

Petawawa Net Zero Project Consultation Report

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Document Revision History

Revision	Date	Reason for Update
0	2025-12-09	Initial Version

Land Acknowledgement

The Corporation of the Town of Petawawa respectfully acknowledges that this project is taking place on the traditional territory of the Omamiwinini (OHMAH ME WIN INN KNEE) (Algonquin) People. We thank the Omamiwinini People and express our respect and support for their rich history, and we are extremely grateful for their man and continued displays of friendship. We also thank all the generations of people who have taken care of this land for thousands of years.

1. Introduction

1.1 Project Overview

The Town of Petawawa (Town), in collaboration with, Ontario Clean Water Agency (OCWA) and Anaergia (Anaergia), received a Renewable Energy Approval (REA#5211-CM3MB6 dated April 25, 2023) from the Ministry of Environment, Conservation and Parks (MECP) for the construction, installation, use, operation, maintenance and retiring of a Class 3 Anaerobic Digestion (AD) facility with an overall project nameplate capacity of 200 kW.

The REA project (Project) is located at the Town of Petawawa's Water Pollution Control Plant (WPCP) and will transform the WPCP into a resource recovery facility by upgrading the two of four digesters to co-digest wastewater sludge and liquid external organics by diverting waste from landfill and boost biogas production for use as electricity, making the plant energy neutral or positive, and reducing greenhouse gas emissions. The project will involve the generation and utilization of biogas on site using a combined heat and power (CHP) unit.

As part of the approval provided by the MECP on April 25, 2023 (REA # 5211-CM3MB6), Condition I23 under Spill Containment was not met in the original REA submission (dated August 17, 2022). As such, the proposed Project changes are to address meeting the requirements of Condition I23 and amend the REA.

Spill Containment, Condition I23 states:

- (1) Prior to the receipt of Organic Waste at the Facility (not including the sludge generated from the on-site municipal wastewater treatment plant), the Company shall submit to the Director for review and approval, the following information:*
- a. a secondary containment plan for the Anaerobic Digesters and Digestate Storage Tanks prepared by a Professional Engineer;*
 - b. a Stormwater Management Plan that addresses stormwater quality and quantity controls at the Facility, prepared by a Professional Engineer; and*
 - c. a groundwater monitoring plan (including upgradient and downgradient monitoring wells, monitoring frequency and parameters) that will identify any leaks in the partially below-ground Anaerobic Digesters and Digestate Storage Tanks, for which the Company has received written concurrence from the District Manager.*

(2) Prior to the submission to the Director for approval under condition I23(1), the groundwater monitoring plan shall be submitted to the District Manager for review and written concurrence by the Ministry's Regional Technical Support Section.

(3) Organic Waste at the Facility (not including the sludge generated from the on-site municipal wastewater treatment plant) shall not be received until this Approval has been amended to approve the information submitted under condition I23(1).

All project information is posted on the Town's website as follows:

Project Website:

<https://www.petawawa.ca/residents/public-works/petawawa-net-zero-project/>

Renewable Energy Approval (REA):

<https://www.petawawa.ca/residents/public-works/petawawa-net-zero-project/notice-of-public-meeting-petawawa-net-zero-project-9099.html>

Renewable Energy Approval Amendment 1 (Pending):

<https://www.petawawa.ca/residents/public-works/petawawa-net-zero-project/renewable-energy-approval-rea-amendment-1-314.html>

1.2 Proposed Technical Changes and Impacts

The proposed Project changes in support of satisfying Condition I23 for Spill Containment of the Project's REA that was issued on April 25, 2023. These technical changes include the following items:

- design and implementation of a secondary spill containment plan to act as another layer of protection should a surface spill occur,
- design and implementation of a stormwater management for quantity and quality control of stormwater runoff, and
- design and implementation of a groundwater monitoring plan that will identify any leaks in the partially below-ground anaerobic digesters.

1.3 REA Amendment Process

The proposed Project changes are proceeding in accordance with the latest version of the *Technical Guide to Renewal Energy Approvals, Chapter 10 Making Changes to Renewable Energy Approval (REA) Projects*, published by the Province of Ontario. Source:

<https://www.ontario.ca/document/technical-guide-renewable-energy-approvals-0/chapter-10-making-changes-renewable-energy>.

2. Consultation Process

Engaging in consultation is a mandatory aspect of the REA process as outlined in O. Reg. 359/09. This process ensures that project-related concerns are identified and addressed early on. It also helps pinpoint interested parties and their specific interests, informs them about the Project, and integrates their feedback into the planning and design phases as much as possible. Furthermore, consultation fosters relationships between the Proponent and interested parties, creating opportunities for valuable feedback to the Project Team. The consultation process is designed to identify potential environmental and socio-economic issues, ensuring they are considered during Project planning, design, construction, operation, and decommissioning.

The consultation process for the Project aimed to:

- Build and maintain community support and secure necessary approvals for the Project.
- Provide accurate, relevant, and consistent information about the Project to local Indigenous Communities, community members, the public, agencies, and municipalities as early as possible.
- Gather and identify relevant information and local knowledge from local communities, municipalities, and Indigenous Communities.
- Identify potential issues and concerns that may arise from the Project.
- Address interests by providing additional information, explanations, modifying Project design, or making commitments in response to local input and comments.
- Develop user-friendly and publicly accessible Project information to help stakeholders and Indigenous Communities understand the Project.
- Offer opportunities for stakeholders and Indigenous Communities to contribute to the collection and sharing of information related to the Project's potential environmental, economic, social, and cultural heritage impacts.
- Collect, respond to, and document public input and interests.

2.1 Consultation Requirements

The Project team prepared the required Modification Documents Report for MECP review. The Modification Documents Report detailed the proposed Project changes and any new or modified supporting documents. Following review of the Modification Documents Report by the MECP, they determined that the proposed Project changes are to be a technical change that will not result in increased negative environmental effects that will or are likely to occur beyond those that were identified, documented and consulted on during the REA process for the original Project.

The MECP further imposed consultation requirements in accordance with the requirements of section 32.3(1) of O. Reg. 359/09, which required the project team to prepare a notice informing of the proposed project change and distribute it to the persons mentioned in paragraph 5 of subsection 15(6) of O. Reg. 359/09 which includes individuals, Indigenous communities and municipalities, in addition to making the Modifications Document Report and

supporting materials available on the Town's website at the same time as the notice. A copy of the MECP imposed consultation requirements is included in **Appendix A**.

Table 1 lists the persons identified in subsection 15(6), paragraph 5, that require to be distributed a copy of the Notice of the proposed project change, and the applicability of those persons to be distributed a copy of the Notice.

Table 1: Summary of Persons Required for Consultation

15(6), p.5	Agency/Community	Applicability
i.	every assessed owner of land within 120 metres of the project location, if the project is in respect of a renewable energy generation facility other than a Class 3, 4 or 5 wind facility,	Applicable. The project is a renewable energy generation facility other than a Class 3, 4 or 5 wind facility. There is one (1) assessed owner of land within 120 metres of the project location which is also an abutting assessed owner of land. Per O.Reg. 359/09, definition of "project location" means, when used in relation to a renewable energy project, a part of land and all or part of any building or structure in, on or over which a person is engaging in or proposes to engage in the project and any air space in which a person is engaging in or proposes to engage in the project; Per Provincial Land Tax Act, 2006, S.O. 2006, c. 33, Sched. Z.2, definition of "assessed owner" means, with respect to land, a person whose name appears on the tax roll as owner of the land; ("propriétaire inscrit").
i.1	every assessed owner of land within 550 metres of the project location, if the project is in respect of a Class 3, 4 or 5 wind facility,	Not Applicable. The project is not a Class 3, 4 or 5 wind facility.
i.2	every assessed owner of land abutting a parcel of land on which the project location is situated, other than an owner described in subparagraph i or i.1,	Applicable. A list of assessed owners of land abutting the land on which the project location has been prepared and notices hand delivered where possible, mailed where not possible to be hand delivered.

15(6), p.5	Agency/Community	Applicability
ii.	every aboriginal community on the list obtained under section 14, if the list was required to be obtained, and any other aboriginal community that, in the opinion of the person mentioned in subsection (1), has or may have constitutionally protected aboriginal or treaty rights that could be adversely impacted by the renewable energy project or otherwise may be interested in any negative environmental effects of the project,	Applicable. The Project team sought an updated list from the MECP of Indigenous Communities to be included in the MECP imposed notice distribution.
iii.	the clerk of each local municipality and upper-tier municipality in which the project location is situated,	Applicable. Local municipality(ies): Town of Petawawa. Upper-tier municipality: County of Renfrew.
iv.	the secretary-treasurer of each local roads board of a local roads area in which the project location is situated,	Not Applicable. There are no local roads boards in which the project location is situated. Per O.Reg. 359/09 definition of “local roads board” means a board of a local roads area under the Local Roads Boards Act;
v.	the secretary of each Local Services Board of a board area in which the project location is situated,	Not Applicable. There are no Local Services Board serving the geographical area in which the project location is situated. Per O.Reg. 359/09 definition of “Local Services Board” means a Local Services Board within the meaning of the Northern Services Boards Act; AND Per O.Reg. 359/09 definition of “board area” means, when used in relation to a Local Services Board, the geographical area within which the Local Services Board may exercise its jurisdiction;

15(6), p.5	Agency/Community	Applicability
vi.	the secretary-treasurer of a planning board that has jurisdiction in an area in which the project location is situated,	Not Applicable. There are no planning boards having jurisdiction in the area in which the project location is situated. Per O.Reg. 359/09 definition of “planning board” means a planning board established under section 9 or 10 of the Planning Act; Per section 9 of the Planning Act: Planning board for planning area (2) Where a planning area is defined under subsection (1), the Minister shall establish the planning board for the planning area and specify the name of the board and the number of members to be appointed to it by the council of each municipality within the planning area and the number of members, if any, to be appointed by the Minister. Per section 10 of the Planning Act Planning area in unorganized territory 10 The Minister may define and name a planning area consisting of territory without municipal organization and may establish and name a planning board for the planning area and appoint the members thereof. R.S.O. 1990, c. P.13, s. 10.
vii.	the chair of the Niagara Escarpment Commission, if the project location is in the area of the Niagara Escarpment Plan,	Not Applicable. The project location is not located in the area of the Niagara Escarpment.
viii.	the Director,	Applicable. The notice to be distributed to the MECP Director.
ix.	the Ministry’s district manager in each district in which the project location is situated.	Applicable. The notice to be distributed to the MECP District Office in Ottawa.
x.	the secretary of every company operating an oil or natural gas pipeline, if a pipeline right of way for the pipeline is located within 200 metres of the project location, and	Not Applicable. There are no oil or natural gas pipelines located within 200 metres of the project location.

15(6), p.5	Agency/Community	Applicability
xi.	the NAV Canada Land Use Office and Transport Canada's Regional Office for Ontario, if the project is in respect of a wind facility. O. Reg. 359/09, s. 15 (6); O. Reg. 521/10, s. 6 (3); O. Reg. 195/12, s. 8.	Not Applicable. The project is not a wind facility.

2.2 Consultation Report Requirements

The purpose of the Consultation Report is to achieve two key objectives:

- To document how consultation activities were undertaken to determine if an application is complete with respect to adherence to the regulated minimum consultation requirements of O. Reg. 359/09.
- To provide a record of the comments and information received by the applicant through consultation and to document how comments were considered. This includes creating a record of whether and how the project was modified as a result of comments received.

This Consultation Report has been prepared to meet the requirements of O. Reg. 359/09 and the MECP imposed consultation requirements for the proposed project technical change.

Consultation was completed as part of the project's initial REA application. This consultation is documented in a separate consultation report that is available on the Town's website. Refer to Subsection **1.1 Project Overview** in this report for links to the Town's website where all project information and supporting documents are available.

Table 2 lists the requirements for the consultation report and includes a reference to the section in this report that addresses the requirement where applicable.

Table 2: Summary of Consultation Report Requirements

Requirement	Section Reference
A summary of communication with any members of the public, Indigenous Communities, municipalities, local roads boards and Local Services Boards regarding the project.	Sections 4 to 7
Evidence that the information required to be distributed to Indigenous Communities under subsection 17 (1) was distributed.	Section 7
Any information provided by an indigenous community in response to a request made under paragraph 4 of subsection 17 (1).	Not applicable per the MECP imposed consultation requirements for this

Requirement	Section Reference
	proposed project technical change.
Evidence that a consultation form was distributed in accordance with subsection 18 (1).	Not applicable per the MECP imposed consultation requirements for this proposed project technical change.
The consultation form distributed under subsection 18 (1), if any part of it has been completed by a municipality, local roads board or Local Services Board.	Not applicable per the MECP imposed consultation requirements for this proposed project technical change.
A description of whether and how, (a) comments from members of the public, Indigenous Communities, municipalities, local roads boards and Local Services Boards were considered by the person who is engaging in the project, (b) the documents that were made available under subsection 16 (5) were amended after the final public meeting was held, and (c) the proposal to engage in the project was altered in response to comments mentioned in subparagraph (a).	(a) Sections 4 to 7 (b) Sections 3 and 8 (c) Section 8
A description of the manner in which the location of the wind turbines was made available to the public, if a person, proposing to engage in a project in respect of a class 4 or 5 wind facility, relied on paragraph 4 of subsection 54 (1.2) or paragraph 4 of subsection 55 (2.2) of O. Reg. 359/09.	Not applicable
If paragraph 7 applies, proof of the date on which the location of the wind turbines referred to in that paragraph was made available to the public.	Not applicable

3. Consultation Activities

3.1 Summary of Consultation Activities and Timing

In accordance with the MECP imposed consultation requirements detailed in their letter dated May 12, 2025, the project team prepared the required Notice and distributed a copy to the applicable persons per subsection 15(6), paragraph 5, and posted the Notice on the Town's

project website including all supporting documents pertaining to the proposed project technical change. A copy of the Notice is included in **Appendix B**.

Documents that were made available to support the Notice included:

- Notice of Proposed Project Technical Changes to the Petawawa Net Zero Project, dated June 25, 2025,
- Updated Indigenous Communities consultation list from MECP, dated June 19, 2025 (copy of the updated list was included with all Notice distributions to the Indigenous Communities),
- MECP Letter of Project Change Notice Requirements, dated May 12, 2025,
- Renewal Energy Approval #5211-CM3MB6, dated April 25, 2023,
- Modification Documents Report for the Proposed Project Changes (Draft), dated March 28, 2025
- Stormwater Management and Secondary Containment Design Report, dated August 16, 2024,
- Groundwater Monitoring Plan, dated October 9, 2024
- Written Concurrence, MECP District Office (Ottawa), RE. Groundwater Monitoring Plan, dated December 17, 2024,
- Project Description Report, Amended June 20, 2025,
- Design and Operations Report, Amended June 20, 2025,
- Decommissioning Plan Report, Amended June 20, 2025,
- Construction Plan Report, Amended June 20, 2025,
- Site Plan, Amended March 25, 2025, and Site Plan Initial

Table 3 provides a summary of the consultation activities, timing and comments received by the identified persons listed in subsection 15(6), p. 5, where applicable.

Table 3: Summary of Consultation Activities and Timing

15(6), p.5	Agency/Community	Distribution Method	Comments Received by July 25, 2025
i.	every assessed owner of land within 120 metres of the project location, if the project is in respect of a renewable energy generation facility other than a Class 3, 4 or 5 wind facility,	Noticed hand delivered to all residential assessed landowners on June 26-27, 2025. Notice emailed to all non-residential assessed landowners on June 25, 2025.	No
i.1	every assessed owner of land within 550 metres of the project location, if the project is in respect of a Class 3, 4 or 5 wind facility,	N/A	N/A

15(6), p.5	Agency/Community	Distribution Method	Comments Received by July 25, 2025
i.2	every assessed owner of land abutting a parcel of land on which the project location is situated, other than an owner described in subparagraph i or i.1,	Noticed hand delivered to all residential assessed landowners on June 26-27, 2025. Notice emailed to all non-residential assessed landowners on June 25, 2025.	No
ii.	every Indigenous Community on the list obtained under section 14, if the list was required to be obtained, and any other aboriginal community that, in the opinion of the person mentioned in subsection (1), has or may have constitutionally protected aboriginal or treaty rights that could be adversely impacted by the renewable energy project or otherwise may be interested in any negative environmental effects of the project,	Noticed emailed on June 25, 2025.	Yes. Refer to Section 4.
iii.	the clerk of each local municipality and upper-tier municipality in which the project location is situated,	Noticed emailed on June 25, 2025.	No
iv.	the secretary-treasurer of each local roads board of a local roads area in which the project location is situated,	N/A	N/A
v.	the secretary of each Local Services Board of a board area in which the project location is situated,	N/A	N/A
vi.	the secretary-treasurer of a planning board that has jurisdiction in an area in which the project location is situated,	N/A	N/A

15(6), p.5	Agency/Community	Distribution Method	Comments Received by July 25, 2025
vii.	the chair of the Niagara Escarpment Commission, if the project location is in the area of the Niagara Escarpment Plan,	N/A	N/A
viii.	the Director,	Noticed emailed on June 25, 2025.	No
ix.	the Ministry's district manager in each district in which the project location is situated.	Noticed emailed on June 25, 2025.	No
x.	the secretary of every company operating an oil or natural gas pipeline, if a pipeline right of way for the pipeline is located within 200 metres of the project location, and	N/A	N/A
xi.	the NAV Canada Land Use Office and Transport Canada's Regional Office for Ontario, if the project is in respect of a wind facility. O. Reg. 359/09, s. 15 (6); O. Reg. 521/10, s. 6 (3); O. Reg. 195/12, s. 8.	N/A	N/A

4. Public Consultation & Landowners

4.1 Public Consultation

A copy of the Notice of the Proposed Project Changes including all supporting documents was posted on the Town's website:

<https://www.petawawa.ca/residents/public-works/petawawa-net-zero-project/renewable-energy-approval-rea-amendment-1-314.html>

Refer also to Subsection **1.1 Project Overview** in this report for links to the Town's website where all project information and supporting documents are available.

At the completion of the Notice period on July 25, 2025, there were no comments received from any member of the public, individuals, or other stakeholders not specifically listed in subsection 15(6), p. 5.

4.2 Landowners within 120 metres

In accordance with subsection 15(6), p. 5, a copy of the Notice of the Proposed Project Changes (**Appendix B**) was hand distributed to all identified assessed landowners that are located within 120 metres (m) of the project location.

Refer to **Figure 1** for a map showing a proximity of 120 m around the project location. Only one (1) assessed landowner was identified to be within 120 m of the project location, which is also an abutting assessed landowner.

Figure 1: Landowners within 120 m of Project Location



At the time of the Notice distribution, the property of the 1 assessed landowner identified to be within 120 m of the project location was listed for sale. A copy of the Notice was hand distributed to the property and emailed to the listing real estate agent.

At the completion of the Notice period on July 25, 2025, there were no comments received from the assessed landowner that was identified to be within 120 m of the project location, nor their listing real estate agent.

Copies of all correspondence with landowners located within 120 m of the project location are included in **Appendix C**.

4.3 Abutting Landowners

In accordance with subsection 15(6), p. 5, a copy of the Notice of the Proposed Project Changes (**Appendix B**) was distributed to all identified assessed landowners that abut the land on which

the project is located (560 Abbie Lane). Refer to **Figure 2** for a map showing the abutting landowners.

Figure 2: Abutting Landowners



A copy of the Notice was hand distributed to each abutting residential assessed landowner and emailed to each abutting non-residential assessed landowner. There were only two (2) non-residential landowners; Hydro One Networks Inc., and National Defence Canada.

At the completion of the Notice period on July 25, 2025, there were no comments received from any of the abutting assessed landowners.

Copies of all correspondence with the abutting landowners are included in **Appendix C**.

5. Municipal Consultation

In accordance with subsection 15(6), p. 5, a copy of the Notice of the Proposed Project Changes (**Appendix B**) was emailed to the Clerk of the County of Renfrew being the upper-tier municipality in which the project location is situated. Please note that the project team did not distribute a copy of the Notice to the Clerk of the Town of Petawawa as the Town is the person engaging in the REA project.

At the completion of the Notice period on July 25, 2025, there were no comments received from either the local or upper-tier municipalities.

Copies of all correspondence with all Municipal agencies are included in **Appendix D**.

6. Ministry Consultation

In accordance with subsection 15(6), p. 5, a copy of the Notice of the Proposed Project Changes (**Appendix B**) was emailed to the MECP Director, and the MECP District Office (Ottawa), in which the project location is situated.

No other Provincial Ministries were identified for consultation in the MECP imposed consultation requirements for the proposed project change.

Table 4 provides a summary of key correspondence between the project team and MECP staff regarding the design approach to satisfy the requirements of the project's REA Condition I23 for Spill Containment.

Copies of key correspondence with the MECP are included in **Appendix E**.

Additionally, prior to the MECP issuing consultation requirements for the proposed project change, the project team and MECP staff carried out multiple discussions regarding design approach pertaining to Condition I23 (Spill Containment) of the project's REA. MECP staff raised several key questions for consideration by the project team. The key questions and project team responses are summarized in a document dated May 1, 2025. A copy of this summary document is also included in **Appendix E**.

Table 4: Summary of Discussions with the MECP

Date of Activity	Key Activity
February 2, 2025	Project team submits a draft Modification Documents Report electronically to the MECP.
May 1, 2025	Project team provides responses to technical questions from MECP staff regarding the design approach to satisfy the requirements of the project's REA Condition I23.
May 12, 2025	MECP issues a letter to the project team advising that the proposed project change is considered as a technical change and details of the imposed consultation requirements to be completed.
June 25, 2025	Copy of Notice emailed to the MECP Director and the Eastern Region Ottawa District Office.

7. Indigenous Communities Consultation

7.1 Notice Distribution to Indigenous Communities

In accordance with subsection 15(6), p. 5, a copy of the Notice of the Proposed Project Changes (**Appendix B**) was emailed to all Indigenous Communities identified in an updated list provided by the MECP in their letter dated June 19, 2025.

The list of Indigenous Communities was updated from a previous list of Indigenous Communities dated August 6, 2020, that was used in the previous consultation that supported the project's initial REA application. A copy of the updated list of Indigenous Communities dated June 19, 2025, is included in **Appendix F-1**.

At the completion of the Notice period on July 25, 2025, comments were received from four (4) Indigenous Communities as follows; Hiawatha First Nation, Algonquins of Pikwakanagan, Alderville First Nation, and Metis Nation of Ontario (Region 5).

Copies of all correspondence with Indigenous Communities are included in **Appendix F-2**.

7.2 Summary of Indigenous Communities Consultation Activities

Table 5 provides a summary of the key consultation activities with each Indigenous Community. Sections 7.3 to 7.6 document the activities and correspondence with each responding Indigenous Community.

Table 5: Summary of Indigenous Communities Consultation Activities

Indigenous Community	Date of Activity	Key Activity
All identified Indigenous Communities	June 25, 2025	Copy of the Notice emailed to all identified Indigenous Communities as per the MECP letter dated June 19, 2025.
Hiawatha First Nation	June 25, 2025	Response received from Tom Cowie, Consultation Indigenous Knowledge Lead from the Hiawatha First Nation, indicating no questions or concerns regarding the changes.
Algonquins of Pikwakanagan First Nation	July 2, 2025	Response received from Chris McKnight of the Consultation & Engagement Department from the Algonquins of Pikwakanagan First Nation. Email contained a letter detailing the consultation process of the Algonquins of Pikwakanagan First Nation and next steps.
	July 17, 2025	Town invoiced from the Algonquins of Pikwakanagan First Nation for their preliminary consultation fee.
	August 25, 2025	Project team emails Chris McKnight of the Consultation & Engagement Department from the Algonquins of Pikwakanagan First Nation, informing that payment of preliminary consultation has been provided, and an offer to schedule a virtual meeting with key project team members for an overview of the project and proposed project change, along with an open discussion for comments and concerns.

Indigenous Community	Date of Activity	Key Activity
	August 29, 2025	Email from Chris McKnight, Project Coordinator, Consultation & Engagement Department from the Algonquins of Pikwakanagan First Nation, advises project team that the project was presented the AOPFN Energy team and that Korey Kauffeldt, the Lead of the AOPFN Energy team, expressed interest in learning more about the Net Zero Project.
	October 14, 2025	Virtual meeting occurred between key project team members and Korey Kauffeldt, Lead Energy Project Coordinator, Consultation Department, Algonquins of Pikwakanagan First Nation.
	October 15, 2025	Project team sends follow-up email to Korey Kauffeldt, Lead Energy Project Coordinator, Consultation Department, Algonquins of Pikwakanagan First Nation. Email included an attachment of the virtual meeting presentation, copy of the Stage 1 Archaeological Assessment and requested a date of October 21, 2025, for any other comments from the AOPFN to be submitted to the project team. The email also included an acknowledgment by the project team that the AOPFN were not specifically consulted during the project's previous consultation as part of the project's initial REA application likely due to previous list of Indigenous Communities required for consultation that was provided by the MECP in 2020 to the project team (at the time) did not specifically list the AOPFN.
Métis Nation of Ontario (Region 5)	July 22, 2025	Question received from Julian Greer, Consultation Advisor, Lands, Resources and Consultations, from the Métis Nation of Ontario, asking if there will be any opportunity to meet to discuss our comments on this project or if this is simply reaching out for comments that will be considered but no meetings? Project team member Trevor Woodtke (Town), provided a follow-up phone call to Julian Greer, noting that there are no public meetings associated with this Notice, that the purpose is to notify and seek comments regarding the proposed project change.
	July 25, 2025	Response received from Julian Greer, Consultation Advisor, Lands, Resources and Consultations, from the Métis Nation of Ontario. Email contained a letter

Indigenous Community	Date of Activity	Key Activity
		detailing comments and concerns with the project and the proposed project change.
	August 25, 2025	Project team emails Julian Greer, Consultation Advisor, Lands, Resources and Consultations, from the Métis Nation of Ontario, with draft responses to their comments and concerns, along with an offer to schedule a virtual meeting with key project team members for an overview of the project and proposed project change, along with an open discussion for comments and concerns.
Alderville First Nation	July 23, 2025	Response received from Dr. Julie Kapyrka, Consultation Manager from the Alderville First Nation. Email contained a letter detailing the consultation process of the Alderville First Nation and next steps.
	July 28, 2025	Town invoiced from the Alderville First Nation for their preliminary consultation fee.
	August 25, 2025	Project team emails Julie Kapyrka, Consultation Manager from the Alderville First Nation, informing that payment of preliminary consultation has been provided, and an offer to schedule a virtual meeting with key project team members for an overview of the project and proposed project change, along with an open discussion for comments and concerns.
	October 1, 2025	Virtual meeting occurred between key project team members and Julie Kapyrka, Consultation Manager from the Alderville First Nation.
	October 2, 2025	Project team sends follow-up email to Julie Kapyrka, Consultation Manager from the Alderville First Nation. Email included an attachment of the virtual meeting presentation and copy of the Stage 1 Archaeological Assessment.
Algonquins of Ontario	July 25, 2025	No comments received at the conclusion of the Notice period.
Curve Lake First Nation	July 25, 2025	No comments received at the conclusion of the Notice period.
Kitigan Zibi Anishinabeg	July 25, 2025	No comments received at the conclusion of the Notice period.
Mississaugas of Scugog Island First Nation	July 25, 2025	No comments received at the conclusion of the Notice period.

7.3 Hiawatha First Nation Consultation

The Hiawatha First Nation provided an email response on June 25, 2025, indicating that they had no questions or concerns regarding the changes. Copies of all correspondence are included in **Appendix F-2**.

7.4 Alderville First Nation Consultation

The Alderville First Nation (AFN) provided an email response on July 23, 2025. The email contained a letter noting an overview of the AFN consultation process in addition to requesting a fee associated with AFN's initial review of the project materials.

Following payment of the requested fee by the Town, a virtual meeting between the project team and AFN representatives was held on October 1, 2025, with the objectives of providing introductions, an overview of the project and the proposed project changes and having open discussions regarding any comments and concerns.

AFN did not have any significant technical comments or concerns pertaining to the proposed project change but did request to receive a copy of the Stage 1 Archaeological Assessment that was completed in support the project's initial REA application. AFN also requested a copy of the final Consultation Report for the proposed project change in support of the project's REA Amendment.

Copies of all correspondence and associated attachments are included in **Appendix F-2**.

Table 6 provides a summary of the discussions from the virtual meeting with AFN representatives and the project team held on October 1, 2025.

Table 6: Summary of Discussions with the Alderville First Nation

Item	Topic / Discussion
1.	Formal introduction of the meeting attendees
Response	<ul style="list-style-type: none"> Julie Kapyrka, Consultation Manager, Alderville FN Community (AFN) Chris Mantha, Director of Public Works, Town of Petawawa (Petawawa) Trevor Woodtke, Asset/Energy Management Coordinator, Town of Petawawa (Petawawa) Kerry Tuyen, Director - Innovation, Technology and Alternate Delivery, Ontario Clean Water Agency (OCWA) Bhavik Vyas – Project Engineer, Innovation, Technology and Alternate Delivery, OCWA (OCWA) Kevin Lutes, Lead R&D Engineer, Anaergia Inc. (Anaergia)
2	Project team presented the Petawawa Net Zero Project slide deck.
Response	Information Only

Item	Topic / Discussion
3	AFN inquired about the consulting firm that performed the Archaeological Assessment Report and requested a copy of the report
Response	Past Recovery Archaeological Services prepared the Stage 1 Archaeological Assessment, and a copy will be provided to AFN.
4	AFN expressed concern that the WPCP and the REA project is located near a major water body and historically projects located near water often did not complete proper due diligence for archaeological assessments. It was further expressed that areas near water may have potential of archaeological artifacts and for project team members to consider this with future projects.
Response	The project team recognizes that the project is located near a major water body (Ottawa River) and that proper due diligence of archaeological assessments may not have been completed to an extent expected today in past projects at the WPCP. The current project is located within the site's previously disturbed area and within the applicable regulated setback limits for a REA project of this nature. The proposed project change will only include surface works to grade the proposed spill containment area which is utilizing an existing ditch that is currently located on the site's previously disturbed area. The project team recognizes the regulatory requirements should any archaeological artifacts be discovered during the construction of the proposed project change.
5	AFN noted that they would have liked to be engaged earlier in the project to provide recommendations on additional archaeological assessments that should be performed within the existing WPCP and along the Ottawa River line where the WPCP's discharge pipe resides.

Item	Topic / Discussion
Response	<p>The project team noted that the AFN was engaged during the previous consultation in support of the project's initial REA application and that no comments were provided by the AFN at the time. It was further noted that this current engagement is to address the proposed project change to satisfy Condition I23 of the project's REA. The MECP considered the proposed project change as a technical change and the following supporting documents were prepared to support this proposed project change:</p> <ol style="list-style-type: none"> 1. Stormwater/Secondary Containment Management Plan 2. Groundwater Monitoring Plan 3. Project Description Report Amended 4. Design and Operations Report Amended 5. Decommissioning Plan Report Amended 6. Construction Plan Report Amended 7. Site Plan Amended and Initial
6	AFN asked which report was assessed by the Ministry of Natural Resources and Forestry (MNRF).
Response	The Natural Heritage Assessment report was reviewed by the MNRF to confirm whether any natural heritage features, habitats, or species at risk exist around the project location.
7	AFN noted that they did not have any technical questions regarding the proposed project change but requested to receive a copy of this final Consultation Report once it is available.
Response	The project team will share a copy of this Consultation Report once available. It was further noted that the previous Consultation Report that supported the project's initial REA application is available on the Town's website.
8	AFN asked whether the project aims to produce excess energy to feed back into the grid.
Response	Project team noted that during Phase 0 of the project, the existing nameplate capacity of the CHP is 192 kW, which has been specified to meet the WPCP's electrical demand. is the next phase of the project is intended to explore greater biogas recovery using additional feedstocks and generate more electricity, however, the Town has not established a timeline to proceed with Phase 2 and if/when Phase 2 proceeds, consultation will be completed in support of the approval process for Phase 2.

7.5 Algonquins of Pikwakanagan

The Algonquins of Pikwakanagan (AOPFN) provided an email response on July 2, 2025. The email contained a letter noting an overview of the AOPFN consultation process in addition to requesting a fee associated with AOPFN's initial review of project materials.

Following payment of the requested fee by the Town, a virtual meeting between the project team and AOPFN representatives was held on October 14, 2025, with the objectives of providing introductions, an overview of the project and the proposed project changes and having open discussions regarding any comments and concerns.

AOPFN did not have any significant technical comments or concerns pertaining to the proposed project change but did request to receive a copy of the Stage 1 Archaeological Assessment that was completed in support the project's initial REA application.

Copies of all correspondence and associated attachments are included in **Appendix F-2**.

Table 7 provides a summary of the discussions from the virtual meeting with AOPFN representatives, and the project team held on October 14, 2025.

Table 7: Summary of Discussions with the Algonquins of Pikwakanagan First Nation

Item	Topic / Discussion
1	Formal introduction of the meeting attendees.
Response	<ul style="list-style-type: none"> Korey Kauffeldt, Lead Energy Project Coordinator, Consultation Department, Algonquins of Pikwakanagan First Nation (AOPFN) Chris Mantha, Director of Public Works, Town of Petawawa (Petawawa) Trevor Woodtke, Asset/Energy Management Coordinator, Town of Petawawa (Petawawa) Kerry Tuyen, Director - Innovation, Technology and Alternate Delivery, Ontario Clean Water Agency (OCWA) Bhavik Vyas – Project Engineer, Innovation, Technology and Alternate Delivery, OCWA (OCWA) Kevin Lutes, Lead R&D Engineer, Anaergia Inc. (Anaergia)
2	AOPFN inquired about which project modifications are included under the current REA amendment.

Item	Topic / Discussion
Response	The amendment is required after the MECP reviewed all the supporting documents and technical reports submitted as part of the initial REA application. The MECP issued the REA following their review, however, the issued REA included a condition for spill containment and restricted receiving external organic waste until the condition was satisfied and the project's REA amended. It specified that the project must have the following plans in place before receiving external organic waste for co-digestion with on-site plant sludge: i) secondary containment plan, ii) stormwater management plan, and iii) groundwater monitoring plan.
3	AOPFN inquired whether the project team expects the treatment site expansion due to the installation of Net Zero Project equipment.
Response	All equipment installation and other works for the Net Zero Project are being completed inside the site's fenced and previously disturbed area. There is no component of the Net Zero Project that will be constructed outside of this area.
4	AOPFN inquired about the current plan for managing the biomaterial generated as a residual from the digestion process.
Response	Currently, since the digesters have been out of service for several years, the plant biosolids are bypassed and stored in the on-site waste holding tank before being hauled off for land application or landfilling, depending on the quality of the biosolids. Once the digesters are operational, the digested biosolids will be used for beneficial purposes—such as land application or mine reclamation—under the Non-Agricultural Source Material (NASM) plan.
5	AOPFN inquired whether there is an established legacy groundwater monitoring program at the Petawawa WPCP.
Response	There are three existing groundwater monitoring wells installed around the area of the digesters and the storage tanks. However, the MECP recommended adding one additional groundwater monitoring well. Cambium was retained to prepared to the required groundwater monitoring plan. The plan has reviewed and received written concurrence from the MECP District Office in Ottawa and will be submitted with the application for the project's REA amendment.
6	AOPFN inquired how the new organic feedstock will be transported to the site, and the type of organic feedstock to be used.

Item	Topic / Discussion
Response	The project team is in the process of procuring external organic waste for the co-digestion process. The preferred external organic waste is fats, oils, and grease, but the current REA permits certain organic wastes which will be non-hazardous in nature and pumped directly from the tanker truck into the digesters. The amount of external organic waste required for the operation of the current phase (Phase 0) of the Net Zero project will be a small quantity, e.g. 1 tanker per day, 5 days per week.
7	AOPFN inquired about the objective of Phase 2 of the project.
Response	Phase 2 of the project will include the addition of more external organic feedstock to the digesters to increase biogas production. The biogas generated will be split into two streams: one portion will be used in the CHP system to produce energy and heat, while the remaining portion will be used to produce Renewable Natural Gas (RNG) on-site. However, the Town has not established a timeline to proceed with Phase 2 and if/when Phase 2 proceeds, consultation will be completed in support of the approval process for Phase 2.
8	AOPFN inquired whether there is a plan to install a slurry machine on-site so the plant can accept more solid waste instead of slurry material.
Response	The current Net Zero Project equipment includes chopper pump at the feedstock receiving station, which will be used to further liquefy the externally received slurry material. However, under Phase 2, the project team is planning to add an on-site external solid waste storage tank and dewatering equipment, along with a slurry-making system using chopper pumps. This will allow the project team to accept solid feedstock in addition to slurry. However, the Town has not established a timeline to proceed with Phase 2.
9	AOPFN inquired whether it is the only Indigenous community that was consulted as part of the consultation process.
Response	The project team received an updated list of Indigenous communities from MECP that need to be consulted as part of the REA amendment process. All identified Indigenous Communities listed received a copy of the Notice and only three (3) communities responded with comments being; Alderville First Nation (AFN), Algonquins of Pikwàkanagàn First Nation (AOPFN), and Métis Nation of Ontario Region 5 – Mattawa/Ottawa River Métis Community. Only one Indigenous Community responded noting that they had no comments or concerns being the Hiawatha First Nation.
10	AOPFN inquired whether it was engaged during the initial REA application process for the Petawawa Net Zero Project.

Item	Topic / Discussion
Response	The project team mentioned that all Indigenous Communities identified on the list provided by the MECP were consulted and the project team believe that the AOPFN was included on the previous Indigenous Communities list. The consultation report, released in August 2022, that supported the project's initial REA application, includes all correspondence and notices that were sent to the Indigenous communities as part of the initial REA application process and is available on the Town's website. As an action item extending from the virtual meeting, the project team reviewed the documents from the previous consultation and discovered that the AOPFN was not specifically identified as an Indigenous Community to be consulted, only the Algonquins of Ontario (AOO) were identified and consulted. The project team acknowledged this finding in an email response to AOPFN on October 15, 2025.
11	AOPFN inquired whether there is budget available for AOP to review the REA amendment reports.
Response	The project team mentioned that AOPFN requested a fee of \$750 for its engagement in the REA amendment process, and that the Town has provided payment for this fee.
12	AOPFN inquired whether there is an opportunity for the community to participate in the project.
Response	The project team mentioned that AOPFN can review the technical reports and provide any questions or concerns related to them. The initial phase of the project is meant to generate enough electricity to meet the plant's electrical demand. The Town is a public sector organization and not a for-profit organization, and revenue generated from tipping fees for receiving the external feedstock will be used to offset operating costs of the plant and help offset future rate increases for system users of the Town's wastewater system. The Town is not looking to generate significant revenue from the project that a for-profit organization may desire to generate.
Other/ Information Only	The project team further mentioned that they are aiming to submit the REA application for the REA amendment to MECP during the week of October 27. As such, the team requested that if AOPFN has any further comments or concerns, that they are welcome to reach out to the project team. The project team has also provided AOPFN with a Notice of Proposed Project Technical Changes for the Petawawa Net Zero Project, which includes links to the project website where all technical reports have been uploaded for review.

7.6 Metis Nation of Ontario Region 5 – Mattawa/Ottawa River Metis Community

The Metis Nation of Ontario, Region 5 (Metis RNO 5) provided an email response on July 25, 2025. The email contained a letter noting various comments and concerns.

The project team prepared draft responses addressing these comments and concerns and emailed them to the responding Metis RNO 5 Consultation Advisor for review, in addition to offering a virtual meeting with Metis RNO 5 representatives, as was offered to the other responding Indigenous Communities, with the objectives of providing introductions, an overview of the project and the proposed project changes and having open discussions regarding any comments and concerns.

At the time of preparing this Consultation Report, the Metis RNO 5 had not responded to project team's invitation for a virtual meeting or provided any further comments.

Copies of all correspondence and associated attachments are included in **Appendix F-2**.

Table 8 provides a summary of the Metis RNO 5 comments and concerns detailed in the Metis RNO 5 letter dated July 25, 2025, and the Project team's responses to address these comments and concerns.

Table 8: Summary of Discussions with the Metis RNO 5

Item	Topic / Discussion
1	While overall, we are supportive of green initiatives and do not oppose this project directly we do have some general concerns regarding the placement of the digestors and the seeming lack of environmental studies that have occurred regarding the Ottawa River in the event of a serious spill. The fact that a spill impacting the Ottawa River is not mentioned in the potential negative environmental impacts table of the Environmental Impact Study (table four) is of particular concern since it would appear that it hasn't been planned for. It is understood that since this is occurring within the confines of the current waste treatment plant footprint that it does not require much in the way of environmental impact assessments for its new use but it should be noted that the new proposed use of the facility could lead to more significant impacts than it was initially designed for and some consideration here is required even with mitigation. It should also be noted that while the river is technically outside of the site footprint and under normal operations it would not be impacted, it is still close enough to merit legitimate concern in the event of an error or externality.

Response	<p>We acknowledge the concern regarding the potential for a major spill that could reach the Ottawa River. However, the project team has carefully considered this risk in the design of the secondary containment pond, with particular attention to protecting natural features such as the Ottawa River. The secondary containment pond was designed by a professional engineer from Stonecrest Engineering Inc., based on prior consultations with the Senior Waste Engineer at the Ministry of the Environment, Conservation and Parks (MECP), Environmental Permissions Branch. The design accounts for both potential spill scenarios and stormwater events. In the event of a spill, the digester level would drop, triggering a low-level alarm in the system. Importantly, the pond is sized according to Ontario government guidelines for chemical and waste storage facilities, which require a containment capacity equal to 100% of the largest tank volume plus the greater of either 10% of the largest tank or 10% of the combined volume of all other tanks. The total volume of the secondary containment pond is 2,994 m³. The modified volumes of Digesters 3 and 4 for the Net Zero Project are 776 m³ and 967 m³, respectively. These digesters typically operate at approximately 80% capacity, resulting in operational volumes of 621 m³ and 774 m³. Therefore, in the event of a spill, only about 10–15% of the pond’s total volume would be occupied, allowing sufficient time for the operator to close the gate valve to restrict the spill within the facility area. Additionally, the Petawawa Water Pollution Control Plant (WPCP) operator follows Class I and II emergency response procedures. A spill would be classified as a Class II event, prompting immediate on-site assessment and action in accordance with the standard operating procedures (SOP), including closing the gate valve of the secondary pond. It is also important to note that the spill containment area encompasses the entire plant. Any spill would first flow into the drain leading to the plant’s headworks. Only if the drain is overwhelmed would the spill be directed to the ditch—and only if the gate valve remains open. Given the containment pond’s capacity, the site layout, and the emergency response protocols, there is no realistic scenario in which a spill would reach the Ottawa River.</p> <p>However, in the unlikely event that all containment and response measures fail, the project team would implement additional containment strategies to isolate the areas (including several other small water features per the site plans) where the spill could reach after exiting the facility. Immediate notification would be provided to the public and the MECP, and appropriate remedial actions would be taken as required.</p>
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2	<p>The proposed location of the digestors is about 200 meters from the river proper and even closer to several other small water features per the site plans. If there were to be a major incident that 200 meters may not be enough to ensure that the spill is captured in time even though it is fairly slow moving as noted in the report. While best practices and such do reduce these concerns, there are still scenarios where the river could be impacted and we would appreciate knowing what the protocols would be to address this concern in the event that a leak or spill coupled with a significant storm event lead to the deposition of the materials in the river. Six years ago in the UK a similar digester spilled into a water body and killed ~10, 000 fish alone not even considering the other damages that were done to the environment so there are recent examples of harm caused by these even with the best intentions.</p>
Response	<p>Please refer to the response provided for Question 1.</p>
3	<p>Compounding these concerns is the lack of automated spill/leak detection or shutoff systems and instead mostly relying on human monitoring systems. Per your documents the main response suggested in the event of a large spill that might threaten the river is as follows: "Offsite migration of the spill can be prevented by blocking the culverts located at the eastern portion of DF2. Cleanup of the spill can be done using a vacuum truck or other suitable equipment for cleaning up spilled organic slurry". This relies entirely on human supervision and seems to ignore the fact that mistakes happen and human error exists. What would happen if someone didn't properly block the culvert and why would there not be some sort of automatic closure system? That should be planned for even if unlikely. While human monitoring should definitely be a part of monitoring surely an automated system in conjunction with this would be both cost effective and beneficial? Any time something is mostly based on human reporting it brings with it many potential issues so having multiple levels of alerts would improve the response time especially regarding leaking infrastructure.</p>
Response	<p>As described in the response to Question 1, an automated monitoring system is in place to detect potential spills. This system includes a level transmitter installed in the digester. In the event of a spill, the digester level would drop, triggering a level alarm that immediately notifies the operator of a possible spill. Additionally, as previously mentioned, the Petawawa WPCP operator follows Class I and II emergency response procedures. A spill would be classified as a Class II event, prompting immediate on-site assessment and action in accordance with the SOP, which includes closing the gate valve of the secondary containment pond.</p>

	Furthermore, in accordance with Ministry guidelines, every spill event must be reported to the Spills Action Centre. This ensures proper investigation of the incident and helps reduce the likelihood of similar events occurring in the future.
4	Some other concerns we have in relation to water pertain to the soils that the site sits on. Based on your documents it appears as though the site is quite sandy with a fair amount of standing water which indicates that the groundwater is relatively close to the surface and that contaminants once released would move fairly quickly through said soils if exposed. After hearing that all of the stormwater containment areas will have a liner these fears are somewhat assuaged but it is still worth pointing out that the stormwater management area directs water towards the river and if there were to be a rupture in the liner it could leach into the river or groundwater. This solution also relies on the liner being properly maintained which is another potential failure point. Would it be possible to have additional monitoring locations added specifically downstream of the Project so that any impact to the river is captured? Currently it appears as though there has only been one additional groundwater well added for the new site usage and this does not seem adequate. Biochemical oxygen demand, E. coli levels and ammonia should be included within this and they should be checked regularly. Without testing the river how can you be sure that it isn't impacted?
Response	The project team has developed a Groundwater Monitoring Plan to monitor groundwater quality and ensure that any potential spills from the digester do not impact the groundwater. This plan was prepared by a licensed Professional Engineer and has been reviewed and accepted by the MECP District Office. As outlined in the response to Question 1, the volume of the secondary pond is significantly greater than any potential spill volume. Furthermore, with OCWA's Emergency Response Plan in place (as detailed in the response to Question 1), the likelihood of a spill breaching the liner and seeping through the soil into the groundwater is minimal. In addition, the entire pond and the grass swales will be lined with synthetic liners that are most appropriate for the application, selected in accordance with industry standards by a qualified Geotechnical Engineer.
5	It should also be noted that the current conception of 1 in 100-year storms needs to be recalibrated to create climate-resilient stormwater management systems since we are no longer in the climate that much of that data is based on. Using data from the last century to inform current century rain patterns is essentially an effort in futility at this point since we experience a greater frequency of torrential storms than were experienced historically. Tornados and other such events now occur in the area and there is no mention of this in your plans. While drafting this comment the area in question was under a

	severe thunderstorm warning and a tornado watch which would have been considered quite unusual not long ago. Similarly, the 24-hour maximum of a rain event may also no longer be accurate and modeling should include more extreme weather scenarios in addition to spring breakup flooding on the Ottawa River, and potential hydraulic backpressure on containment features.
Response	<p>The pond design and stormwater management plan have been developed by an experienced Professional Engineer using industry-accepted methodologies. Both the secondary containment pond and the stormwater management plan are designed in accordance with:</p> <ul style="list-style-type: none"> • The Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities issued by the Government of Ontario, and • The Stormwater Management Planning and Design Manual (2003) by the Ontario Ministry of the Environment, specifically for water quality protection. <p>Runoff volumes for a 100-year, 24-hour storm event were calculated using the Modified Rational Method, consistent with industry standards. The IDF data used for these calculations was sourced from the Pembroke Climate Station (6106367). It was confirmed that the pond has more than sufficient capacity to accommodate both the required volume for secondary containment and the runoff from a 100-year storm event. For detailed sizing calculations of the containment pond, please refer to the Stormwater Management and Secondary Containment Design Report available on the Town of Petawawa's website: https://www.petawawa.ca/residents/public-works/petawawa-net-zero-project/renewable-energy-approval-rea-amendment-1-314.html</p> <p>It should also be noted that the structures at the Petawawa WWTP were installed in the mid-1990s and were designed to withstand extreme wind conditions and seismic events. Additionally, approximately 50% of the tank volumes at the facility are located below ground level. As part of the Net Zero project, both digesters have been rehabilitated and coated. In accordance with the Town's asset management policies, all structures are drained, cleaned, and inspected every 5 to 7 years to ensure they remain in good physical and operational condition.</p>
6	<p>Further, I am curious as to how this will contribute to the overall reduction of emissions from fossil fuels when you factor in the additional emissions that 250 tanker trucks a year emit on top of the expected 15-30 per day during fertilizer spreading season plus flaring etc. 200kw of power is not very much to generate over an entire year so does the anticipated rate of return on emissions reductions from the plant actually make sense in the big picture when factoring in transportation? Does the offsetting of landfill emissions equate to fewer total emissions getting released when transportation is factored in? How far does the spent digestate get shipped on average before it is used? These are all very relevant questions when examining anything</p>

	claiming to be net zero and these questions are also asked in good faith because if it truly is net zero then this should be lauded as a massive environmental success story.
Response	<p>We acknowledge that the addition of trucking haulage to transport the additional volume of food waste to the plant will result in associated GHG emissions. However, this incremental increase is significantly lower than the overall GHG emissions reduction the plant is expected to achieve. These reductions come from turning digester solids into fertilizer that can be applied to land, earning carbon credits, and from diverting food waste away from landfills and into digesters. Overall, the following activities are considered in calculating the expected GHG emissions reduction from the Net Zero Project:</p> <ol style="list-style-type: none"> 1. Biogas Production in Anaerobic Digester The project will enhance renewable energy generation and reduce the plant's carbon footprint through co-digestion of food waste, biosolids, and additional sludge. 2. Landfill Avoidance of Food Waste Currently, some food waste from Petawawa and surrounding areas is sent to landfill. Under this project, food waste and FOG (fats, oils, and grease) will be diverted to digestion, significantly reducing GHG emissions. 3. Land Application of Primary and Secondary Biosolids Traditionally, biosolids are land-applied after wastewater treatment. This project will instead use biosolids as feedstock for digestion, converting them into digestate. 4. Land Application of Anaerobic Digestate The digestate produced will be land-applied, contributing to carbon sequestration and sustainable reuse of residual solids. 5. Transportation GHG emissions associated with transporting additional food waste to the site and digestate from the digesters to land application sites are accounted for in the overall emissions analysis. <p>The proposed diversion of biosolids and food waste, combined with electricity offset and switching the heat source, is projected to reduce GHG emissions by up to 16,160 tCO₂e annually. By 2050, the cumulative GHG reductions in Canada resulting from this project are estimated to be 313,845 tCO₂e. Additionally, the project aims to divert 236,500 tonnes of food waste and 220,000 tonnes of sludge from landfills over a 10-year period, with the potential for continued emissions reductions and waste diversion in subsequent years.</p>
7	<p>Given that there are also plans to turn this into a renewable natural gas plant in future I also wonder if the emissions from the burning of that RNG will be factored into your calculations in addition to the processing? It is unquestionably a better fuel than traditional natural gas since it doesn't add new carbon but it's burning does still generate emissions that are essentially the same as regular natural gas even if the total carbon output is reduced. If</p>

	the project does get to this stage, we hope that the carbon dioxide separated from the biogas to produce renewable natural gas is properly captured and sequestered.
Response	<p>The Net Zero project is divided in two phases: phase 0 and phase 2. Phase 0, the scope of which includes:</p> <ul style="list-style-type: none"> • Refurbishment and upgrade two of the four existing anaerobic digesters 3 & 4; • Using anaerobic digestion to co-digest and convert Town's biosolids external organics into renewable electric energy. • Implementing a CHP to make beneficial use of digester biogas and produce electricity and heat for the plant to achieve the goal of being an Energy Net Zero Plant. <p>The scope for Phase 2 is for future consideration and includes:</p> <ul style="list-style-type: none"> • Addition of an upgraded RNG system, dewatering system and buffering tanks. • Enabling greater quantities of food waste slurry will be received. • Upgrading the facility to generate RNG from excess biogas production, which is a valuable end product. <p>At this time, there is no established timeline for implementing Phase 2 of the project. If a timeline is determined, the project team will follow all applicable environmental permitting processes including consultation and engagements.</p>
Conclusion	<p>In short, we are pleased to see green—or at least greener—energy being considered more often and the use of anerobic digestors in general are supported but more environmental information is needed to assuage our concerns regarding the river in the event of human error and/or generational weather systems. The river is an important part of the community's past, present and future so therefore it protection is essential. While it is understood that under normal operating conditions there is limited risk of a major environmental event one should always plan for the worst case as well as the best. Having a plan in place and understanding the potential impacts before they occur is essential to proper mitigation, so we hope that you take our concerns seriously.</p>

8. Outcomes of the Consultation Process

A common concern that was expressed from the responding Indigenous Communities is that the project is located near a major water body (Ottawa River) and the potential for a spill reaching the Ottawa River.

The project team understands this concern. The Town's Water Pollution Control Plant (PCP) has been located at the project site for decades and have proven successful operation and minimal

impact to the Ottawa River. The REA project along with the proposed project change, have been designed to meet industry regulatory requirements with both primary and secondary measures to mitigate potential environmental impacts to the surrounding area and the Ottawa River.

Following review of the comments received during the consultation period, and further discussions with some of the responding Indigenous Communities, the project team has concluded that no further revisions were necessary to the supporting documents for the proposed project change.

9. Conclusion

The Town of Petawawa as the facility owner, will be held to regulatory requirements ensuring that the facility will remain in a good state of repair and operation, including reoccurring inspections and audits by various regulatory agencies such as the Technical Standards and Safety Authority (TSSA). Additionally, the Town is a public sector organization and is not pursuing this REA project for profit, but rather to contribute to the Town's efforts in reducing greenhouse gas emissions and becoming a better environmental steward.

This Consultation Report documents the consultation activities that were undertaken in accordance with the MECP imposed consultation requirements for the proposed project change. This report will be submitted as part of the Town's application to the MECP to amend the project's REA. A copy of the final report will be made available on the Town's website with all other project documents.

Appendix A – MECP Consultation Requirements

**Ministry of the Environment,
Conservation and Parks**

**Ministère de l'Environnement,
de la Protection de la nature
et des Parcs**

Environmental Assessment
Branch

Direction des évaluations
environnementales

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135 St. Clair Avenue W
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135, avenue St. Clair Ouest
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May 12, 2025

Trevor Woodtke
Asset/Energy Management Coordinator
Town of Petawawa
1111 Victoria Street. Petawawa, ON K8H 2E6
Sent by email only to: twoodtke@petawawa.ca

Dear Trevor Woodtke:

The Ministry of the Environment, Conservation and Parks (ministry) has reviewed the March 28, 2025 draft Modification Document regarding the proposed modification to the Anerobic Digestion Facility at the Petawawa Water Pollution Control Plant (Project). The ministry issued Renewable Energy Approval (REA) No. 5211-CM3MB6 for the Project on April 25, 2023. The ministry understands that the Town of Petawawa is seeking an amendment to the Project as it was described in the REA application and approved by the ministry.

The ministry has completed a cursory review of the information in the draft Modification Document. In reviewing this document, the ministry referred to [Chapter 10, "Making Changes to Renewable Energy Approval \(REA\) Projects"](#) in the *Technical Guide to Renewable Energy Approvals* (Technical Guide), to confirm the type of change and determine next steps.

Based on the details provided in the draft Modification Document the ministry considers the submission of the secondary containment plan, Stormwater Management Plan and groundwater monitoring plan per condition I23 of the REA to be a **technical change**. Technical changes are those that will not result in increased negative environmental effects that will or are likely to occur beyond those that were identified, documented and consulted on during the REA process for the original Project.

In accordance with the requirements of section 32.3(1) of O. Reg. 359/09, the ministry expects the Town to prepare a notice informing of the proposed change and distribute it to the persons mentioned in paragraph 5 of subsection 15(6) of O. Reg. 359/09 which includes individuals, Indigenous communities and municipalities. Please refer to section [3.2 of Chapter 10 of the Technical Guide to Renewable Energy Approvals](#) for guidance regarding preparation of the notice. It is also required that the Town make the Modification Document and supporting materials available on their website at the same time as the notice. Should the proponent not have a website, materials must be made available for public review in the municipality for which the project is located.

Once the Town has notified the groups noted above, addressed any comments received and finalized the Modification Document and supporting reports to reflect the details of the notification activities, comments received and any additional changes incorporated, the Town may submit a formal REA amendment application to the ministry. The REA amendment application must be submitted to:

The Ministry of the Environment, Conservation and Parks
Director, Client Services and Permissions Branch
135 St. Clair Avenue West, 1st Floor
Toronto ON M4V 1P5
Email: enviropemissions@ontario.ca

Note that there is a \$300 fee for amendment applications, payable to the Minister of Finance.

When the ministry receives the REA amendment application we will screen the application to ensure that it includes all the information the ministry requires to process and decide on the amendment.

When the ministry has made a decision on the amendment, a bulletin will be posted on the Environmental Registry of Ontario. The amendment is subject to third party appeal rights.

If you have any questions, please feel free to contact me at 289-980-0466 or by email at kendrick.doll@ontario.ca

Yours sincerely,



Kendrick Doll
Senior Project Evaluator
Environmental Assessment Branch

c: Tracy Hart, Manager, Ministry Ottawa District
Mohsen Keyvani, Manager, Ministry Waste Approval
Nick Colella, Supervisor, Ministry EA Program Support



Appendix B – Distributed Notice



Town of Petawawa

Public Works
1111 Victoria Street
Petawawa, ON K8H 2E6
613-687-5536

Notice of Proposed Project Technical Changes to the Petawawa Net Zero Project

June 25, 2025

Project: Petawawa Net Zero Project

Location: 560 Abbie Lane

MECP Reference No.: 5211-CM3MB6

IESO Reference No.: N/A

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

Project Description

The Town of Petawawa (Town), in collaboration with, Ontario Clean Water Agency (OCWA) and Anaergia (Anaergia), received an approval for the Renewable Energy Approval (REA) application that had been submitted for the REA project at the Town of Petawawa's Water Pollution Control Plant. The approved REA (REA#5211-CM3MB6 dated April 25, 2023) from the Ministry of Environment, Conservation and Parks (MECP) provided the approval for the construction, installation, use, operation, maintenance and retiring of a Class 3 Anaerobic Digestion (AD) facility with an overall project nameplate capacity of 200 kWe. The REA approval provided by the MECP required that prior to the receipt of Organic Waste at the facility, the Town must submit a secondary containment plan, a stormwater management plan and a ground water monitoring plan to the satisfaction of the Director.

The REA project (Project) is located at the Town of Petawawa's Water Pollution Control Plant (WPCP) and will transform the WPCP into a resource recovery facility by upgrading the two of four digesters to co-digest wastewater sludge and liquid external organics by diverting waste from landfill and boost biogas production for use as electricity, making the plant energy neutral or positive, and reducing greenhouse gas emissions. The project will involve the generation and utilization of biogas on site using a combined heat and power (CHP) unit.



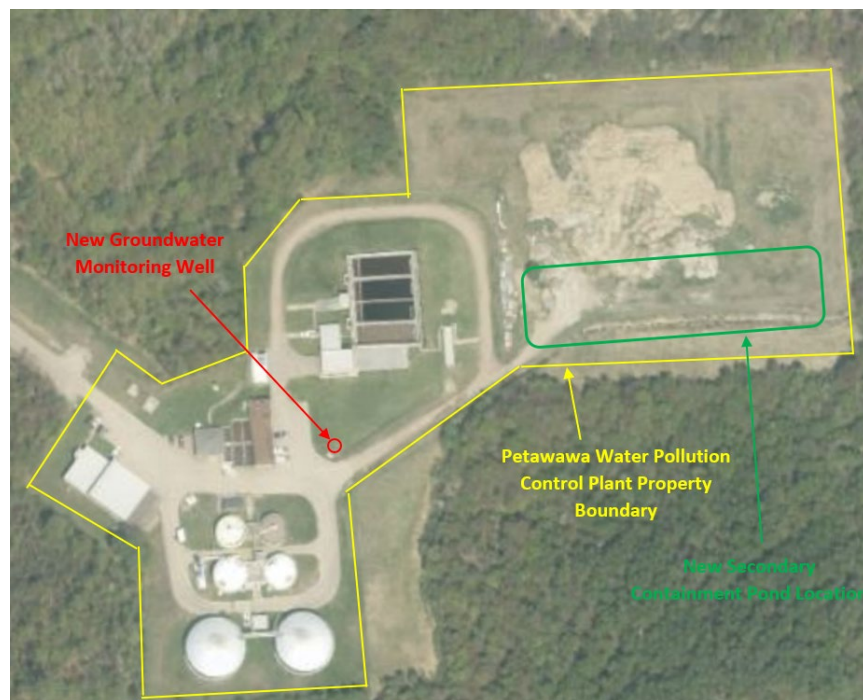
Town of Petawawa

Public Works
1111 Victoria Street
Petawawa, ON K8H 2E6
613-687-5536

All project information including the initial Renewable Energy Approval (REA) supporting documents and notices are posted on the Town's website:

<https://www.petawawa.ca/residents/public-works/petawawa-net-zero-project/>

The Petawawa WPCP is located at 560 Abbie Lane, Petawawa, County of Renfrew, K8H 2E6. The Site has an area of 75.3 acres and is registered as Range Lake Pt Lot 17, RP49R6385 Parts 1 to 5, Petawawa, County of Renfrew; roll number 4779079020069000000.



Proposed Project Changes

The proposed project technical changes are in support of adhering to Spill Containment Condition I23 of the Project's REA issued on April 25, 2023. These technical changes include:

- i. design and implementation of a secondary containment plan for the Anaerobic Digesters (AD#3 and AD#4) and the two Digestate Storage Tanks,
- ii. development of a stormwater management plan that addresses stormwater quality and quantity controls at the WPCP, and



Town of Petawawa

Public Works
1111 Victoria Street
Petawawa, ON K8H 2E6
613-687-5536

- iii. development of the Groundwater Monitoring plan that will identify any leaks in the partially below-ground Anaerobic Digesters.

It is important to note that the overall project design and nameplate capacity will not change and no physical modifications to equipment installed will be required. As per the *Technical Guide to Renewable Energy Approvals, Chapter 10 Making changes to Renewable Energy Approval (REA) Projects*, the technical changes proposed will result in improvements to the environment and will not result in increased negative environmental effects.

Documents for Review

The following draft documents have been prepared or modified to support the proposed project technical changes and are available on the Town's website:

<https://www.petawawa.ca/residents/public-works/petawawa-net-zero-project/renewable-energy-approval-rea-amendment-1-314.html>

1. 2025.05.12--- MECP Letter of Project Changes Notice Requirements
2. 2025.03.28---Modification Report (Draft Rev1)
3. 2023.04.25---Renewable Energy Approval – Petawawa Net Zero Project (Modification Report Appendix A)
4. 2024.08.16---Stormwater Management and Secondary Containment Design Report (Modification Report Appendix B)
5. 2024.12.17---Groundwater Monitoring Plan MECP-DO Concurrence Letter (Modification Report Appendix C)
6. 2024.10.09---Groundwater Monitoring Plan (Modification Report Appendix C)
7. 2025.06.20---Project Description Report Amended
8. 2025.06.20---Design and Operations Report Amended
9. 2025.06.20---Decommissioning Plan Report Amended
10. 2025.06.20---Construction Plan Report Amended
11. 2025.03.25---Site Plan Amended and Initial

Printed copies of the listed documents are available by request to the noted project contact.

Comments

The MECP has prescribed a notice period of thirty (30) days for the review and submission of written comments relating to the proposed project technical changes. The Town invites



Town of Petawawa

Public Works
1111 Victoria Street
Petawawa, ON K8H 2E6
613-687-5536

members of the community, Indigenous communities and municipalities to submit written comments on or before **July 25, 2025**.

Information collected will be used in accordance with the *Municipal Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, c. M.56, as amended. With the exception of personal information, all comments will become part of the public record.

Written comments may be submitted as follows:

Attention to: Trevor Woodtke, Asset/Energy Management Coordinator
Subject: Petawawa Net Zero Project Proposed Project Changes

By Email:

planning@petawawa.ca

In Person / Mail:

Town of Petawawa
1111 Victoria Street Petawawa, ON K8H 2E6

Project Contacts

Should you have any questions regarding this notice or to learn more about the proposed project technical changes, please contact:

Trevor Woodtke
Asset/Energy Management Coordinator
Town of Petawawa, Public Works Department
Phone: 613-687-5536 x 2026 | Email: planning@petawawa.ca

Appendix C – Landowners Correspondence

Trevor Woodtke

From: Planning
Sent: June 25, 2025 1:56 PM
To: Sean.Trenholm@forces.gc.ca; cfha-alfc.petawawa@forces.gc.ca;
joan.behnke@forces.gc.ca
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf

To Department of National Defence Canada, Garrison South Townsite,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

You are receiving a copy of this notice as the DND is an owner of property that abuts the Town's Water Pollution Control Plant located at 560 Abbie Lane.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



Planning and Development

Town of Petawawa

613-687-5536

www.petawawa.ca

1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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Trevor Woodtke

From: Planning
Sent: June 25, 2025 1:48 PM
To: landuseplanning@Hydroone.com
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf

To Hydro One Land Use Planning,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

You are receiving a copy of this notice as Hydro One is an owner of property that abuts the Town's Water Pollution Control Plant located at 560 Abbie Lane.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



Planning and Development

Town of Petawawa
613-687-5536
www.petawawa.ca
1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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Trevor Woodtke

From: Planning
Sent: June 25, 2025 1:57 PM
To: Davies@royallepage.ca
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf

To Evan Davies, Royal LePage

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

You are receiving a copy of this notice as it is understood by the Town that Royal LePage is the reator representative for the property known as 540 Abbie Lane, a property that abuts the Town's Water Pollution Control Plant located at 560 Abbie Lane for which the project location is situated. Please note that the owner of 540 Abbie Lane will be receiving a hand delivered copy of the same attached notice.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



Planning and Development

Town of Petawawa
613-687-5536

www.petawawa.ca

1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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Appendix D – Municipal Correspondence

Trevor Woodtke

From: Planning
Sent: June 25, 2025 1:44 PM
To: gdombroski@countyofrenfrew.on.ca
Cc: info@countyofrenfrew.on.ca; BHowarth@countyofrenfrew.on.ca
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf

To Clerks of the County of Renfrew and Town of Petawawa,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

You are receiving a copy of this notice as the County of Renfrew is an upper-tier municipality in which the project location is situated.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



Planning and Development

Town of Petawawa
613-687-5536
www.petawawa.ca
1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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Appendix E – Ministry Correspondence

Trevor Woodtke

From: Planning
Sent: June 25, 2025 1:59 PM
To: Mohsen.Keyvani@ontario.ca; tracy.hart@ontario.ca
Cc: Kendrick.Doll@ontario.ca; Nick.Colella@ontario.ca
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf

To MECP Director and Eastern Region Ottawa District Office,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



Planning and Development

Town of Petawawa
613-687-5536
www.petawawa.ca
1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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MECP's Questions and Petawawa Net Zero Project Team's Responses Related to the Secondary Containment Plan for the Petawawa Net Zero Project

REA# 5211-CM3MB6

Prepared by:

Town of Petawawa
1111 Victoria Street
Petawawa, Ontario K8H 2E6

Anaergia Inc.
4210 South Service Road
Burlington, Ontario L7L 4X5

Ontario Clean Water Agency
2085 Hurontario Street, 5th Floor
Mississauga, Ontario L5A 4G1

1 May 2025

Attached:

- Email from Kendrick Doll (Senior Project Evaluator, Environmental Assessment Branch, MECP) with questions on the secondary containment dated April 15, 2025.
- Stormwater Management and Secondary Containment Plan report developed by Stonecrest Engineering Inc. dated August 16, 2024. (**Note:** The final version of the Stormwater Management and Secondary Containment Plan report will be stamped and signed by Stonecrest Engineering Inc. following MECP's approval of the REA modification document.)

1. Are the swales and secondary containment pond lined or constructed within an impermeable substrate?

Response: Yes, the secondary containment area will be lined with an impermeable substrate as identified in the draft Stormwater Management and Secondary Containment Design Report, dated August 16, 2024 and prepared by Stonecrest Engineering Inc.

The design and construction of the containment area will meet this requirement and additional details of the engineering design will be provided in the final stamped and signed design report.

2. How will you ensure any potential spill events are contained within the secondary containment pond if the gate valve is left in the open position?

Response: As a default, the gate valve has been designed to be left in the open position to allow for storm water to pass through the outlet.

A spill is unlikely to occur rapidly and given the proposed containment flow path and pond capacity, there will be sufficient time for an operator to manually close the gate valve before a spill reaches the secondary containment pond. An operating and control strategy will be developed to address a spill scenario.

The Petawawa water pollution control plant operator follows Class I and II response procedures in case of an emergency. The spill event would be considered a Class II response event, where the operator would immediately report to the site to assess the situation and act according to the SOP, which includes closing the gate valve. It should also be recognized that the spill containment area encompasses the entire plant area, so the spill would first go to the drain directed towards the headworks of the plant. If the drain cannot keep up with the spill, then only the spill would be directed to the ditch (if the valve remains open). Considering the possible spill volume, the available containment pond volume, and the current site arrangement, there is no possibility of the spill being discharged to the river even if the gate valve remains open.

3. Is the gate valve a locking position indicator valve to prevent tampering (e.g., if trespassing is an issue at the site) and to indicate that the valve is properly in the locked position in the event of a spill?

Response: No, the gate valve is not a locking position indicator type. The gate valve will not be locked in the open position as per the design engineer's recommendation. A locked gate valve would add unnecessary time for the operator to gain control of the gate valve during a spill event.

Additionally, the Petawawa WPCP facility is fully enclosed by fencing, with the gate valve situated behind two locked access gates. This setup restricts access and enhances security of the gate valve.

4. Will you be proposing an inspection and monitoring plan for the secondary containment pond (e.g., testing the valve to ensure locking remains functional if the valve will be left in the open position)?

Response: Yes, an inspection and monitoring plan (as part of the SOP) will be implemented for the secondary containment pond. This will include daily checks of the secondary containment infrastructure which would identify any potential tampering of the gate valve.

5. Do you need to heat trace any of the secondary containment infrastructure (e.g., valves and piping above the frost depth if necessary)?

Response: No, heat tracing of the secondary containment infrastructure is not necessary. As mentioned in response to Question 4, an inspection and monitoring plan will be developed with daily checks of the secondary containment infrastructure.

If freezing or accumulation of ice is observed, a specific cleaning procedure for ice removal will be implemented in the SOP. This procedure will ensure that any ice buildup is promptly addressed to maintain the valve's operability.

Through ongoing monitoring and inspection, if freezing becomes a more prevalent issue, further investigations will be completed to determine the permanent mitigation measures.

Bhavik Vyas

From: Trevor Woodtke <twoodtke@petawawa.ca>
Sent: April-17-25 11:17 AM
To: Doll, Kendrick (MECP)
Cc: Tse, Amanda (MECP); Bhavik Vyas; Kerry Tuyen
Subject: RE: Town of Petawawa AD - Secondary Containment Questions

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Kendrick,

We are currently preparing responses to the noted questions and we are aiming to have responses back to the MECP on or before Friday, May 2.

Regards,

Trevor Woodtke, C.Tech.
Asset/Energy Management Coordinator | Town of Petawawa
& Treasurer/Secretary | Renfrew County Road Supervisors Association
1111 Victoria Street | Petawawa, ON K8H 2E6 | p: 613-687-5536 x 2026

From: Doll, Kendrick (MECP) <Kendrick.Doll@ontario.ca>
Sent: April 15, 2025 2:43 PM
To: Bhavik Vyas <bvyas@ocwa.com>
Cc: Trevor Woodtke <twoodtke@petawawa.ca>; Tse, Amanda (MECP) <Amanda.Tse@ontario.ca>
Subject: FW: Town of Petawawa AD - Secondary Containment Questions

Hi Bahvik,

We are working on sending over MECP's response to the draft modification document to provide direction on consultation requirements for the proposed amendment.
Per our discussion, could you please provide an update on the timing to address the below comments?

Kendrick

Kendrick Doll
Senior Project Evaluator | Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks | 135 St. Clair Avenue West, Toronto, ON M4V 1P5
E: Kendrick.Doll@ontario.ca | T: 289-980-0466

From: Trevor Woodtke <twoodtke@petawawa.ca>
Sent: Friday, September 27, 2024 9:36 AM
To: Tse, Amanda (MECP) <Amanda.Tse@ontario.ca>
Cc: Doll, Kendrick (MECP) <Kendrick.Doll@ontario.ca>; Chris Mantha <cmantha@petawawa.ca>
Subject: RE: Town of Petawawa AD - Secondary Containment Questions

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Hi Amanda,

Received. Thank you for these comments. I will forward them to our project team for review and consideration.

Regards,

Trevor Woodtke, C.Tech.

Asset/Energy Management Coordinator | Town of Petawawa
& Treasurer/Secretary | Renfrew County Road Supervisors Association
1111 Victoria Street | Petawawa, ON K8H 2E6 | p: 613-687-5536 x 2026

From: Tse, Amanda (MECP) <Amanda.Tse@ontario.ca>

Sent: September 27, 2024 9:31 AM

To: Trevor Woodtke <twoodtke@petawawa.ca>

Cc: Doll, Kendrick (MECP) <Kendrick.Doll@ontario.ca>; Chris Mantha <cmantha@petawawa.ca>

Subject: Town of Petawawa AD - Secondary Containment Questions

Some people who received this message don't often get email from amanda.tse@ontario.ca. [Learn why this is important](#)

Good morning Trevor,

Thank you kindly for attending the meeting yesterday.

As discussed, here is a list of questions/clarifications I had regarding the secondary containment plan:

1. Are the swales and secondary containment pond lined or constructed within an impermeable substrate?
2. How will you ensure any potential spill events are contained within the secondary containment pond if the gate valve is left in the open position?
3. Is the gate valve a locking position indicator valve to prevent tampering (e.g., if trespassing is an issue at the site) and to indicate that the valve is properly in the locked position in the event of a spill?
4. Will you be proposing an inspection and monitoring plan for the secondary containment pond (e.g., testing the valve to ensure locking remains functional if the valve will be left in the open position)?
5. Do you need to heat trace any of the secondary containment infrastructure (e.g., valves and piping above the frost depth if necessary)?

Thank you for your time,

Amanda Tse, P.Eng.

Senior Waste Engineer

Environmental Assessment and Permissions Division

Ontario Ministry of the Environment, Conservation and Parks

135 St. Clair Ave. W, Toronto, ON, M4V 1P5

amanda.tse@ontario.ca
(705) 761-6723

**PETAWAWA NET-ZERO PROJECT
STORMWATER MANAGEMENT AND SECONDARY CONTAINMENT
DESIGN REPORT
560 ABBIE LANE, PETAWAWA, ONTARIO**

**STONECREST ENGINEERING INC.
440 Wright Blvd.
STRATFORD, ONTARIO**

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**PETAWAWA NET-ZERO PROJECT
STORMWATER MANAGEMENT AND SECONDARY CONTAINMENT
DESIGN REPORT
560 ABBIE LANE, PETAWAWA, ONTARIO**

File no. 8549

1.0 INTRODUCTION

Stonecrest Engineering Inc. was retained by Anaergia to provide the design for secondary containment and stormwater management to satisfy the requirements for a Renewable Energy Approval under Ontario Regulation 359/09.

The subject property is located at 560 Abbie Lane, Petawawa, Ontario. The property is an established Water Pollution Control Plant (WPCP) with anaerobic digestion.

This report documents the design of a stormwater management system secondary containment design for the site located at 560 Abbie Lane in the Town of Petawawa. This report is to be read in conjunction with other submitted documents, including the engineering design drawings (provided separately) which provide the proposed design and construction details.

2.0 SITE INFORMATION

2.1 Overview of Site Operations

The Petawawa Water Pollution Control Plant has existing anaerobic digestion facilities to digest an organic slurry and wastewater solids. The Petawawa Net-Zero Project is upgrading the existing facilities to generate electricity using combined heat and power (CHP). Overall, the upgrades account for an impervious area increase of less than 1%.

The modifications to the site include:

- Improving the anaerobic digesters so they are compliant with current regulations administered by Technical Standards and Safety Authority;
- Modifying the digesters so they can accept an organic slurry;
- Construction of concrete pads for placement of equipment;
- Addition of biogas cleaning and conditioning equipment; and
- Installation of a CHP with a nameplate capacity of 200 kWe to generate electricity and heat.

2.2 Contaminant Overview

The anaerobic digestion facility is designed to handle and process biomass, source separated organics, farm materials, and digestate. The primary function of the anaerobic digestion facility is to treat

wastewater from the Town of Petawawa, reducing the risk of contamination. The wastewater solids fed into the digester have a total solids content of 2-3%. The organic slurry is expected to have a total solids content of 15%, and will make up approximately 10% of the liquid being fed into the digesters.

2.3 Existing Drainage Patterns

The site has an established stormwater management network which utilizes swales to reduce flow velocities and directs water towards the property outlets.

The drainage patterns and features referenced in this report are from the Site Investigation Report completed by Cambium (Cambium 11757-002) and the topographical survey provided to Stonecrest by Anaergia.

Figure 1 provides an overview of the existing drainage at the site. Most of the property outlets through the swale and culvert located on the east side of the property. These flows ultimately are received by the Ottawa River. The north-west corner of the property is drained via a swale to the unnamed water course.



Figure 1: Existing Drainage Patterns and Features on the Site

3.0 DESIGN CRITERIA

3.1 Site Definition

The area of study for the secondary containment and stormwater quantity controls were limited to the areas which may be affected by the current proposed development. It was decided that the stormwater in all areas outside of areas outside of secondary containment were appropriately handled by existing stormwater infrastructure.

The area of study was determined by observing the flow directions (as shown in Figure 1) around the anaerobic digestion equipment. The study area boundary encapsulates the area that may be affected in the event of a spill.

3.2 Secondary Containment Design Criteria

The *Guidelines for environmental protection measures at chemical and waste storage facilities* set out by the Government of Ontario recommend a containment capacity of 100% of the volume of the largest tank plus the greater of 10% of the volume of the largest tank or 10% of the aggregate volume of all remaining tanks. Other factors to consider during design include:

- Ensure the containment area shall be structurally sound and has soils or is lined with material having adequate hydraulic conductivity to prevent excessive infiltration.
- The containment area shall be designed to withstand a 100-year storm event.
- All grades within the project area shall be sloped towards the containment pond to ensure no pooling of contaminants occurs.

3.3 Stormwater Management Design Criteria

The Town of Petawawa follows the Stormwater Management Criteria set out in the Ontario Ministry of the Environment *Stormwater Management Planning and Design Manual (2003)* for Water Quality.

As the receiving aquatic habitat of the project area (Ottawa River) is relatively insensitive to stormwater impacts, Basic Protection can be used for the design of end-of-pipe volumes. Basic Protection corresponds to the long-term average removal of 60% of suspended solids. Table 1 outlines the requirements for Basic Protection set out by the MECP Design Manual.

Table 1: Water Quality Storage Requirements

% Impervious	0%	35%	20.8%
SWMP Type	Dry-Pond (Continuous Flow)		
Storage Volume Requirement	0 m ³ /ha	90 m ³ /ha	53.6 m ³ /ha

The new additions to the site account for less than a 1% increase in impervious area. With such minimal increase to this value, the Town of Petawawa permitted the assumption that the existing infrastructure on the site could handle storm water runoff volumes.

To protect the receiving aquifer, the secondary containment capacity must also be able to handle the volumes produced by a 100-year design storm event.

4.0 SECONDARY CONTAINMENT DESIGN

Secondary containment must be provided for the structures associated with the renewable energy project that store potential contaminants. This includes Digesters 3 and 4, and both Digestate Storage tanks. Digesters 1 and 2 have been decommissioned and no longer store any material, nor is there an intention to store material in these digesters in the future. Table 2 outlines the above grade capacities of these facilities.

Table 2: Above Grade Storage Volumes.

Storage Structure	Above Grade Volume
Digester 3	776 m ³
Digester 4	967 m ³
Digestate Storage 1	2100 m ³
Digestate Storage 2	2100 m ³

As per the criteria outlined in Section 3.3, the volume required for secondary containment is 2484 m³. This value does not include the necessary volumes to withstand a 100-year storm. The secondary containment pond shall be lined with suitable soils.

5.0 STORMWATER MANAGEMENT DESIGN

5.1 Design Approach

The increase in stormwater quantity is of minimal concern as there is only a 0.9% increase in imperviousness in the study area. However, to properly design a secondary containment system the containment area must be able to hold both the secondary containment design volume with the additional safety factor of the volume for a 100-year storm.

Runoff volumes for a 100-year 24-hour storm were calculated using the Modified Rational Method. IDF data used was for PEMBROKE CLIMATE Station (6106367).

5.3 Drainage Area and Control Methods

The discharge rates are consistent with the previous discharge rates due to the minimal increase in impervious surfaces. The following components form the conditions of the study area:

Study Area Conditions

i)	Buildings/digesters	1657 m ²
ii)	Pavement/concrete	2380 m ²
iii)	Grassed	<u>15341 m²</u>
		19378 m ²

To meet the stormwater management quantity control criteria, an additional 510 m³ of storage is required.

5.4 Quality Control

The study area is 19378 m² (1.9 ha), with an imperviousness of 21%. Based on the criteria outlined in Section 3.3, 104 m³ of Continuous Flow Dry-Pond is prescribed to achieve 60% suspended solids removal. Due to the increased pond volume required for secondary storage, the storage volume required for water quality control is exceeded.

To ensure water quality is protected from surface water contamination, the surface water features (swales and pond) are to be vegetated.

6.0 DESIGN SUMMARY

The study area drains into the existing swales surrounding the study area which direct surface water to the pond. The pond has sufficient volume to hold both the required volume for secondary containment and for a 100-year storm event. The total storage volume required is 2994 m³.

The outlet of the pond shall be through a 600 mm pipe with a gate valve. The valve shall be left open to allow for stormwater flow to pass through the site outlet. As a spill is unlikely to occur rapidly and the with the length of the proposed flow path there should be sufficient time to manually close the valve prior to discharging into the receiver. In the event of a spill, the valve shall be manually closed and kept closed until the spill can be appropriately remediated. The pond shall be lined with material having a low hydraulic conductivity to minimize excessive infiltration.

The area north of the study area which previously drained to the same swale has been redirected to a new, adjacent swale of equivalent storage volumes. This outlet of this swale ties into the existing outlet to the Ottawa River. No additional runoff volumes are expected on the site.

All swales and the pond shall be vegetated to enhance nutrient uptake and reduce erosion, improving water quality reaching the site outlet. Several factors to consider when selecting plants include but are not limited to climate conditions, soil conditions, frequency of flooding, maintenance requirements, and availability.

7.0 CONCLUSION AND RECOMMENDATIONS

In summary, the features of the storm water management system are as follows:

- A containment pond sized for secondary storage of digester and digestate storage materials able to withstand the runoff volumes produced from a 100-year design storm event.
- Recreation of the existing outlet swale to handle the stormwater from the rest of the site.

We recommend the storm water management system be constructed as shown on the Drawing G1 which accompanies this report.

All of which is respectfully submitted.

STONECREST ENGINEERING INC.

Per:

N. Hendry, P.Eng.

**PETAWAWA NET-ZERO PROJECT
STORMWATER MANAGEMENT AND SECONDARY CONTAINMENT
DESIGN REPORT
560 ABBIE LANE, PETAWAWA, ONTARIO**

APPENDIX A – STORMWATER VOLUME ANALYSIS

Modified Rational Method:

$$Q = kCiA$$

k 2.78
C Runoff coefficient
i Rainfall Intensity (mm/hr)
A Contribution Area (ha)

Rainfall Parameters:

Climate Station	Rainfall Event	I (mm/hr)	Duration (hr)
PEMBROKE CLIMATE	100-yr	3.4	24

Catchment Characteristics:

Surface Type	Area (m ²)	Runoff Coefficient (C)
Building	1657	0.9
Asphalt/Concrete	2379	0.9
Grassed	15342	0.17
Total:	19378	0.32

Storage Volume Calculation:

Rainfall Event	C	I (mm/hr)	A (ha)	Q (L/s)	Duration (hr)	Volume (m3)
100-yr	0.32	3.4	1.94	5.9	24	509.7

**PETAWAWA NET-ZERO PROJECT
STORMWATER MANAGEMENT AND SECONDARY CONTAINMENT
DESIGN REPORT
560 ABBIE LANE, PETAWAWA, ONTARIO**

APPENDIX B – STORAGE VOLUME ANALYSIS

Secondary Containment Volume Requirements

Structure	Above Grade Volume
Digester 3	776 m ³
Digester 4	967 m ³
Digestate Storage 1	2100 m ³
Digestate Storage 2	2100 m ³
Secondary Containment Required	2484 m³

Total Storage Volume Required

100-year 24-hour Storm Volume	510 m ³
Secondary Containment Volume	2484 m ³
Total Volume:	2994 m³

Existing Outlet Swale Stage Storage:

Pond Elevation	Area (m ²)	Volume (m ³)	Cumulative Volume (m ³)
113.40	0.59	0.00	0.00
113.50	13.35	0.70	0.70
113.60	47.88	3.06	3.76
113.70	112.05	8.00	11.75
113.80	205.12	15.86	27.61
113.90	291.39	24.83	52.44
114.00	418.90	35.51	87.95
114.10	5.27	21.21	109.16
114.20	8.26	0.68	109.84
114.30	11.95	1.01	110.85
114.40	16.28	1.41	112.26
114.50	21.28	1.88	114.14

Designed Outlet Swale Stage Storage:

Pond Elevation	Area (m ²)	Volume (m ³)	Cumulative Volume (m ³)
113.60	1.44	0.00	0.00
113.70	13.80	0.76	0.76
113.80	39.00	2.64	3.40
113.90	77.02	5.80	9.20
114.00	127.73	10.24	19.44
114.10	191.14	15.94	35.38
114.20	266.93	22.90	58.29
114.30	355.18	31.11	89.39
114.40	1306.17	83.07	172.46
114.50	1284.73	129.54	302.01
114.60	1265.37	127.50	429.51
114.70	1246.60	125.60	555.11

Secondary Storage Pond Design Stage Storage:

Pond Elevation	Area (m ²)	Volume (m ³)	Cumulative Volume (m ³)
113.00	0.00	0.00	0.00
113.10	337.94	16.90	16.90
113.20	694.06	51.60	68.50
113.30	1073.92	88.40	156.90
113.40	1477.82	127.59	284.48
113.50	1903.87	169.08	453.57
113.60	2162.67	203.33	656.89
113.70	2260.45	221.16	878.05
113.80	2359.23	230.98	1109.03
113.90	2458.95	240.91	1349.94
114.00	2559.64	250.93	1600.87
114.10	2661.30	261.05	1861.92
114.20	2763.92	271.26	2133.18
114.30	2867.50	281.57	2414.75
114.40	2972.05	291.98	2706.73
114.50	3077.56	302.48	3009.21

Appendix F-1 – Indigenous Communities Distribution List

**Ministry of the Environment,
Conservation and Parks**

**Ministère de l'Environnement,
de la Protection de la nature
et des Parcs**

Environmental Assessment
Branch

Direction des évaluations
environnementales

1st Floor
135 St. Clair Avenue W
Toronto ON M4V 1P5
Tel.: 416 314-8001
Fax.: 416 314-8452

Rez-de-chaussée
135, avenue St. Clair Ouest
Toronto ON M4V 1P5
Tél. : 416 314-8001
Télec. : 416 314-8452

June 19, 2025

Trevor Woodtke
Asset/Energy Management Coordinator
Town of Petawawa
1111 Victoria Street. Petawawa, ON K8H 2E6
Sent by email only to: twoodtke@petawawa.ca

Dear Trevor Woodtke:

RE: Updated Indigenous communities consultation list

As identified in the Ministry of the Environment, Conservation and Parks' (ministry's) May 12, 2025 letter, the ministry categorized the proposed amendment to the Renewable Energy Approval (REA) for the Anerobic Digestion Facility at the Petawawa Water Pollution Control Plant (known as the Petawawa Net Zero Project) to incorporate the secondary containment plan, stormwater management plan and groundwater monitoring plan as a technical change and prescribed additional notification requirements.

This letter serves to provide the Town of Petawawa (Town) with an updated list of Indigenous communities that the Town is required to provide notice to in order to comply with the requirements outlined in the ministry's May 12, 2025, letter.

The Town is required to provide the notice referenced in the ministry's May 12, 2025 to the following Indigenous communities:

1. Alderville First Nation

- To: Chief Taynar Simpson, tsimpson@alderville.ca
- Cc: Dave Simpson, Lands & Resources Coordinator, consultation@alderville.ca

* Please copy Karry Sandy McKenzie at inquiries@williamstreatiesfirstnations.ca on all correspondence.

2. Algonquins of Ontario (AOO)

- To: Algonquins of Ontario, algonquins@tanakiwin.com
- Cc: Jim Meness, Executive Director, jmeness@tanakiwin.com

*Please copy AOP on any correspondence going to AOO and vice versa.

3. Algonquins of Pikwàkanagàn First Nation (AOP)

- To: Chief Gregory Sarazin, chief.pik@pikwakanagan.ca, chiefcouncil@pikwakanagan.ca,
- Cc: Amanda Two-Axe Kohoko, Consultation Coordinator, consultation@pikwakanagan.ca

*Please copy AOO on any correspondence going to AOP and vice versa.

4. Curve Lake First Nation

- To: Chief Keith Knott, KeithK@curvelake.ca
- Cc: Shannon Day, Executive Assistant to Chief and Council, ShannonD@curvelake.ca

* Please copy Karry Sandy McKenzie at inquiries@williamstreatiesfirstnations.ca on all correspondence.

5. Hiawatha First Nation

- To: Chief Laurie Carr, chiefcarr@hiawathafn.ca
- Cc: Tom Cowie, Lands Resource Consultation Liaison, tcowie@hiawathafn.ca

* Please copy Karry Sandy McKenzie at inquiries@williamstreatiesfirstnations.ca on all correspondence.

6. Kitigan Zibi Anishinabeg

- To: Chief Jean Guy Whiteduck, jeanguy.whiteduck@kza.qc.ca

7. Métis Nation of Ontario Region 5 - Mattawa/Ottawa River Métis Community

- To: Linda Norheim, Director, Lands, Resources and Consultations, consultations@metisnation.org
- Cc: Roger Rose, Regional Councillor Region 5, rogerr@metisnation.org

8. Mississaugas of Scugog Island First Nation

- To: Chief Kelly LaRocca, klarocca@scugogfirstnation.com
- Cc: Don Richardson, Consultation Coordinator,
drichardson@scugogfirstnation.com

* Please copy Karry Sandy McKenzie at
inquiries@williamstreatiesfirstnations.ca on all correspondence.

Please note none of the foregoing should be taken to imply approval of this REA amendment application. You should also be aware that information upon which the above list of Indigenous communities is based is subject to change. Indigenous communities can make assertions at any time, and other developments, for example the discovery of Indigenous archaeological resources, can occur that may require additional Indigenous communities to be notified. Similarly, if you receive any feedback from any Indigenous communities not included in this list during the REA amendment process the ministry would appreciate being notified.

If you have any questions, please feel free to contact me at 289-980-0466 or by email at kendrick.doll@ontario.ca

Yours sincerely,



Kendrick Doll
Senior Project Evaluator
Environmental Assessment Branch

c: Mohsen Keyvani, Manager, MECP Waste Approval
Shannon Dennie, Indigenous Advisor, MECP EA Program Support
Tracy Hart, Manager, MECP Ottawa District
Kerry Tuyen, Director, OCWA Innovation, Technology and Alternate Delivery

Appendix F-2 – Indigenous Communities Correspondence

Trevor Woodtke

From: Planning
Sent: June 25, 2025 1:38 PM
To: tsimpson@alderville.ca
Cc: consultation@alderville.ca; afnreception@alderville.ca; inquiries@williamstreatiesfirstnations.ca
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: 20250619-Letter-IndConsultList_Amend.pdf; Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf

To Chief Taynar Simpson,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



Planning and Development

Town of Petawawa
613-687-5536
www.petawawa.ca
1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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Trevor Woodtke

From: Julie Kapyrka <jkapyrka@alderville.ca>
Sent: July 23, 2025 8:17 PM
To: Planning
Cc: Taynar Simpson
Subject: Petawawa Net Zero Project
Attachments: Notice of Proposed Project Changes to the Petawawa Net Zero Project - June 2025.pdf

Follow Up Flag: Follow up
Flag Status: Completed

You don't often get email from jkapyrka@alderville.ca. [Learn why this is important](#)

Aaniin,

Please see attached.

Miigwech,

Dr. Julie Kapyrka
Consultation Manager



Administration Office
11696 Second Line Rd.
Roseneath, ON K0K 2X0
Office: 905-352-2662
jkapyrka@alderville.ca



ALDERVILLE FIRST NATION

11696 Second Line Road
Roseneath, Ontario K0K 2X0
Phone: (905) 352-2011
Fax: (905) 352-3242
www.alderville.ca

Chief: Taynar Simpson
Councillor: Dawn Marie Kelly
Councillor: Lisa McDonald
Councillor: Nora Sawyer
Councillor: Jason Marsden

VIA E-MAIL

July 23, 2025

Trevor Woodtke, Asset/Energy Management Coordinator
Petawawa Net Zero Project Proposed Project Changes
Town of Petawawa, Public Works Department
Phone: 613-687-5536 x 2026 | Email: planning@petawawa.ca

Dear Trevor Woodtke,

RE: Notice of Proposed Project Changes to the Petawawa Net Zero Project

I would like to acknowledge receipt of your correspondence, which was received June 25th, 2025, regarding the above noted project.

As you may be aware, the area in which this project is proposed is situated within the Traditional and Treaty Territory of Alderville First Nation. Our First Nation's Territory is incorporated within the Williams Treaties Territory and was the subject of a claim under Canada's Specific Claims Policy, which has now been settled. All 7 First Nations within the Williams Treaties have had their harvesting rights legally re-affirmed and recognized through this settlement (2018).

In addition to Aboriginal title, Alderville First Nation rights in its Reserve and Traditional Territory and/or Treaty Territory include rights to hunt, fish and trap, to harvest plants for food and medicine, to protect and honour burial sites and other significant sites, to sustain and strengthen its spiritual and cultural connection to the land, to protect the Environment that supports its survival, to govern itself, sustain itself and prosper including deriving revenues from its lands and resources, and to participate in all governance and operational decisions about how the land and resources will be managed, used and protected.

Alderville First Nation is requiring a File Fee for this project in the amount of \$300.00. This Fee includes administration, an initial meeting, project updates as well as review of standard material and project overviews. Depending on the number of documents to be reviewed by the Consultation Department, additional fees may apply. **Please make this payment to Alderville First Nation and please indicate the project name or number on the cheque.**

Proudly working together to build a prosperous and healthy environment that promotes independence, honours and respects our values, and enhances our way of life.

If you do not have a copy of Alderville First Nation's Consultation Protocol, it is available at: alderville.ca/wp-content/uploads/2017/02/AFNProtocol2.pdf. Please note that the mapping in this document needs updating to reflect the Williams Treaties First Nations Settlement Agreement 2018.

In order to assist us in providing you with timely input, please provide us with a Notice of Request to Consult containing relevant information and material facts in sufficient form and detail to assist Alderville First Nation to understand the matter in order to prepare a meaningful response. Guidance for giving notice can be found on pages 11-12 of our Consultation Protocol. Based on the information that you have provided us with respect to the notice of **Notice of Proposed Project Changes to the Petawawa Net Zero Project**, Alderville First Nation may require a mutual agreement to establish a special consultation process for this project. After the information is reviewed it is expected that you or a representative will be in contact to discuss this matter in more detail and possibly set up a date and time to meet with Alderville First Nation in person or virtually.

Although we have not conducted exhaustive research nor do we have the resources to do so, there may be the presence of burial or archaeological sites in your proposed project area. Please note, that we have particular concern for the remains of our ancestors. Should excavation unearth bones, remains, or other such evidence of a native burial site or any other archaeological findings, we must be notified without delay. In the case of a burial site, Council reminds you of your obligations under the *Cemeteries Act* to notify the nearest First Nation Government or other community of Aboriginal people which is willing to act as a representative and whose members have a close cultural affinity to the interred person. As I am sure you are aware, the regulations further state that the representative is needed before the remains and associated artifacts can be removed. Should such a find occur, we request that you contact our First Nation immediately.

Furthermore, Alderville First Nation also has available, trained Archaeological Liaisons who can actively participate in the archaeological assessment process as a member of a field crew, the cost of which shall be borne by the proponent. Alderville First Nation expects engagement at Stage 1 of an archaeological assessment, so that we may include Indigenous Knowledge of the land in the process. We insist that at least one of our Archaeological Liaisons be involved in any Stage 2-4 assessments, including test pitting, and/or pedestrian surveys, to full excavation.

Although we may not always have representation at all stakeholders' and rights holders' meetings, it is our wish to be kept apprised throughout all phases of this project.

Should you have further questions or if you wish to hire a Liaison for a project, please feel free to contact Julie Kapyrka, Consultation Manager, at 905-352-2662 or via email at jkapyrka@alderville.ca.

Yours sincerely,



Chief Taynar Simpson
Alderville First Nation

Trevor Woodtke

From: Julie Kapyrka <jkapyrka@alderville.ca>
Sent: July 28, 2025 1:31 PM
To: Planning
Cc: Jordon MacArthur
Subject: RE: Petawawa Net Zero project
Attachments: AFN Invoice 148 - Filing Fee - Petawawa Net Zero Project - July 2025.pdf

Follow Up Flag: Follow up
Flag Status: Completed

You don't often get email from jkapyrka@alderville.ca. [Learn why this is important](#)

Aaniin Trevor,

Please see attached invoice.

Miigwech,

Dr. Julie Kapyrka
Consultation Manager



Administration Office
11696 Second Line Rd.
Roseneath, ON K0K 2X0
Office: 905-352-2662
jkapyrka@alderville.ca

From: Planning <planning@petawawa.ca>
Sent: July 28, 2025 11:01 AM
To: Julie Kapyrka <jkapyrka@alderville.ca>
Cc: Planning <planning@petawawa.ca>
Subject: Re: Petawawa Net Zero project

Hello Julie,

Please issue the invoice for the \$300 file fee to the attention of the following Town contact. You may email the invoice to the planning@petawawa.ca email. Once received we will process the invoice for payment as soon as possible.

Attention to:

Trevor Woodtke
Asset/Energy Management Coordinator
Town of Petawawa

1111 Victoria Street, Petawawa, ON K8H 2E6

Thank you!

Trevor Woodtke, C.Tech.

Asset/Energy Management Coordinator

Town of Petawawa

613-687-5536 x 2026

www.petawawa.ca

1111 Victoria Street, Petawawa, Ontario, K8H 2E6



Planning and Development

Town of Petawawa

613-687-5536

www.petawawa.ca

1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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From: Julie Kapyrka <jkapyrka@alderville.ca>

Sent: 28 July 2025 10:41

To: Planning <planning@petawawa.ca>

Subject: Petawawa Net Zero project

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Aaniin Trevor,

I received your phone message, thank you.

Please let me know who to make the invoice out to – and I will send over right away.

The best way to communicate with me right now is through e-mail.

Miigwech.

All the best,

Dr. Julie Kapyrka
Consultation Manager



Administration Office
11696 Second Line Rd.
Roseneath, ON K0K 2X0

Office: 905-352-2662
jkapyrka@alderville.ca

Trevor Woodtke

From: Trevor Woodtke
Sent: September 9, 2025 8:03 AM
To: 'Julie Kapyrka'
Subject: RE: Petawawa Net Zero Project

Hi Julie,

When you receive the Teams invite, please forward to any other representatives as needed or let me know their emails and I can add them to the meeting invite.

Cheers,

Trevor Woodtke, C.Tech.

Asset/Energy Management Coordinator
Town of Petawawa
613-687-5536 x 2026
www.petawawa.ca
1111 Victoria Street, Petawawa, Ontario, K8H 2E6

From: Julie Kapyrka <jkapyrka@alderville.ca>
Sent: September 8, 2025 4:18 PM
To: Trevor Woodtke <twoodtke@petawawa.ca>
Subject: RE: Petawawa Net Zero Project

Thanks!

Dr. Julie Kapyrka
Consultation Manager



11696 Second Line Rd.
Roseneath, ON K0K 2X0
905-352-2662
jkapyrka@alderville.ca

From: Trevor Woodtke <twoodtke@petawawa.ca>
Sent: Monday, September 8, 2025 4:02 PM
To: Julie Kapyrka <jkapyrka@alderville.ca>
Subject: RE: Petawawa Net Zero Project

Hi Julie,

I can confirm that our project team is able to meet on Oct 1 at 1:00 pm. I will send a virtual meeting invite soon. Please let me know if there is anything you need from our project team ahead of the virtual meeting.

Regards,

Trevor Woodtke, C.Tech.

Asset/Energy Management Coordinator

Town of Petawawa

613-687-5536 x 2026

www.petawawa.ca

1111 Victoria Street, Petawawa, Ontario, K8H 2E6

From: Julie Kapyrka <jkapyrka@alderville.ca>

Sent: August 31, 2025 3:47 PM

To: Trevor Woodtke <twoodtke@petawawa.ca>

Subject: RE: Petawawa Net Zero Project

Aaniin Trevor,

Thank you for your e-mail.

Apologies, but the earliest availability I have is October 1st at 1pm.

If that date and time works for your team, please send a calendar invite and a link for a virtual meeting.

Miigwech.

All the best,

Dr. Julie Kapyrka

Consultation Manager



11696 Second Line Rd.

Roseneath, ON K0K 2X0

905-352-2662

jkapyrka@alderville.ca

From: Trevor Woodtke <twoodtke@petawawa.ca>

Sent: Monday, August 25, 2025 3:05 PM

To: Julie Kapyrka <jkapyrka@alderville.ca>

Cc: Taynar Simpson <tsimpson@alderville.ca>

Subject: RE: Petawawa Net Zero Project

Hello Julie,

Thank you to the Alderville First Nation for your response to the Town of Petawawa's Notice of Proposed Project Changes to the Petawawa Net Zero Project, located at the Town's water pollution control plant

(WPCP). The Town, along with our partners the Ontario Clean Water Agency (OCWA) and Anaergia, are committed to fulfilling the consultation process in support of our application to amend the project's Renewable Energy Approval (REA) with respect to the proposed project changes.

Hopefully the AFN has received a cheque issued by the Town of Petawawa for payment of the \$300 file fee as requested in your letter dated July 23, 2025. Please let us know if not and we will resolve the matter as soon as possible.

As a next step, our project team would like to offer a virtual introduction meeting with AFN representatives. The purpose of the introduction meeting will be to provide some background information on the project and the proposed project changes which may help to streamline the review by AFN representatives.

Please let us know some available dates/times within the next 1-3 weeks that you may have for a virtual introduction meeting.

Thank you,



Trevor Woodtke, C.Tech.
Asset/Energy Management Coordinator
Town of Petawawa
613-687-5536 x 2026
www.petawawa.ca
1111 Victoria Street, Petawawa, Ontario, K8H 2E6

My working hours and your working hours may be different. Please do not feel obligated to reply outside your normal working hours.

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From: Julie Kapyrka <jkapyrka@alderville.ca>

Sent: July 23, 2025 8:17 PM

To: Planning <planning@petawawa.ca>

Cc: Taynar Simpson <tsimpson@alderville.ca>

Subject: Petawawa Net Zero Project

You don't often get email from jkapyrka@alderville.ca. [Learn why this is important](#)

Aaniin,

Please see attached.

Miigwech,

Dr. Julie Kapyrka
Consultation Manager



Administration Office
11696 Second Line Rd.
Roseneath, ON K0K 2X0
Office: 905-352-2662
jkapyrka@alderville.ca

Trevor Woodtke

From: Trevor Woodtke
Sent: October 2, 2025 3:02 PM
To: Julie Kapyrka
Cc: Chris Mantha; Kerry Tuyen (OCWA); Bhavik Vyas (OCWA); Brad Sweet (OCWA); Kevin Lutes (Anaergia)
Subject: RE: Petawawa Net Zero Project - Review Meeting
Attachments: Petawawa Net Zero Project-AldervilleFN-251001.pdf; Archaeological Assessment Stage 1_2022_Petawawa Net Zero Project.pdf

Hi Julie,

Thank you for meeting virtually with our project team to learn more about the Town's net zero project and the proposed project changes for which the Town is seeking an amendment to the project's Renewable Energy Approval (REA). We appreciate your interest and questions along with the valuable insights that you shared with our project team.

Per your request, our project team will provide you with a copy of our consultation report that will be prepared to support our REA amendment application. Additionally, the following documents are attached to this email for your reference:

- presentation slide deck from our Oct 1 virtual meeting, and
- Stage 1 Archaeological Assessment that was completed at the request of the Algonquins of Ontario following consultation in 2022.

As detailed in our presentation, our project has been subject to meeting the requirements of the MECP REA process. Here are some key links regarding the this approval process.

REA Process:

<https://www.ontario.ca/page/renewable-energy-approvals>

REA Technical Guidelines:

<https://www.ontario.ca/document/technical-guide-renewable-energy-approvals-0>

Thank you again for meeting with our project team. Please reach out to us should you have any further questions.

Best regards,



Trevor Woodtke, C.Tech.

Asset/Energy Management Coordinator

Town of Petawawa

613-687-5536 x 2026

www.petawawa.ca

1111 Victoria Street, Petawawa, Ontario, K8H 2E6

My working hours and your working hours may be different. Please do not feel obligated to reply outside your normal working hours.
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-----Original Appointment-----

From: Trevor Woodtke

Sent: September 9, 2025 8:16 AM

To: Julie Kapyrka; Kerry Tuyen (OCWA); Bhavik Vyas (OCWA); Brad Sweet (OCWA); Kevin Lutes (Anaergia)

Cc: Chris Mantha

Subject: Petawawa Net Zero Project - Review Meeting

When: October 1, 2025 1:00 PM-2:00 PM (UTC-05:00) Eastern Time (US & Canada).

Where: Microsoft Teams Meeting

Hi everyone,

The purpose of the introduction meeting will be to provide some background information on the project and the proposed project changes.

Regards,

Trevor Woodtke, C.Tech.

Asset/Energy Management Coordinator

Town of Petawawa

613-687-5536 x 2026

www.petawawa.ca

1111 Victoria Street, Petawawa, Ontario, K8H 2E6

Petawawa Net Zero Project

Project Info Presented to: Alderville First Nation

DATE: October 1st, 2025

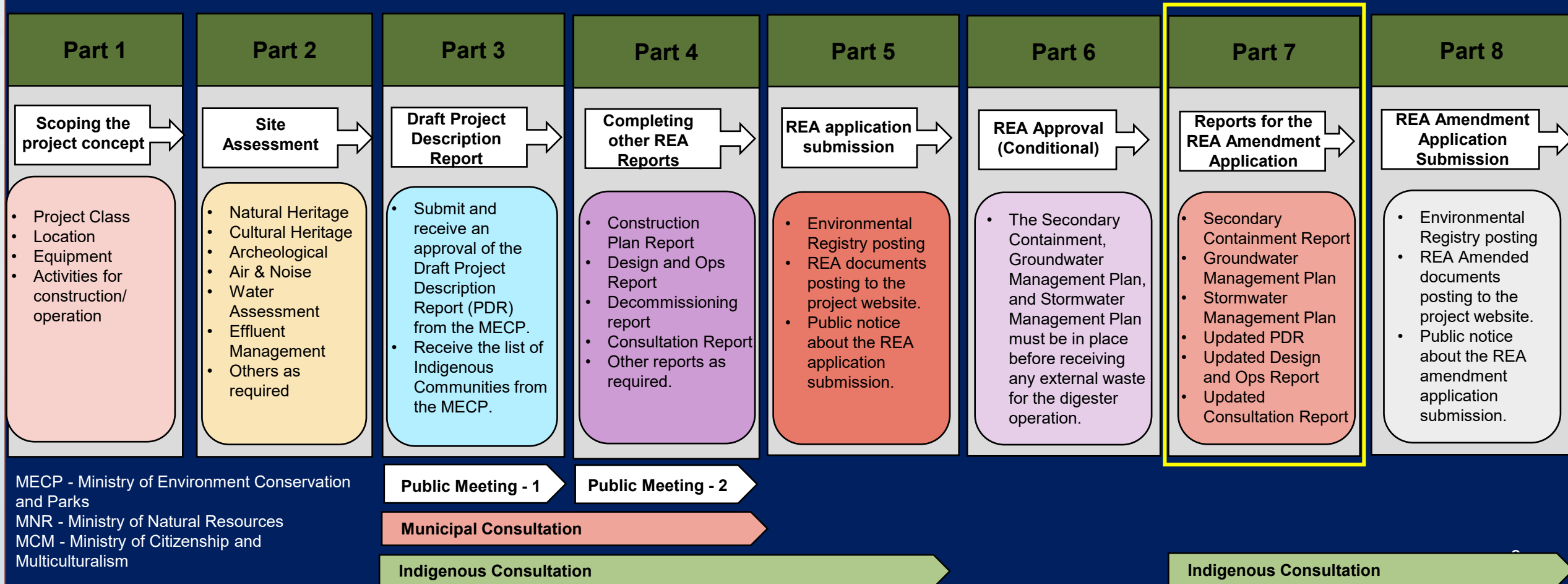


Renewable Energy Approval (REA)

- The REA is an authorization from the Ontario Ministry of the Environment, Conservation and Parks (MECP) for the operation of an energy facility that utilizes a renewable fuel – specifically wind, solar, or biogas.
- The REA outlines legally binding conditions of operation to ensure that the environment and community are protected from any adverse effect associated with the operation of the facility.
- An REA is obtained for a proposed facility through demonstration of compliance with applicable regulations by means of relevant studies, consultations with affected communities, and development of design, construction, operational, and decommissioning plans.

REA Process Overview

Meetings/consultations with key regulatory bodies (MECP, MNR, MCM, local authorities etc) – as required.



Town of Petawawa

- The Town of Petawawa is nestled in the western shore of the Ottawa River, just 160 km west of Ottawa.
- It's the largest community in Renfrew County with a population over 17,000.
- Historically, the town was originally an Algonquin settlement and later a logging town. The Canadian military established a presence in the early 20th century, leading to the development of CFB Petawawa, one of the largest and oldest military bases in Canada.
- The Town owns the Petawawa Water Pollution Control Plant (WPCP).
- The Town has contracted the Ontario Clean Water Agency (OCWA) to operate and maintain both its Water and Wastewater Treatment Facilities.



Petawawa WPCP



- **Location:** 560 Abbie Lane, Petawawa, County of Renfrew, K8H 2E6.
- **Function:** The plant treats domestic sewage from the Town of Petawawa and Garrison Petawawa, a Canadian Forces base.
- **Average Rated Capacity:** 8,730 cubic meters per day.
- **Wastewater Treatment:** The Petawawa WPCP utilizes a Sequencing Batch Reactor (SBR) activated sludge system for wastewater treatment. This system employs four SBR basins in parallel, each with a pre-react zone and a fine pore aeration system. Effluent from the SBR basins is disinfected by a UV system before being discharged into the Ottawa River.
- **Solids Treatment:** Solids generated from the wastewater treatment process are currently stored in two on-site sludge holding tanks. Once stabilized, the solids are transported by truck to designated land application sites.
- **Petawawa WPCP Energy Sources:** Grid electrical use and energy use from natural gas boilers.

Petawawa Net Zero Project – Project Team



Retained by the Town of Petawawa to design and build the Net Zero Project equipment at the Petawawa WPCP.



Owner of the Petawawa WPCP



Contracted by the Town of Petawawa as the operating authority for the Petawawa WPCP,
Providing all necessary on-site support to Anaergia for the execution of the Net Zero Project.

Petawawa Net Zero Project – Drivers

Petawawa WPCP

Facility Optimization Program (FOP) study completed by OCWA in September 2018 recommended for plant upgrades

TSSA requirements for making the existing digesters operational

Beneficial use of biogas/biosolids

GHG emission reduction and landfill diversion of external waste

Funding availability: Low Carbon Economy Fund (LCEF)

Petawawa Net Zero Project – Key Phases

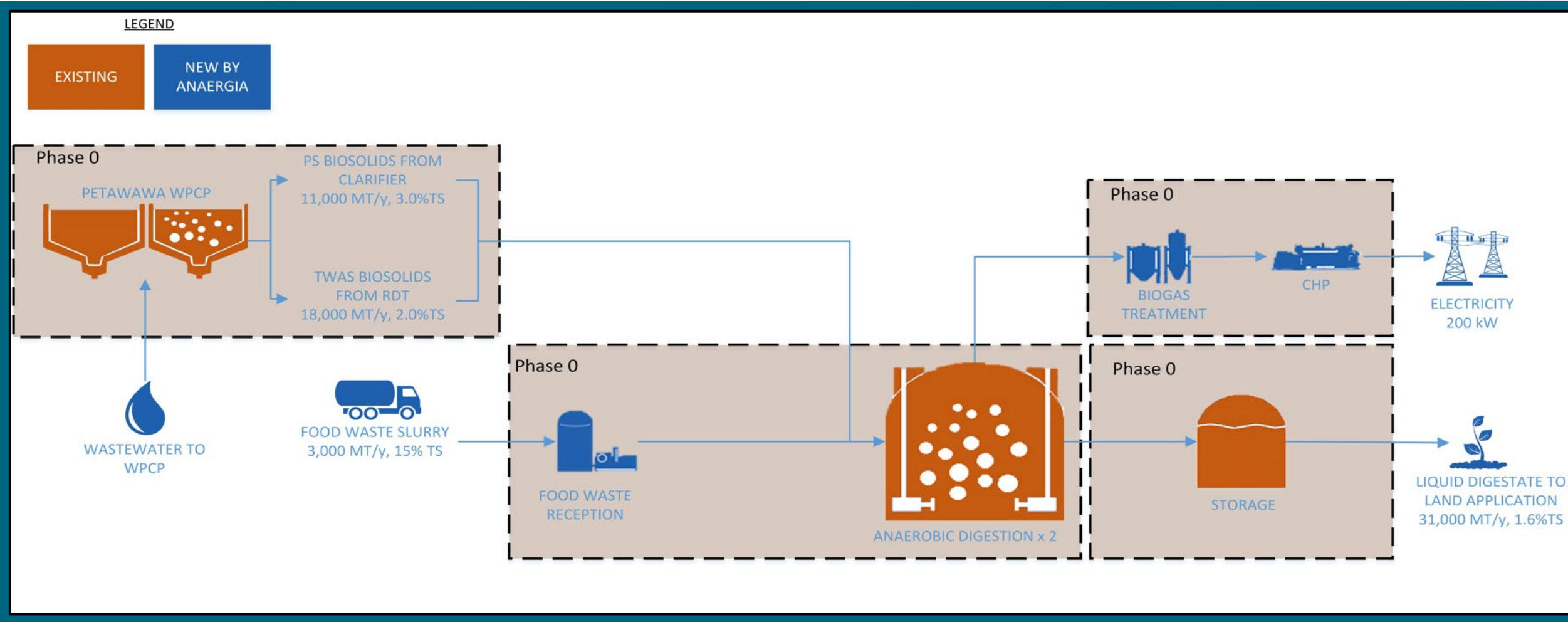
Phase 0: Meet Town's Requirements on Digester Upgrade and Energy Neutrality – In Progress

1. Upgrade existing digesters (#3 and #4) to co-digest the Town's biosolids with external organic waste.
2. Produce renewable electrical energy to meet Technical Standards and Safety Authority (TSSA) permit renewal requirements.
3. Offset the plant's base electrical demand with renewable energy, enhancing operational resilience.

Phase 2 (Improve environmental attributes and financial performance) – Timeline not defined yet.

1. Augment digestate management with dewatering to reduce truck traffic and generate quality feedstock for composting.
2. Enhance biogas utilization by adding renewable natural gas generating system.

Petawawa Net Zero Project – Phase 0



CHP Design & Operation Benefits

- **Size:** 192 kW_e
- **Biogas source:** Designed to utilize 100% of the biogas generated at the Petawawa WPCP.
- **Biogas Use:** 100% of the biogas will be used in the CHP system.
- **Heat use:** Process and space heating
- **Electricity use:** Onsite with a net metering arrangement with Hydro One.
- Once the CHP system becomes operational, it is expected to meet 100% of the plant's electricity demand through the electricity generated by the system.
- The implementation of the CHP system, along with the utilization of external waste in the digesters to produce biogas for the system, is expected to reduce annual greenhouse gas (GHG) emissions by approximately 16,160 tCO₂e.

Net Zero Equipment Locations



Provincial and Local Municipal Permits Requirements

- Ministry of Environment, Conservation and Parks (MECP)
- Ministry of Natural Resource and Forestry (MNRF)
- Ministry of Citizenship and Multiculturalism (MCM)
- Ministry of Labour (MOL)
- Ministry of Transportation (MTO)
- Hydro One Networks Inc.
- Electrical Safety Authority (ESA)
- Technical Standards and Safety Authority (TSSA)

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Project Description Report	<p>The Project Description Report provides a comprehensive overview of:</p> <ul style="list-style-type: none">○ Project components○ Project contact information○ Project location○ Proposed technology○ Nameplate capacity○ Facility classification○ Key project activities○ Preliminary project schedule○ Summarizes the potential environmental impacts	Completed in August 2022	<ul style="list-style-type: none">○ N/A

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Construction Plan Report	<p>The Construction Plan Report focuses on the:</p> <ul style="list-style-type: none">○ Construction activities for the Biogas Utilization Project○ Identifies potential negative environmental effects○ Describes mitigation measures to address these effects.	Completed in August 2022	<ul style="list-style-type: none">○ Construction will take place entirely within the fenced perimeter of the Petawawa WPCP.○ Excess soils that cannot be used for backfill will be removed and used in local projects where appropriate or sold to third parties as fill material.○ Air quality impacts will be temporary during the construction only with not all sources emitted at the same time.○ Site clearing will be scheduled to begin in during appropriate periods when wind speeds are anticipated to be low, which will minimize the creation of dust.○ Activities that result in excessive noise emissions will be scheduled to occur after 9:00 am and before 5:00 pm to avoid disturbing sensitive receptors.○ Truck drivers will be licensed to operate the size and weight of equipment brought to the site and will travel to the site primarily during daylight hours in order to reduce the likelihood of vehicle accidents.○ The site supervisor or designate will communicate to the truck drivers and vehicle operators to reduce speeds while on the site during the construction.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Design and Operations Report	<p>The Design and Operations Report focuses on the:</p> <ul style="list-style-type: none">○ Project site plan○ Key project design components and the facility operations plan○ Potential Negative Environmental Effects and mitigation measures○ Emergency Response and Communications Plan	Completed in March 2023	<ul style="list-style-type: none">○ N/A
Decommissioning Plan Report	<p>The Decommissioning Plan Report ensures:</p> <ul style="list-style-type: none">○ The CHP system at Petawawa WPCP is decommissioned responsibly, restoring the site to pre-development conditions and managing waste properly.	Completed in August 2022	<ul style="list-style-type: none">○ The site would be restored to existing conditions, including existing vegetation (grass) and landscaping, and the existing impermeable asphalt and concrete surfaces, to minimize impacts from storm water runoff or dust resulting from a decommissioning process.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Natural Heritage Assessment (NHA) Report	<p>The NHA Report involved:</p> <ul style="list-style-type: none">○ A comprehensive review of provincial, federal, and local records to identify natural heritage features and potential impacts within 120 m of the project locations.	Completed in July 2022	<ul style="list-style-type: none">○ The report identifies some natural features at or near the proposed project location. However, it is expected that all project equipment will be located within the fenced perimeter of the Petawawa WPCP; therefore, the impact on the natural heritage features is expected to be minimal.
Cultural Heritage Assessment Report	<p>The Cultural Heritage Assessment Report focuses on the:</p> <ul style="list-style-type: none">○ Identification and evaluation of any cultural heritage resources within and adjacent to the project location that may be impacted by the proposed Renewable Energy project.	Completed in February 2023	<ul style="list-style-type: none">○ There were no cultural heritage resources identified during the cultural heritage assessment.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Archaeological Assessment Report	<p>The purpose of the Archaeological Assessment is to:</p> <ul style="list-style-type: none">○ Assess the archaeological potential of the project site○ Confirm that the proposed Petawawa WPCP Biogas Utilization Project complies with the Ontario Heritage Act and relevant standards.	Completed in August 2022	<ul style="list-style-type: none">○ The Archaeological Assessment found that the proposed construction locations had been deeply and extensively disturbed by modern construction and landscaping and the study area no longer retained potential for pre-Contact or post Contact archaeological resources.
Noise Study (Acoustic Assessment Report)	<p>The Acoustic Assessment Report evaluates:</p> <ul style="list-style-type: none">○ Noise emissions from existing and proposed equipment, including a new CHP system, to ensure compliance with Ontario's environmental regulations.	Completed in October 2022	<ul style="list-style-type: none">○ A traffic management plan will be implemented to prevent vehicle queues on site and on road around the WPCP to minimize the vehicle noise.○ In the event the project does not operate in accordance with the terms and conditions of the REA, noncompliant components may be shut down until the problem is resolved.○ Regular maintenance program to fix damaged components and would help minimize the likelihood of malfunctioning equipment resulting in excessive noise emissions.○ It was also confirmed that the facility noise impact at each established Point of Reception (POR) is less than the applicable criteria set by the MECP.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Air Emissions Study (Emission Summary and Dispersion Modelling - ESDM Report)	<p>The purpose of the ESDM Report is to:</p> <ul style="list-style-type: none"> Assess emissions from both existing and proposed sources, including a biogas-fueled CHP system, and evaluate their compliance with air quality standards, with a particular focus on points of impingement (POI). 	Completed in July 2022	<ul style="list-style-type: none"> Significant sources of contaminant emissions were identified from the proposed facility, including the exhaust points of the emergency flare, the upgas upgrade system vent, and the CHP unit. However, the impacts of all sources and contaminants were determined to be negligible, consistent with O. Reg. 419/05, and include all wastewater treatment activities at the Petawawa WPCP and any additional on-site sewage treatment activities.
Odour Study Report	<p>The Odour study report assesses:</p> <ul style="list-style-type: none"> Potential odor sources from both existing and proposed project equipment, including a biogas-fueled CHP system and evaluates their environmental effects on nearby receptors. 	Completed in July 2022	<ul style="list-style-type: none"> U.S. EPA's AERMOD model is used to simulate odour dispersion and predict ground-level concentrations. The AERMOD model does not predict any significant negative impact at any of the nearby receptors. Development of the odour control plan for the Petawawa WPCP is in progress and is expected to be submitted to the MECP by the end of October 2025.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Hydrogeological Assessment Report	<p>The Hydrogeological Assessment Report provides:</p> <ul style="list-style-type: none">○ A description of the project geology/hydrogeology and an assessment of site suitability.	Completed in August 2021	<ul style="list-style-type: none">○ The storage of biomass and the management of biosolids will not be impacted by this project. Biomass will continue to be handled as set out in the existing WPCP ECA to mitigate discharge of contaminants to groundwater, with contingency plans in place in the unlikely event of a spill.○ Cambium Inc. was retained to inspect the existing groundwater monitoring wells and to add one more groundwater monitoring well as recommended by the MECP.○ A geotechnical engineer would be retained, if required, to examine and monitor the subgrade conditions, placement and compaction of fill material, granular base courses, and asphaltic concrete during future construction activities and during the construction of an additional secondary containment pond to prevent stormwater or any spill from permeating through the soil and impacting the groundwater, as suggested by the MECP.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Surface Water Assessment Report	<p>The Surface Water Assessment Report aims to:</p> <ul style="list-style-type: none">○ Assess the existing surface water conditions,○ Ensure compliance with environmental regulations,○ Demonstrate that the proposed CHP system will not produce liquid discharges that could impact local water bodies.	Completed in February 2023	<ul style="list-style-type: none">○ Surface water will not be affected by implementation of the project because effluent from the Net Zero Facility will be treated by the WPCP and there is only a minor change in impervious area of the site.○ Spill prevention is achieved both operationally and by design. In the event of a spill, plant staff will mitigate it according to the plant's Emergency Response Plan (ERP), preventing the spill from reaching waterways and ensuring proper cleanup.
Effluent Management Plan	<p>The Effluent Management Plan outlines:</p> <ul style="list-style-type: none">○ A description of the existing effluent at the site○ An assessment of the project's impacts on the existing site from an effluent management perspective.	Completed in August 2022	<ul style="list-style-type: none">○ The effluent generated by the Net-Zero Facility will not be directly discharged to a receiving water body.○ All of the effluent will be treated by the WPCP under compliance of the WPCP' ECA. The WPCP is capable of treating the return streams provided operational practices are implemented to mitigate impacts of the return streams on the WPCP treatment processes.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Traffic Management Plan	<p>The Traffic Management Plan identifies:</p> <ul style="list-style-type: none">○ The potential traffic issues that may occur as part of this project○ Proposed mitigation measures to reduce negative environmental effects that will or are likely to occur as a result of traffic issues.	Completed in July 2023	<ul style="list-style-type: none">○ Submitted to the County of Renfrew as suggested by the MECP. Increased traffic is anticipated during the mobilization and demobilization phases of the project due to the transport of equipment and materials.○ Travel to and from the site will occur during agreed construction hours to mitigate excess traffic noise.○ Drivers will be appropriately licensed for the size and weight of their vehicles.○ No oversized loads are anticipated for this project.○ Deliveries will primarily occur during daylight hours to reduce the potential for vehicle accidents.○ Negligible traffic impacts are expected during the operational phase, with only occasional maintenance required.○ Additional traffic after the WPCP begins receiving external waste is estimated at one truck per hour.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Consultation Report	<p>The purpose of the consultation Report is:</p> <ul style="list-style-type: none">○ Documentation of Consultation Activities: Ensures the application meets the regulated minimum consultation requirements of O. Reg. 359/09.○ Record of Comments and Modifications: Provides a record of comments received and how they were considered, including any project modifications resulting from the feedback.	Completed in August 2022	<ul style="list-style-type: none">○ N/A

REA Amendment

REA Approval and Current Limitations

- The Net Zero Project received REA in April 2022.
- However, the existing REA only permits operation of the Net Zero equipment using sludge from the Petawawa WPCP.
- Under the current REA, the upgraded digesters cannot process external Source Separated Organics (SSOs).

Requirements for REA Amendment to Accept External SSOs

- To enable co-digestion of external SSOs with plant sludge, the following conditions must be fulfilled:
 1. Secondary Containment Plan
 2. Stormwater Management Plan
 3. Groundwater Management Plan
 4. Consultation

REA Amendment Application

- Once all three plans are finalized and approved by the MECP, and consultation with all the local communities is completed, the project team will submit an REA amendment application to the MECP to allow the use of external SSOs in the upgraded digesters.

REA Amendment Requirements

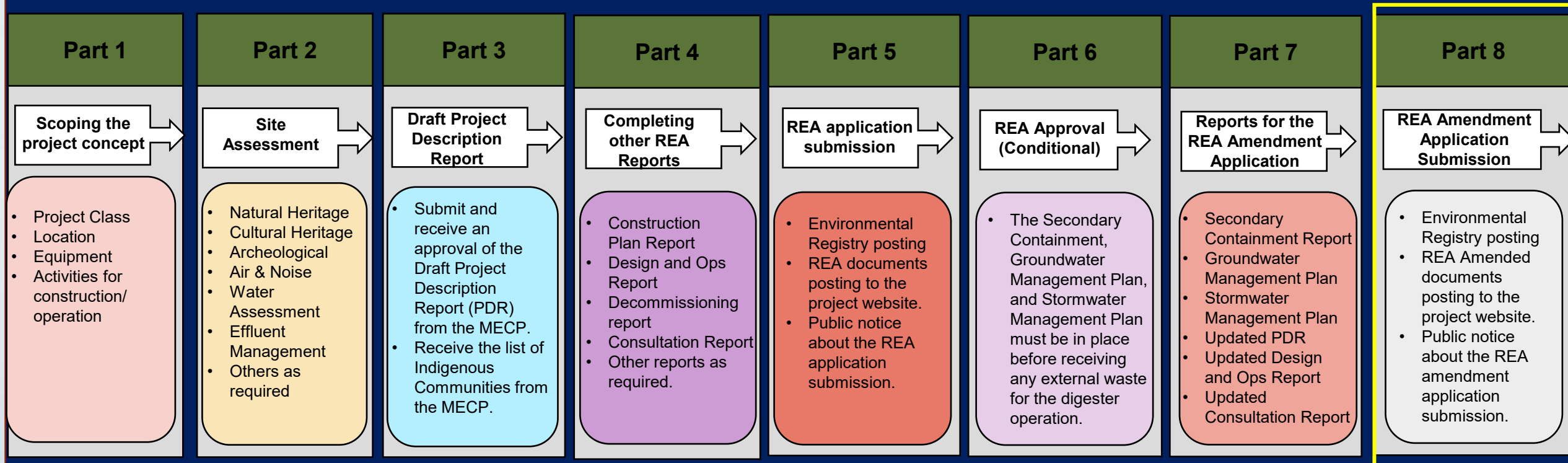
Reports	Purpose	Status
Secondary Containment Plan	To prevent any spills from the digesters from reaching the Ottawa River or nearby water bodies.	Expected to be completed in September 2025
Stormwater Management Plan	To protect the Ottawa River and nearby water bodies from pollutants carried by stormwater runoff, and to mitigate potential flood damage to the plant.	Expected to be completed in September 2025
Groundwater Management Plan	To monitor groundwater quality and ensure it is not impacted by any potential spills permeating through the soil.	Accepted and Approved by the MECP.
Amended Consultation Report	To address all comments and concerns received from Indigenous communities.	Expected to be completed in September 2025
Amended Project Description Report	To incorporate the proposed project changes—namely the Secondary Containment Plan, Stormwater Management Plan, and Groundwater Management Plan—into the original Project Description Report.	Completed in June 2025

REA Amendment Requirements

Reports	Purpose	Status
Amended Design and Operations Report	To incorporate the proposed project changes—namely the Secondary Containment Plan, Stormwater Management Plan, and Groundwater Management Plan—into the original Design and Operations Report.	Expected to be completed in September 2025
Amended Decommissioning Plan Report	To incorporate the proposed project changes—namely the Secondary Containment Plan, Stormwater Management Plan, and Groundwater Management Plan—into the original Design and Operations Report.	Completed in June 2025
Amended Construction Plan Report	To incorporate the proposed project changes—namely the Secondary Containment Plan, Stormwater Management Plan, and Groundwater Management Plan—into the original Design and Operations Report.	Completed in June 2025

Next Steps

Meetings/consultations with key regulatory bodies (MECP, MNR, MCM, local authorities etc) – as required.



MECP - Ministry of Environment Conservation and Parks

MNR - Ministry of Natural Resources

MCM - Ministry of Citizenship and Multiculturalism

Public Meeting - 1

Public Meeting - 2

Municipal Consultation

Indigenous Consultation

Indigenous Consultation

Contact Information



Kevin Lutes
Lead R&D Engineer
Anaergia Inc.
Kevin.Lutes@anaergia.com
647-922-7385

Trevor Woodtke, C.Tech.
Asset/Energy Management Coordinator
Town of Petawawa
twoodtke@petawawa.ca
613-687-5536 x 2026

Kerry Tuyen, P.Eng
Director – Innovation, Technology and
Alternate Delivery
Ontario Clean Water Agency
ktuyen@ocwa.com
905-301-1957

Trevor Woodtke

From: Planning
Sent: June 25, 2025 1:40 PM
To: algonquins@tanakiwin.com
Cc: jmeness@tanakiwin.com; consultation@pikwakanagan.ca; assistant.consultation@pikwakanagan.ca
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: 20250619-Letter-IndConsultList_Amend.pdf; Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf

To Jim Meness,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



Planning and Development

Town of Petawawa
613-687-5536
www.petawawa.ca
1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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Trevor Woodtke

From: Planning
Sent: June 25, 2025 1:42 PM
To: chief.pik@pikwakanagan.ca
Cc: chiefcouncil@pikwakanagan.ca; consultation@pikwakanagan.ca; assistant.consultation@pikwakanagan.ca; algonquins@tanakiwin.com; jmeness@tanakiwin.com
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf; 20250619-Letter-IndConsultList_Amend.pdf

To Chief Gregory Sarazin,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



Planning and Development

Town of Petawawa

613-687-5536

www.petawawa.ca

1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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Trevor Woodtke

From: Chris McKnight <projectco9@pikwakanagan.ca>
Sent: July 2, 2025 2:45 PM
To: Planning
Cc: Amanda Two-Axe Kohoko
Subject: RE: Petawawa Net Zero
Attachments: Petawawa Net Zero Project.pdf

Follow Up Flag: Follow up
Flag Status: Completed

You don't often get email from projectco9@pikwakanagan.ca. [Learn why this is important](#)

Kwey Trevor,

My name is Chris McKnight, and I am contacting you on behalf of AOPFN Consultation Department with regards to the Project, *Petawawa Net Zero Project*.

We thank you for contacting AOPFN with and providing the community the ability to participate and engage with this project.

I have attached a letter to this email that I invite you to review that outlines the next steps to evaluate the initiative in more details.

Should you have further questions please feel free to contact me.

Miigwetch,

Chris McKnight

Consultation & Engagement Department
Algonquins of Pikwakanagan First Nation
Cell: 613-299-6242 Email: projectco9@pikwakanagan.ca
Mailing address: 1657A Mishomis Inamo, Pikwakanagan, ON K0J 1X0
Physical Address: 4-473 Kokomis Inamo, Pikwakanagan, ON K0J 1X0



Algonquins of Pikwakanagan First Nation

July 2, 2025

Name: Trevor Woodtke
Address: 1111 Victoria Street, Petawawa, ON, K8H 2E6
Email planning@petawawa.ca

RE: Petawawa Net Zero Project

Thank you for sending over your documents for review. In order for The Algonquins of Pikwakanagan First Nation (AOPFN) to review your documents, a one time fee of \$750.00 will be required for a preliminary review.

With work looking to be commenced in AOPFN's traditional and unsundered territory, we require an initial fee of \$750.00 to be paid to: Algonquins of Pikwakanagan First Nation

The \$750.00 fee will allote us capacity to have a quick review of the documents you have provided.

- Site Plans
- A quick overview of any Environmental Studies
- Rehabilliation Plans
- Any plans related to Hydrogeology
- Traffic Impact (if they exist)

Once the evaluation of the documents has been completed, you will receive a notice that states that we wish to consult or that we will sign off that we do not wish to consult.

In the case where full consultation and engagement is being sought after by AOPFN, we will reach out to schedule a meeting with you and the party(ies) in order to gather further information and explain next steps for engagement and to enter into an agreement with one another.

Upon Agreement, we will then do a more in depth study of the documents, provide technical comments and recommendations, and schedule a site visit to be able to properly survey the lands that are located in the footprint and the surrounding area allowing us to report back to the community.

Should you wish to continue, please provide the contact information to send an invoice and once payment is recieved we will commence the review.

Miigwetch,

Amanda Two-Axe Kohoko

**1657A Mishòmis Inamo
Pikwakanagan, Ontario K0J 1X0**

Tel: (613) 625-2800

Fax: (613) 625-2332

Trevor Woodtke

From: Chris McKnight <projectco9@pikwakanagan.ca>
Sent: July 17, 2025 9:25 AM
To: Planning
Cc: Amanda Two-Axe Kohoko; Donna McKnight; Doug Kutschke; Selena Roesler; Juhui Heo
Subject: RE: Petawawa Net Zero
Attachments: 107-1-010 Town of Petawawa -Net Zero.pdf

Follow Up Flag: Follow up
Flag Status: Completed

You don't often get email from projectco9@pikwakanagan.ca. [Learn why this is important](#)

Hello Trevor,

Enclosed in the attachment is a detailed PDF of the invoice for the Net Zero Project.

This invoice is for Consultation and Engagement to review the project to establish if engagement is necessary.

When remitting please note the invoice number with your remittance details. If you are unable to do this, please send an email to finance.consultant@pikwakanagan.ca and cc to finance@pikwakanagan.ca so that we can match your payment with the appropriate invoice.

If you are sending an etransfer please email to Mgr.finance@pikwakanagan.ca and use the INVOICE # as your PASSWORD.

Should you have any other questions or concerns, please feel free to reach out.

Thank you and have a great day!

Best,

Chris

From: Planning <planning@petawawa.ca>
Sent: July 16, 2025 4:24 PM
To: Chris McKnight <projectco9@pikwakanagan.ca>
Cc: Amanda Two-Axe Kohoko <consultation@pikwakanagan.ca>
Subject: Re: Petawawa Net Zero

Hello Chris,

Thank you for your letter dated July 2, 2025 regarding the Town of Petawawa's Notice of Proposed Project Technical Changes to the Petawawa Net Zero Project. As outlined in your letter, you may issue the invoice for the \$750 fee to the following Town contact:

Trevor Woodtke
Asset/Energy Management Coordinator
Town of Petawawa
1111 Victoria Street, Petawawa, ON K8H 2E6

Thank you,



Planning and Development

Town of Petawawa
613-687-5536
www.petawawa.ca
1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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From: Chris McKnight <projectco9@pikwakanagan.ca>
Sent: 02 July 2025 14:44
To: Planning <planning@petawawa.ca>
Cc: Amanda Two-Axe Kohoko <consultation@pikwakanagan.ca>
Subject: RE: Petawawa Net Zero

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Kwey Trevor,

My name is Chris McKnight, and I am contacting you on behalf of AOPFN Consultation Department with regards to the Project, *Petawawa Net Zero Project*.

We thank you for contacting AOPFN with and providing the community the ability to participate and engage with this project.

I have attached a letter to this email that I invite you to review that outlines the next steps to evaluate the initiative in more details.

Should you have further questions please feel free to contact me.

Miigwetch,

Chris McKnight

Consultation & Engagement Department
Algonquins of Pikwakanagan First Nation
Cell: 613-299-6242 Email: projectco9@pikwakanagan.ca
Mailing address: 1657A Mishomis Inamo, Pikwakanagan, ON K0J 1X0
Physical Address: 4-473 Kokomis Inamo, Pikwakanagan, ON K0J 1X0

Trevor Woodtke

From: Trevor Woodtke
Sent: October 8, 2025 10:16 AM
To: 'Korey Kauffeldt'
Subject: RE: Petawawa Net Zero

Hi Korey,

Our project team is good to meet on Oct 14, 9-10 am. I'll send a Teams meeting invite.

Cheers,

Trevor Woodtke, C.Tech.

Asset/Energy Management Coordinator
Town of Petawawa
613-687-5536 x 2026
www.petawawa.ca
1111 Victoria Street, Petawawa, Ontario, K8H 2E6

From: Trevor Woodtke
Sent: October 7, 2025 10:55 AM
To: 'Korey Kauffeldt' <CEC@pikwakanagan.ca>
Subject: RE: Petawawa Net Zero

Hi Korey,

Thanks for the response and no worries. I'll advise our project team and see which time(s) will work.

Cheers,

Trevor Woodtke, C.Tech.

Asset/Energy Management Coordinator
Town of Petawawa
613-687-5536 x 2026
www.petawawa.ca
1111 Victoria Street, Petawawa, Ontario, K8H 2E6

From: Korey Kauffeldt <CEC@pikwakanagan.ca>
Sent: October 7, 2025 9:51 AM
To: Trevor Woodtke <twoodtke@petawawa.ca>
Subject: Re: Petawawa Net Zero

Good morning Trevor,

So sorry for the slow response. I have been playing catchup since my trip and I am just getting around to your email now.

If the offer is still on the table, I would love to meet the team and learn more about the project! My availability is:

Oct 14th - 9-10 or 11-12

Oct 15th - 9-11 or 1-4

Oct 16th - 9-12

Oct 17th - anytime

Migwech,

Korey Kauffeldt, *Kijjajawiziwin Anokàdjigan Nìgànzì Nàgànìdj*

(Lead Energy Project Coordinator)

Consultation Department

Algonquins of Pikwakanagan First Nation

Tel: 613-625-4027 Email: cec@pikwakanagan.ca

Mailing Address: 1657A Mishomis Inamo, Pikwakanagan, ON K0J 1X0

Physical Address: 4-473 Kokomis Inamo, Pikwakanagan, ON K0J 1X0

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From: Trevor Woodtke <twoodtke@petawawa.ca>

Sent: October 2, 2025 3:10 PM

To: Korey Kauffeldt <CEC@pikwakanagan.ca>

Subject: FW: Petawawa Net Zero

Hi Korey,

I just wanted to follow up to see if you are still interested in meeting with our project team to learn about the Town of Petawawa's net zero project and proposed project changes. Our project team is looking to conclude our consultation in support of our Renewal Energy Approval (REA) amendment application to the MECP, but want to make sure that we have an opportunity to meet with you.

If you could please let me know some times that you have available for a 1 hour virtual meeting within the next 1-2 weeks that would be much appreciated.

Best regards,



Trevor Woodtke, C.Tech.

Asset/Energy Management Coordinator

Town of Petawawa

613-687-5536 x 2026

www.petawawa.ca

1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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From: Trevor Woodtke
Sent: August 29, 2025 9:40 AM
To: Chris McKnight <projectco9@pikwakanagan.ca>
Cc: Korey Kauffeldt <CEC@pikwakanagan.ca>
Subject: RE: Petawawa Net Zero

Hi Chris,

Thank you for the update. Our project team looks forward to meeting with Korey upon his return to discuss more about project and the proposed project changes.

Take care,



Trevor Woodtke, C.Tech.
Asset/Energy Management Coordinator
Town of Petawawa
613-687-5536 x 2026
www.petawawa.ca
1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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From: Chris McKnight <projectco9@pikwakanagan.ca>
Sent: August 29, 2025 8:57 AM
To: Trevor Woodtke <twoodtke@petawawa.ca>
Cc: Korey Kauffeldt <CEC@pikwakanagan.ca>
Subject: Re: Petawawa Net Zero

Hi Trevor,

I hope you have been well.

Sorry for the delay, I have been away for the past several weeks and finally had the opportunity this week to present the project to our Energy team.

With that said, Korey Kauffeldt, the lead of our Energy team, has expressed interest in learning more about the Net Zero Project. He will be away in Japan until the week of September 15th.

I have cc'd Korey on this email and will allow him to reach out with a suitable time to discuss the project with you in greater detail.

It's been a pleasure working with you and AOPFN thanks you for the opportunity to discuss in further detail.

Have a great long weekend and thanks again!

THIS EMAIL IS CONFIDENTIAL

Chris McKnight

Project Coordinator, Consultation Department

Algonquins of Pikwakanagan First Nation

Phone: 613-625-4010

Email: projectco9@pikwakanagan.ca

Mailing Address: 1657A Mishomis Inamo, Pikwakanagan, ON K0J 1X0

Physical Address: 4-473 Kokomis Inamo, Pikwakanagan, ON K0J 1X0

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From: Trevor Woodtke <twoodtke@petawawa.ca>
Sent: Monday, August 25, 2025 3:01 PM
To: Chris McKnight <projectco9@pikwakanagan.ca>
Cc: Amanda Two-Axe Kohoko <consultation@pikwakanagan.ca>
Subject: RE: Petawawa Net Zero

Hi Chris,

Thank you to the Algonquins of Pikwakanagan First Nation for your response to the Town of Petawawa's Notice of Proposed Project Changes to the Petawawa Net Zero Project, located at the Town's water pollution control plant (WPCP). The Town, along with our partners the Ontario Clean Water Agency (OCWA) and Anaergia, are committed to fulfilling the consultation process in support of our application to amend the project's Renewable Energy Approval (REA) with respect to the proposed project changes.

Hopefully the AOPFN has received a cheque issued by the Town of Petawawa for payment of the \$750 preliminary review fee as requested in your letter dated July 2, 2025. Please let us know if not and we will resolve the matter as soon as possible.

As a next step, our project team would like to offer a virtual introduction meeting with AOPFN representatives. The purpose of the introduction meeting will be to provide some background information on the project and the proposed project changes which may help to streamline the review by AOPFN representatives.

Please let us know some available dates/times within the next 1-3 weeks that you may have for a virtual introduction meeting.

Thank you,



Trevor Woodtke, C.Tech.

Asset/Energy Management Coordinator

Town of Petawawa

613-687-5536 x 2026

www.petawawa.ca

1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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From: Chris McKnight <projectco9@pikwakanagan.ca>

Sent: July 2, 2025 2:45 PM

To: Planning <planning@petawawa.ca>

Cc: Amanda Two-Axe Kohoko <consultation@pikwakanagan.ca>

Subject: RE: Petawawa Net Zero

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Kwey Trevor,

My name is Chris McKnight, and I am contacting you on behalf of AOPFN Consultation Department with regards to the Project, *Petawawa Net Zero Project*.

We thank you for contacting AOPFN with and providing the community the ability to participate and engage with this project.

I have attached a letter to this email that I invite you to review that outlines the next steps to evaluate the initiative in more details.

Should you have further questions please feel free to contact me.

Miigwetch,

Chris McKnight

Consultation & Engagement Department

Algonquins of Pikwakanagan First Nation

Cell: 613-299-6242 Email: projectco9@pikwakanagan.ca

Mailing address: 1657A Mishomis Inamo, Pikwakanagan, ON K0J 1X0

Physical Address: 4-473 Kokomis Inamo, Pikwakanagan, ON K0J 1X0

Trevor Woodtke

From: Trevor Woodtke
Sent: October 15, 2025 2:20 PM
To: Korey Kauffeldt
Cc: Kerry Tuyen (OCWA); Bhavik Vyas (OCWA); Chris Mantha; Brad Sweet (OCWA); Kevin Lutes (Anaergia)
Subject: RE: Petawawa Net Zero Project - Review Meeting
Attachments: Petawawa Net Zero Project- Algonquins of Pikwakanagan FN-251014.pdf; Archaeological Assessment Stage 1_2022_Petawawa Net Zero Project.pdf; Notice of Proposed Project Changes to the Petawawa Net Zero Project; RE: Petawawa Net Zero

Hi Korey,

Thank you for meeting virtually with our project team to learn more about the Town's net zero project and the proposed project changes for which the Town is seeking an amendment to the project's Renewable Energy Approval (REA) with the MECP. We appreciate your interest and questions pertaining to our project.

For reference, I have attached the following documents:

- Presentation slide deck from our Oct 14 virtual meeting.
- Stage 1 Archaeological Assessment that was completed at the request of the Algonquins of Ontario following consultation in 2022.
- Copy of the email sent to the Algonquins of Pikwakanagan containing the Town's issued notice of the REA proposed project changes dated June 25, 2025 (see attached email file Notice of Proposed Project Changes to the Petawawa Net Zero Project – there are 2x PDFs attached within).
- Copy of the email sent from the Algonquins of Pikwakanagan containing your letter dated July 2, 2025, submitted in response to the Town's issued notice (see attached email file RE_Petawawa Net Zero – PDF letter attached within). Following receipt of your letter, the Town provided payment for the requested preliminary review fee.

Our project team is looking to conclude this consultation for the proposed project changes by the end of October so that we can proceed to finalize and submit our application to the MECP for an amendment to the project's REA. We kindly request if you could please provide our project team with any final comments by no later than **Tuesday, October 21, 2025**.

Lastly, I wanted to follow up on a question that you had asked during our virtual meeting on Oct 14. You had asked if the Algonquins of Pikwakanagan was included during the previous project consultations. I looked through our consultation files and final report which is posted on Town website: [2022.08.16--- Consultation Report](#), and it does not appear that the Algonquins of Pikwakanagan was directly notified during the past consultations in 2020 and 2022. It appears that our project team of the day proceeded with the consultations based on the list of Indigenous Communities that they had received from the MECP in August 2020, which only listed the Algonquins of Ontario and not the Algonquins of Pikwakanagan. However, for this consultation pertaining to the proposed project changes and an amendment to the project's issued REA, we had made a request to the MECP for an updated list of Indigenous Communities which does list both the Algonquins of Ontario and Algonquins of Pikwakanagan.

Thank you again for meeting with our project team. Please reach out to us should you have any further questions.

Best regards,



Trevor Woodtke, C.Tech.

Asset/Energy Management Coordinator

Town of Petawawa

613-687-5536 x 2026

www.petawawa.ca

1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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-----Original Appointment-----

From: Trevor Woodtke

Sent: October 8, 2025 10:18 AM

To: Trevor Woodtke; Korey Kauffeldt; Kerry Tuyen; Bhavik Vyas; Brad Sweet; Kevin Lutes

Subject: Petawawa Net Zero Project - Review Meeting

When: October 14, 2025 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).

Where: Microsoft Teams Meeting

Hi everyone,

The purpose of the introduction meeting will be to provide some background information on the project and the proposed project changes.

Regards,

Trevor Woodtke, C.Tech.

Asset/Energy Management Coordinator

Town of Petawawa

613-687-5536 x 2026

www.petawawa.ca

1111 Victoria Street, Petawawa, Ontario, K8H 2E6

Petawawa Net Zero Project

Project Info Presented to: Algonquins of Pikwakanagan First Nation

DATE: October 14th, 2025



Renewable Energy Approval (REA)

- The REA is an authorization from the Ontario Ministry of the Environment, Conservation and Parks (MECP) for the operation of an energy facility that utilizes a renewable fuel – specifically wind, solar, or biogas.
- The REA outlines legally binding conditions of operation to ensure that the environment and community are protected from any adverse effect associated with the operation of the facility.
- An REA is obtained for a proposed facility through demonstration of compliance with applicable regulations by means of relevant studies, consultations with affected communities, and development of design, construction, operational, and decommissioning plans.

REA Process Overview

Meetings/consultations with key regulatory bodies (MECP, MNR, MCM, local authorities etc) – as required.

Part 1

Scoping the project concept

- Project Class
- Location
- Equipment
- Activities for construction/operation

Part 2

Site Assessment

- Natural Heritage
- Cultural Heritage
- Archeological
- Air & Noise
- Water Assessment
- Effluent Management
- Others as required

Part 3

Draft Project Description Report

- Submit and receive an approval of the Draft Project Description Report (PDR) from the MECP.
- Receive the list of Indigenous Communities from the MECP.

Part 4

Completing other REA Reports

- Construction Plan Report
- Design and Ops Report
- Decommissioning report
- Consultation Report
- Other reports as required.

Part 5

REA application submission

- Environmental Registry posting
- REA documents posting to the project website.
- Public notice about the REA application submission.

Part 6

REA Approval (Conditional)

- The Secondary Containment, Groundwater Management Plan, and Stormwater Management Plan must be in place before receiving any external waste for the digester operation.

Part 7

Reports for the REA Amendment Application

- Secondary Containment Report
- Groundwater Management Plan
- Stormwater Management Plan
- Updated PDR
- Updated Design and Ops Report
- Updated Consultation Report

Part 8

REA Amendment Application Submission

- Environmental Registry posting
- REA Amended documents posting to the project website.
- Public notice about the REA amendment application submission.

Public Meeting - 1

Public Meeting - 2

Municipal Consultation

Indigenous Consultation

Indigenous Consultation

MECP - Ministry of Environment Conservation and Parks

MNR - Ministry of Natural Resources

MCM - Ministry of Citizenship and Multiculturalism

Town of Petawawa

- The Town of Petawawa is nestled in the western shore of the Ottawa River, just 160 km west of Ottawa.
- It's the largest community in Renfrew County with a population over 17,000.
- Historically, the town was originally an Algonquin settlement and later a logging town. The Canadian military established a presence in the early 20th century, leading to the development of CFB Petawawa, one of the largest and oldest military bases in Canada.
- The Town owns the Petawawa Water Pollution Control Plant (WPCP).
- The Town has contracted the Ontario Clean Water Agency (OCWA) to operate and maintain both its Water and Wastewater Treatment Facilities.



Petawawa WPCP



- **Location:** 560 Abbie Lane, Petawawa, County of Renfrew, K8H 2E6.
- **Function:** The plant treats domestic sewage from the Town of Petawawa and Garrison Petawawa, a Canadian Forces base.
- **Average Rated Capacity:** 8,730 cubic meters per day.
- **Wastewater Treatment:** The Petawawa WPCP utilizes a Sequencing Batch Reactor (SBR) activated sludge system for wastewater treatment. This system employs four SBR basins in parallel, each with a pre-react zone and a fine pore aeration system. Effluent from the SBR basins is disinfected by a UV system before being discharged into the Ottawa River.
- **Solids Treatment:** Solids generated from the wastewater treatment process are currently stored in two on-site sludge holding tanks. Once stabilized, the solids are transported by truck to designated land application sites.
- **Petawawa WPCP Energy Sources:** Grid electrical use and energy use from natural gas boilers.

Petawawa Net Zero Project – Project Team



Retained by the Town of Petawawa to design and build the Net Zero Project equipment at the Petawawa WPCP.



Owner of the Petawawa WPCP



Contracted by the Town of Petawawa as the operating authority for the Petawawa WPCP,
Providing all necessary on-site support to Anaergia for the execution of the Net Zero Project.

Petawawa Net Zero Project – Drivers

Petawawa WPCP

Facility Optimization Program (FOP) study completed by OCWA in September 2018 recommended for plant upgrades

TSSA requirements for making the existing digesters operational

Beneficial use of biogas/biosolids

GHG emission reduction and landfill diversion of external waste

Funding availability: Low Carbon Economy Fund (LCEF)

Petawawa Net Zero Project – Key Phases

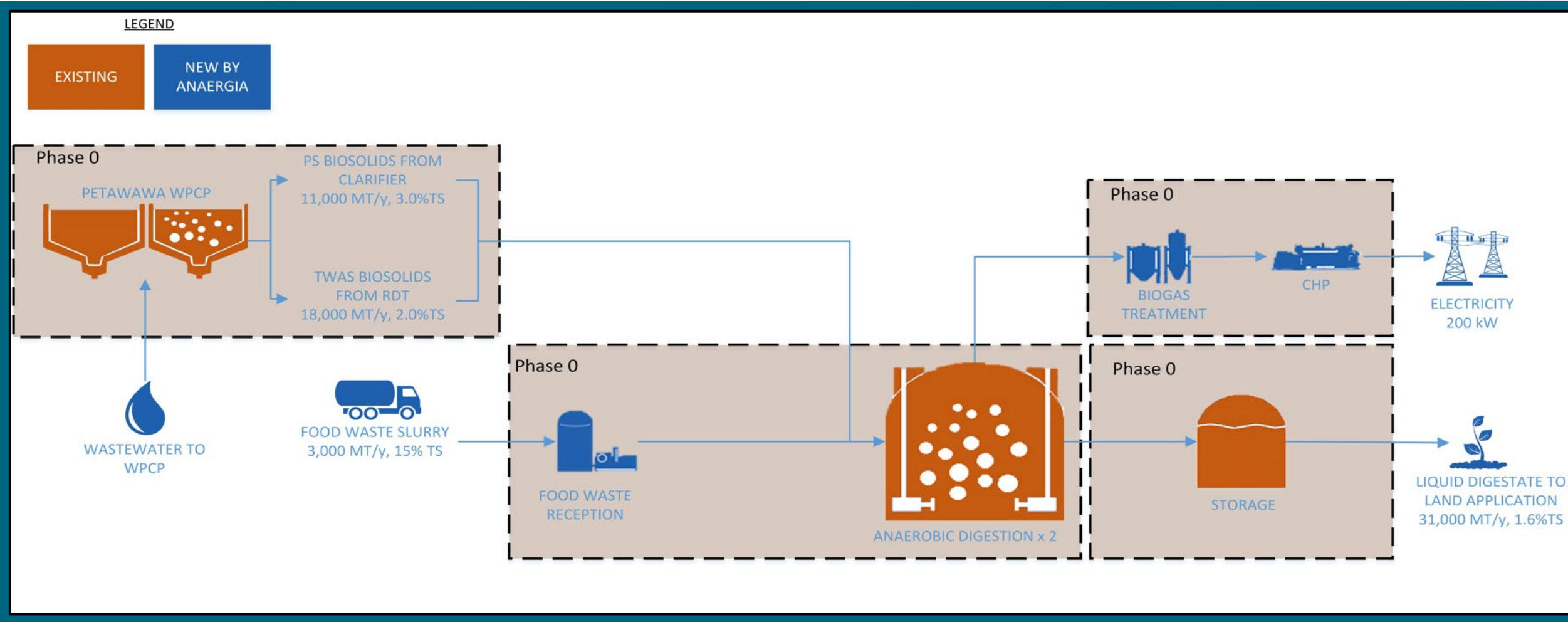
Phase 0: Meet Town's Requirements on Digester Upgrade and Energy Neutrality – In Progress

1. Upgrade existing digesters (#3 and #4) to co-digest the Town's biosolids with external organic waste.
2. Produce renewable electrical energy to meet Technical Standards and Safety Authority (TSSA) permit renewal requirements.
3. Offset the plant's base electrical demand with renewable energy, enhancing operational resilience.

Phase 2 (Improve environmental attributes and financial performance) – Timeline not defined yet.

1. Augment digestate management with dewatering to reduce truck traffic and generate quality feedstock for composting.
2. Enhance biogas utilization by adding renewable natural gas generating system.

Petawawa Net Zero Project – Phase 0



CHP Design & Operation Benefits

- **Size:** 192 kW_e
- **Biogas source:** Designed to utilize 100% of the biogas generated at the Petawawa WPCP.
- **Biogas Use:** 100% of the biogas will be used in the CHP system.
- **Heat use:** Process and space heating
- **Electricity use:** Onsite with a net metering arrangement with Hydro One.
- Once the CHP system becomes operational, it is expected to meet 100% of the plant's electricity demand through the electricity generated by the system.
- The implementation of the CHP system, along with the utilization of external waste in the digesters to produce biogas for the system, is expected to reduce annual greenhouse gas (GHG) emissions by approximately 16,160 tCO₂e.

Net Zero Equipment Locations



Provincial and Local Municipal Permits Requirements

- Ministry of Environment, Conservation and Parks (MECP)
- Ministry of Natural Resource and Forestry (MNRF)
- Ministry of Citizenship and Multiculturalism (MCM)
- Ministry of Labour (MOL)
- Ministry of Transportation (MTO)
- Hydro One Networks Inc.
- Electrical Safety Authority (ESA)
- Technical Standards and Safety Authority (TSSA)

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Project Description Report	<p>The Project Description Report provides a comprehensive overview of:</p> <ul style="list-style-type: none">○ Project components○ Project contact information○ Project location○ Proposed technology○ Nameplate capacity○ Facility classification○ Key project activities○ Preliminary project schedule○ Summarizes the potential environmental impacts	Completed in August 2022	<ul style="list-style-type: none">○ N/A

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Construction Plan Report	<p>The Construction Plan Report focuses on the:</p> <ul style="list-style-type: none">○ Construction activities for the Biogas Utilization Project○ Identifies potential negative environmental effects○ Describes mitigation measures to address these effects.	Completed in August 2022	<ul style="list-style-type: none">○ Construction will take place entirely within the fenced perimeter of the Petawawa WPCP.○ Excess soils that cannot be used for backfill will be removed and used in local projects where appropriate or sold to third parties as fill material.○ Air quality impacts will be temporary during the construction only with not all sources emitted at the same time.○ Site clearing will be scheduled to begin in during appropriate periods when wind speeds are anticipated to be low, which will minimize the creation of dust.○ Activities that result in excessive noise emissions will be scheduled to occur after 9:00 am and before 5:00 pm to avoid disturbing sensitive receptors.○ Truck drivers will be licensed to operate the size and weight of equipment brought to the site and will travel to the site primarily during daylight hours in order to reduce the likelihood of vehicle accidents.○ The site supervisor or designate will communicate to the truck drivers and vehicle operators to reduce speeds while on the site during the construction.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Design and Operations Report	<p>The Design and Operations Report focuses on the:</p> <ul style="list-style-type: none">○ Project site plan○ Key project design components and the facility operations plan○ Potential Negative Environmental Effects and mitigation measures○ Emergency Response and Communications Plan	Completed in March 2023	<ul style="list-style-type: none">○ N/A
Decommissioning Plan Report	<p>The Decommissioning Plan Report ensures:</p> <ul style="list-style-type: none">○ The CHP system at Petawawa WPCP is decommissioned responsibly, restoring the site to pre-development conditions and managing waste properly.	Completed in August 2022	<ul style="list-style-type: none">○ The site would be restored to existing conditions, including existing vegetation (grass) and landscaping, and the existing impermeable asphalt and concrete surfaces, to minimize impacts from storm water runoff or dust resulting from a decommissioning process.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Natural Heritage Assessment (NHA) Report	<p>The NHA Report involved:</p> <ul style="list-style-type: none">○ A comprehensive review of provincial, federal, and local records to identify natural heritage features and potential impacts within 120 m of the project locations.	Completed in July 2022	<ul style="list-style-type: none">○ The report identifies some natural features at or near the proposed project location. However, it is expected that all project equipment will be located within the fenced perimeter of the Petawawa WPCP; therefore, the impact on the natural heritage features is expected to be minimal.
Cultural Heritage Assessment Report	<p>The Cultural Heritage Assessment Report focuses on the:</p> <ul style="list-style-type: none">○ Identification and evaluation of any cultural heritage resources within and adjacent to the project location that may be impacted by the proposed Renewable Energy project.	Completed in February 2023	<ul style="list-style-type: none">○ There were no cultural heritage resources identified during the cultural heritage assessment.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Archaeological Assessment Report	<p>The purpose of the Archaeological Assessment is to:</p> <ul style="list-style-type: none">○ Assess the archaeological potential of the project site○ Confirm that the proposed Petawawa WPCP Biogas Utilization Project complies with the Ontario Heritage Act and relevant standards.	Completed in August 2022	<ul style="list-style-type: none">○ The Archaeological Assessment found that the proposed construction locations had been deeply and extensively disturbed by modern construction and landscaping and the study area no longer retained potential for pre-Contact or post Contact archaeological resources.
Noise Study (Acoustic Assessment Report)	<p>The Acoustic Assessment Report evaluates:</p> <ul style="list-style-type: none">○ Noise emissions from existing and proposed equipment, including a new CHP system, to ensure compliance with Ontario's environmental regulations.	Completed in October 2022	<ul style="list-style-type: none">○ A traffic management plan will be implemented to prevent vehicle queues on site and on road around the WPCP to minimize the vehicle noise.○ In the event the project does not operate in accordance with the terms and conditions of the REA, noncompliant components may be shut down until the problem is resolved.○ Regular maintenance program to fix damaged components and would help minimize the likelihood of malfunctioning equipment resulting in excessive noise emissions.○ It was also confirmed that the facility noise impact at each established Point of Reception (POR) is less than the applicable criteria set by the MECP.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Air Emissions Study (Emission Summary and Dispersion Modelling - ESDM Report)	<p>The purpose of the ESDM Report is to:</p> <ul style="list-style-type: none"> Assess emissions from both existing and proposed sources, including a biogas-fueled CHP system, and evaluate their compliance with air quality standards, with a particular focus on points of impingement (POI). 	Completed in July 2022	<ul style="list-style-type: none"> Significant sources of contaminant emissions were identified from the proposed facility, including the exhaust points of the emergency flare, the upgas upgrade system vent, and the CHP unit. However, the impacts of all sources and contaminants were determined to be negligible, consistent with O. Reg. 419/05, and include all wastewater treatment activities at the Petawawa WPCP and any additional on-site sewage treatment activities.
Odour Study Report	<p>The Odour study report assesses:</p> <ul style="list-style-type: none"> Potential odor sources from both existing and proposed project equipment, including a biogas-fueled CHP system and evaluates their environmental effects on nearby receptors. 	Completed in July 2022	<ul style="list-style-type: none"> U.S. EPA's AERMOD model is used to simulate odour dispersion and predict ground-level concentrations. The AERMOD model does not predict any significant negative impact at any of the nearby receptors. Development of the odour control plan for the Petawawa WPCP is in progress and is expected to be submitted to the MECP by the end of October 2025.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Hydrogeological Assessment Report	<p>The Hydrogeological Assessment Report provides:</p> <ul style="list-style-type: none">○ A description of the project geology/hydrogeology and an assessment of site suitability.	Completed in August 2021	<ul style="list-style-type: none">○ The storage of biomass and the management of biosolids will not be impacted by this project. Biomass will continue to be handled as set out in the existing WPCP ECA to mitigate discharge of contaminants to groundwater, with contingency plans in place in the unlikely event of a spill.○ Cambium Inc. was retained to inspect the existing groundwater monitoring wells and to add one more groundwater monitoring well as recommended by the MECP.○ A geotechnical engineer would be retained, if required, to examine and monitor the subgrade conditions, placement and compaction of fill material, granular base courses, and asphaltic concrete during future construction activities and during the construction of an additional secondary containment pond to prevent stormwater or any spill from permeating through the soil and impacting the groundwater, as suggested by the MECP.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Surface Water Assessment Report	<p>The Surface Water Assessment Report aims to:</p> <ul style="list-style-type: none">○ Assess the existing surface water conditions,○ Ensure compliance with environmental regulations,○ Demonstrate that the proposed CHP system will not produce liquid discharges that could impact local water bodies.	Completed in February 2023	<ul style="list-style-type: none">○ Surface water will not be affected by implementation of the project because effluent from the Net Zero Facility will be treated by the WPCP and there is only a minor change in impervious area of the site.○ Spill prevention is achieved both operationally and by design. In the event of a spill, plant staff will mitigate it according to the plant's Emergency Response Plan (ERP), preventing the spill from reaching waterways and ensuring proper cleanup.
Effluent Management Plan	<p>The Effluent Management Plan outlines:</p> <ul style="list-style-type: none">○ A description of the existing effluent at the site○ An assessment of the project's impacts on the existing site from an effluent management perspective.	Completed in August 2022	<ul style="list-style-type: none">○ The effluent generated by the Net-Zero Facility will not be directly discharged to a receiving water body.○ All of the effluent will be treated by the WPCP under compliance of the WPCP' ECA. The WPCP is capable of treating the return streams provided operational practices are implemented to mitigate impacts of the return streams on the WPCP treatment processes.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Traffic Management Plan	<p>The Traffic Management Plan identifies:</p> <ul style="list-style-type: none">○ The potential traffic issues that may occur as part of this project○ Proposed mitigation measures to reduce negative environmental effects that will or are likely to occur as a result of traffic issues.	Completed in July 2023	<ul style="list-style-type: none">○ Submitted to the County of Renfrew as suggested by the MECP. Increased traffic is anticipated during the mobilization and demobilization phases of the project due to the transport of equipment and materials.○ Travel to and from the site will occur during agreed construction hours to mitigate excess traffic noise.○ Drivers will be appropriately licensed for the size and weight of their vehicles.○ No oversized loads are anticipated for this project.○ Deliveries will primarily occur during daylight hours to reduce the potential for vehicle accidents.○ Negligible traffic impacts are expected during the operational phase, with only occasional maintenance required.○ Additional traffic after the WPCP begins receiving external waste is estimated at one truck per hour.

REA Application Requirements

Technical Reports	Purpose of Technical Report	Status	Report Outcomes
Consultation Report	<p>The purpose of the consultation Report is:</p> <ul style="list-style-type: none">○ Documentation of Consultation Activities: Ensures the application meets the regulated minimum consultation requirements of O. Reg. 359/09.○ Record of Comments and Modifications: Provides a record of comments received and how they were considered, including any project modifications resulting from the feedback.	Completed in August 2022	<ul style="list-style-type: none">○ N/A

REA Amendment

REA Approval and Current Limitations

- The Net Zero Project received REA in April 2022.
- However, the existing REA only permits operation of the Net Zero equipment using sludge from the Petawawa WPCP.
- Under the current REA, the upgraded digesters cannot process external Source Separated Organics (SSOs).

Requirements for REA Amendment to Accept External SSOs

- To enable co-digestion of external SSOs with plant sludge, the following conditions must be fulfilled:
 1. Secondary Containment Plan
 2. Stormwater Management Plan
 3. Groundwater Management Plan
 4. Consultation

REA Amendment Application

- Once all three plans are finalized and approved by the MECP, and consultation with all the local communities is completed, the project team will submit an REA amendment application to the MECP to allow the use of external SSOs in the upgraded digesters.

REA Amendment Requirements

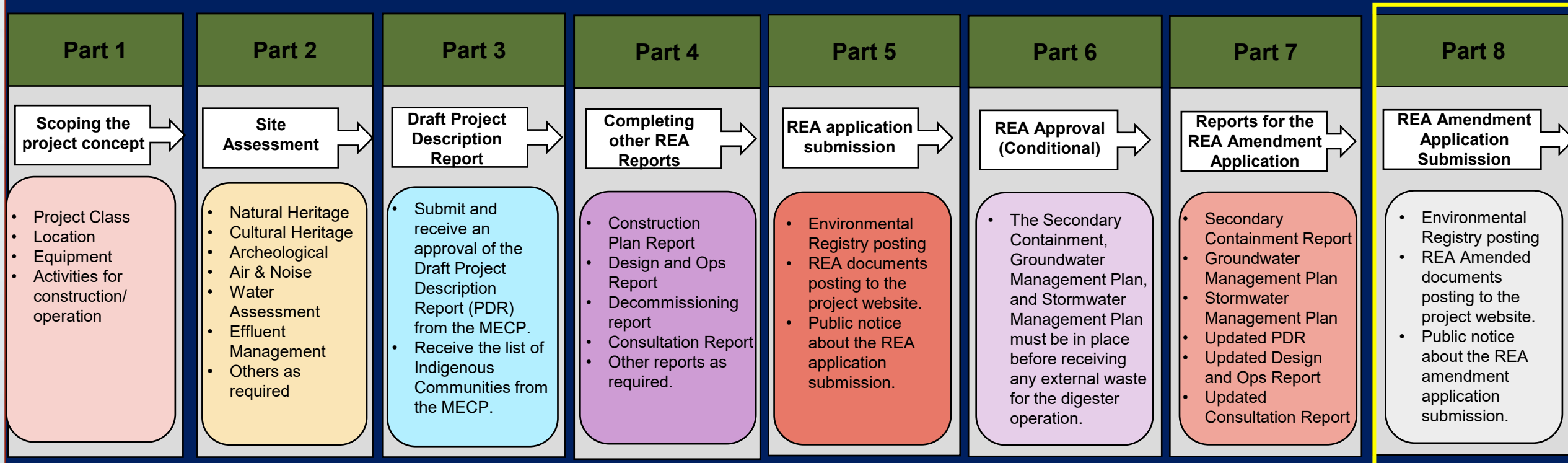
Reports	Purpose	Status
Secondary Containment Plan	To prevent any spills from the digesters from reaching the Ottawa River or nearby water bodies.	Expected to be completed in September 2025
Stormwater Management Plan	To protect the Ottawa River and nearby water bodies from pollutants carried by stormwater runoff, and to mitigate potential flood damage to the plant.	Expected to be completed in September 2025
Groundwater Management Plan	To monitor groundwater quality and ensure it is not impacted by any potential spills permeating through the soil.	Accepted and Approved by the MECP.
Amended Consultation Report	To address all comments and concerns received from Indigenous communities.	Expected to be completed in September 2025
Amended Project Description Report	To incorporate the proposed project changes—namely the Secondary Containment Plan, Stormwater Management Plan, and Groundwater Management Plan—into the original Project Description Report.	Completed in June 2025

REA Amendment Requirements

Reports	Purpose	Status
Amended Design and Operations Report	To incorporate the proposed project changes—namely the Secondary Containment Plan, Stormwater Management Plan, and Groundwater Management Plan—into the original Design and Operations Report.	Expected to be completed in September 2025
Amended Decommissioning Plan Report	To incorporate the proposed project changes—namely the Secondary Containment Plan, Stormwater Management Plan, and Groundwater Management Plan—into the original Design and Operations Report.	Completed in June 2025
Amended Construction Plan Report	To incorporate the proposed project changes—namely the Secondary Containment Plan, Stormwater Management Plan, and Groundwater Management Plan—into the original Design and Operations Report.	Completed in June 2025

Next Steps

Meetings/consultations with key regulatory bodies (MECP, MNR, MCM, local authorities etc) – as required.



MECP - Ministry of Environment Conservation and Parks
MNR - Ministry of Natural Resources
MCM - Ministry of Citizenship and Multiculturalism

Public Meeting - 1

Public Meeting - 2

Municipal Consultation

Indigenous Consultation

Indigenous Consultation

Contact Information



Kevin Lutes
Lead R&D Engineer
Anaergia Inc.
Kevin.Lutes@anaergia.com
647-922-7385

Trevor Woodtke, C.Tech.
Asset/Energy Management Coordinator
Town of Petawawa
twoodtke@petawawa.ca
613-687-5536 x 2026

Kerry Tuyen, P.Eng
Director – Innovation, Technology and
Alternate Delivery
Ontario Clean Water Agency
ktuyen@ocwa.com
905-301-1957

Trevor Woodtke

From: Planning
Sent: June 25, 2025 1:46 PM
To: chiefcarr@hiawathafn.ca
Cc: tcowie@hiawathafn.ca; reception@hiawathafn.ca; inquiries@williamstreatiesfirstnations.ca
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: 20250619-Letter-IndConsultList_Amend.pdf; Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf

To Chief Laurie Carr,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



Planning and Development

Town of Petawawa
613-687-5536
www.petawawa.ca
1111 Victoria Street, Petawawa, Ontario, K8H 2E6

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Trevor Woodtke

From: Tom Cowie <tcowie@hiawathafn.ca>
Sent: June 25, 2025 1:56 PM
To: Planning; Chief Laurie Carr
Cc: Lynn Wilford; inquiries@williamstreatiesfirstnations.ca
Subject: RE: Notice of Proposed Project Changes to the Petawawa Net Zero Project

Aaniin Trevor,

Chi miigwech for the information on the proposed changes on your project. At this moment we have no questions or concerns regarding the changes. If any should arise we will contact your office. Have a great week.

Gichi manaadendamowin

Tom Cowie

Tom Cowie
Consultation Indigenous Knowledge Lead
Hiawatha First Nation
431 Hiawatha Line,
Hiawatha, On
K9J 0E6
705 295-4421 Ext. 216
Email tcowie@hiawathafn.ca



We, the Michi Saagiig of Hiawatha First Nation, are a vibrant, proud, independent and healthy people balanced in the richness of our culture and traditional way of life

From: Planning <planning@petawawa.ca>
Sent: Wednesday, June 25, 2025 1:46 PM
To: Chief Laurie Carr <chiefcarr@hiawathafn.ca>
Cc: Tom Cowie <tcowie@hiawathafn.ca>; Lynn Wilford <reception@HiawathaFN.ca>; inquiries@williamstreatiesfirstnations.ca
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project

ALERT: This message originated outside of HFN's network. **BE CAUTIOUS** before clicking any link or attachment.

To Chief Laurie Carr,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of

subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



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Trevor Woodtke

From: Planning
Sent: June 25, 2025 1:45 PM
To: KeithK@curvelake.ca
Cc: ShannonD@curvelake.ca; inquiries@williamstreatiesfirstnations.ca
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: 20250619-Letter-IndConsultList_Amend.pdf; Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf

To Chief Keith Knott,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



Planning and Development

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Trevor Woodtke

From: Planning
Sent: June 25, 2025 2:13 PM
To: Jenna.Dumont@kza.qc.ca
Subject: Fw: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: 20250619-Letter-IndConsultList_Amend.pdf; Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf

Hi Jenna,

We received an undeliverable email notice for jeanguy.whiteduck@kza.qc.ca and are just forwarding you this notice in hopes you can direct it to the appropriate member.

Thank you,

Trevor



Planning and Development

Town of Petawawa

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From: Planning <planning@petawawa.ca>
Sent: Wednesday, June 25, 2025 1:48 PM
To: jeanguy.whiteduck@kza.qc.ca <jeanguy.whiteduck@kza.qc.ca>
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project

To Chief Jean Guy Whiteduck,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



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Trevor Woodtke

From: Planning
Sent: June 25, 2025 1:53 PM
To: klarocca@scugogfirstnation.com
Cc: drichardson@scugogfirstnation.com; consultation@scugogfirstnation.com; inquiries@williamstreatiesfirstnations.ca
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: 20250619-Letter-IndConsultList_Amend.pdf; Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf

To Chief Kelly LaRocca,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



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Trevor Woodtke

From: Planning
Sent: June 25, 2025 1:50 PM
To: consultations@metisnation.org
Cc: rogerr@metisnation.org; MMCPresident@metisnation.org; president.ormc@gmail.com
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project
Attachments: 20250619-Letter-IndConsultList_Amend.pdf; Notice of Project Changes_Petawawa Net Zero REA_2025-06-25.pdf

To Linda Norheim, Director, Lands, Resources and Consultations,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



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Trevor Woodtke

From: Suzanne Fortin <SuzanneF@metisnation.org>
Sent: July 2, 2025 1:32 PM
To: Planning
Subject: RE: Notice of Proposed Project Changes to the Petawawa Net Zero Project

You don't often get email from suzannef@metisnation.org. [Learn why this is important](#)

Thank you for this email.

Please replace your contact information as follows:

rogerr@metisnation.org is replaced by suzannef@metisnation.org

Maarsii

Suzanne

Maarsii, Merci, Miigwetch, Thank you

Suzanne B. Fortin
PCMNO Region 5 Councillor
Pronouns: She/Her
Azilda, ON
C: (705) 923-8803
E: suzannef@metisnation.org
W: www.metisnation.org
www.ontariometisfacts.com - Know the Facts – Know the Truth!

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Please consider the environment before printing this e-mail.

From: Planning <planning@petawawa.ca>
Sent: June 25, 2025 1:50 PM
To: Consultations <Consultations@metisnation.org>
Cc: Roger Rose <RogerR@metisnation.org>; MMCPresident <MMCPresident@metisnation.org>; president.ormc@gmail.com
Subject: Notice of Proposed Project Changes to the Petawawa Net Zero Project

Attention: External Email

To Linda Norheim, Director, Lands, Resources and Consultations,

Please find attached a notice regarding proposed project changes to the Town of Petawawa's net zero project located at the Town's Water Pollution Control Plant at 560 Abbie Lane in Petawawa, Ontario.

The Ontario Ministry of the Environment, Conservation and Parks (MECP) has directed the Town of Petawawa to prepare a notice of the proposed project changes in accordance with paragraph 5 of subsection 15 (6) of Ontario Regulation 359/09, which includes providing notice to individuals, Indigenous communities and municipalities.

We kindly request that you please review the notice and available documents relating to the proposed project changes, and provide any comments that you may have in writing, to the attention of the contact, on or before the due date, that is identified in the attached notice.

Sincerely,

Trevor Woodtke
Asset/Energy Management Coordinator



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Trevor Woodtke

From: Suzanne Fortin <SuzanneF@metisnation.org>
Sent: July 16, 2025 11:32 AM
To: Planning
Subject: Update Email Contacts

You don't often get email from suzannef@metisnation.org. [Learn why this is important](#)

Good afternoon –

I have noticed your correspondence to the Region 5 MNO group is still going to Roger Rose. Mr. Rose is no longer the Regional Councillor.

Please update your contact information to reflect me as the current Regional Councillor for Region 5, MNO.

Thanking you in advance.

Suzanne

Maarsii, Merci, Miigwetch, Thank you

Suzanne B. Fortin
PCMNO Region 5 Councillor
Pronouns: She/Her
Azilda, ON
C: (705) 923-8803
E: suzannef@metisnation.org
W: www.metisnation.org
www.ontariometisfacts.com - Know the Facts – Know the Truth!

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Trevor Woodtke

From: Julian Greer <JulianG@metisnation.org>
Sent: July 25, 2025 3:06 PM
To: Planning
Subject: RE: Proposed Project Changes to the Petawawa Net Zero Project Question
Attachments: Comment on Petawawa Digestors MNO R5.pdf

Follow Up Flag: Follow up
Flag Status: Completed

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Hello again Trevor,

Please find attached our comments on this Project. In short we are supportive of the concept but are still a bit concerned about the proximity to the Ottawa River in the event of an externality or mistake. Our chat the other day did reduce these concerns quite a bit but I would not say completely.

Let me know if you have any questions and thanks for taking the time to review our thoughts on the matter.

Julian Greer, HBEM
Consultation Advisor
Lands, Resources and Consultations
Métis Nation of Ontario.
E: JulianG@metisnation.org
C: 1 (249) 535-1844
www.ontariometisfacts.com

From: Julian Greer
Sent: July 22, 2025 9:36 AM
To: 'planning@petawawa.ca' <planning@petawawa.ca>
Subject: Proposed Project Changes to the Petawawa Net Zero Project Question

Hello Trevor,

I was wondering if there will be any opportunity to meet to discuss our comments on this project or if this is simply reaching out for comments that will be considered but no meetings? We will be submitting one either way but just thought it better to know so I can structure it properly.

Best,

Julian Greer, HBEM
Consultation Advisor
Lands, Resources and Consultations
Métis Nation of Ontario.
E: JulianG@metisnation.org
C: 1 (249) 535-1844

Comment on the Proposed Changes to the Petawawa Water Pollution Control Plant

To the Planning Department at the Town of Petawawa,

While overall, we are supportive of green initiatives and do not oppose this project directly we do have some general concerns regarding the placement of the digestors and the seeming lack of environmental studies that have occurred regarding the Ottawa River in the event of a serious spill. The fact that a spill impacting the Ottawa River is not mentioned in the potential negative environmental impacts table of the Environmental Impact Study (table four) is of particular concern since it would appear that it hasn't been planned for. It is understood that since this is occurring within the confines of the current waste treatment plant footprint that it does not require much in the way of environmental impact assessments for its new use but it should be noted that the new proposed use of the facility could lead to more significant impacts than it was initially designed for and some consideration here is required even with mitigation. It should also be noted that while the river is technically outside of the site footprint and under normal operations it would not be impacted, it is still close enough to merit legitimate concern in the event of an error or externality.

The proposed location of the digestors is about 200 meters from the river proper and even closer to several other small water features per the site plans. If there were to be a major incident that 200 meters may not be enough to ensure that the spill is captured in time even though it is fairly slow moving as noted in the report. While best practices and such do reduce these concerns, there are still scenarios where the river could be impacted and we would appreciate knowing what the protocols would be to address this concern in the event that a leak or spill coupled with a significant storm event lead to the deposition of the materials in the river. Six years ago in the UK a similar digester spilled into a water body and killed ~10,000 fish alone not even considering the other damages that were done to the environment so there are recent examples of harm caused by these even with the best intentions.

Compounding these concerns is the lack of automated spill/leak detection or shutoff systems and instead mostly relying on human monitoring systems. Per your documents the main response suggested in the event of a large spill that might threaten the river is as follows: "Offsite migration of the spill can be prevented by blocking the culverts located at the eastern portion of DF2. Cleanup of the spill can be done using a vacuum truck or other suitable equipment for cleaning up spilled organic slurry". This relies entirely on human supervision and seems to ignore the fact that mistakes happen and human error exists. What would happen if someone didn't properly block the culvert and why would there not be some sort of automatic closure system? That should be planned for even if unlikely. While human monitoring should definitely be a part of monitoring surely an automated system in conjunction with this would be both cost effective and beneficial? Any time something is mostly based on human reporting it brings with it many potential issues so having multiple levels of alerts would improve the response time especially regarding leaking infrastructure.

Some other concerns we have in relation to water pertain to the soils that the site sits on. Based on your documents it appears as though the site is quite sandy with a fair amount of standing water which indicates that the groundwater is relatively close to the surface and that contaminants once released

would move fairly quickly through said soils if exposed. After hearing that all of the stormwater containment areas will have a liner these fears are somewhat assuaged but it is still worth pointing out that the stormwater management area directs water towards the river and if there were to be a rupture in the liner it could leach into the river or groundwater. This solution also relies on the liner being properly maintained which is another potential failure point. Would it be possible to have additional monitoring locations added specifically downstream of the Project so that any impact to the river is captured? Currently it appears as though there has only been one additional groundwater well added for the new site usage and this does not seem adequate. Biochemical oxygen demand, E. coli levels and ammonia should be included within this and they should be checked regularly. Without testing the river how can you be sure that it isn't impacted?

It should also be noted that the current conception of 1 in 100-year storms needs to be recalibrated to create climate-resilient stormwater management systems since we are no longer in the climate that much of that data is based on. Using data from the last century to inform current century rain patterns is essentially an effort in futility at this point since we experience a greater frequency of torrential storms than were experienced historically. Tornadoes and other such events now occur in the area and there is no mention of this in your plans. While drafting this comment the area in question was under a severe thunderstorm warning and a tornado watch which would have been considered quite unusual not long ago. Similarly, the 24-hour maximum of a rain event may also no longer be accurate and modeling should include more extreme weather scenarios in addition to spring breakup flooding on the Ottawa River, and potential hydraulic backpressure on containment features.

Further, I am curious as to how this will contribute to the overall reduction of emissions from fossil fuels when you factor in the additional emissions that 250 tanker trucks a year emit on top of the expected 15-30 per day during fertilizer spreading season plus flaring etc. 200kw of power is not very much to generate over an entire year so does the anticipated rate of return on emissions reductions from the plant actually make sense in the big picture when factoring in transportation? Does the offsetting of landfill emissions equate to fewer total emissions getting released when transportation is factored in? How far does the spent digestate get shipped on average before it is used? These are all very relevant questions when examining anything claiming to be net zero and these questions are also asked in good faith because if it truly is net zero then this should be lauded as a massive environmental success story.

Given that there are also plans to turn this into a renewable natural gas plant in future I also wonder if the emissions from the burning of that RNG will be factored into your calculations in addition to the processing? It is unquestionably a better fuel than traditional natural gas since it doesn't add new carbon but it's burning does still generate emissions that are essentially the same as regular natural gas even if the total carbon output is reduced. If the project does get to this stage, we hope that the carbon dioxide separated from the biogas to produce renewable natural gas is properly captured and sequestered.

In short, we are pleased to see green—or at least greener—energy being considered more often and the use of anaerobic digestors in general are supported but more environmental information is needed to assuage our concerns regarding the river in the event of human error and/or generational weather systems. The river is an important part of the community's past, present and future so therefore its

protection is essential. While it is understood that under normal operating conditions there is limited risk of a major environmental event one should always plan for the worst case as well as the best. Having a plan in place and understanding the potential impacts before they occur is essential to proper mitigation so we hope that you take our concerns seriously.

Sincerely,

Julian Greer

Consultation Advisor for the Mattawa/Ottawa River and Environs Métis Community (Region 5)

Trevor Woodtke

From: Trevor Woodtke
Sent: August 25, 2025 3:45 PM
To: Julian Greer
Cc: SuzanneF@metisnation.org
Subject: RE: Proposed Project Changes to the Petawawa Net Zero Project Question
Attachments: Comment on Petawawa Digestors MNO R5_Project Team Responses Draft.pdf;
Comment on Petawawa Digestors MNO R5.pdf

Hello Julian,

Thank you to the Metis Nation of Ontario (Region 5) for your response to the Town of Petawawa's Notice of Proposed Project Changes to the Petawawa Net Zero Project, located at the Town's water pollution control plant (WPCP). The Town, along with our partners the Ontario Clean Water Agency (OCWA) and Anaergia, are committed to fulfilling the consultation process in support of our application to amend the project's Renewable Energy Approval (REA) with respect to the proposed project changes.

As a next step, our project team would like to offer a virtual introduction meeting with MNO, Region 5 representatives. The purpose of the introduction meeting will be to provide more information on the project and the proposed project changes along with engaging in further discussions which may help to reduce any remaining concerns. To assist with discussions, our project team has attached some draft responses to your comments that were submitted to the Town on July 25, 2025.

Please let us know some available dates/times within the next 1-3 weeks that you may have for a virtual introduction meeting.

Thank you,



Trevor Woodtke, C.Tech.
Asset/Energy Management Coordinator
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My working hours and your working hours may be different. Please do not feel obligated to reply outside your normal working hours.

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From: Julian Greer <JulianG@metisnation.org>
Sent: July 25, 2025 3:06 PM
To: Planning <planning@petawawa.ca>
Subject: RE: Proposed Project Changes to the Petawawa Net Zero Project Question

You don't often get email from juliang@metisnation.org. [Learn why this is important](#)

Hello again Trevor,

Please find attached our comments on this Project. In short we are supportive of the concept but are still a bit concerned about the proximity to the Ottawa River in the event of an externality or mistake. Our chat the other day did reduce these concerns quite a bit but I would not say completely.

Let me know if you have any questions and thanks for taking the time to review our thoughts on the matter.

Julian Greer, HBEM

Consultation Advisor
Lands, Resources and Consultations
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From: Julian Greer
Sent: July 22, 2025 9:36 AM
To: 'planning@petawawa.ca' <planning@petawawa.ca>
Subject: Proposed Project Changes to the Petawawa Net Zero Project Question

Hello Trevor,

I was wondering if there will be any opportunity to meet to discuss our comments on this project or if this is simply reaching out for comments that will be considered but no meetings? We will be submitting one either way but just thought it better to know so I can structure it properly.

Best,

Julian Greer, HBEM

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Mattawa/Ottawa River and Environs Métis Community (Region 5)

RE: Notice of Proposed Project Technical Changes to the Petawawa Net Zero Project – Draft Responses to MNO Region 5 Comments Submitted July 25, 2025.

Q.1 While overall, we are supportive of green initiatives and do not oppose this project directly we do have some general concerns regarding the placement of the digestors and the seeming lack of environmental studies that have occurred regarding the Ottawa River in the event of a serious spill. The fact that a spill impacting the Ottawa River is not mentioned in the potential negative environmental impacts table of the Environmental Impact Study (table four) is of particular concern since it would appear that it hasn't been planned for. It is understood that since this is occurring within the confines of the current waste treatment plant footprint that it does not require much in the way of environmental impact assessments for its new use but it should be noted that the new proposed use of the facility could lead to more significant impacts than it was initially designed for and some consideration here is required even with mitigation. It should also be noted that while the river is technically outside of the site footprint and under normal operations it would not be impacted, it is still close enough to merit legitimate concern in the event of an error or externality.

Response:

We acknowledge the concern regarding the potential for a major spill that could reach the Ottawa River. However, the project team has carefully considered this risk in the design of the secondary containment pond, with particular attention to protecting natural features such as the Ottawa River.

The secondary containment pond was designed by a professional engineer from Stonecrest Engineering Inc., based on prior consultations with the Senior Waste Engineer at the Ministry of the Environment, Conservation and Parks (MECP), Environmental Permissions Branch. The design accounts for both potential spill scenarios and stormwater events.

In the event of a spill, the digester level would drop, triggering a low-level alarm in the system. Importantly, the pond is sized according to Ontario government guidelines for chemical and waste storage facilities, which require a containment capacity equal to 100% of the largest tank volume plus the greater of either 10% of the largest tank or 10% of the combined volume of all other tanks.

The total volume of the secondary containment pond is 2,994 m³. The modified volumes of Digesters 3 and 4 for the Net Zero Project are 776 m³ and 967 m³, respectively. These digesters typically operate at approximately 80% capacity, resulting in operational volumes of 621 m³ and 774 m³. Therefore, in the event of a spill, only about 10–15% of the pond's total volume would be occupied, allowing sufficient time for the operator to close the gate valve to restrict the spill within the facility area.

Additionally, the Petawawa Water Pollution Control Plant (WPCP) operator follows Class I and II emergency response procedures. A spill would be classified as a Class II event, prompting immediate on-site assessment and action in accordance with the standard operating procedures (SOP), including closing the gate valve of the secondary pond.

It is also important to note that the spill containment area encompasses the entire plant. Any spill would first flow into the drain leading to the plant's headworks. Only if the drain is overwhelmed would the spill be directed to the ditch—and only if the gate valve remains open. Given the containment pond's capacity, the site layout, and the emergency response protocols, there is no realistic scenario in which a spill would reach the Ottawa River.

However, in the unlikely event that all containment and response measures fail, the project team would implement additional containment strategies to isolate the areas (including several other small water features per the site plans) where the spill could reach after exiting the facility. Immediate notification would be provided to the public and the MECP, and appropriate remedial actions would be taken as required.

Q2. The proposed location of the digestors is about 200 meters from the river proper and even closer to several other small water features per the site plans. If there were to be a major incident that 200 meters may not be enough to ensure that the spill is captured in time even though it is fairly slow moving as noted in the report. While best practices and such do reduce these concerns, there are still scenarios where the river could be impacted and we would appreciate knowing what the protocols would be to address this concern in the event that a leak or spill coupled with a significant storm event lead to the deposition of the materials in the river. Six years ago in the UK a similar digester spilled into a water body and killed ~10,000 fish alone not even considering the other damages that were done to the environment so there are recent examples of harm caused by these even with the best intentions.

Response:

Please refer to the response provided for Question 1.

Q3. Compounding these concerns is the lack of automated spill/leak detection or shutoff systems and instead mostly relying on human monitoring systems. Per your documents the main response suggested in the event of a large spill that might threaten the river is as follows: "Offsite migration of the spill can be prevented by blocking the culverts located at the eastern portion of DF2. Cleanup of the spill can be done using a vacuum truck or other suitable equipment for cleaning up spilled organic slurry". This relies entirely on human supervision and seems to ignore the fact that mistakes happen and human error exists. What would happen if someone didn't properly block the culvert and why would there not be some sort of automatic closure system? That should be planned for even if unlikely. While human monitoring should definitely be a part of monitoring surely an automated system in conjunction with this would be both cost effective and beneficial? Any time something is mostly based on human reporting it brings with it many

potential issues so having multiple levels of alerts would improve the response time especially regarding leaking infrastructure.

Response:

As described in the response to Question 1, an automated monitoring system is in place to detect potential spills. This system includes a level transmitter installed in the digester. In the event of a spill, the digester level would drop, triggering a level alarm that immediately notifies the operator of a possible spill.

Additionally, as previously mentioned, the Petawawa WPCP operator follows Class I and II emergency response procedures. A spill would be classified as a Class II event, prompting immediate on-site assessment and action in accordance with the SOP, which includes closing the gate valve of the secondary containment pond.

Furthermore, in accordance with Ministry guidelines, every spill event must be reported to the Spills Action Centre. This ensures proper investigation of the incident and helps reduce the likelihood of similar events occurring in the future.

Q4. Some other concerns we have in relation to water pertain to the soils that the site sits on. Based on your documents it appears as though the site is quite sandy with a fair amount of standing water which indicates that the groundwater is relatively close to the surface and that contaminants once released would move fairly quickly through said soils if exposed. After hearing that all of the stormwater containment areas will have a liner these fears are somewhat assuaged but it is still worth pointing out that the stormwater management area directs water towards the river and if there were to be a rupture in the liner it could leach into the river or groundwater. This solution also relies on the liner being properly maintained which is another potential failure point. Would it be possible to have additional monitoring locations added specifically downstream of the Project so that any impact to the river is captured? Currently it appears as though there has only been one additional groundwater well added for the new site usage and this does not seem adequate. Biochemical oxygen demand, E. coli levels and ammonia should be included within this and they should be checked regularly. Without testing the river how can you be sure that it isn't impacted?

Response:

The project team has developed a Groundwater Monitoring Plan to monitor groundwater quality and ensure that any potential spills from the digester do not impact the groundwater. This plan was prepared by a licensed Professional Engineer and has been reviewed and accepted by the MECP District Office.

As outlined in the response to Question 1, the volume of the secondary pond is significantly greater than any potential spill volume. Furthermore, with OCWA's Emergency Response Plan in place (as detailed in the response to Question 1), the likelihood of a spill breaching the liner and seeping through the soil into the groundwater is minimal.

In addition, the entire pond and the grass swales will be lined with synthetic liners that are most appropriate for the application, selected in accordance with industry standards by a qualified Geotechnical Engineer.

Q5. It should also be noted that the current conception of 1 in 100-year storms needs to be recalibrated to create climate-resilient stormwater management systems since we are no longer in the climate that much of that data is based on. Using data from the last century to inform current century rain patterns is essentially an effort in futility at this point since we experience a greater frequency of torrential storms than were experienced historically. Tornadoes and other such events now occur in the area and there is no mention of this in your plans. While drafting this comment the area in question was under a severe thunderstorm warning and a tornado watch which would have been considered quite unusual not long ago. Similarly, the 24-hour maximum of a rain event may also no longer be accurate and modeling should include more extreme weather scenarios in addition to spring breakup flooding on the Ottawa River, and potential hydraulic backpressure on containment features.

Response:

The pond design and stormwater management plan have been developed by an experienced Professional Engineer using industry-accepted methodologies. Both the secondary containment pond and the stormwater management plan are designed in accordance with:

- The Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities issued by the Government of Ontario, and
- The Stormwater Management Planning and Design Manual (2003) by the Ontario Ministry of the Environment, specifically for water quality protection.

Runoff volumes for a 100-year, 24-hour storm event were calculated using the Modified Rational Method, consistent with industry standards. The IDF data used for these calculations was sourced from the Pembroke Climate Station (6106367).

It was confirmed that the pond has more than sufficient capacity to accommodate both the required volume for secondary containment and the runoff from a 100-year storm event.

For detailed sizing calculations of the containment pond, please refer to the Stormwater Management and Secondary Containment Design Report available on the Town of Petawawa's website: <https://www.petawawa.ca/residents/public-works/petawawa-net-zero-project/renewable-energy-approval-rea-amendment-1-314.html>

It should also be noted that the structures at the Petawawa WWTP were installed in the mid-1990s and were designed to withstand extreme wind conditions and seismic events. Additionally, approximately 50% of the tank volumes at the facility are located below ground level. As part of the Net Zero project, both digesters have been rehabilitated and coated. In accordance with the Town's asset management policies,

all structures are drained, cleaned, and inspected every 5 to 7 years to ensure they remain in good physical and operational condition.

Q6. Further, I am curious as to how this will contribute to the overall reduction of emissions from fossil fuels when you factor in the additional emissions that 250 tanker trucks a year emit on top of the expected 15-30 per day during fertilizer spreading season plus flaring etc. 200kw of power is not very much to generate over an entire year so does the anticipated rate of return on emissions reductions from the plant actually make sense in the big picture when factoring in transportation? Does the offsetting of landfill emissions equate to fewer total emissions getting released when transportation is factored in? How far does the spent digestate get shipped on average before it is used? These are all very relevant questions when examining anything claiming to be net zero and these questions are also asked in good faith because if it truly is net zero then this should be lauded as a massive environmental success story.

Response:

We acknowledge that the addition of trucking haulage to transport the additional volume of food waste to the plant will result in associated GHG emissions. However, this incremental increase is significantly lower than the overall GHG emissions reduction the plant is expected to achieve. These reductions come from turning digester solids into fertilizer that can be applied to land, earning carbon credits, and from diverting food waste away from landfills and into digesters.

Overall, the following activities are considered in calculating the expected GHG emissions reduction from the Net Zero Project:

1. Biogas Production in Anaerobic Digester

The project will enhance renewable energy generation and reduce the plant's carbon footprint through co-digestion of food waste, biosolids, and additional sludge.

2. Landfill Avoidance of Food Waste

Currently, some food waste from Petawawa and surrounding areas is sent to landfill. Under this project, food waste and FOG (fats, oils, and grease) will be diverted to digestion, significantly reducing GHG emissions.

3. Land Application of Primary and Secondary Biosolids

Traditionally, biosolids are land-applied after wastewater treatment. This project will instead use biosolids as feedstock for digestion, converting them into digestate.

4. Land Application of Anaerobic Digestate

The digestate produced will be land-applied, contributing to carbon sequestration and sustainable reuse of residual solids.

5. Transportation

GHG emissions associated with transporting additional food waste to the site and digestate from the digesters to land application sites are accounted for in the overall emissions analysis.

The proposed diversion of biosolids and food waste, combined with electricity offset and switching the heat source, is projected to reduce GHG emissions by up to **16,160 tCO₂e** annually. By 2050, the cumulative GHG reductions in Canada resulting from this project are estimated to be **313,845 tCO₂e**. Additionally, the project aims to divert 236,500 tonnes of food waste and 220,000 tonnes of sludge from landfills over a 10-year period, with the potential for continued emissions reductions and waste diversion in subsequent years.

Q7. Given that there are also plans to turn this into a renewable natural gas plant in future I also wonder if the emissions from the burning of that RNG will be factored into your calculations in addition to the processing? It is unquestionably a better fuel than traditional natural gas since it doesn't add new carbon but it's burning does still generate emissions that are essentially the same as regular natural gas even if the total carbon output is reduced. If the project does get to this stage, we hope that the carbon dioxide separated from the biogas to produce renewable natural gas is properly captured and sequestered.

Response:

The Net Zero project is divided in two phases: phase 0 and phase 2.

Phase 0, the scope of which includes:

- Refurbishment and upgrade two of the four existing anaerobic digesters 3 & 4;
- Using anaerobic digestion to co-digest and convert Town's biosolids external organics into renewable electric energy.
- Implementing a CHP to make beneficial use of digester biogas and produce electricity and heat for the plant to achieve the goal of being an Energy Net Zero Plant.

The scope for Phase 2 is for future consideration and includes:

- Addition of an upgraded RNG system, dewatering system and buffering tanks.
- Enabling greater quantities of food waste slurry will be received.
- Upgrading the facility to generate RNG from excess biogas production, which is a valuable end product.

At this time, there is no established timeline for implementing Phase 2 of the project. If a timeline is determined, the project team will follow all applicable environmental permitting processes including consultation and engagements.

In short, we are pleased to see green—or at least greener—energy being considered more often and the use of anaerobic digesters in general are supported but more environmental information is needed to assuage our concerns regarding the river in the event of human error and/or generational weather

systems. The river is an important part of the community's past, present and future so therefore its protection is essential. While it is understood that under normal operating conditions there is limited risk of a major environmental event one should always plan for the worst case as well as the best. Having a plan in place and understanding the potential impacts before they occur is essential to proper mitigation so we hope that you take our concerns seriously.

DRAFT