table below and responses were issued where required. A copy of all comments and responses are attached.

Contact Date (MM/DD/YYYY)	Contact Name / Organization	Comment Summary	Response / Action	Response Date (MM/DD/YYYY)	Related ESR Updates
07/21/2022	MECP	Pre-Notice of Study Completion courtesy email were sent by GM BluePlan to MECP members separately from mass email.	n/a	n/a	<ul style="list-style-type: none"> <li>Record of consultation dates updated in Volume 4, Section 6.2.</li> <li>Records appended to Appendix V4.8 (Consultation Records).</li> </ul>
07/21/2022	Indigenous Groups	Pre-Notice of Study Completion courtesy emails and hardcopy letters were sent by Niagara Region to the following indigenous groups separate from mass email. <ul style="list-style-type: none"> <li>Haudenosaunee Development Institute (HDI)</li> <li>Mississaugas of the Credit First Nations (MCFN)</li> <li>Six Nations of the Grand River (SNGR)</li> </ul>	n/a	n/a	<ul style="list-style-type: none"> <li>Record of consultation dates updated in Volume 4, Section 6.1.</li> <li>Records appended to Appendix V4.8 (Consultation Records).</li> </ul>
07/26/2022	Dawn LaForme (Six Nations)	SNGR confirmed receipt of notice of study completion and informed that future letters and e-mail notifications can be addressed to Lonny Bomberry, Director of Lands and Resources.	Region and Project team acknowledges the information provided. No action required.	No response required.	<ul style="list-style-type: none"> <li>Record of consultation dates updated in Volume 4, Section 6.1.</li> <li>Record of correspondences appended to Appendix V4.8 (Consultation Records).</li> </ul>
07/28/2022	Project Stakeholders	Notice of Study Completion sent by GM BluePlan on behalf of Niagara Region to project stakeholders (see Appendix V4.2 Contact List) using mass email newsletter.	n/a	n/a	<ul style="list-style-type: none"> <li>Records appended to Appendix V4.7 (Notice of Study Completion).</li> </ul>
07/28/2022	Resident Mail-Out	Notice of Study Completion and ESR Public Review mailed to residents within 5 kilometre radius of the new treatment plant site and 1 kilometre radius of the new Black Horse Sewer Pumping Station site by Niagara Region.	n/a	n/a	<ul style="list-style-type: none"> <li>Records appended to Appendix V4.7 (Notice of Study Completion).</li> </ul>
07/29/2022	Henry Cary (Wood Environment)	Phase 1/Stage 1 Archaeological Assessment (P327-013-2021) filed with the Ministry of Tourism Culture and Sport (MTCS) by Wood Environment.	MTCS responded and provided letter confirming report has been accepted and entered into Register.	E-mail: 08/28/2022	<ul style="list-style-type: none"> <li>Record of submission dates updated in Volume 4, Section 6.5.</li> <li>Acceptance letter appended to Appendix V3.2.4 (Stage 1 Archaeological Assessment – Preferred Trunk Sewer).</li> </ul>
08/02/2022	Barbra Slim (Wood Environment)	Phase 2/Stage 1-2 Archaeological Assessment (P348-0106-2020, P348-0107-2020) filed with Ministry of Tourism Culture and Sport (MTCS) by Wood Environment.	MTCS responded and provided letter confirming report has been accepted and entered into Register.	E-mail: 09/01/2022	<ul style="list-style-type: none"> <li>Record of submission dates updated in Volume 4, Section 6.5.</li> <li>Acceptance letter appended to Appendix V3.2.3 (Stage 1 and 2 Archaeological Assessment – Preferred Wastewater Treatment Site).</li> </ul>

Contact Date (MM/DD/YYYY)	Contact Name / Organization	Comment Summary	Response / Action	Response Date (MM/DD/YYYY)	Related ESR Updates
08/09/2022	Kaitlin Webber (TransCanada Pipeline)	TransCanada Energy confirmed that the Notice of Study Completion was reviewed and advised that TransCanada Pipeline (TCPL) has sever 3 large-diameter high-pressure natural gas pipelines crossing the study area. TCPL's requirements for crossings were provided.	Project team acknowledges that they will plan to consult with TCPL during the detailed design stage for Thorold Servicing Strategy as there are: <ul style="list-style-type: none"> <li>• One pipeline crossing Barron Road, parallel to Glover Road.</li> <li>• Two pipelines crossing Allanport Road, about 325 metres north of Lundy's Lane.</li> </ul>	E-mail: 09/27/2022	<ul style="list-style-type: none"> <li>• Record of correspondences appended to Appendix V4.8 (Consultation Records).</li> </ul>
08/10/2022	Transport Canada	Confirmed receipt of notice of study completion and provided a summary of common Acts that may be applicable to an EA context.	No action or response was provided as the correspondence provided clarification for proponents to self-assess. If no needed in future stages of the project, Transport Canada can be removed contact list.	No response required.	<ul style="list-style-type: none"> <li>• Record of correspondences appended to Appendix V4.8 (Consultation Records).</li> </ul>
08/11/2022	Newspaper Ads	Notice of Study Completion and ESR Public Review second week of ads appearing newspapers and on social media platforms.	n/a	n/a	<ul style="list-style-type: none"> <li>• Proof of advertisements appended to Appendix V4.7 (Notice of Study Completion).</li> <li>• Updated Volume 4 Section 7.0 date from August 4 to 11 based on actual advertised date.</li> </ul>
08/16/2022	██████████ (Resident)	Phone call to Niagara Region project manager, Albert Succi, confirming receipt of notice of study completion and ESR review, inquired about the SNFWWS project.	Project overview was provided for the resident by Region's project manager and informed them that the ESR is available for review on the project website until September 26, 2022.	Phone Call: 08/18/2022	<ul style="list-style-type: none"> <li>• Record of correspondences appended to Appendix V4.8 (Consultation Records).</li> </ul>
08/23/2022	Adam Kennedy (MNR)	Confirmed receipt of notice of study completion and provided a summary of permits/approvals that are required for various project components at the detailed design stage.	Region and Project team acknowledges the information provided. No action required.	No response required.	<ul style="list-style-type: none"> <li>• Record of correspondences appended to Appendix V4.8 (Consultation Records).</li> </ul>
08/23/2022	██████████ (Resident)	Re-directed email from the Region's Long Term Planning Department (Greg Bowie, David Heyworth, Phill Lambert) regarding new South Niagara Falls WWTP Assimilative Capacity Study and effluent objectives.	Project team provided clarification that effluent objectives were reviewed with MECP and NPCA, and that limits were established and approved by MECP. The design of the new WWTP must meet the established effluent objectives at the noted preferred discharge location into Chippawa Creek. WWTP design will be subject to further review by MECP and NPCA during the detailed design phase.	E-mail: 09/27/2022	<ul style="list-style-type: none"> <li>• Record of correspondences appended to Appendix V4.8 (Consultation Records).</li> </ul>

Contact Date (MM/DD/YYYY)	Contact Name / Organization	Comment Summary	Response / Action	Response Date (MM/DD/YYYY)	Related ESR Updates
08/29/2022	Susan Hongxia Sun (HydroOne)	HydroOne confirmed receipt of notice of study completion and provided a summary of high voltage Transmission facilities within the study area and requested to stay informed via <a href="mailto:secondarylanduse@hydroone.com">secondarylanduse@hydroone.com</a> .	<p>Project team acknowledges that they will plan to consult with HydroOne via the provided email and will be a key stakeholder with regards to subsurface utility engineering consultation and coordination, as well as any possibility of settlement analysis if work will be near any hydro transmission towers.</p> <p>The following were also noted in the response with regards to the SNFWWS conceptual design report:</p> <ul style="list-style-type: none"> <li>• Consideration of existing hydro poles along Hwy 58, Allanport Road, Barron Road, Thorold Townline Rad, Beechwood Road, and some sections of Brown Road.</li> <li>• Consideration of existing transmission wires crossing Allanport Road, south of Hwy 20 (Lundy's Lane).</li> <li>• Overhead utility aligned with Bell, Cogeco, NPEI, and NRBN.</li> </ul>	E-mail: 09/27/2022	<ul style="list-style-type: none"> <li>• Record of correspondences appended to Appendix V4.8 (Consultation Records).</li> </ul>
09/07/2022	Joan Del Villar Cuicas (MECP)	MECP requested additional review time.	Project team followed up with MECP via phone call to discuss details of the comments and agreed additional review period for MECP to extended until October 21, 2022.	Phone: 09/23/2022 E-mail: 09/27/2022	<ul style="list-style-type: none"> <li>• Record of consultation dates updated in Volume 4, Section 6.2.</li> <li>• Record of correspondences appended to Appendix V4.8 (Consultation Records).</li> </ul>
09/23/2022	██████████ (Resident)	<p><b>Resident brought up the following concerns:</b></p> <ul style="list-style-type: none"> <li>• Potential underestimation of the level of contaminants in Chippewa Creek and Hydro Canal that are above Provincial limits</li> <li>• Equipment failure at the wastewater treatment plant</li> </ul>	Region provided response letter. Copy of the response letter can be found in Appendix V4.8.7.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>• Record of correspondences appended to Appendix V4.8 (Consultation Records).</li> </ul>
09/26/2022	██████████ (Resident)	<p><b>Resident brought up the following concerns:</b></p> <ul style="list-style-type: none"> <li>• Impact on common species and insects, emphasis on further due diligence to keep Niagara Region from pushing common species to Special Concern status</li> <li>• Bat colonies and bird breeding/nesting</li> <li>• Suggests that the entire length of Lyons Creek Rd from QEW to Chippewa is a wildlife corridor for conservation purposes</li> <li>• Impact of odour on upcoming residential properties at Thundering Waters</li> <li>• Lengthy report, would like further public engagement</li> </ul> <p><b>Resident inquired about the following:</b></p> <ul style="list-style-type: none"> <li>• Will there be some sort of particulate in the discharge? (images via form was not viewable)</li> <li>• Why wasn't detailed investigation on the property was not done in the first place?</li> <li>• Why is Thorold South waste to be sent to the new treatment plant?</li> </ul>	Region provided response letter. Copy of the response letter can be found in Appendix V4.8.7.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>• Record of correspondences appended to Appendix V4.8 (Consultation Records).</li> </ul>

Contact Date (MM/DD/YYYY)	Contact Name / Organization	Comment Summary	Response / Action	Response Date (MM/DD/YYYY)	Related ESR Updates
10/21/2022	Joan Del Villar Cuicas (MECP)	The project team received detailed MECP Project Review Unit comments (see below)	Region provided response letter which has been appended. The following line items summarizes the responses below with regards to each individual comment.	Collective response to MECP Project Review Unit was provided by the project team via E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Response letter to be appended to Appendix V4.8 (Consultation Records).</li> </ul>
10/21/2022	MECP Project Review Unit comment 1	Appendix V3.1.1 (Natural Environment Baseline Report) that if the project team believes there is any impact to species at risk, contact: <a href="mailto:SAROntario@ontario.ca">SAROntario@ontario.ca</a>	Project team acknowledges, and no changes required.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 2 and 3	<p><b>Appendix V3.4.4 (Phase Two Environmental Site Assessment for the Preferred WWTP Site) on page 30</b></p> <ul style="list-style-type: none"> <li>MECP noted to be aware that if Permit-to-take-Water (PTTW) will be required if more than 50,000 L/d is to be pumped.</li> </ul> <p><b>Appendix V3.4.6 (Phase Two Environmental Site Assessment for the Preferred Trunk Sewer) on page 30</b></p> <ul style="list-style-type: none"> <li>MECP noted to be aware that if Permit-to-take-Water (PTTW) will be required if more than 50,000 L/d is to be pumped.</li> </ul>	The Region will undertake a detailed hydrogeological investigation during detailed design. Pending these findings, the Region will assess the need for a PTTW during construction.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>No changes made in ESR since comment was previously addressed in Volume 2 Section 9.13 Table 9-4 which summarizes permit considerations for detailed design, that if more than 50,000 L/d of groundwater are to be pumped during construction.</li> </ul>
10/21/2022	MECP Project Review Unit comment 4	<p><b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 1.1</b></p> <ul style="list-style-type: none"> <li>MECP has no further comments on the selection process used to determine the preferred location.</li> </ul>	Project team acknowledges, and no changes required.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 5	<p><b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 3.1.3</b></p> <ul style="list-style-type: none"> <li>Unionized ammonia calculated based on water temperature and pH in Chippewa Creek. Need to calculate as well for end of pipe acute toxicity.</li> </ul>	Project team acknowledges that they will also verify end-of pipe unionized ammonia to ensure non-toxicity.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>See Comment 16.</li> </ul>
10/21/2022	MECP Project Review Unit comment 6	<p><b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 3.1.3</b></p> <ul style="list-style-type: none"> <li>Maximum allowable concentrations from GoldSim Modelling. Need careful consideration of TP and E.coli limits.</li> </ul>	In developing effluent limits, it was noted that the elevated conditions were due to Welland River East contributions and already exist. Details on Rationale for selection of TP limits and E.coli limits were presented in Section 4.1 and 4.4 respectfully. MECP comments 13 and 18 further accept this rationale.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 7	<p><b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 3.2.2</b></p> <ul style="list-style-type: none"> <li>Mass balance for BOD and DO. Consider Street-Phelps equation.</li> </ul>	Project team acknowledges that the results indicated there would be adequate capacity to accept cBOD5 at 25 mg/L, so there is no need to do a full analysis using the Street-Phelps equation. This is due to the low proportion or effluent flow relative to the receiver flow.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Updated Volume 2 Section 5.5.3.8</li> </ul>

Contact Date (MM/DD/YYYY)	Contact Name / Organization	Comment Summary	Response / Action	Response Date (MM/DD/YYYY)	Related ESR Updates
10/21/2022	MECP Project Review Unit comment 8	<b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 3.2.3</b> <ul style="list-style-type: none"> <li>Mass Balance Modelling for TSS. Allowable concentrations are significantly greater than standard limit of 25 mg/L; so appropriate to keep limit at 25 mg/L.</li> </ul>	Project team agrees that the standard limit of 25 mg/L for TSS is appropriate.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 9	<b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 3.3</b> <ul style="list-style-type: none"> <li>MECP agreed with use of 200:1 for mixing zone analysis. Provide model output to ensure input parameters are appropriate.</li> </ul>	Project team acknowledges that the CORMIX model output results will be provided.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Updated Appendix V3.5.3 (Assimilative Capacity Study Detailed Assessment) to include Appendix B which provide model outputs from CORMIX model.</li> </ul>
10/21/2022	MECP Project Review Unit comment 10	<b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 3.3.7</b> <ul style="list-style-type: none"> <li>MECP noted that the performance estimates are acceptable given the modelling indicates adequate performance during most scenarios, and that a dilution ratio of only 10:1 is required for all parameters except for TP.</li> </ul>	Project team agrees that the performance estimates are acceptable.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 11	<b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 3.3.7</b> <ul style="list-style-type: none"> <li>Th results of mixing zone analysis are satisfactory. A 350 metre mixing zone is adequately small considering size of receiver.</li> </ul>	Project team agrees that the results of the mixing zone analysis are satisfactory.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 12	<b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 4.0</b> <ul style="list-style-type: none"> <li>The approach is acceptable and consistent with MECP document "Water Management Policies, Guideline, Provincial Water Quality Objectives of the MOEE, July 1994)</li> </ul>	Project team agrees that this approach is acceptable and consistent with the MECP document.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 13	<b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 4.1</b> <ul style="list-style-type: none"> <li>The total phosphorous limit of 0.75 mg/L is acceptable given that negligible increases to TP are expected to occur outside the growing season for algae and reasonable treatment technologies are available in CAS to meet this limit.</li> </ul>	Project team agrees that the total phosphorous limit of 0.75 mg/L is acceptable.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 14	<b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 4.2</b> <ul style="list-style-type: none"> <li>MECP agreed that effluent limits for nitrate are not required at this point in time, but may be required in the future as standard limits for nitrate which are being developed by the MECP.</li> </ul>	Project team acknowledges that the MECP is reviewing potential future standards for nitrate. As such, it is recommended that nitrate be included in the monitoring program.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Updated Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) separately Section 4.2.</li> <li>Updated Volume 2 Section 9.13 Table 9-5.</li> </ul>

Contact Date (MM/DD/YYYY)	Contact Name / Organization	Comment Summary	Response / Action	Response Date (MM/DD/YYYY)	Related ESR Updates
10/21/2022	MECP Project Review Unit comment 15 and 16	<p><b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 4.3</b></p> <ul style="list-style-type: none"> <li>While MECP agrees that the effluent limit for TAN should be determined using the end-of-pipe acute toxicity limit of 0.1 mg/L for un-ionized ammonia, the calculations used for Table 28 are flawed. Using the 75 percentile of water temperature and pH does not represent the maximum values for TAN under worst case scenarios.</li> <li>MECP recommended to re-calculate the TAN value using monthly maximum water temperature and the pH effluent maximum of 8.5. For example, if the effluent pH changed to 8.5, the resulting TAN limit would be 0.8 mg/L instead of 8.8 mg/L from May to October. It is expected that these revised would result in much more stringent TAN limits. If this is the case, then the TAN effluent limits should be set based on available treatment technology rather than using the end-of pipe acute toxicity limit of 0.1 mg/L for un-ionized ammonia.</li> </ul>	<p>The project team does not believe it is appropriate to use pH of 8.5 for determination of unionized ammonia. The project team does not see pH values this high in municipal wastewater effluents. The project team proposes to calculate unionized ammonia using the 75 percentile effluent pH and temperature from the existing Niagara Falls (Stanley Ave.) WWTP. Approximately half of the flow to the new facility will be flow that currently goes to the existing WWTP and should be representative of anticipated conditions in the effluent of the new SNFWWTP. Furthermore, the existing WWTP has not historically fully nitrified so the pH will be higher than a fully nitrifying facility (conservative approach). Nitrifications (ammonia removal) consumes alkalinity and results in slightly lower overall pH.</p>	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 17	<p><b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) page 69, Section 4.4</b></p> <ul style="list-style-type: none"> <li>Typing error referring to Total Phosphorous instead of E.coli.</li> </ul>	<p>Project team acknowledges the typo and has updated to reflect E.coli instead of total phosphorous.</p>	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Updated Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 4.4.</li> </ul>
10/21/2022	MECP Project Review Unit comment 18	<p><b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 4.4</b></p> <ul style="list-style-type: none"> <li>MECP noted that based on the analysis, a compliance limit of 200 cfu/100 mL of E.coli is acceptable.</li> </ul>	<p>Project team agrees that the compliance limit of E.coli is acceptable.</p>	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 19	<p><b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 4.5</b></p> <ul style="list-style-type: none"> <li>MECP noted that based on the analysis, a compliance limit equal to 50% of the saturation concentration is acceptable.</li> </ul>	<p>Project team agrees that the compliance limit equal to 50% of the saturation concentration is acceptable.</p>	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 20	<p><b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 4.5</b></p> <ul style="list-style-type: none"> <li>MECP noted that the proposed cBOD5 compliance limit of 25 mg/L is acceptable as this is the standard value for secondary treated effluent.</li> </ul>	<p>Project team agrees that the compliance limit for cBOD5 is acceptable.</p>	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 21	<p><b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 4.6</b></p> <ul style="list-style-type: none"> <li>MECP noted that the proposed TSS compliance limit of 25 mg/L is acceptable as this is the standard value for secondary treated effluent.</li> </ul>	<p>Project team agrees that the TSS compliance limit of 25 mg/L is acceptable.</p>	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 22	<p><b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 4.7</b></p> <ul style="list-style-type: none"> <li>MECP noted that the effluent limit for total residual chloring of 0.02 mg/L is acceptable.</li> </ul>	<p>Project team agrees that the effluent limit for total residual chlorine is acceptable.</p>	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>

Contact Date (MM/DD/YYYY)	Contact Name / Organization	Comment Summary	Response / Action	Response Date (MM/DD/YYYY)	Related ESR Updates
10/21/2022	MECP Project Review Unit comment 23 and 24	<b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 4.8</b> <ul style="list-style-type: none"> <li>MECP recommends a more restrictive range of 6.5 to 8.5 for pH.</li> </ul>	Project team acknowledges that this recommendation is consistent with some more recent ECA and PWQO and will update the pH range of 6.5 to 8.5.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Updated Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 4.8 to include updated pH range of 6.5 to 8.5.</li> </ul>
10/21/2022	MECP Project Review Unit comment 25	<b>Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 5.0, Table 36</b> <ul style="list-style-type: none"> <li>Table should be updated to reflect any changes made because of previous comments and recommendations.</li> </ul>	Project team acknowledges that the table will be updated.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Updated Volume 1 Section 6.2.1 Table 6-1</li> <li>Updated Volume 2 Section 7.1.8 Table 7-5</li> <li>Updated Appendix V3.5.3 (Assimilative Capacity Studies Detailed Assessment) Section 5 Table 36 with the following changes: <ul style="list-style-type: none"> <li>Updated pH range to 6.5 to 8.5.</li> <li>Updated Total Ammonia Effluent Limit to 7 mg/L (Summer) and 12 mg/L (Winter).</li> </ul> </li> </ul>
10/21/2022	MECP Project Review Unit comment 26	<b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site) Table 3</b> <ul style="list-style-type: none"> <li>Table 3 indicates 2015 to 2019 data were used while accompanying text states 2014-2018. Consistency is needed. Clarify why 2020 data was not used in this assessment is needed.</li> </ul>	<p>The project team provides the following response to MECP:</p> <p>2014-2018 data was primarily used, unless otherwise indicated by footnotes b and c of Table 3 (i.e., SO<sub>2</sub> data from Simcoe Station and Ozone and PM<sub>2.5</sub> data from St Catharines Station). This was dependent on data availability at the time of the assessment.</p> <p>2020 data was not used for any contaminants as the COVID-19 pandemic had an impact on many emission sources including industry and reduced transportation emissions. As a result, air quality concentrations for this year were not used for conservatism.</p>	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 27	<b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site)</b> <ul style="list-style-type: none"> <li>Generally, emission calculations were based on a generic document (McGinley &amp; McGinley, 2008). On-site measured emissions from similar facilities in Ontario should be considered for a more refined and localized emission calculation.</li> </ul>	The project team responded that published emission factors for Ontario based water treatment facilities are not available, therefore published data from the US was used as it is anticipated to have a higher data quality than unpublished local data and is typically more conservative. The Region acknowledges that additional sensitivity analysis shall be conducted at the next stage of the process, which includes the detailed design and ECA submission. In particular, there may be an opportunity to add existing Stanley Avenue data at the next stage.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>



Contact Date (MM/DD/YYYY)	Contact Name / Organization	Comment Summary	Response / Action	Response Date (MM/DD/YYYY)	Related ESR Updates
10/21/2022	MECP Project Review Unit comment 28	<p><b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site)</b></p> <ul style="list-style-type: none"> <li>If using the 2008 reference, it is recommended that the third quartile (75 percentile) rather than geometric mean of odour detection thresholds be used for emission calculation to be conservative. This is also recommended in the abstract of the reference.</li> </ul>	The project team noted that given that the current analysis indicates concentrations are less than 26% of the MECP guideline, it is anticipated that this edit would not have a significant impact on the conclusions of the odour study. As part of next stage of the process, more site-specific information and sensitivities relevant to 75 percentile can be added to the assessment.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 29a	<p><b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site)</b></p> <ul style="list-style-type: none"> <li>MECP requested to provide a reference for bio-trickling filters 99% odour removal efficiency.</li> </ul>	The project team noted that the information was based on the specifications for the bio-trickling filter installed and commissioned at the G.E. Booth WWTP. The use of this data has been approved for the GE Booth wastewater treatment plant as part of their current ECA.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 29b	<p><b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site)</b></p> <ul style="list-style-type: none"> <li>MECP requested to provide justification the use of 20 ppm as the H2S inlet concentration.</li> </ul>	The project team noted that 20 ppm was selected as a very conservative limit that is commonly used to size equipment. The project team provides reference based on the specifications for the G.E. Booth WWTP. A range of concentration from 1 to 20 ppm for treatment are specified to reflect seasonal variations with 20 ppm being a very conservative upper limit for headworks facility. The use of this data has been approved for the G.E. Booth WWTP as part of their current ECA.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 29c	<p><b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site) Section 3.2</b></p> <ul style="list-style-type: none"> <li>MECP noted a potential typo with sample calculation. Confirm the flow rate of 0.35 m3/s when the opening paragraph states a flow rate of 5.67 m3/s. Revise as appropriate.</li> </ul>	The project team noted the typo in the sample calculation. The resulting emission factor was correctly calculated using 5.67 m3/s.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Updated Appendix V3.6.1 (Air and Odour Impact Assessment – Preferred WWTP Site) Section 3.2 with the following updated text to reflect the typo in the sample calculation using 5.67 m3/s:  <math display="block">= 2959 \frac{OU}{m^3} \times 5.67 \frac{m^3}{s} \times (1 - 99\%)</math> <math display="block">= 167.68 \frac{OU}{s}</math> </li> </ul>
10/21/2022	MECP Project Review Unit comment 29d	<p><b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site) Section 3.3</b></p> <ul style="list-style-type: none"> <li>This section uses an odour emission factor for digester vents but appears to be applied for truck emissions. It is unclear if this calculation is intended for truck loading calculations, fugitives from anaerobic digester building or both. Clarification on specific sources and operations is needed.</li> </ul>	The project team noted that fugitive emissions from the anaerobic digestion room occur primarily during truck loading and was noted in the text that this is the most likely time when fugitive emissions may occur. Therefore, the venting emission factor was used to represent this source although it was conservatively assumed that it could occur up to 12 hours a day, though in reality would occur primarily during truck loading, which only happens up to 12 times per day.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>

Contact Date (MM/DD/YYYY)	Contact Name / Organization	Comment Summary	Response / Action	Response Date (MM/DD/YYYY)	Related ESR Updates
10/21/2022	MECP Project Review Unit comment 30	<p><b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site)</b></p> <ul style="list-style-type: none"> <li>MECP requested justification for exclusion of sources from emissions calculations such as dewatering, aeration tanks, secondary clarifiers, hauled waste truck unloading and all other potential sources should be included in the report.</li> </ul>	The project team noted that there is no dewatering at the facility. The additional activities documented are primarily enclosed and/or would not be expected to contribute significantly to emissions from the facility. Hauled waste truck unloading occurs via a pipe at the wet well, controlled through negative pressure and connected to odour control at headworks.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Updated Appendix V3.6.1 (Air and Odour Impact Assessment – Preferred WWTP Site) Section 3.9 with the following updated text: <ul style="list-style-type: none"> <li>The facility may also emit small fugitive emissions from processes including aeration tanks, secondary clarifiers and hauled waste unloading although these are not expected to contribute significantly to emissions from the Facility and were consequently not assessed further.</li> </ul> </li> </ul>
10/21/2022	MECP Project Review Unit comment 31	<p><b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site) Section 3.5</b></p> <ul style="list-style-type: none"> <li>MECP requested to provide a reference for 61% methane content, temperature of 35 Celsius degrees, 5% moisture and pressure of 0.39 psi in digester gas.</li> </ul>	The project team noted that mesophilic anaerobic digesters operate at 35 Celsius degrees and a pressure of 10-12" water column (WC) (which is consistent with 0.39 psi) 60-70% is typical for methane content of digester gas.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 32	<p><b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site) Section 3.6</b></p> <ul style="list-style-type: none"> <li>MECP requested to provide justification for the use of a less conservative NOx emission factor rather than the Chapter 3.3 USEPA reference that was used for other contaminants.</li> </ul>	The project team noted that Chapter 3.3 of AP42 is dated October 1996. In 2000, Environment Canada implemented new emission standards for off-road engines that are much more stringent ( <a href="http://dieselnet.com">Emission Standards: Canada: Off-Road Engines (dieselnet.com)</a> ). It was conservatively assumed that the generator would meet only Tier 2 emission standards, although in reality a brand-new standby generator is likely to meet tier 3 or 4 standards.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 33	<p><b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site) Section 3.7</b></p> <ul style="list-style-type: none"> <li>MECP inquired on the possibility of idling trucks. Provide MOVES3 input parameters for reference.</li> </ul>	The project team noted that the facility will not introduce significant truck traffic (i.e. up to 10 sewage haulers and 12 biosolid trucks) therefore the likelihood of on-site queuing is low. Tailpipe emissions from vehicles do not typically require assessment as part of an ECA application for air but were conservatively included in this assessment to provide a comprehensive analysis.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>

Contact Date (MM/DD/YYYY)	Contact Name / Organization	Comment Summary	Response / Action	Response Date (MM/DD/YYYY)	Related ESR Updates
10/21/2022	MECP Project Review Unit comment 34	<p><b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site) Table 15</b></p> <ul style="list-style-type: none"> <li>MECP noted that Emergency generator testing may occur for up to 1 hour at a time and that emergency generator testing should include 1 hour criteria. Further the emergency generator emits NO<sub>x</sub>, SO<sub>2</sub> and CO. Clarify why these contaminants were not included in Table 15 under the emergency generator scenario.</li> </ul>	<p>The project team noted that the emergency generator may be tested for up to an hour, no more than once per month. Emergency generators are not a significant contributor to ambient air quality due to their infrequent and sporadic use and are therefore not typically included in an assessment of ambient air quality. To provide a more fulsome assessment in accordance with ECA practices, the generator was assessed in accordance with the Emergency Generator checklist <a href="#">PIBS: 7976e - Emergency Generator Checklist Supplement To Application For Approval, EPA s.9 (gov.on.ca)</a>. As per this checklist, only NO<sub>x</sub> requires assessment.</p>	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 35	<p><b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site) Section 7.0</b></p> <ul style="list-style-type: none"> <li>Predicted H<sub>2</sub>S (10 minute) concentrations should also be discussed.</li> </ul>	<p>The project team acknowledges that additional text related to H<sub>2</sub>S should be discussed.</p>	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Updated Appendix V3.6.1 (Air and Odour Impact Assessment – Preferred WWTP Site) Section 7.0 with the following updated text: <ul style="list-style-type: none"> <li>Predicted concentrations of 1 hour H<sub>2</sub>S are approaching the relevant AAQC at some gridded receptor locations along the southern property fenceline, however they remain below the relevant AAQC and are less than 25% of the relevant AAQC at all sensitive receptor locations.</li> </ul> </li> </ul>
10/21/2022	MECP Project Review Unit comment 36	<p><b>Appendix V3.6.1 (Air and Odour Impact Assessment for the Preferred WWTP Site)</b></p> <ul style="list-style-type: none"> <li>MECP noted that It would be beneficial to include a contour plot of predicted H<sub>2</sub>S (10 minutes), PM<sub>2.5</sub> (annual, SPM (24-h4) and NO<sub>2</sub> (1 hour) concentrations since these are above or close to their respective limits.</li> </ul>	<p>Project team responded that contour plots will be provided as part of the detailed design as well as the ECA application submission, once the Project team has refined the assessment with more information about the source locations, elevations, and specifications.</p>	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 37	<p><b>Appendix V3.6.3 (Noise Impact Assessment for the Preferred WWTP Site)</b></p> <ul style="list-style-type: none"> <li>A detailed Noise Assessment will be completed at the Environmental Compliance Approval (ECA) review.</li> </ul>	<p>The project team agrees that a detailed noise assessment will be completed at the ECA review.</p>	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>

Contact Date (MM/DD/YYYY)	Contact Name / Organization	Comment Summary	Response / Action	Response Date (MM/DD/YYYY)	Related ESR Updates
10/21/2022	MECP Project Review Unit comment 38	<p><b>Volume 2 Section 3.2 and Appendix V3.7.1 (Planning and Flow Projections)</b></p> <ul style="list-style-type: none"> <li>MECP noted that the discussions of the provincial planning and policy context appear to be based on the Provincial Policy Statement (PPS), 2014 and the “A place to Growth: Growth Plan for the Greater Golden Horseshoe, 2017”. Please note the PPS and the Growth Plan were updated in 2020. The Report should include a discussion on any relevant changes that came into effect in 2020.</li> </ul>	The project team acknowledges that the report should include a discussion on the relevant changes that came into effect in 2020 for the PPS and the Growth Plan, including the new 2051 planning horizon.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Updated Volume 2 Section 3.2.1</li> <li>Updated Volume 2 Section 3.2.2</li> <li>Updates to Appendix V3.7.1 (Planning and Flow Projections).</li> </ul>
10/21/2022	MECP Project Review Unit comment 39	<p><b>Appendix V3.10.2 (Preliminary Hydrogeological Investigations for the Preferred WWTP Site and Trunk Sewer)</b></p> <ul style="list-style-type: none"> <li>MECP will address all the hydrogeological issues in the updated hydrogeological assessment report to be submitted for PTTW application for this site.</li> </ul>	The project team agrees that additional hydrogeological investigations and mitigation measures will be completed during the detailed design in support of the PTTW.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 40	<p><b>Appendix V3.10.2 (Preliminary Hydrogeological Investigations for the Preferred WWTP Site and Trunk Sewer)</b></p> <ul style="list-style-type: none"> <li>MECP supports the proposed additional groundwater scope of work which includes collection of more seasonal water levels data, ecological survey, additional monitoring wells and update the dewatering calculations in the PTTW Application.</li> </ul>	The project team agrees that additional hydrogeological investigations and mitigation measures will be completed during the detailed design in support of the PTTW.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 41	<p><b>Appendix V4.2 (Contact List)</b></p> <ul style="list-style-type: none"> <li>MECP requested to add the current MECP Acting Water Compliance Supervisor (Elizabeth Chee Sing) to the contact list.</li> </ul>	The project team acknowledges that the Contact List will be updated to include Elizabeth Chee Sing.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Updated Appendix V4.2 (Contact List).</li> </ul>
10/21/2022	MECP Project Review Unit comment 42	<p><b>Volume 4, Section 6.1 (Indigenous Consultation)</b></p> <ul style="list-style-type: none"> <li>Further to any follow-up during the review period for the EA, the proponent should continue reaching out to all communities previously engaged if there are any substantial changes to the project / process or if they are applying for subsequent permits from the Ministry that may be of interest or concern to the communities.</li> </ul>	The project team agrees to reach out to all Indigenous Communities previously engaged if there are any substantial changes to the project / process or if they are applying for permits that may be of interest or concern to the communities. This is an important recommendation which was previously noted in Volume 2 Section 12.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Updated Volume 4 Section 6.1 with the following text: <ul style="list-style-type: none"> <li>Following the completion of the SNFWWS Class EA, it is important to that Indigenous communities noted above shall continue to be engaged should there be substantial changes to the project / process or if subsequent permits that may be of interest or concern to the communities take place.</li> </ul> </li> </ul>

Contact Date (MM/DD/YYYY)	Contact Name / Organization	Comment Summary	Response / Action	Response Date (MM/DD/YYYY)	Related ESR Updates
10/21/2022	MECP Project Review Unit comment 43	<p><b>Appendix V4.7 (Notice of Study Completion)</b></p> <ul style="list-style-type: none"> <li>The Notice of Completion should reflect the changes made to the Environmental Assessment Act in July 2020, which resulted in a scoping of what grounds a s.16 order/part II order request can be made on. Section 16(6) of the Environmental Assessment Act provides that a request for an order can be made only on the grounds that the order may prevent, mitigate, or remedy adverse impacts on existing Aboriginal and treaty rights of the Aboriginal peoples of Canada as recognized and affirmed in section 35 of the Constitution Act, 1982.</li> </ul>	The project team agrees that the Notice of Completion has reflected the changes made to the Environmental Assessment Act in July 2020. The Notice of Completion is in line with the wording found in the Notice of Completion Template provided by MECP in January 2021.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>
10/21/2022	MECP Project Review Unit comment 44	For future reference, MECP encourages the practice of sharing a draft copy of the ESR for review in advance of the issuance of the Notice of Completion. Sometimes EA documentation is deficient or incomplete and/or MECP identifies concerns that may require further work or consultation. It is advantageous for both the proponent and the Ministry to identify these concerns or comments before the final notice is issued.	The project team agrees that in the future, they will share a draft copy of the ESR for review with the MECP in advance of the issuance of the Notice of Completion.	E-mail: 11/30/2022	<ul style="list-style-type: none"> <li>Project team acknowledges, and no changes required.</li> </ul>

The following changes were made (i.e. grammar and formatting) after the 45-day public review period.

Volume	Section	Comment on Revision	Previous Text	New Text
1	2	Minor text changes	n/a	Added 45-day public review period to list of key public and agency consultation dates.
2	9	Minor text changes, grammar	The following section provides a summary of the comprehensive SNFWWS Program impacts of recommendations, and the associated mitigation and monitoring measures required during detailed design and construction.	The following section provides a summary of the comprehensive SNFWWS Program impacts <b>and</b> recommendations, and the associated mitigation and monitoring measures required <b>to be reviewed</b> during detailed design and construction.
2	7.1.3	Table 7-1: changes to reflect MECP comment 23, 24, and 25.	Effluent Limit for TP: 0.5 Effluent Limit for TAN (May to Nov.): 8.8 Effluent Limit for TAN (Dec. to April): 15	Effluent Limit for TP: <b>0.75</b> Effluent Limit for TAN (May to Nov.): <b>7</b> Effluent Limit for TAN (Dec. to April): <b>12</b>
2	11.4	Table 11-2: changes to reflect MHSTCI name change	Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI)	Ministry of <b>Tourism, Culture and Sport (MTSC, formerly MHSTCI)</b>
4	7	Minor text change to reflect date of actual advertisement.	The notice of completion was first published on July 28, 2022, and again on August 4, 2022.	The notice of completion was first published on July 28, 2022, and again on August <b>11</b> , 2022.
4	8	Minor text update to reflect update of Appendix V4.9 documenting comments received during the 45-day review period.	During the public review period, comments received will be documented in the filed copy of the Environmental Study Report. This section, as well as supporting Appendix V4.9, will be updated following the 45-day public review period to include all comments received and / or note any revisions made to Volumes 1 to 4 of the South Niagara Falls Wastewater Solutions Environmental Study Report.	During the public review period, comments received <b>were</b> documented in the filed copy of the Environmental Study Report. This section, as well as supporting Appendix V4.9, <b>have been</b> updated following the 45-day public review period to include all comments received and / or note any revisions made to Volumes 1 to 4 of the South Niagara Falls Wastewater Solutions Environmental Study Report.