

Appendix F-7-4

Comments and Responses to ESR

Agencies, and Provincial/Local Organizations

From: Mike Dakin <MDakin@crca.ca>
Sent: Wednesday, September 11, 2024 4:00 PM
To: Roberts, Heather; Scanlan, Lauren
Cc: David Ellingwood; Tom Beaubiah
Subject: RE: Notice of Completion, Municipal Class Environmental Assessment- Kingston Regional Biosolids & Biogas Facility

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Hi Heather and Lauren,

CRCA staff have now had a chance to go through the ESR submission for the proposed Biosolids & Biogas Facility.

As you know, we've been engaged since early on with this proposal and we appreciate the open communication that UK and their consultant team have had with us at various steps along the way so far. As previously noted, our main interests in the project continue to be protection of watershed features, including surface water, groundwater and natural heritage, as well as avoidance of adverse impacts to the Little Cataraqui Creek Conservation Area (e.g. odour, noise, traffic, etc.).

We've reviewed the ESR documents and are glad to see no red flags have been raised in the various assessments to date. We're now at the point where we will reach back out to our Board to hear from them. We plan to prepare a report to our Board for the upcoming September 25th Full Authority Meeting. This report will serve as a progress update, as a summary of the assessment findings and as information on next steps.

We expect the main item for further discussion will be odour since it presents likely the highest potential impact to the adjacent lands (as we've already discussed). We've looked through the Final ESR document and Appendix H (Air Impact Assessment) from a staff perspective and note the conclusion that "the Facility can be designed to meet relevant air quality criteria and can operate under relevant O.Reg. 419/05 regulatory compliance guidelines." Moving forward, we'd like to have further conversation on these findings to understand the assessment and applicable guidelines better. We also wanted to know whether certain public uses at Little Cat (e.g. school programming, camps, etc.) were considered sensitive receptors in the assessment.

We're raising this now as a comment for consideration as the Class EA process wraps up, but also as an item for future conversation as we know there are other critical steps in the process before UK and the City make final decisions on the project.

No need for an immediate response. Just wanted to let you know where we're at with things following the ESR and some questions that may come up through further discussions with our Board. We're happy to discuss further at an appropriate time.

Thanks again for keeping us updated. Lastly, let me know if this feedback needs to be provided through another channel to become part of the project record.

Best regards,
Mike

Michael Dakin RPP, MCIP
Supervisor, Development Review



Phone: (613) 546-4228 ext. 228
Toll-Free: 1-877-956-2722
Web: www.CataraqiConservation.ca

Please note individuals should schedule an appointment with Cataraqi Conservation staff for any in-person inquiries relating to planning and permitting matters. Contact me or visit <https://crca.ca/property-inquiry-form/> to do so.

From: Mike Dakin
Sent: August 14, 2024 1:56 PM
To: Roberts, Heather <hroberts1@utilitieskingston.com>
Cc: Scanlan, Lauren <lscanlan@utilitieskingston.com>
Subject: RE: Notice of Completion, Municipal Class Environmental Assessment- Kingston Regional Biosolids & Biogas Facility

Thank you for this, Heather. We appreciate the updates.

We'll look through the ESR and if we have any comments or questions, will be sure to reach out before the 11th.

Mike

Michael Dakin RPP, MCIP
Supervisor, Development Review



Phone: (613) 546-4228 ext. 228
Toll-Free: 1-877-956-2722
Web: www.CataraqiConservation.ca

Please note individuals should schedule an appointment with Cataraqi Conservation staff for any in-person inquiries relating to planning and permitting matters. Contact me or visit <https://crca.ca/property-inquiry-form/> to do so.

From: Roberts, Heather <hroberts1@utilitieskingston.com>
Sent: Tuesday, August 13, 2024 9:51 AM
To: Mike Dakin <MDakin@crca.ca>
Cc: Scanlan, Lauren <lscanlan@utilitieskingston.com>
Subject: Notice of Completion, Municipal Class Environmental Assessment- Kingston Regional Biosolids & Biogas Facility

Good morning Mike,

Exciting news and milestone announcement!

As an important agency in our community and stakeholder to this project, I wanted to take the opportunity to provide you with the attached Notice of Completion.

The final Environmental Study Report for the Kingston Regional Biosolids and Biogas Facility will be posted to the project webpage (<https://utilitieskingston.com/Projects/Detail/RegionalBiosolidsBiogasFacility>) today, Tuesday, August 13!

The proposed facility offers an innovative solution to combine and process biosolids from the Ravensview and Cataraqi Bay Wastewater Treatment Plants and food waste from the City's Green Bin program, producing renewable natural gas (biogas) and other beneficial resources.

The document will be posted for a 30-day public review period from August 13 to September 11.

The Class EA work is being supplemented with a separate Business Case study, that is currently underway. Once that project is complete, a 'Go/No-Go' recommendation to Council will be made in November/December.

Thank you again for your time and engagement on the project over the past two years,
H

Heather Roberts (she/her), C.E.T.

Director, Water & Wastewater Services
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2400 C: 613-876-1132
hroberts1@utilitieskingston.com

_____|_____|_____|_____|

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

Utilities Kingston acknowledges that we are situated on the ancestral and continuing unceded territory of the Huron-Wendat, Anishinaabe and Haudenosaunee Peoples. We thank these Peoples for their stewardship of the land. As we preserve and protect the land and water, we commit to delivering our services with care for the Earth.

From: Leclerc, Erika (MCM) <erika.leclerc@ontario.ca>
Sent: Wednesday, September 11, 2024 4:52 PM
To: Scanlan, Lauren; abanihashemi@dillon.ca
Cc: Orpana, Jon (MECP); Barboza, Karla (She/Her) (MCM); Hamilton, James (MCM); UKBiogasFacility@Dillon.ca
Subject: MCM Response - Notice of Completion - Kingston Regional Biosolids & Biogas Facility
Attachments: 2024-09-11 KingstonBiosolidsBiogasFacility_ESR_MCMComments.pdf; 2024-08-13 UK Biosolid_NofCompletion_AODA.pdf

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Good afternoon,

Thank you for sending the Notice of Completion for the above-referenced project to the Ministry of Citizenship and Multiculturalism (MCM). Please find attached MCM's comments on the Environmental Study Report.

Please do not hesitate to contact me if you have any questions.

Best regards,

Erika Leclerc
Heritage Planner | Heritage Branch | Citizenship, Inclusion and Heritage Division
Ministry of Citizenship and Multiculturalism | Ontario Public Service
416-305-0757 | erika.leclerc@ontario.ca



Taking pride in strengthening Ontario, its places and its people

From: abanihashemi@dillon.ca <abanihashemi@dillon.ca> On Behalf Of Facility, UK Biogas
Sent: Tuesday, August 13, 2024 9:25 AM
To: Orpana, Jon (MECP) <Jon.Orpana@ontario.ca>; barb.mcmurray@ontario.ca; rahim@ontariowater.ca; IMaharjan@ocwa.com; Hammill, Nathan (MEDJCT) <Nathan.Hammill@ontario.ca>; Wittenbrinck, Joerg (ENERGY) <Joerg.Wittenbrinck@ontario.ca>; Elms, Michael (MMAH) <Michael.Elms@ontario.ca>; Warren, Catherine (She/Her) (MNR) <Catherine.Warren@ontario.ca>; Barboza, Karla (She/Her) (MCM) <Karla.Barboza@ontario.ca>; Abdi, Fuad (He/Him) (SOLGEN) <Fuad.Abdi@ontario.ca>; Meleschuk, Jenn (MTO) <Jenn.Meleschuk@ontario.ca>
Cc: Scanlan, Lauren <lsanlan@utilitieskingston.com>
Subject: Notice of Completion - Kingston Regional Biosolids & Biogas Facility

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

Good Day,

Utilities Kingston undertook a Municipal Class Environmental Assessment (Class EA) for a combined biosolids and organic waste processing facility at Knox Farm, a Municipally owned property located off Perth Road just northwest of the Highway 401 and Division Street interchange in the City of Kingston.

On behalf of Utilities Kingston, please find the Notice of Completion attached for the Kingston Regional Biosolids & Biogas Facility Municipal Class EA. Information can also be found on the project website <http://www.utilitieskingston.com/Projects/Detail/RegionalBiosolidsBiogasFacility>

The study process and recommendations are documented within the Environmental Study Report 7which is now available for a 30-day comment period on the Utilities Kingston website: www.utilitieskingston.com/Projects/Detail/RegionalBiosolidsBiogasFacility

If you have any questions or comments about the Project, please respond back to this email or contact the Project team members listed in the notice.

Kind Regards,

Avid Banihashemi
Environmental Assessment Lead

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**Ministry of Citizenship
and Multiculturalism**

Heritage Planning Unit
Heritage Operations Branch
Citizenship, Inclusion and
Heritage Division
5th Flr, 400 University Ave
Toronto, ON M5G 1S7
Tel.: 416-305-0757

**Ministère des Affaires civiques
et du Multiculturalisme**

Planification relative au patrimoine
Opérations relatives au patrimoine
Division des affaires civiques, de
l'inclusion et du patrimoine
5e étage, 400, av. University
Toronto, ON M5G 1S7
Tél.: 416-305-0757



September 11, 2024

Lauren Scanlan, P.Eng.
Project Advisor – Risk & Research
Utilities Kingston
lscanlan@utilitieskingston.com

MCM File : **0017828**
Proponent : **Utilities Kingston**
Subject : **Municipal Class Environmental Assessment – Schedule C – Notice
of Completion**
Project : **Kingston Regional Biosolids & Biogas Facility**
Location : **City of Kingston**

Dear Lauren Scanlan:

Thank you for providing the Ministry of Citizenship and Multiculturalism (MCM) with the Notice of Completion and the Environmental Study Report (ESR, dated August 2024 and prepared by Dillon Consulting Ltd.) for the above-referenced project.

MCM's interest in this Environmental Assessment (EA) project relates to its mandate of conserving Ontario's cultural heritage.

Project Summary

Utilities Kingston undertook a Municipal Class EA for a combined biosolids and organic waste processing facility at Knox Farm, a municipally owned property located off Perth Road just northwest of the Highway 401 and Division Street interchange in the City of Kingston. The intent is that the facility will process wastes from the City's wastewater treatment plants and "Green Bin" program to produce a renewable natural gas (biogas) and other beneficial resources.

This study has been completed in accordance with the planning and design process for Schedule C projects as outlined in the Municipal Class EA (October 2000, as amended in 2007, 2011, 2015, and 2023), which is approved under the *Ontario Environmental Assessment Act*.

Comments

MCM finds that cultural heritage due diligence has been undertaken in preparing this ESR by:

- Undertaking a Stage 1 archaeological assessment (AA, under Project Information Form (PIF) number P007-1420-2022, included in Appendix B-1 of the ESR) and a Stage 2 AA (under PIF number P007-1543-2023, included in Appendix B-2 of the ESR).
 - The AA reports have been entered into the Ontario Public Register of Archaeological Reports.
 - The Stage 2 AA did not identify any archaeological materials within the study area. No further assessment was recommended; however, the remainder of the Knox

Farm property was not assessed and may require further assessment if development is contemplated in the future.

- Completing a Cultural Heritage Assessment Report (CHAR, dated December 23, 2022, and prepared by Archaeological Research Associates Ltd.).
 - The CHAR did not identify any known or potential built heritage resources or cultural heritage landscapes within or adjacent to the study area.
 - MCM has reviewed the CHAR and finds that the report is overall consistent with the requirements, guidance, and standards of the Municipal Class EA and with best practice guidance prepared by MCM.

We have attached a table with detailed comments and suggested revisions for alignment with the legislative framework and to support the documentation of cultural heritage due diligence.

Thank you for the opportunity to review the ESR. If you have any questions or require clarification, please do not hesitate to contact me.

Sincerely,

Erika Leclerc
Heritage Planner
Erika.leclerc@ontario.ca

Copied to: Betsy Varghese, Partner, Dillon Consulting Ltd.

Avid Banihashemi, Environmental Assessment Lead, Dillon Consulting Ltd.

EA Notices to Eastern Region, MECP

James Hamilton, Manager, Heritage Planning Unit, MCM

Karla Barboza, Team Lead – Heritage Planning Unit, MCM

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. The Ministry of Citizenship and Multiculturalism (MCM) makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MCM be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out an archaeological assessment, in compliance with Section 48(1) of the *Ontario Heritage Act*.

The *Funeral, Burial and Cremation Services Act, 2002*, S.O. 2002, c.33 requires that any person discovering human remains must cease all activities immediately and notify the police or coroner. If the coroner does not suspect foul play in the disposition of the remains, in accordance with *Ontario Regulation 30/11* the coroner shall notify the Registrar, Ontario Ministry of Public and Business Service Delivery, which administers provisions of that Act related to burial sites. In situations where human remains are associated with archaeological resources, the Ministry of Citizenship and Multiculturalism should also be notified (at archaeology@ontario.ca) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.

Comment #	Reference to Report	Comments and Rationale	Proposed Action/Solution
1.	Section 4.10 – Archaeology (p.68)	The Stage 2 archaeological assessment notes that while no archaeological materials were identified within the study area and no further assessment is recommended, the remainder of the Knox Farm property was not assessed and may require further assessment if development is contemplated in the future. We recommend including this in the ESR to ensure consistency between the reports.	Revision to report.
2.	Section 4.11 – Built Heritage and Cultural Heritage Landscapes (p.69-70)	We recommend revising the title of this section. In addition, we recommend editing this section for clarity and alignment with the current legislative framework.	<p>Revision to report. MCM recommends the following edits:</p> <p>“4.11 Built Heritage Resources and Cultural Heritage Landscapes</p> <p>A Cultural Heritage Assessment Report (CHAR) was completed by ARA (Appendix C). A The purpose of the CHAR outlines the existing identified is to identify known and potential built heritage resources and cultural heritage resources landscapes, including properties recognized under the Ontario Heritage Act, those located adjacent to a Canadian Heritage River, National Historic Sites, properties with an Ontario Heritage Trust easement or plaques and any known cemeteries in the entire study area. Any properties that have been identified through other reports for projects within the Study Area are also to be examined in this the CHAR.</p> <p>After conducting historical research, consultation and field survey, no known or potential built heritage resources or cultural heritage resources landscapes were identified within the Study Area. To date, there are no concerns with respect to built heritage resources and cultural heritage landscapes related to the proposed Facility construction on the Knox Farm property.”</p>

3.	Section 7.3 – Potential Impacts and Mitigation, Table 7-9 (p.160)	Please note that cultural heritage resources include three distinct types: built heritage resources, cultural heritage landscapes, and archaeological resources. We recommend revising the terminology in Table 7-9, under “Heritage Resources.”	Revision to report. We recommend the following edits: “Built Heritage Resources and Cultural Heritage Landscapes <ul style="list-style-type: none">• No built heritage resources or cultural heritage resources landscapes were identified within or adjacent to the property in the Cultural Heritage Assessment Report (CHAR) (ARA, Dec 2022).” We also recommend removing the following paragraph under the Archaeological Resources row: “Should deeply buried archaeological deposits be found during construction activities, the Ontario Ministry of Citizenship and Multiculturalism must be notified immediately (at archaeology@ontario.ca).”
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Indigenous Communities and Organizations

From: Benjamin Labbe <Benjamin.Labbe@wendake.ca>
Sent: Tuesday, September 3, 2024 9:50 AM
To: Facility, UK Biogas
Subject: RE: Notice of Completion - Kingston Regional Biosolids & Biogas Facility

Kwe Avid,

Thank you for your email. We do not have additional comments at the moment. Please keep us involved if archaeological resources are encountered during construction.

Please note that we have updated our way of processing consultations. Any new consultation or project notice must be sent to the following email address: consultations@wendake.ca. We also kindly ask that you remove any other email address that you have on file from all your mailing lists.

Tiawenhk,



NATION HURONNE-WENDAT

Bureau du Nionwentsio

Benjamin Labbé, M. Sc
Conseiller en gestion du territoire

255, place Chef Michel Laveau
Wendake (QC) G0A 4V0
T : 418 843-3767
@ : Benjamin.Labbe@wendake.ca

WENDAKE.CA

De : abanishemi@dillon.ca <abanishemi@dillon.ca> De la part de Facility, UK Biogas

Envoyé : 13 août 2024 09:23

À : Administration <Administration@wendake.ca>

Cc : Naomi Leduc <Naomi.Leduc@wendake.ca>; Mario Gros Louis <Mario.GrosLouis@wendake.ca>; Lori-Jeanne Bolduc <Lori-Jeanne.Bolduc@wendake.ca>; Betsy Varghese <bvarghese@dillon.ca>;

Scanlan, Lauren <lscanlan@utilitieskingston.com>; McLeod, Alan <amcleod@cityofkingston.ca>

Objet : Notice of Completion - Kingston Regional Biosolids & Biogas Facility

Vous ne recevez pas souvent de courriers de la part de ukbiogasfacility@dillon.ca. [Découvrez pourquoi cela est important](#)

Good Day,

Utilities Kingston undertook a Municipal Class Environmental Assessment (Class EA) for a combined biosolids and organic waste processing facility at Knox Farm, a Municipally owned property located off Perth Road just northwest of the Highway 401 and Division Street interchange in the City of Kingston.

On behalf of Utilities Kingston, please find the Notice of Completion attached for the Kingston Regional Biosolids & Biogas Facility Municipal Class EA. Information can also be found on the project website <http://www.utilitieskingston.com/Projects/Detail/RegionalBiosolidsBiogasFacility>

The study process and recommendations are documented within the Environmental Study Report 7 which is now available for a 30-day comment period on the Utilities Kingston website:

www.utilitieskingston.com/Projects/Detail/RegionalBiosolidsBiogasFacility

If you have any questions or comments about the Project, please respond back to this email or contact the Project team members listed in the notice.

Kind Regards,

Avid Banihashemi
Environmental Assessment Lead

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From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Friday, September 6, 2024 3:15 PM
To: Aboriginal Voices
Subject: RE: Test Email from Utilities Kingston


Hi Douglas,

Just getting out of my 1pm meeting so apologies for the delay in replying. The Appendix A document I sent you earlier this afternoon has its own appendices which may be what you are seeing, so I don't think you have all the other ESR appendices (unless my link is sharing my whole folder inadvertently). Just to be sure, here are individual links for each ESR appendix (A through H):

 [Appendix A - Knox Farm Suitability Report_Final.pdf](#)

 [Appendix B Stage 1 and 2 Archaeological Assessment_Final.pdf](#)


 [Appendix C Cultural Heritage Assessment Report_Final.pdf](#)

 [Appendix D - Financial Assessment Report_Final.pdf](#)

 [Appendix E Evaluation Matrix_Final.pdf](#)

 [Appendix F - Consultation Materials_Final.pdf](#)

 [Appendix G - Acoustic Assessment Report_Final.pdf](#)

 [Appendix H - Air Impact Assessment Report_Final.pdf](#)

I do hope this helps! It's a lot of material and exciting that you are taking the time to review. Please let me know if you have any questions. I hope you have a great weekend!

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



Utilities Kingston acknowledges that we are situated on the ancestral and continuing unceded territory of the Huron-Wendat, Anishinaabe and Haudenosaunee Peoples. We thank these Peoples for their stewardship of the land. As we preserve and protect the land and water, we commit to delivering our services with care for the Earth.

From: Aboriginal Voices <aboriginalvoices@cfrc.ca>
Sent: 06 September 2024 1:37 PM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Subject: Re: Test Email from Utilities Kingston

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

The file you sent has all Apps attached and clear reading ahead.
Thank you for your assistance.

No further work on your part at this time.

Cheers
Douglas Farquhar

On Fri, Sep 6, 2024 at 12:29 PM Scanlan,Lauren <lscanlan@utilitieskingston.com> wrote:

Hi Douglas,

As discussed, please see the 2nd link below to access a higher quality PDF of Appendix A (Knox Farm Suitability Report), which supports the Environmental Study Report for the 'Regional Biosolids & Biogas Facility' as posted on our project webpage (<https://utilitieskingston.com/Projects/Detail/RegionalBiosolidsBiogasFacility>).

 [Appendix A - Knox Farm Suitability Report_Final.pdf](#)

Please let me know if the link above works for you! The document is 188MB and contains 323 pages. If this looks good, I can use this same method to send you the remaining appendices later this afternoon (I am in a meeting from 1-2pm).

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



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From: Aboriginal Voices <aboriginalvoices@cfrc.ca>
Sent: 06 September 2024 12:03 PM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Subject: Re: Test Email from Utilities Kingston

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Thank you for your response.

Douglas

On Fri, Sep 6, 2024 at 12:02 PM Scanlan,Lauren <lscanlan@utilitieskingston.com> wrote:

Hi Douglas,

Please let me know if you get this!

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



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Public

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Tuesday, September 10, 2024 2:50 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Proposed biogas plant

Hi Barbara,

Thank you for connecting and providing feedback on the Kingston Regional Biosolids and Biogas Facility project. I understand the intent of your email is to support [REDACTED] letter and can note this in our project files as such. Please note that while I did speak with [REDACTED] on the phone yesterday, I have not received a written communication from him. I will keep an eye out for this.

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



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From: [REDACTED] >
Sent: 10 September 2024 1:15 PM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Cc: [REDACTED]
Subject: Proposed biogas plant

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Dear Mr. Scanlon,

I am hearing about this for the first time Wednesday, 10 Sept. so have little time to respond. As such, I am in agreement with and I ask to be considered a co-signer of [REDACTED] letter copied below.

Sent from my iPad

7. Concerns re Utilities Kingston's New Biogas Initiative - Deadline for Comments - Sept 10!

Editor's Note: Although this is not in the Inner Harbour per se, it is relevant given concerns about Climate Change and whether this type of facility is in fact a good idea according to current research and the serious impacts of increasing the production of methane and CO2.

Concerns Received from [REDACTED] late August, 2024

[Utilities Kingston: Regional Biosolids & Biogas Facility: Environmental Study Report](#)

1. This is the Phase 4 Environmental Study that has taken a year to be completed by the contracted engineers. It was sent out to two people, including me. Apparently, we two are the public input!
2. As it happens, our homes on Sunnyside Road were not included in the study because we are considered to be just outside the 1km radius around the site!!
3. However, I note that our properties are included in, or **adjacent to, the currently designated Environmental Protection Area (EPA) of the conservation area**, which would not allow this plant to be built. A part of the plant site is included in the EPA, but the City is expected to pass a bylaw that will make an exception and overrule the EPA, allowing the plant to go ahead.
4. **A designated Provincially Significant Wetland (the Little Cataraqui Creek Complex), which would also deliver provincial protection, borders** on the site boundary, and so also does not offer protection.
5. **There is significant woodland on the Knox Farm property.** This would also deliver protection but the engineers designated it as 'deciduous thicket' which avoids this protection.
6. **Two threatened species of birds were identified on the site**, which was considered to be of special concern. A threatened species of amphibian was also identified on the site. Blandings' turtles were observed nearby. (None of this should be surprising, after all, this has been designated as a Conservation Area for over 50 years.)
7. A large human refuse plant such as this will no doubt attract and encourage a breeding site for rodents and other vermin. This would no doubt significantly **affect the carefully nurtured natural wildlife balance in the conservation area**. This subject is not mentioned in the report
8. A presentation was given to the Cataraqui Region Conservation Authority in January and the only major concerns raised were about odour, groundwater and well protection. **(Somebody should remind them that this is also a protected Conservation Area that contains animals and natural resources to be cared for, and is an important environmental resource for our families' education and recreation, and for our school programs.)**
9. **Hydrologically, the property is in a designated 'Highly Vulnerable Area'** of the Cataraqui Source Protection Area (SPA) and is located on a formation of unstable bedrock. Surface water runoff travels down to the Cataraqui Creek Reservoir. (This reservoir already has very limited recreation value because of the toxic pollution coming down directly from the old city garbage dump on McAdoo's Lane. The Cataraqui Creek also runs into and out of this reservoir, and on down to the lake.)
10. **There are so many assumptions made in this report!** For example, the report states that the plant can be designed to operate under air quality guidelines and comply with regulatory requirements. (My emphasis)...but will it? And what are the implications if it doesn't? The requirements should have been nailed down by now by the engineers!
11. **Noise levels were assumed to not be a problem and potential light pollution was not mentioned.** Sunnyside Road is also not included in the potential traffic study implications.
12. The dominant wind direction is from the south west with moderate west and northwest components.
13. **The size of the current plant is designed to accommodate the City of Kingston, but possible significant expansion is expected and anticipated.** The economic plan is to bring in human waste from a much larger region. The tonnage of undigested wastewater sludge and raw sewage anticipated to be delivered is a guess, depending on how big the regional catchment area turns out to be.

14. **The topic of the inevitable air pollution and toxic odour from the site focuses only on the degree of ventilation required inside the operation's buildings!!** Presumably, these buildings are ventilated to the outside! (When I asked about the air pollution and odour control, I was told that there would be sensors on the perimeter to keep track...reassuring?...then what?)
15. **The end of the process will be 'liquid solid waste'...the biosolids! This will be sprayed on farmer's fields as a fertilizer...sweet!** (However, this waste cannot be spread on fields that grow crops for human consumption because of the possible toxic residues in the sewage, e.g., pharmaceuticals and medicines. This is not mentioned in the report.)
16. **There are two plant designs being considered with different technologies. Both have lagoons and pools of waste on the property to produce the gas. Methane gas flaring will be required to burn it off.**
17. **This is a big and expensive operation.** The estimated initial upfront capital costs for the two designs are: Design 1 - \$71.1 Million, Design 2 – \$84.9 Million!! (Our property taxes!) In each case the engineering costs will be about \$10 Million. The engineers recommend going ahead with Design 1.
18. **The ongoing annual costs of operation are estimated at about \$2 Million.** (Taking out the costs of 5-6 full-time staff, an annual budget of \$1.5 Million for ongoing operation and maintenance of such a large and complex plant is clearly woefully inadequate.)
19. **A decision to go ahead with this plant is expected by the end of 2024. The project will be initiated in 2025 with a 5 year construction timeframe. The plant would then be in operation in 2030.**

At the last open house I asked the consulting engineers for an example of where this technology had been successful installed. The engineers thought there was one, but they weren't sure.

I am very concerned that we are being 'greenwashed' here by the engineers, to cover up the negative implications and consequences of this very expensive but non-tested venture. Thank you for your attention.

[REDACTED]
[REDACTED]
[REDACTED]

Further Correspondence:

Since this initial letter, a **petition has been created** and **further community outreach** is in process along with collection of scientific data on comparable projects. It is scheduled to go to Council later this month.

"Kingston Utilities has now sent out the Environmental Study on the Biosolids and Gas Facility being considered to be built on the Knox Farm property close to us, next to the Little Cat Conservation Area. This facility is specifically designed to manufacture methane gas and carbon dioxide. These are two of the most dangerous gases on the planet.

They ask for any comments on this report to be submitted only by September 10th. I wanted to get this report out to you quickly should you want to respond to them."

"I spoke to the project contact at Kingston Utilities, Lauren Scanlan, this morning and told her to expect a response from us by the project deadline which is Wednesday. A number of us have been working on this response.

Given the fast approaching deadline to get responses in, we just don't have time to finalize it and get agreement across our group on a joint document, as we had hoped. There are just too many divergent points to be included.

Lauren Scanlan indicated that what is sent in by the deadline will be included in the project conclusion document that will then be sent to the City Council, CRCA, etc. After Wednesday's deadline it will be too late.

Given this situation, I am urging any one of us who wishes to make a contribution to this important project document to do so by contacting Lauren Scanlan directly by a written submission before the close of business on Wednesday.

She can be contacted at:

Lauren Scanlan

lscanlan@utilitieskingston.com

613 546-1181 ext. 2462

Thank you and all the best,

[REDACTED]
[REDACTED]

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Thursday, September 5, 2024 10:13 AM
To: [REDACTED]
Cc: Roberts,Heather
Subject: Biosolids and Biogas Facility Class Environmental Assessment

Good Morning [REDACTED]

I received your communication below through our customer service representatives as it relates to the Biosolids and Biogas Facility Class Environmental Assessment.

Thank you for taking the time to share your thoughts regarding the proposed biogas facility project in Kingston. We appreciate your engagement and concern about the development in our community. Please note that the proposed facility is still in the planning stages and has not been confirmed to proceed. The work completed to-date includes the completion of a study on the suitability of Knox Farm (proposed site location) for the proposed facility and a Class Environmental Assessment (Class EA). Both studies included detailed assessments of the potential impacts of the proposed facility on areas such as air quality, land use, natural environment, traffic, etc. The reports and other project information can be found here on the [project website](#).

Utilities Kingston is also undertaking a separate business case of the proposed facility which is due to be complete by the end of this year.

As part of the Class EA, the recommended design incorporates an emphasis on sustainability and environmental responsibility. The proposed facility aligns with the City's commitment to advancing eco-friendly initiatives and reducing our carbon footprint while playing a crucial role in our efforts to enhance renewable energy production and promoting waste management solutions that are beneficial for both our City and the environment.

We value your feedback and are open to further questions or concerns you might have and in the meantime have filed your comments with our consulting team and project records.

Kind Regards,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP
Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



Utilities Kingston acknowledges that we are situated on the ancestral and continuing unceded territory of the Huron-Wendat, Anishinaabe and Haudenosaunee Peoples. We thank these Peoples for their stewardship of the land. As we preserve and protect the land and water, we commit to delivering our services with care for the Earth.

Customer Comments:

Customer Name: [REDACTED]
Customer Contact: [REDACTED]
Customer Address: [REDACTED]
Mobile Phone: [REDACTED]
Home Phone: No Value
Office Phone: No Value - Ext.
Subject:

Knox Farm

Customer By Service Email [REDACTED] (08/28/2024 08:35 PM)

I was appalled to learn that the city plans to proceed with the biosolids and gas facility on the Knox Farm property. First, the city approved the scrap yard on McAdoos Lane - what a lovely sight to greet visitors and residents alike as they come to Kingston and the Little Cataraqui Creek Conservation Area. Now I learn the city is proceeding with a biosolids and biogas facility just across Perth Road from the scrap yard and uphill from the Conservation Area. This shows the utter disrespect the City has for the residents living north of the 401. Our substantial tax dollars have been contributing to city coffers for decades with virtually no services to show for them. The city propounds to be working towards an environmental, sustainable, green city and yet would consider this type of facility in a neighbourhood, near the Conservation Area, and will be an eyesore for visitors to the city.
I strongly object to consideration of this type of project and fear the effect will be detrimental to the residents living north of the 401 and the city in general.

[REDACTED]

Incident Address: [REDACTED]

Escalated: No

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Tuesday, September 10, 2024 10:41 AM
To: [REDACTED]
Subject: RE: Regional Biosolids and Biogas Facility

Hi [REDACTED]

Thank you for taking the time to provide feedback on the Kingston Biosolids and Biogas Facility. We appreciate your concerns and have noted your objection. Work completed to date has emphasized the importance of minimizing impacts to the natural environment and source water protection. Should the project proceed, these factors will continue to be important design considerations.

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



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From: [REDACTED]
Sent: 09 September 2024 4:29 PM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Subject: Regional Biosolids and Biogas Facility

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Ms. Scanlan,

I would like to submit my name to the objection for the Regional Biosolids and Biogas Facility being planned for the Knox Farm above the "Little Cat" Conservation Area. My Fathers farm was expropriated by the Conservation and his livelihood ended. I would not like to see this was for nothing, as the Conservation has become a sanctuary for many species and this facility would endanger this. Also the damage to all the wells in this area would be extensive.

Thank you for your consideration in this matter. [REDACTED]

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Tuesday, September 10, 2024 8:09 AM
To: [REDACTED]
Subject: RE: Question about the Biogas Facility Project

Good Morning [REDACTED]

Thank you for the questions below. Please see responses directly in your original email below in **orange**.

Please let me know if you have any additional comments or questions.

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



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From: [REDACTED]
Sent: 09 September 2024 1:49 PM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Subject: Question about the Biogas Facility Project

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Hi, Lauren. I have a several questions about the proposed biogas facility project after reading the Environmental Study Report (ESR).

When the reports talk about transporting biosolids from the two waste water treatment plants, are they talking about the dewatered sludge/cake or the liquid form before it is dewatered? **We are referring to hauling thickened undigested sludge at around 15% (somewhere in between the consistency of cake and liquid).**

What are the reasons for taking biosolids to the proposed facility? "A fully enclosed biosolids storage facility was added" when Ravensview [was upgraded](#), and an earlier annual report for the facility indicated there is sufficient room for on-site storage for up to 200 days before the biosolids are spread on farmers' fields. And it looks like a recent upgrade at [Catarauqui Bay WWTP](#) also improved cake storage. So, a considerable amount of time, effort and money were recently spent on both WWTPs for biosolid storage. **Utilities Kingston completed a Master Plan for "Enhanced Biosolids Management and Biogas Utilization" in 2020. The purpose of that assignment was to review our long-term approach for biosolids management and biogas utilization for the community, including addressing the need to add solids treatment capacity at the Catarauqui Bay WWTP to service future growth. While the recent upgrade at the Catarauqui Bay WWTP did include improved dewatering and cake storage as you noted, it did not address solids treatment capacity. A major objective of the Master Plan project was to identify opportunities to improve our environmental footprint of managing wastewater biosolids materials and biogas, while also addressing the Catarauqui Bay WWTP capacity constraint. Through the Master Plan project, a variety of alternatives were reviewed, and ultimately this new offsite facility was identified as the preferred alternative based on an evaluation exercise that considered biogas production (which can contribute to a carbon footprint reduction if beneficially reused), required footprint, transport requirements, capital and operating costs, and proximity to sensitive land uses and natural features. The purpose of the current Class EA project was to carry out a deeper review and evaluation of the preferred alternative by evaluating the preliminary site (Knox Farm) for suitability and evaluating preliminary design concepts. I invite you to check out the 2020 Master Plan, also available on our project webpage (<https://utilitieskingston.com/Projects/Detail/RegionalBiosolidsBiogasFacility>), where you'll find more details about the various alternatives considered.**

What is the purpose of the "Covered Liquid Biosolids Storage Lagoon" shown in Figure 7-1 on page 137 of the ESR? Is that what will be received from the WWTPs? **The purpose of the covered liquid biosolids storage lagoon is to store the digested biosolids product in a liquid form. The material would be stored during the winter season and hauled offsite for land application as a fertilizer. Material received at the site would include the undigested sludge from the WWTPs and the source separated organics from the City's green bin program. The green bin materials would be pre-treated to remove contaminants and blended with the undigested sludge from the WWTPs before entering the digestion process on site.**

Finally, do the anaerobic digesters require water over and above that provided by the biosolids and SSOs? If so, where will that come from? **Some water may be required during the material blending and pre-processing step for treatment, although it is anticipated that the majority of the water required would be contained in the feedstock. This is something that would be optimized during design. For the purpose of the Class EA, it has been assumed that water will be trucked to site to if required. However, it may be possible to provide process water requirements via an onsite well subject to additional testing.**

I apologize if the answers to my questions were contained in the ESR, but I've missed them if they were.

I plan to provide you comments by your Wednesday deadline.

Thank you.

[REDACTED]

From: [REDACTED]
Sent: Wednesday, September 11, 2024 3:41 PM
To: Scanlan, Lauren
Cc: bvarghese@dillon.ca
Subject: Pdf copy of my letter
Attachments: Letter to UK re Kingston Kingston Regional Biosolids and Biogas Facility - [REDACTED]

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Lauren – I meant to send you a pdf copy of my letter but clicked on the Word version by mistake. Could I provide the attached instead?

Thank you, and I apologize for any confusion.

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

11 September 2024

Laura Scanlan
Project Advisor - Risk & Research
Utilities Kingston
85 Lappan's Lane
Kingston, ON K7L 4X7
Utilities Kingston
lscanlan@utilitieskingston.com

Dear Ms. Scanlan,

I would like to provide comments on the Environmental Study Report (ESR) for the proposed Regional Biosolids & Biogas Facility, released for public review by Utilities Kingston 13 August 2024. I fully support the idea of making use of alternate energy sources and using biogas generated from waste streams, but I do not believe Knox Farm is the right location to generate it. My concerns are similar to those raised by Ursula Melinz, lawyer with the firm of Soloway Wright, in a letter that can be found in online Appendix F, Part 1, beginning on pdf page 70.¹

The Little Cataraqui Conservation Area is a jewel for the City of Kingston. It is a sanctuary for wildlife and is invaluable to the community, widely used for recreation by all Kingston residents and offering a sugar (maple) bush that attracts hundreds of people each spring, a place that school groups visit, and summer camps for children, which my own grandson has attended. Why would we put a waste processing facility immediately next to it?

The Executive Summary² tells us:

“Several confirmed and potential sensitive natural heritage features were identified as occurring within the Knox Farm Property Boundary such as the Cataraqui Clay Creek Ridges Earth Science Area of Natural and Scientific Interest (ANSI), significant woodlands, a watercourse and unevaluated wetlands as well as potential species at risk (SAR) habitat and candidate Significant Wildlife Habitat (SWH). However, the presence of these features was not significant within the boundaries of the Proposed Site Location. According to the Source Protection Atlas by the MECP, the Knox Farm Property is located within the Cataraqui Source Protection area (SPA) and

¹ ESR Annex F, Part 1, page 70

https://utilitieskingston.com/Cms_Data/Contents/UtilitiesKingston/Media/Documents/Projects/Biosolids_Biogas_Facility_ClassEA/CompletionDocs/Appendix-F-Consultation-Materials-Part-1-F1-to-F2_Optimized.pdf

² ESR, page xvi

is identified to be within a Significant Groundwater Recharge Area and a Highly Vulnerable Area; of which the majority of the Cataraqui SPA is identified.”

Unfortunately, rather than recommending finding a different location for the proposed facility to avoid the concerns raised above, the ESR recommends changing the zoning, which really doesn't have the spirit of protecting the habitats for species at risk and significant wildlife, the species within them, the groundwater and the entire SPA. Could we build the proposed facility on Knox Farm? Yes, of course. But *should* we is the question?

Section 6 of the ESR discusses the consultations held with the public during two drop-in sessions. Utilities Kingston did a reasonable job publicizing those sessions, including announcements in the Kingston Whig Standard newspaper on March 14, 2023, and March 21, 2023. I wonder, though, how many people thought the sessions were to simply be a discussion about green bins and didn't connect the word, “biosolids,” with undigested sludge from the WWTPs, nor appreciated how close the proposed facility would be to the Little Cat.

The sessions were not well attended, which means most Kingston residents were uninterested, did not understand what the project was about, or missed seeing the various announcements. A survey was completed by just 35 respondents.³

Survey respondents were asked if they supported the proposed site location at Knox Farm and roughly 63% said yes, 6% said no, while 31% were unsure at that time. Thus, just 22 people supported the proposed location, not really a sufficient sample size upon which to base any decisions. What is *not* highlighted in the ESR is that 80% of the survey respondents were concerned about the “Impact to the environment (e.g. wildlife, water quality).”

It is disappointing that this concern was not discussed. I suspect the percentage of respondents who thought Knox Farm was a suitable location would have been lower if they had understood that the plan was to bring SSOs from other municipalities, truck undigested sludge from the WWTPs, and store digested biosolids in a “Covered liquid biosolids storage lagoon” close to Little Cat (as shown in Figure 7-1⁴ of the ESR).

Building a biosolids and biogas facility at Knox Farm provides a solution to a problem that does not currently need a solution (and I appreciate that large capital projects often require many years to complete).

In recent years, Utilities Kingston upgraded both its Cataraqui WWTP and Ravensview WWTP. At Cataraqui WWTP, the upgrade provided increased plant capacity (from 38,800 to 55,000 m³/day to meet projected population growth), with storage of dewatered cake in two buildings and capacity for 240 days of biosolids cake storage.⁵

³ Note that the ESR directs the reader to Appendix F-5 to see the survey and results, but that appendix does not contain any documentation (nor does any other appendix) – one needs to return to the project website and find it in Part 2, beginning on pdf page 70.

⁴ ESR, page 137

⁵ UK Master Plan for Enhanced Biosolids Management and Biogas Utilization, page 5

Beginning in 2006, the Ravensview WWTP was expanded, at a cost of \$115M. At the time, it was the largest single capital project by the City of Kingston in its history. The upgrade added anaerobic sludge digestion, which allowed for the increased production of methane biogas as a by-product and used in a 375-kW cogeneration system to produce electricity and heat year-round. A fully enclosed biosolids storage facility was also added and provided for up to 200 days storage. The upgraded plant has a capacity of 95,000 m³/day and is one of the largest of its kind in Canada.⁶

Table 2-7 on page 12 of the 2020 Master Plan for Enhanced Biosolids Management and Biogas Utilization shows the projected volume of raw sludge in 2037 for Cataraqui Bay will be 27,142 m³/yr (i.e., 49.3% of its current capacity), and Table 2-8 shows it will be 59,778 m³/yr for Ravensview (63% of its current capacity). The tables also show us projected values for the total volume of dewatered cake, and from 2022 to 2037 the increase in volume is only 7.4% for each facility. Thus, both WWTPs should have ample capacity for at least 13 more years for both wastewater treatment and the storage of biosolids (cake).

Source separated organics (SSOs) are collected from the curb side as part of the green bin program and taken to a facility run by Tomlinson Environmental on Fortune Crescent, and from there to Tomlinson Organics on Joyceville Road in the City's east end, where they are composted and the compost sold. Tomlinson also accepts leaf and yard waste at the Kingston Area Recycling Centre on Lappan's Lane, along with leaf and yard waste collected during the fall curb-side pick-up). Besides a small administration building and a weigh scale at the site, there is a large structure with a Biologically Aerated Filter (to reduce odours) where SSO can be stored until it is placed outside in windrows to be composted, and lots of open space.

Thus, the City has two WWTPs in place for wastewater treatment well into the future, and Tomlinson is handling the City's SSOs. Continuing with this option is not really discussed in the detailed assessment, except perhaps as Option 1 – Do Nothing (page 34). The label, "Do Nothing," implies there is something wrong with that option, an option that is currently working suitably well. In the ESR, a comparison is made of GHG production between the proposed facility and the status quo. The latter produces less GHG if there is no generation of Renewable Natural Gas (RNG) (Tables 7-5 through 7-8)⁷. It is only with RNG that the new proposed facility comes out ahead. This topic will be discussed further below.

Given Tomlinson already has a facility in Kingston, asking them what they might provide the City should have been included as an option, taking advantage of the site and processes they already have, but there is no evidence in any report that they were consulted, save for mention of

⁶ J.L. Richards website, <https://www.canadianconsultingengineer.com/features/j-l-richards-associates-ravensview-wastewater-treatment-plant/>

⁷ ESR, page 153

a site visit to the “Lystek Organic Materials Recovery Facility in Dundalk,”⁸ but no further discussion is offered.⁹

It might also make sense to construct the facility envisioned for Knox Farm at the Tomlinson facility, perhaps in a public-private-partnership arrangement, if it is decided that one is needed. There is certainly room for the facility there, the location is close to the 401 and there are few nearby homes and businesses. However, that option was not explored, either. Nor does it appear any other sites were considered.

On page 6 of the report, the ESR correctly quotes Section 1.2.6.1 of the Provincial Policy Statement (PPS; Ministry of Municipal Affairs and Housing (MMAH), 2020), which provides overall policy directions on matters of provincial interest related to land use and development in Ontario and applies to the City:

“Major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures (MMAH, 2020).”

However, the ESR omits the direction in subparagraph (b) of the next section, 1.2.6.2, to consider alternate locations:

“Where avoidance is not possible in accordance with policy 1.2.6.1, planning authorities shall protect the long-term viability of existing or planned industrial, manufacturing or other uses that are vulnerable to encroachment by ensuring that the planning and development of proposed adjacent sensitive land uses are only permitted if the following are demonstrated in accordance with provincial guidelines, standards and procedures:

- a) there is an identified need for the proposed use;
- b) *alternative locations for the proposed use have been evaluated and there are no reasonable alternative locations;*** (emphasis added)
- c) adverse effects to the proposed sensitive land use are minimized and mitigated; and
- d) potential impacts to industrial, manufacturing or other uses are minimized and mitigated.”

⁸ 2018 Preliminary Assessment Report Kingston Biosolids and Biogas Master Plan, page 42

⁹ (It is worth noting that Lystek is a subsidiary of Tomlinson. Their website (<https://lystek.com/about/>) indicates “Lystek is a leading provider of Thermal Hydrolysis solutions for the sustainable management of biosolids and organics. The multi-use, award-winning Lystek system reduces costs, volumes and GHG’s by converting wastewater treatment facilities into resource recovery centers.” They also provide “facility assessment, design-build, regulatory and community engagement, and product management services to provide turn-key solutions for biosolids & organics management.” Their website gives numerous examples of successful projects in operation in Canada and the U.S., many of them making use of anaerobic digesters to produce liquid fertilizer from organic waste, so they have expertise in that area.)

Avoidance *is* possible in this instance, as it is not imperative that the facility be built at all (we could stay with the status quo), and especially at Knox Farm. If the proposed facility is a priority, it might require the City to purchase land elsewhere, or perhaps swap the Knox Farm land for something else, but that was not explored.

(It should be noted that a new PPS was recently released, coming into effect 20 October 2024, and the new corresponding sections are Sections 3.5.1 and 3.5.2. The previous subparagraphs associated with Section 1.2.6.2 have been removed. However, it would make good sense from a fiscal and environmental perspective to have explored other possible sites besides Knox Farm.)

The Master Plan notes that “the work was initially triggered by UK’s interest in identifying alternative strategies to: manage biosolids in a way that would enhance biogas production.”¹⁰ Options presented included optimizing infrastructure at Cataraqui Bay WWTP, transporting dewatered sludge to Ravensview WWTP, including SSO transported by the City, and developing an integrated biosolids and SSO processing facility at Knox Farm.

We saw earlier that the proposed facility would reduce GHGs more than remaining with the status quo and could provide revenue to the City, but *only* if the production of RNG was incorporated into the project. It is noteworthy that, in Europe, most AD projects use biogas to generate electric power, which is then sold to the local power grid under feed-in tariff programs.¹¹

Last year, the Minister of Energy indicated the Ontario government had begun “planning for Ontario’s next competitive electricity procurement focused on new clean resources including wind, solar, hydroelectric, batteries and *biogas*” to support growing *electricity* demand.¹²

In May of this year, the City ordered two Mack® LR Electric battery-electric vehicle refuse vehicles.¹³ In an article published in 2023¹⁴, a wide range of electric light duty vehicles in use by City workers are presented, along with electric Zambonis and two electric buses with plans to acquire another five. The City is moving towards an electric vehicle fleet – would it make more sense to generate electric power that could be used to charge their batteries? However, generating electric power (and using the heat generated in the process for other purposes) in place of generating RNG does not appear to have been explored in depth.

Under the current proposal, it appears the long-term plan is to considerably increase the volume of SSO processed in Kingston by accepting SSO from our neighbours, including Loyalist Township, Brockville, Belleville and/or Quinte¹⁵. If SSO is to be accepted on-site, that will mean many more trucks will travel in and out of the facility, likely considerably more than the number

¹⁰ 2020 Master Plan for Enhanced Biosolids Management and Biogas Utilization, page i

¹¹ Environment Canada publication, Technical Document on Municipal Solid Waste Organics Processing, 2013, <https://publications.gc.ca/site/eng/436855/publication.html>

¹² Powering Ontario’s Growth – Ontario’s Plan for a Clean Energy Future, <https://www.ontario.ca/page/powering-ontarios-growth>

¹³ <https://www.macktrucks.com/mack-news/2024/the-city-of-kingston-ontario-orders-two-mack-lr-electric-refuse-vehicles>

¹⁴ <https://autosphere.ca/fleet/2023/05/04/kingston-scores-with-electric-zambonis-more/>

¹⁵ ESR, page 77

(27) shown in the ESR.¹⁶ Indeed, Appendix B of the Master Plan indicates “More truck trips by multiple vehicles with greater distance to processing facility” for this option. That appendix also indicates that without sufficient SSO from other municipalities, this option is the “Least attractive, but potentially more attractive as SSO input increases,” and having the worst NPV = -\$8,149,455 ((lowest cost & highest revenue); NPV = - \$25,467,796 (highest cost & lowest revenue).

Table 7-8 compares diversion emissions of the preferred design concept with RNG versus the status quo and shows that the preferred design concept provides a net GHG reduction compared to the do-nothing scenario. The assessment also implies that any increase in feedstock addition (especially SSO materials) would provide a proportional increase in net GHG reduction. What is missing from that table (and the two preceding tables) is from where the data values come. It is also unclear what the increase in GHGs would be if neighbouring communities truck their waste to the facility, given the distances those trucks would have to travel.

The ESR supports the production of RNG at Knox Farm, at an estimated capital cost of \$71.1 million for the preferred option. That will be a considerable amount of taxpayer dollars should this project move forward with taxpayer support. Please consider an alternate site to Knox Farm should it do so.

With best regards,

██████████
████████████████████

¹⁶ ESR, page 93

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Wednesday, September 11, 2024 3:52 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Help with talking points about biosolids pleas

Hi [REDACTED]

Thank you for reaching out and I appreciate the opportunity to comment. Our team will be reviewing all feedback received about the project and will determine how/if we prepare additional resources for public viewing. If we do end up preparing a public facing document that addresses some of your specific questions, I can circle back and let you know! We have received a lot of feedback on this project as the public review period closes today, so it will take me a bit of time to get through it all

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



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From: [REDACTED]
Sent: 11 September 2024 2:52 PM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>; Bach,Bryan <bbach@utilitieskingston.com>; Bourne,Timothy <tbourne@utilitieskingston.com>
Cc: [REDACTED]
Subject: Help with talking points about biosolids pleas

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Hello

As someone who is part of the NSERC Alliance Mission Project, I have a question. I am on the email list for SCAN (Seniors for Climate Action Now), and got an email from them yesterday which included this:

"Kington Utilities wants to build a large plant beside Little Cat Conservation Area to process sewage and city compost to create METHANE GAS to sell to city residents. This will create far more biosolids, now known to poison farms, livestock and humans.(See "Something's Poisoning America'sLand"-NY Times).

Excess methane will have to burned into the air. Do we want wind and solar —or methane gas... during a Climate crisis?"

My question to members of UK, especially those working with the WWT plants, is what can be used to respond to this type of information? From what I understand, methane is burned within the AD to generate electricity, or can be converted to RNG to be used as a fuel. I had never before read that biosolids could poison farms (and I do not have access to the NY Times, but did find this article in the Guardian:<https://www.theguardian.com/environment/2019/oct/05/biosolids-toxic-chemicals-pollution>)

Is there information you could provide to me about regulations used in Canada/Ontario to ensure that biosolids from WWT plants are safe to spread on agricultural fields? I am sure that SCAN does not want to spread mis-information and would like to supply them with facts regarding the proposed Biogas facility.

Note: the email was asking people to write a note to the mayor, and to sign a petition to stop the building of the Biogas facility. Here is a link to the petition: <https://www.change.org/p/halt-the-construction-of-biosolid-facility-near-little-catarauqui-creek-conservation-area>

Thank you so very much for any information you can provide.
Take care

[REDACTED]

From: [REDACTED]
Sent: Wednesday, September 11, 2024 12:03 AM
To: Scanlan, Lauren
Subject: FW: Biogas?

FYI

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

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

-----Original Message-----

From: [REDACTED]
Sent: Tuesday, September 10, 2024 5:34 PM
To: [REDACTED]
Subject: Biogas?

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Off gassing, wetland peril, groundwater peril = bad idea

[REDACTED]
[REDACTED]
Sent from my iPhone

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Wednesday, September 11, 2024 12:18 PM
To: [REDACTED]
Cc: UKBiogasFacility@dillon.ca; Stephen,Wendy; Glenn,Conny; Tozzo,Brandon; Mayor & Council; Roberts,Heather
Subject: RE: The biogas and methane facility proposed for Knox Farm.

Hi [REDACTED]

On behalf of the project team, we are confirming receipt of your comments below. Thank you very much for providing feedback on the proposed Biosolids and Biogas Facility Class EA project.

Kind Regards,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



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From: [REDACTED]
Sent: 11 September 2024 12:20 AM
To: Roberts,Heather <hroberts1@utilitieskingston.com>; Scanlan,Lauren <lscanlan@utilitieskingston.com>
Cc: UKBiogasFacility@dillon.ca; Stephen,Wendy <wstephen@cityofkingston.ca>; Glenn,Conny <cglenn@cityofkingston.ca>; Tozzo,Brandon <btizzo@cityofkingston.ca>; Mayor & Council <Mayor&Council@cityofkingston.ca>
Subject: The biogas and methane facility proposed for Knox Farm.

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Hello.

A decade ago, creating biogas and using it on local farms seemed brilliant. Back then, creating our own methane for homes instead of piping fossil gas to homes also seemed better.

Since then we have quickly progressed into a global climate crisis. The oceans are hotter. Across Canada there are heat fines, wildfires, hurricanes, floods and melting glaciers and permafrost.

I'm rather shocked that Kingston would even consider, today, deliberately creating methane and thinking it was okay to pipe that to homes and burn off extra into the air. We must help each other to move away from burning gases and switch over to wind, solar and water renewable energy. Kingston Utilities should be figuring how to shut down their gas pipeline services and instead help all buildings to access federal monies to switch to heat pumps.

Like Montreal, Quebec, and others, Kingston should rule that no new buildings will burn a fossil fuel or any gas. Heat pumps are the way to save our future. We love ours.

Is biogas methane?

“**Biogas consists mainly of methane and carbon dioxide.** It can also include small amounts of hydrogen sulphide, siloxanes and some moisture. The relative quantities of these vary depending on the type of waste involved in the production of the resulting biogas.Feb 23, 2023

[VYmcAAAAAEIFtkSuQmCC](#)

<https://www.nationalgrid.com> > wha...

[What is biogas? | National Grid Group](#)

Is methane good for the planet?

“ Due to its structure, methane traps more heat in the atmosphere per molecule than carbon dioxide (CO₂), making it **80 times more harmful than CO₂** for 20 years after it is released. Cutting methane emissions by 45 per cent by 2030 could help us meet the Paris Agreement's goal of limiting global warming to 1.5°C.Oct 18, 2022

[UAAAAASUVORK5CYII=](#)

<https://www.unep.org> > video > w...

[What's the deal with methane? - UNEP](#)

As well, it is now known that ,although biosolids are tested for heavy metals and spread on land to to make it “ fertile”, there were many other toxic substances hiding in city sewage that actually poison the land and animals, and can get into milk, etc. “Forever chemicals” are the new culprit, but there are still other chemicals being discovered in biosolids that we have never been testing for.

I am attaching 2 newer articles about how biosolids are poisoning land, and animals. There are many available.

1. "Something's Poisoning America's Land. Scientists Fear Forever Chemicals" NYTimes Sept 2024 (biosolids)
2. <https://ehjournal.biomedcentral.com/articles/10.1186/s12940-023-01008-4> "Emerging environmental health risks associated with the land application of biosolids" in Environmental Health Journal online, August 2023

Thank you for thinking this over. Methane and biosolids are both highly dangerous. Let us drop this plan, not waste more funding on it, certainly not nearly 90 million dollars, and consider new alternatives.

Thank you for reading this.

[REDACTED]

[REDACTED]

Gratefully living on Anishinaabe and Haudenosaunee territories.

From: [REDACTED]
Sent: Wednesday, September 11, 2024 12:02 AM
To: Scanlan,Lauren
Subject: FW: PLEASE: Put a stop to this sick behaviour!

FYI

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

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From: [REDACTED]
Sent: Tuesday, September 10, 2024 7:29 PM
To: Mayor & Council <Mayor&Council@cityofkingston.ca>
Subject: PLEASE: Put a stop to this sick behaviour!

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Kington Utilities wants to build a large plant beside Little Cat Conservation Area to process sewage and city compost to create METHANE GAS to sell to city residents. This will create far more biosolids, now known to poison farms, livestock and humans.(See "Something's Poisoning America'sLand" -NY Times).

Thanks,
[REDACTED]

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Wednesday, September 11, 2024 3:41 PM
To: [REDACTED]
Cc: UKBiogasFacility@dillon.ca
Subject: RE: Proposed Biogas Facility ...

Hi [REDACTED]

On behalf of the project team, I am confirming receipt of your comments below. Thank you very much for providing feedback on the Biosolids and Biogas Facility Class EA.

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



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From: [REDACTED]
Sent: 11 September 2024 12:20 PM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>; UKBiogasFacility@dillon.ca
Subject: Proposed Biogas Facility ...

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Hello! I am writing to share my opposition to the proposed biogas facility. We all know that methane is a very harmful GHG. So, why would you create it, especially when leakage is a distinct possibility?

Also, the proposed location beside the Cataraqui Region Conservation Authority could negatively impact the CRCA's natural areas with outflows, odours, etc.

I am forwarding a list of reasons to oppose the facility prepared by someone who knows more than I do. Regards, [REDACTED]

- diversion of green bin waste which is currently aerobically digested (i.e. without producing methane). It creates compost which is 100% suitable for fertilizing soil used for growing food. Mixing this with sewage sludge contaminates it with forever chemicals, pharmaceuticals, heavy metals, microplastics, etc.
- creation of more bio-solids or bio-liquid from sewage (because of the added volumes from Green Bin organics). It may meet current regulations for farm use but it is far from benign and current research suggests it is not a wise practice. It is being banned in some jurisdictions.
- GHG accounting. (see consultants report: https://utilitieskingston.com/Cms_Data/Contents/UtilitiesKingston/Media/Documents/Projects/Biosolids_Biogas_Facility_ClassEA/CompletionDocs/Final-Draft-ESR-July-29-2024-AODA.pdf pages 152 - 154.)

As far as I can see there was no accounting for leakage of methane. As you know methane (i.e. Fossil or Renewable Natural Gas) is a potent Green House Gas so even small leaks are very consequential.

What is the methane leakage from the loading and unloading of the thickened undigested sludge from Cataraqui Bay and Ravensview, the digester, the piping/valves, the upgrader, the compressors? We need to replace Natural Gas as an energy source – even if it comes from a renewable source - as it will continue the GHG problems with leakage in the downstream distribution system, air pollution, etc.

Quotes from *RNG Not inherently climate friendly*: ([At scale, renewable natural gas systems could be climate intensive: the influence of methane feedstock and leakage rates - IOPscience](#))

"RNG is not inherently climate friendly. Based on consideration of both the source of methane used to produce RNG and the likely alternative fate of that methane, and using reasonable assumptions about likely system methane leakage, it is unlikely that an RNG system could deliver GHG-negative, or even zero GHG, energy at scale." and

"Designing a system that depends on RNG, or delaying transition to a system that does not depend on natural gas because of the promise of RNG, could delay climate mitigation because of induced demand for intentionally produced methane. Particularly given that past experience demonstrates that policy can rapidly drive resource allocation to RNG (Bartoli et al 2019), RNG's environmental performance should be carefully compared with that of its likely long-term competitors—not just FNG—before resources are allocated."

Sent from my iPad

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Wednesday, September 11, 2024 3:33 PM
To: [REDACTED]
Cc: UKBiogasFacility@dillon.ca
Subject: RE: Knox Farm Biogas/biosolids Facility Concerns

Hi [REDACTED]

On behalf of the project team, we are confirming receipt of your comments below. Thank you very much for taking time to provide feedback on the proposed Biosolids and Biogas Facility Class EA project.

Kind Regards,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
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From: [REDACTED]
Sent: 11 September 2024 11:17 AM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>; UKBiogasFacility@dillon.ca
Subject: Knox Farm Biogas/biosolids Facility Concerns

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Ms' Scanlan and Varghese,

I am writing regarding the proposed Knox Farm Biogas/solids facility. I have several concerns about this facility (e.g., location very close to a conservation area, transport and storage of wastewater sludge and biosolid products). I will limit this note to three issues, loss of Green Bin/garden waste compost, supporting the continued use of methane as an energy source in Kingston buildings, and an apparent lack of consideration of GHG-free energy sources for running the City's water pumping and wastewater treatment facilities.

1. Diversion of Green Bin/garden waste compost from the public.

I purchase compost from the Green Bin/garden waste material produced at Tomlinson Organics to use on my vegetable plots. From my understanding, Green Bin/garden waste will now be processed in combination with wastewater treatment plant solids, which will then be available for agricultural fields. This will not, and cannot, be used for growing food for human consumption. Home and community gardeners will need to purchase compost in plastic bags, potentially manufactured many kilometers away, *adding* to GHG generation in our community.

Aside from this turn from useful action against climate change, many States in the USA have banned the use of wastewater sludge on farm fields due to the presence of 'forever chemicals' such as perfluoro alkanes. Closer to home, a dairy goat farm in Ontario was shut down in 2022 due to PFA contamination of the milk. This was found to have originated from wastewater sludge on a neighbour's fields (<https://www.nationalobserver.com/2022/05/20/news/toxic-chemicals-contaminating-us-farms-food-canada-rarely-tests>).

2. Continued use of methane into the future.

The use of methane, currently fossil-fuel derived, by buildings is assumed by UK to continue and increase over the projected period out to 2060. This is contrary scientific fact which tells us that we must stop emitting CO₂ if we wish to mitigate global warming. This also contradicts the city's declaration of a climate emergency, made a few years ago.

The projected methane production is roughly four times that of fossil-derived natural gas used by the City's water and wastewater facilities in 2019 (https://utilitieskingston.com/Cms_Data/Contents/UtilitiesKingston/Media/Documents/Energy-Consumption-and-Greenhouse-Gas-Emissions-Summary-2019_accessible.pdf). Providing any methane, locally generated renewable or fossil-derived, is no incentive for us to get off GHG-producing sources of heating and energy.

3. What is the cost of building and maintaining this biogas/solids plant versus installing net-metered solar voltaics on every water and wastewater facility? Out to 2060, say?

Depending on the design concept used, the capital cost of the project is between \$70 and \$85 million dollars. As a concerned citizen, I would have liked to see non-carbon emitting alternatives costed out.

In conclusion, the statement that 'This project aligns with the City of Kingston and Utilities Kingston's Strategic Plans to Demonstrate Leadership on Climate Action, with a goal of reducing greenhouse gas (GHG) emissions City-wide' is misleading.

Regards,

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Tuesday, September 10, 2024 8:23 PM
To: Scanlan,Lauren
Subject: RE: What will the pellets from the biogas facility be used for?

Hi Lauren. Thanks for those details.

Two further questions....will the City of Kingston be able to start collecting pet waste in their green bins as a result of this anaerobic digester? The reason that the city can't collect pet waste in the green bins has been that Kingston doesn't have access to an anaerobic digester. This is unlike the GTA that does collect pet waste because they have access to an anaerobic digester and Ottawa has started to collect pet waste too because an anaerobic digester has been built around Ottawa a few years ago.

Second question – about the liquid fertilizer, I know that waste treatment plants have been doing this for years, but recently, there are countries now banning the practise (such as in Europe) and even in the USA, there are States now banning it and in the spring of this year, 2024, farmers in Texas have now sued Biogas facilities for their fertilizer pellets killing their livestock. I know that these lawsuits have been since this Biogas project started up. But knowing now about the ban in Europe and these lawsuits in the USA, how does UK defend going forward with this project? Are we testing our liquid fertilizer product for heavy metals and pollutants like forever chemicals before we give it to farmers? Do we sell it to farmers or do we give it away?

I heard that our liquid fertilizer is only allowed to be spread on agricultural fields that will have feed for livestock; not for human consumption. Is that true? I don't know how UK would ensure that farmers are only using it in that way. However, based on the lawsuits in Texas at the below links where livestock has died due to the chemical byproducts in the sewage fertilizer, then it's not safe for livestock either.

I don't see how UK can address those concerns. Thank you. [REDACTED]

<https://www.timescolonist.com/local-news/company-behind-crd-biosolids-sued-in-texas-over-health-issues-animal-deaths-8487584>

<https://cen.acs.org/food/agriculture/PFAS-biosolids-prompt-lawsuits/102/i7>

<https://www.vicnews.com/local-news/crds-biosolids-maker-sued-by-texan-farmers-over-illnesses-animal-deaths-7331682>

There are other countries like the Netherlands, Switzerland and Austria where land application of sewage sludge and of any sludge derived products, including digested sewage sludge, is banned.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

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

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Tuesday, September 10, 2024 3:11 PM
To: [REDACTED]
Subject: RE: What will the pellets from the biogas facility be used for?

Hi [REDACTED]

Thank you for your inquiry regarding the Kingston Biosolids and Biogas Facility project.

Two beneficial products are anticipated from anaerobically digesting municipal biosolids and green bin organics together at the proposed facility:

Biogas – this is a renewable energy source and is formed when organic materials are anaerobically digested. At this time, the preferred 'end-use' for the biogas at this facility is to treat the biogas to an acceptable quality (referred to as renewable natural gas) and inject it into the natural gas main on Perth Road, thereby displacing fossil fuel natural gas.

Agricultural soil amendment – The proposed facility is envisioned to produce a digested biosolids (and green bin organics) product in liquid form that would be stored onsite during the winter season and hauled offsite for land application as a **liquid fertilizer product**. We do not currently anticipate producing pellets (which would require further processing of the liquid digested biosolids product).

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
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From: [REDACTED]
Sent: 10 September 2024 2:47 PM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Subject: What will the pellets from the biogas facility be used for?

Hi Lauren. Is UK going to use the pellets to give to farmers for their fields or will the pellets be used to burn to create the fuel? Thank you.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

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From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Thursday, September 12, 2024 10:47 AM
To: [REDACTED]
Cc: UKBiogasFacility@Dillon.ca; Roberts,Heather
Subject: RE: Comments on the proposed Biogas Facility

Hi [REDACTED]

Just wanting to confirm that we've received both of your emails below with comments and questions. We'll consider the feedback and get back to you shortly with answers for your specific questions. Thank you very much for staying engaged.

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

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From: [REDACTED]
Sent: 11 September 2024 11:48 PM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>; UKBiogasFacility@Dillon.ca
Subject: Comments on the proposed Biogas Facility

Hi Lauren and Betsy. In addition to my questions below, I have comments and additional questions as the deadline for comments by Sept 11th nears.

To preface, I have been on board with this project from the beginning, but I think I was naïve and uneducated. The climate change organizations have taught me a lot in the last little while.

When council first heard about this a few years ago, the site at that time was going to be by the Invista Plant. Due to what I know now, I can absolutely understand why we had to change the location to a more remote area, out of sight/out of mind.

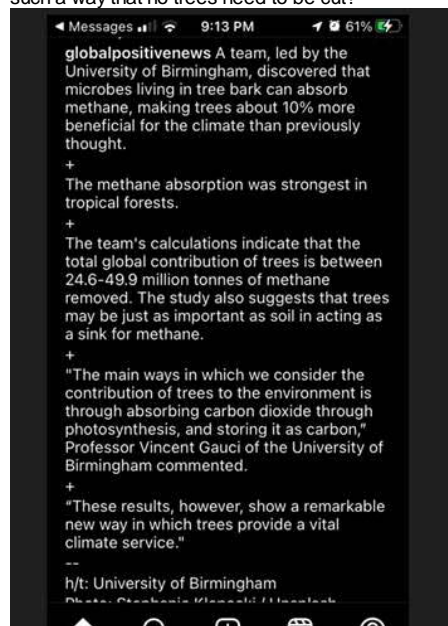
Then in just the past two weeks, I have learned about the lawsuits in Texas, that have come about recently in 2024, which is much AFTER we moved the location to Knox Farm.

I have also known for years that we spread the waste excrement sludge from our waste treatments plants to farm fields. I have smelled the horrible smells from the farm fields that have spread it. But it was supposed to be all good for the crops.

Then, in just the past two weeks, I have learned about the toxic byproducts from our waste that sit in the sludge like the forever chemicals that then get metabolized by the crops and we eat the crops. Horrifying. I have heard that the crops will only be those fed to livestock. How is that ever going to be enforced and guaranteed? Then I learn of the lawsuits that the fertilizers have killed livestock and do I want Kingston to contribute to that? Never!!! Watching any of those documentaries on Dupont's chemicals and one will learn that it is very difficult to prove causation of chemicals on a farm (fields or water) to the death of livestock.

You have received many emails this week from people in this field and expertise. They have all been against the project. I respect their knowledge and opinions.

In your document, you talk about some trees that need to be taken out. How many? I think it's terrible that any part of the forest has to be removed at this Knox Farm location for this project. How ironic that we are trying to save our trees and woodlands in Kingston and this project that is supposed to be so green and a climate change win, according to UK, needs to remove part of a woodland. Of course the ESA will say that it's just a very minor removal of the woodland and it's not even a significant woodland. In my opinion, it is so ironic that new research just came out last month that showed that trees are methane sinks...yet this project is going to cut down trees to make room for the facility. Can't we build the facility in such a way that no trees need to be cut?



I agree with the one email that said that UK instead should be focusing on selling cold weather heat pumps. When this biogas facility was first looked at, we didn't know back then what we know now about the danger of the fertilizer sludge.

Also, many residents rely on Tomlison's to purchase garden compost. The Master Gardeners in this region only recommend it. They don't recommend buying the Big Yellow Bag or any commercial soil. They only recommend our local garden compost at Tomlison's. This project will use up all of the garden waste and gardeners won't be able to buy any at Tomlison's. I am very much against that.

Thank you. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

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From: [REDACTED]
Sent: Tuesday, September 10, 2024 8:23 PM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Subject: RE: What will the pellets from the biogas facility be used for?

Hi Lauren. Thanks for those details.

Two further questions...will the City of Kingston be able to start collecting pet waste in their green bins as a result of this anaerobic digester? The reason that the city can't collect pet waste in the green bins has been that Kingston doesn't have access to an anaerobic digester. This is unlike the GTA that does collect pet waste because they have access to an anaerobic digester and Ottawa has started to collect pet waste too because an anaerobic digester has been built around Ottawa a few years ago.

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<https://cen.acs.org/food/agriculture/PFAS-biosolids-prompt-lawsuits/102/i7>

<https://www.vicnews.com/local-news/crds-biosolids-maker-sued-by-texan-farmers-over-illnesses-animal-deaths-7331682>

There are other countries like the Netherlands, Switzerland and Austria where land application of sewage sludge and of any sludge derived products, including digested sewage sludge, is banned.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

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From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Tuesday, September 10, 2024 3:11 PM
To: Osanic,Lisa <[REDACTED]>
Subject: RE: What will the pellets from the biogas facility be used for?

Hi [REDACTED]

Thank you for your inquiry regarding the Kingston Biosolids and Biogas Facility project.

Two beneficial products are anticipated from anaerobically digesting municipal biosolids and green bin organics together at the proposed facility:

Biogas – this is a renewable energy source and is formed when organic materials are anaerobically digested. At this time, the preferred 'end-use' for the biogas at this facility is to treat the biogas to an acceptable quality (referred to as renewable natural gas) and inject it into the natural gas main on Perth Road, thereby displacing fossil fuel natural gas.

Agricultural soil amendment – The proposed facility is envisioned to produce a digested biosolids (and green bin organics) product in liquid form that would be stored onsite during the winter season and hauled offsite for land application as a **liquid fertilizer product**. We do not currently anticipate producing pellets (which would require further processing of the liquid digested biosolids product).

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
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From: [REDACTED]
Sent: 10 September 2024 2:47 PM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Subject: What will the pellets from the biogas facility be used for?

Hi Lauren. Is UK going to use the pellets to give to farmers for their fields or will the pellets be used to burn to create the fuel? Thank you.

[REDACTED]

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

From: [REDACTED]
Sent: Wednesday, September 11, 2024 5:18 PM
To: Scanlan, Lauren; bvarghese@dillon.ca; MacLatchy, Paul
Cc: Mayor & Council; Salter-Keane, Julie
Subject: Feedback: Kingston Regional Biosolids & Biogas Facility Proposal - A potential stranded asset?
Attachments: Kingston Regional Biosolids and Biogas Facility Feedback - [REDACTED]

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Please see my feedback in the attached PDF file.

I am concerned that this facility will not be climate beneficial and is at high risk of becoming a stranded asset.

Regards,

[REDACTED]
[REDACTED]

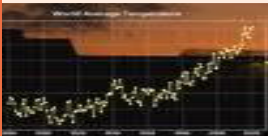
*Born when the atmospheric CO2 level was 311 PPM. Today it's 421 PPM and climbing.
Gratefully living on Anishinaabe, Huron Wendat and Haudenosaunee territories.*

Kingston Regional Biosolids & Biogas Facility Proposal

Feedback



2024-09-11



finding a pathway to net zero ...

Outline of feedback

1. Concern of adding Green Bin feedstock to Bio-sludge vs practice of spreading treated bio-sludge (or liquid version) on agricultural fields
2. Concern on methodology for calculating net Greenhouse Gas (GHG) benefit for proposal
3. Concern that the Renewable Natural Gas (RNG*) produced will not be climate beneficial
4. Conclusions

*i.e. biologically produced methane treated to remove CO₂

Note: this document has hyperlinks to various articles and scientific papers

1. Green Bin Organics diversion

- The current practice of collecting green bin materials (SSO – Source Separated Organics) and aerobically digesting it, produces compost which is 100% suitable for fertilizing soil used for growing food.
- Mixing this stream with sewage sludge contaminates it with PFAS (forever chemicals), pharmaceuticals, heavy metals*, microplastics, etc**.
- A risk is that such treated sewage sludge will not meet future regulations for application on agricultural fields***. If this happens the facility could incur much higher costs (Case 1) or become a stranded asset (Case 2). See likely new process diagrams on next slides.

* even if the levels meet current limits

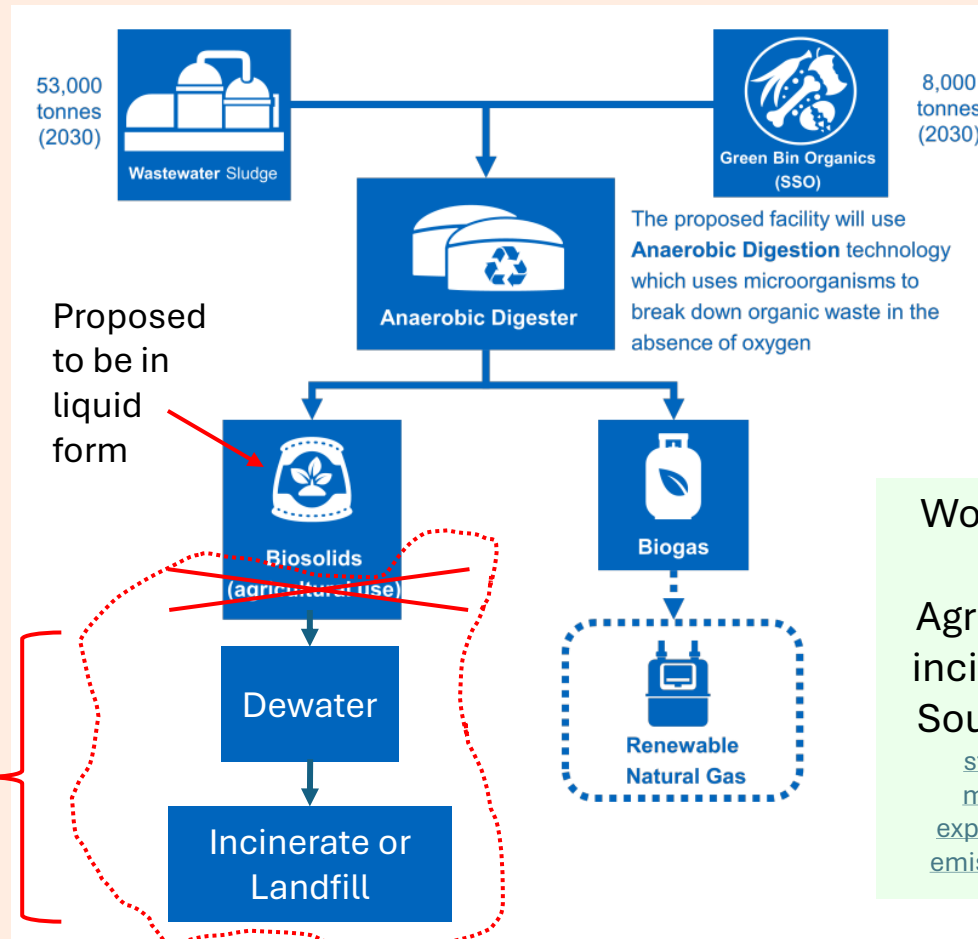
** [Ecotoxicology and Environmental Safety \(May 2021\) Volume 214: Sewage sludge in agriculture – the effects of selected chemical pollutants and emerging genetic resistance determinants on the quality of soil and crops – a review](#)

*** Some jurisdictions have already moved in this direction.

- Maine is one such jurisdiction ([Connections: Unpacking Maine's New Ban On Biosolids Use Due To PFAS | BioCycle](#))
- There are pending changes in provincial limits: Hold the PFAS, please: Keeping forever chemicals out of the food chain in Canada ([PFAS regulation in Canada and addressing forever chemicals in biosolids | BLG](#))

1a. New Process Flow Diagram if Biosolids are banned from land application

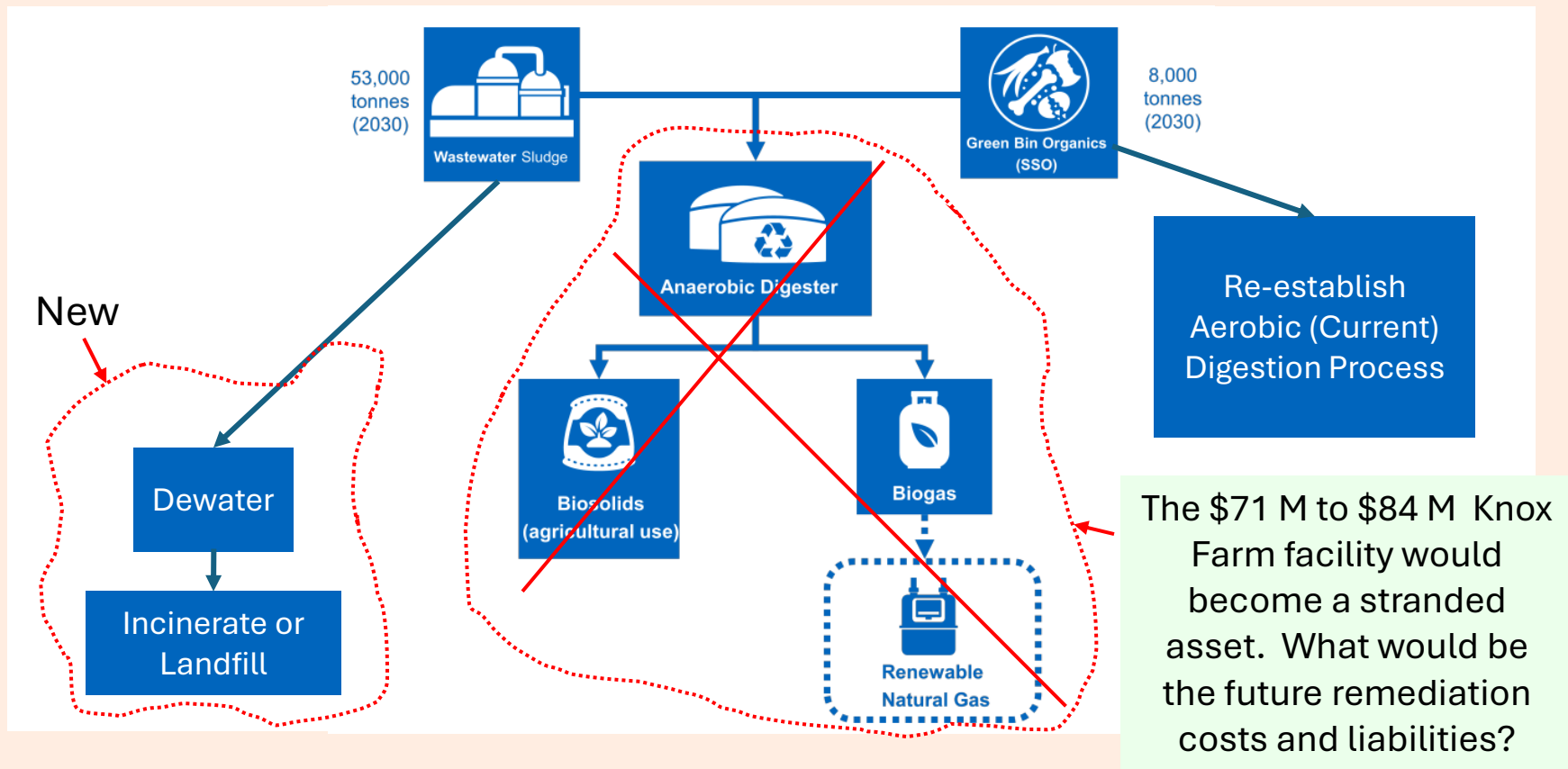
Case 1 – Modify Proposed Process



Worldwide sewage sludge disposal methods: Agricultural use; compost; incineration; landfill; other.
Source: (PDF) [Development, current state and future trends of sludge management in China: Based on exploratory data and CO2-equivalent emissions analysis \(researchgate.net\)](#)

1b. New Process Flow Diagram if Biosolids are banned from land application

Case 2 – Abandon Proposed Process



2. Greenhouse Gas (GHG) Accounting

Referencing the consultant's report* (pages 152 - 154.):

- As far as I can see there was no accounting for the leakage of methane in the proposed process. Methane (i.e. Fossil or Renewable Natural Gas) is a potent Green House Gas (~80X potential of CO₂ over a 20-year time span) so even small leaks are very consequential.
 - What is the methane leakage from the loading and unloading of the thickened undigested sludge from Cataraqui Bay and Ravensview, the digester, the piping/valves, the upgrader, the compressor(s)?
- Quote from IOP Science Environmental Research article (August 2020): “RNG Not inherently climate friendly”**

"RNG is not inherently climate friendly. Based on consideration of both the source of methane used to produce RNG and the likely alternative fate of that methane, and using reasonable assumptions about likely system methane leakage, it is unlikely that an RNG system could deliver GHG-negative, or even zero GHG, energy at scale."
- It would be useful to use a more comprehensive methodology – such as the analysis in the article referenced above – to get a more realistic GHG accounting

*[Utilities Kingston: Regional Biosolids & Biogas Facility: Environmental Study Report](#)

** [At scale, renewable natural gas systems could be climate intensive: the influence of methane feedstock and leakage rates - IOPscience](#)

3. Biogenic Methane (RNG) – Is it a climate solution?

- Another quote from IOP Science Environmental Research article (August 2020):
“RNG Not inherently climate friendly”*
"Designing a system that depends on RNG, or delaying transition to a system that does not depend on natural gas because of the promise of RNG, could delay climate mitigation because of induced demand for intentionally produced methane. Particularly given that past experience demonstrates that policy can rapidly drive resource allocation to RNG (Bartoli et al 2019), RNG's environmental performance should be carefully compared with that of its likely long-term competitors—not just FNG—before resources are allocated."
- We know that local Natural Gas Distribution systems leak releasing high GHG impact methane. New studies show that previous estimates were low e.g.
 - Environmental Science & Technology Vol 54/Issue 14: [A National Estimate of Methane Leakage from Pipeline Mains in Natural Gas Local Distribution Systems](#)
“Methane emissions from local distribution systems are currently estimated to account for 3.4% of total U.S. methane emissions. (8) Under this updated scenario, this number would increase to 7.6%”
 - Smithsonian Magazine Oct 24, 2022 [Gas Stoves Are Leaking Toxins Into California Homes](#)
- Thus, no matter what the source, burning methane after transiting our local piping grid results in GHG emissions that would not have occurred if space heating was converted to a clean energy source (e.g. heat pump).
- \$71 M to \$84 M could fund a lot of natural gas to heat pump conversions!!

* [At scale, renewable natural gas systems could be climate intensive: the influence of methane feedstock and leakage rates - IOPscience](#)

4. Conclusions

- The current proposal and analysis has weaknesses and risks
 - The new facility could become a stranded asset or incur significant additional operating costs as well as loss of value for the Green Bin Organics stream.
 - The proposal risks induced demand that would slow the transition to non-carbon heating systems (similar to how freeway expansions can have the perverse effect of increasing congestion).
 - In an economy transitioning to carbon neutrality, RNG (Biogenic methane) is not a solution, except perhaps if close coupled with a hard to abate process via piping that has very low leakage rates.

From: Jaynes, Janet <jjaynes@cityofkingston.ca>
Sent: Thursday, September 12, 2024 12:56 PM
To: [REDACTED]
Cc: Scanlan, Lauren
Subject: RE: Please defer the Biogas proposal until more is known

Hello,

The City of Kingston acknowledges receipt of your communication which you provided directly to Members of Council. Please be advised that your communication may form part of the public agendas and minutes, and therefore will be made available to members of the public at the meetings, through requests, and through the website of the Corporation of the City of Kingston. Contact information, such as phone numbers and email addresses, will be redacted from documents shared with the public.



Janet Jaynes
City Clerk
Office of the City Clerk

City of Kingston
City Hall
216 Ontario Street Kingston, ON K7L 2Z3
613-546-4291 extension 1262
jjaynes@cityofkingston.ca



The City of Kingston acknowledges that we are on the traditional homeland of the Anishinaabe, Haudenosaunee and the Huron-Wendat, and thanks these nations for their care and stewardship over this shared land.

From: [REDACTED]
Sent: September 11, 2024 4:28 PM
To: Mayor & Council <Mayor&Council@cityofkingston.ca>
Subject: Please defer the Biogas proposal until more is known

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Mayor and Council,

So many concerns have been expressed.

It seemed like a good idea ten years ago but now we know more about its harms and our concern for Climate Change is front and centre.

Thanks,

[REDACTED]
[REDACTED]
[REDACTED]

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Tuesday, August 27, 2024 8:43 AM
To: Facility, UK Biogas
Cc: Varghese, Betsy; Sydney Tasfi
Subject: FW: Notices in Whig - Availability Through Email

Hi there,

Forwarding along a public inquiry exchange below for your records (no action).

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



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From: Matt <mashie@utilitieskingston.com>
Sent: Tuesday, August 27, 2024 8:37 AM
To: Ashie, Matt <mashie@utilitieskingston.com>; Scanlan, Lauren <lscanlan@utilitieskingston.com>
Subject: FWD: Notices in Whig - Availability Through Email

The following request has been submitted to Utilities Kingston.

Please respond directly to the customer within 5 business days with a BCC to the clerk who sent you this service request. If you call the customer instead of emailing, please send confirmation of the outcome/resolution to the clerk to document and close the service request. Thank you in advance.

Service Request Type: New product type needed

Reference #: 240826-000184
Disposition: Completed - contact informed
Severity: No Value

Utilities Kingston Comments:

Hi Lauren,

I've included the response to the resident regarding biosolids below. Thanks again!

The following issue has been submitted to Utilities Kingston. Please investigate and reply to this email with your update.

Customer Name: [REDACTED]

Customer Contact: [REDACTED]

Customer Address: , , ,

Mobile Phone:

Home Phone:

Office Phone: - Ext.

Subject:

Notices in Whig - Availability Through Email

Response By Email (Matt) (08/27/2024 08:34 AM)

Hi there,

We are glad that you saw the notice in the Kingston Whig! That is a great question. We do try to disseminate this type of information through a variety of different channels but are always happy to consider alternative means to reach more people! Here is how we issued the Notice of Completion that you are referring to below:

On August 13, 2024:

Notice issued in the Kingston Whig
Project Webpage updated with the Notice and report documents
(<https://utilitieskingston.com/Projects/Detail/RegionalBiosolidsBiogasFacility>)
Notices posted on our Facebook and LinkedIn Pages
Direct e-mailed notices to an established consultation list, including organizations, nearby municipalities, Indigenous Communities, and public members who had requested to be kept informed of this project at some

point over the last 2 years

Hand-delivered notices to neighbors of the proposed facility location

Featured the notice prominently on our website homepage for two weeks.

We are now replacing this with a full news article to ensure the information remains available.

August 20, 2024:

Notice re-issued in the Kingston Whig

September 3, 2024 (PLANNED):

Notice reminders to be posted on our Facebook and X Pages

We're currently working on adding an email subscription option for interested residents. While that service is not currently available, please let us know if you'd like to be added to our project list managed by our consultant to ensure you receive future updates about this project. You can also follow our social media channels for the latest news.

We'd be happy to hear if you have any other suggestions that we could consider in the future to reach more people!

Thank you,

Matt

Customer Service

Utilities Kingston

O: 613-546-1181

E: info@utilitieskingston.com

Monday to Friday 8 a.m. to 4:30 p.m.

Note By (Matt) (08/26/2024 02:44 PM)

I e-mailed Lauren to see who could assist with this inquiry.

Customer By Service Email ([REDACTED]) (08/26/2024 10:32 AM)

Dear Utilities Kingston,

There was a notice from Utilities Kingston in the 20 August 2024 issue of The Whig.

The notice was in regards to Utilities Kingston biosolids & biogas.

If I was not able to afford a newspaper subscription where would I find these notices?

Is there a way to receive these notices from Utilities Kingston by email and can these notices be posted on the Utilities Kingston website in the news section?

Sincerely, [REDACTED]

Incident Address: No Value

Escalated: No

From: [REDACTED]
Sent: Wednesday, September 11, 2024 12:02 AM
To: Scanlan,Lauren
Subject: FW: Biosolid facility

FYI

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

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

From: [REDACTED]
Sent: Tuesday, September 10, 2024 6:43 PM
To: Mayor & Council <Mayor&Council@cityofkingston.ca>
Subject: Biosolid facility

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear [REDACTED]

As a citizen of Kingston (Countryside District) I am writing to express my and my wife's strong opposition to the proposed biosolid facility near the Cataraqui Creek Conservation Area.

It is unconscionable, in this era of climate change, for Kingston to even think of supporting a facility that will create methane gas, one of the most toxic of carbon-based gases.

We urge you and Council to vote against this measure.

Respectfully,

[REDACTED]
[REDACTED]

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Thursday, September 12, 2024 10:44 AM
To: Facility, UK Biogas
Cc: Varghese, Betsy; Roberts,Heather; Sydney Tasfi; Avid Banihashemi
Subject: FW: FYI - Substack article about biogas facility

For info – no action.

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



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From: Knight,Nancie <nlknight@utilitieskingston.com>
Sent: 12 September 2024 10:38 AM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Subject: FYI - Substack article about biogas facility

Good morning Lauren,

You may have already come across this substack article, but sharing just in case: [REDACTED]

I came across the link on Twitter in this post: [REDACTED]

Thanks,
Nancie



Nancie Knight (she/her)

Manager, Public Relations and Communications
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2309 C: 343-422-3566
nlknight@utilitieskingston.com



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

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From: [REDACTED]
Sent: Wednesday, September 11, 2024 11:44 AM
To: Scanlan,Lauren
Subject: Submission Report on the Regional Biosolids and Biogas Facility
Attachments: Submission on the Biosolids and Gas Facility.docx

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Hello Ms. Scanlan,

I have enclosed a filed report on the above study.

We appreciate the opportunity to submit this file to be included in the Environment Study.

Thank you,

[REDACTED]

Hello Ms. Scanlan,

Introduction

I am here submitting a response to the Environmental Study of the Regional Biosolids and Biogas Facility.

Because I am a resident who lives close to this 'site of opportunity', I attended the last open-house for this project at your offices and came away disappointed and very concerned. The engineers I talked to were happy to talk to the flip charts in green terms about recycling and bio this and bio that but they were not comfortable with the mechanics and details. For example, questions I asked about odour, leakage, noise, light pollution, anticipated future site and project expansion, were answered superficially and with no specific and reassuring answers. The experience made me very nervous. I signed up to respond to the report when it came out.

Having gone through the report I am now even less reassured and more nervous about this project than I was before. I made notes of my concerns and summarized them. These notes are attached following The Concerns Raised as The Newsletter.

I circulated this 'Newsletter' to 125 residencies around the Little Cat Conservation Area. A group of residents came forward as a result to express their significant concerns. Most pointed out that they had no idea what was really going on. We are now meeting and communicating as a concerned group and the circle of concern has been expanding significantly through our neighbourhood and beyond through the city.

This submission continues in two parts:

Part 1: The Concerns Raised By the Neighbourhood Group.

Part 2: The Newsletter That Was Circulated to 125 Little Cat Neighbours.

Part 1: The Concerns Raised By the Neighbourhood Group

The following is a group of major concerns that have been raised to date within the group. This list is now expanding daily but the deadline for submission is now upon us.

The Economic and Social Decision Process to Move Ahead

The City of Kingston has no Master Plan that covers situations such as this. This Facility is big, complicated, expensive and with decades of long-term political, social, environmental and economic implications. With no master plan as reference, the decision to proceed will be based on the whims, passions, and the political influence of individual councillors and groups. This is too important a project for the City to give it a green light without the support and guidance of a Master Plan.

There are many unusual and hidden costs in running such an operation. For example, we understand that methane gas produced in this manner is not pure and has other gases mixed in with it. It is very acid and dirty and consequently the machinery involved requires careful regular routine cleaning and regular replacement of corroded parts. These significant costs are not identified or estimated. Common sense dictates that the stated estimate of \$2 million for the ongoing annual costs of operating and maintaining such a large facility is clearly totally inadequate and misleading.

This project requires much greater clarity and analysis of the detailed long-term financial commitments that are implied by agreeing to this biodigester and greenhouse gas manufacturing plant. The details and figures presented in the report read more like a rough guess than the result of realistic and serious analysis. For example, the report quotes estimates for a 'City-sized' plant, but a 'Regional-sized' plant will be required to make it viable. There is no detailed discussion of how big this catchment area will need to be or any breakdown of the implications of this significant expansion on the facility and its budget. If this project proceeds, the City will be committing itself to a very significant

and uncertain sunk cost and future funding requirements. Other municipalities are expressing deep reservations about having done so, e.g., the City of Edmonton.

The Lack of Full Disclosure of Available Information

The true nature of this operation has been simply covered up. A major fuel for this operation is sewage sludge, this information is simply not presented openly in this report. In the report sent to us, the words 'trucking' and 'sewage' and 'sludge' are not even mentioned. At the open-house we attended, the presentation was focused on the Knox Farm as a 'green' site for taking care of green bin disposal, not as a site for the manufacture of greenhouse gases using sewage sludge as fuel.

The report provides dead-end, misleading and misinformed information at every turn. For example, some onsite birds and animals are identified as being protected, but this information is brushed off and the report moves on. A significant wooded area on the site is misidentified as a 'deciduous thicket', which would allow the trees to be cleared. Similar seemingly important findings are simply ignored, dismissed and/or buried in the later analysis. No appendices are populated in the on-line version, for example there is a reference to 35 submissions having been received, but this appendix is missing. We cannot present a full critique with the partial and misleading information as presented.

The Building and Operation of the Facility

The inclusion of regional septic tank trucks is not defined but sewage sludge that will fuel this operation will certainly need to be trucked from the Catarqui Bay Water Treatment Plant and perhaps Ravensview. At a minimum, the trucking costs, traffic disruption, road rerouting and pollution from the diesel fuel for the significant transport requirements to and from the facility, the treatment plants and the gas terminal, will all need to be accounted for and added in. There is no mention of these costs.

Fully understanding the implications of generating and transporting highly dangerous, and potent greenhouse gases is way beyond the everyday training, expertise and understanding of any City Council. Great reliance will necessarily need to be placed on the word of specialist engineering advisors. This is not an unbiased source. It's noted that the engineer advisors involved will receive very significant financial benefits if the project moves ahead, whether the project is deemed to be successful or not.

The Designation of the Knox Farm as the Chosen Site

Why and how Kingston Utilities chose the Knox Farm site as the 'site of opportunity' from the project initiation is not disclosed, other than it is a property that has long been owned by the City. The report reads as if the site was 'proposed' rather than 'selected' as the best choice from a group. The engineers subsequently deemed this site to be suitable even though there are significant issues. This suitability is now in question from a number of fronts, one of which is that there are designated protected sites on the property that should eliminate it from consideration. It is to be hoped that the City does not bend the rules and quietly step in to remove this protection, just to allow a waste management site to replace it. That would be a public disgrace.

There are no doubt more appropriate and available alternate sites but apparently these have not even been considered. Potential sites on McAdoos lane, across the road, offer consideration. A much more efficient and sensible location would be for the digester and gas generator to be co-located with a water treatment plant that produces at least some of the sewage sludge. There is green space on the industrial site of the Cataraqui Bay Water Treatment Plant next to the lake for this co-location, which would eliminate many of the trucking, traffic and transportation pollution problems, and would perhaps make this process economically viable. If the Cataraqui Bay site would not be able to generate sufficient methane to make the RNG profitable, it could certainly be used for power generate and heating.

The designation of the Knox Farm site, adjacent to the CRCA, puts the management of the Cataraqui Region Conservation Area in a very difficult

situation. It has social, financial, and political obligations to the City and to the province, but for different purposes and with different responsibilities. This waste management site will have a significant impact on Little Cat and its wildlife. The CRCA must be free to balance these different responsibilities with its own need to demonstrate public duty, its role in the community, its care of the Little Cat, and its need for public support for its local services, as it sees fit and it must respond accordingly.

Part 2: The Newsletter That Was Circulated to 125 Little Cat Neighbours.

Dear Neighbour,

Kingston Utilities has now sent out the Environmental Study on the Biosolids and Gas Facility being considered to be built on the Knox Farm property close to us, next to the Little Cat Conservation Area. This facility is specifically designed to manufacture methane gas and carbon dioxide. These are two of the most dangerous gases on the planet.

They ask for any comments on this report to be submitted only by September 10th. I wanted to get this report out to you quickly should you want to respond to them.

[Utilities Kingston: Regional Biosolids & Biogas Facility: Environmental Study Report](#)

I've gone through the report quickly and made the following notes and observations that concern me:

1. This is the Phase 4 Environmental Study that has taken a year to be completed by the contracted engineers. It was sent out to two people, including me. Apparently, we two are the public input!
2. As it happens, our homes on Sunnyside Road were not included in the study because we are considered to be just outside the 1km radius.
3. However, I note that our properties are included in, or adjacent to, the currently designated Environmental Protection Area (EPA) of the conservation area, which would not allow this plant to be built. A part of the plant site is included in the EPA, but the City is expected to pass

a bylaw that will make an exception and overrule the EPA, allowing the plant to go ahead.

4. A designated Provincially Significant Wetland (the Little Cataraqui Creek Complex), which would also deliver provincial protection, borders on the site boundary, and so also does not offer protection.
5. There is significant woodland on the Knox Farm property. This would also deliver protection but the engineers designated it as 'deciduous thicket' which avoids this protection.
6. Two threatened species of birds were identified on the site, which was considered to be of special concern. A threatened species of amphibian was also identified on the site. Blandings' turtles were observed nearby. (None of this should be surprising, after all, this has been designated as a Conservation Area for over 50 years.)
7. A large human refuse plant such as this will no doubt attract and encourage a breeding site for rodents and other vermin. This would no doubt significantly affect the carefully nurtured natural wildlife balance in the conservation area. This subject is not mentioned.
8. A presentation was given to the Cataraqui Region Conservation Authority in January and the only major concerns raised were about odour, groundwater and well protection. (Somebody should remind them that this is also a protected Conservation Area that contains animals and natural resources to be cared for, and is an important environmental resource for our families' education and recreation, and for our school programs.)
9. Hydrologically, the property is in a designated 'Highly Vulnerable Area' of the Cataraqui Source Protection Area (SPA) and is located on a formation of unstable bedrock. Surface water runoff travels down to the Cataraqui Creek Reservoir. (This reservoir already has very limited recreation value because of the toxic pollution coming down from the old city garbage dump on McAdoo's Lane. The Cataraqui Creek also runs into and out of this reservoir, and on to the lake.)
10. There are so many assumptions made in this report! For example, the report states that the plant can be designed to operate under air

quality guidelines and comply with regulatory requirements. (My emphasis)...but will it? And what are the implications if it doesn't?)

11. Noise levels were assumed to not be a problem and potential light pollution was not mentioned. Sunnyside Road is also not included in the potential traffic study implications.
12. The dominant wind direction is from the south west with moderate west and northwest components.
13. The size of the current plant is designed to accommodate the City of Kingston, but possible significant expansion is expected and anticipated. The economic plan is to bring in human waste from a much larger region. The tonnage of undigested wastewater sludge and raw sewage anticipated to be delivered is a guess, depending on how big the regional catchment area turns out to be.
14. The topic of the inevitable air pollution and toxic odour from the site focuses only on the degree of ventilation required inside the operation's buildings!! Presumably, these buildings are ventilated to the outside! (When I asked about the air pollution and odour control, I was told that there would be sensors on the perimeter to keep track...reassuring? Then what?)
15. The end of the process will be 'liquid solid waste' ...the biosolids! This will be sprayed on farmer's fields as a fertilizer...sweet! (However, this waste cannot be spread on fields that grow crops for human consumption because of the possible toxic residues in the sewage, e.g., pharmaceuticals and medicines. This is also not mentioned.)
16. There are two plant designs being considered with different technologies. Both have lagoons and pools of waste on the property to produce the gas. Methane gas flaring will be required to burn it off.
17. This is a big and expensive operation. The estimated initial upfront capital costs for the two designs are: Design 1 - \$71.1 Million, Design 2 - \$84.9 Million!! (Our property taxes!) In each case the engineering costs will be about \$10 Million. The engineers recommend Design 1.

18. The ongoing annual costs of operation are estimated at about \$2 Million. (Taking out the costs of 5-6 full-time staff, an annual budget of \$1.5 Million for ongoing operation and maintenance of such a large and complex plant is clearly woefully inadequate.)
19. A decision to go ahead with this plant is expected by the end of 2024. The project will be initiated in 2025 with a 5-year construction timeframe. The plant would then be in operation in 2030.

At the last open house I asked the consulting engineers for an example of where this technology had been successful installed. The engineers thought there was one, but they weren't sure.

I am very concerned that we are being 'greenwashed' here by the engineers, to cover up the negative implications and consequences of this very expensive but non-tested venture.

Thank you for your attention.

[REDACTED]

Conclusion

Thank you, Ms. Scanlan, for receiving our submission. I would add that we have found the time given for a response to be inadequate considering the depth of this report and the time required to organize ourselves, complete our own analysis and prepare a response. We are requesting a further opportunity to present a more complete response in the future.

Sincerely,

[REDACTED]

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Wednesday, September 11, 2024 12:26 PM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Proposed Biogas plant

Hi [REDACTED]

Thank you for the inquiry. We do not currently have plans to host another public meeting associated with this phase of the project at this time. "This phase" is referring to the Municipal Class Environmental Assessment process. Please note that as part of this phase of the project, two public meetings were held, one in March of 2023 to review the site selection and one this past March of 2024 to review the design concepts.

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



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From: [REDACTED]
Sent: 11 September 2024 8:24 AM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>; [REDACTED]
Subject: Proposed Biogas plant

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Good morning Ms Scanlan,
Will there be a public meeting about this project in the near future?

From: [REDACTED]
Sent: Thursday, September 5, 2024 10:05 AM
To: Scanlan,Lauren
Cc: [REDACTED]
Subject: Re: Kingston Regional Biosolids and Biogas Facility

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Good morning Lauren,

This is quite helpful and informative. We very much appreciate your detailed and rapid response to our immediate questions.

We'll follow the process, with [REDACTED] assistance, as the Project unfolds.

Thank you and enjoy your upcoming weekend.

Best,
[REDACTED]
[REDACTED]

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Thursday, September 5, 2024 9:58:39 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Kingston Regional Biosolids and Biogas Facility

Good Morning [REDACTED]

Thank you very much for reaching out. Responses to your questions below:

1. If the project proceeds to implementation, we're estimating shovels in the ground in 2028, with operations commencing in 2030.
2. A 2-year construction period is anticipated.
3. While the facility is anticipated to contribute to odour in the local area, these potential emissions are predicted to be within MECP guidelines. Our consultant, Dillon Consulting, completed an air quality study which included advanced air dispersion modelling (AERMOD) over 5-years of meteorological conditions which demonstrated the predicted compliance. If constructed, the facility will be equipped with engineering controls (e.g. biofilter) to manage odorous emissions at the facility exhaust stack.

Additionally, potential fugitive odours would be managed according to a fugitive odour best management practices plan (BMPP) that would be prepared and approved by the MECP before operation. For example, the unloading of green bin organics is typically understood to be an odorous process. The concept design for this facility has assumed that this process would be entirely enclosed within a ventilated and air-treated building envelope (rather than undertaken outdoors). Furthermore, the facility would be required by its operating license to demonstrate compliance with regulatory requirements once the facility is operational. Any further conditions set forth by the MECP in an environmental compliance approval (ECA) would also be adhered to in order to further mitigate potential air quality impacts.

Please let us know if you or other residents have additional questions or comments, and we will do our best to respond.

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP
Project Advisor - Risk & Research
P.O. Box 790, Kingston, ON K7L 4X7
P: 613-546-1181 x.2462 C: 613-217-7181
lscanlan@utilitieskingston.com



Utilities Kingston acknowledges that we are situated on the ancestral and continuing unceded territory of the Huron-Wendat, Anishinaabe and Haudenosaunee Peoples. We thank these Peoples for their stewardship of the land. As we preserve and protect the land and water, we commit to delivering our services with care for the Earth.

From: [REDACTED]
Sent: 04 September 2024 8:21 AM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Cc: [REDACTED]
Subject: Kingston Regional Biosolids and Biogas Facility
Importance: High

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Good morning Lauren,

I'm a [REDACTED]

Just a few questions regarding the planned Biosolids/Gas project please:

- 1) What is the current Target Date for shovels in the ground for this Project?
- 2) How long from initial site preparation to production?
- 3) Air quality (odour) impact anticipated with this project?

While there are several other concerns (truck traffic, roadway spills, etc.), the above questions probably represent some of the immediate questions on the minds of our Neighbours.

I have cc'd our [REDACTED] as he will be attending our Annual Corn Boil on September 10th and may be able to speak to the project.

Appreciate your anticipated response, Lauren.

Regards,
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Tuesday, September 10, 2024 3:57 PM
To: [REDACTED]
Cc: [REDACTED] UKBiogasFacility@Dillon.ca; Roberts,Heather
Subject: RE: Submission re Environmental Study Report Biogas

Hi [REDACTED]

On behalf of the project team, confirming receipt of your feedback which will be reviewed and considered as part of the project.

My apologies on inadequately highlighting the comment protocol directly on our project webpage and for your unanswered voicemail to Utilities Kingston. Our 2-page Notice of Completion document is what we used in our public advertising efforts which summarizes the commenting protocol but to your point, we could have arranged our webpage more clearly. I really appreciate the feedback and will keep this in mind for future notices and projects.

Thank you,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

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From: [REDACTED]
Sent: 10 September 2024 3:27 PM
To: Roberts,Heather <hroberts1@utilitieskingston.com>; UKBiogasFacility@Dillon.ca; Scanlan,Lauren <lscanlan@utilitieskingston.com>
Cc: [REDACTED]
Subject: FW: Submission re Environmental Study Report Biogas

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Hello:

Please find attached my comments on the Environmental Study Report – 22-4641.

I note that although the Report was easy to find on the Utilities Kingston website, information about to whom to send comments was not. My phone call to Utilities Kingston to ask remains unanswered. Thank you to [REDACTED] who provided the information.

I hope that you will take my comments in the attached into consideration.

Thank you.

[REDACTED]
[REDACTED]
[REDACTED]

Comments on the Environmental Study Report

Regional Biosolids and Biogas Facility

22-4641

It seems that this proposal is trying to address two problems facing **Utilities Kingston**.

1. An estimated excess of wastewater sludge from its sewage treatment plants.
2. Millions of dollars of natural gas infrastructure that could be a write-off should the use of natural gas be phased out as has happened in some Canadian cities, or natural gas becomes too expensive or unavailable for local customers.

For the **City of Kingston**, having a publicly owned facility to manage green waste (from compost bins etc.) could increase the diversion of these materials from garbage and reduce garbage removal and disposal costs.

For the **taxpayers** of Kingston, the proposal estimates construction costs of \$85 million for the preferred option and annual operating costs of \$1.35 million are a significant investment. Is it justified?

From my reading of the Phase II Environmental Study Report the proposal lacks evidence of feasibility and risks an ongoing cost of millions of dollars every year. Why would we invest in this untested technology?

Yes, biogas produced from source separated organics is a proven technology. The same cannot be said about combining source separated organics with wastewater sludge as proposed.

Where is the evidence that the gas produced will be usable and able to travel through existing infrastructure?

And where is the evidence that the waste that remains from the process will be able to be used? Other jurisdictions are raising the alarm about disposing of wastewater sludge in the environment because of the contaminants it contains. Where is the evidence that the waste produced will not become a costly disposal burden?

Do benefits outweigh the risks?

In reading the Environmental Study Report, there is no detailed risk analysis – financial, environmental, or practical. The assumption is that the project makes sense and that it will not have negative environmental impacts.

Note that the word “assume” or the term “it is assumed” appear over 50 times in the Report.

It would seem that this Environmental Study Report is incomplete and premature.

The precautionary principle holds that so many assumptions speak to the project's viability.

The precautionary principle is an approach to risk management, where, if it is possible that a given policy or action might cause harm to the public or the environment and if there is still no scientific agreement on the issue, the policy or action in question should not be carried out.

Here are my questions and concerns about the risks.

1. Is the technology proven to work?

Where in the Report does it say that this is a proven technology?

In what other parts of the world has this approach to combining green waste and wastewater sludge to produce biogas been scaled-up as is proposed for Kingston?

This is all that the Report says on this – emphasis added:

Upgrading requirements were reviewed at a **highlevel** as part of the Project, and **it is understood at this time** that biogas generated from wastewater sludge and SSO [source separated organics] would be suitable for upgrading into RNG [renewable natural gas]. (5.3.1)

The above is not a reassuring statement about the likelihood that this proposed \$85 million investment will deliver what is suggested in the Report. It's a risk.

2. Is natural gas infrastructure suitable for the distribution of renewable natural gas that has been produced through a process blending both source separated organics and wastewater sludge?

Where is the information about the quality of the biogas product resulting from the combining of source separated organics and wastewater sludge? The Report estimates the amount of source separated organics and wastewater sludge that is likely to be available for the process. It has no estimates on the profitability of the biogas. It's a risk.

3. Will the biogas produce meet the necessary standards?

This is what the Report says:

It is assumed that any **selected technology** would produce a digestate biproduct that will meet the requirements of the federal Fertilizer Act and regulations as administered by the Canadian Food Inspection Agency (CFIA). **This implies** that the product would not be subject to approval and end-use requirements for Non-Agricultural Source Materials (NASMs) set out in O.Reg. 267/03 (General) under the

Nutrient Management Act, as 5.0 Phase 3: Alternative Design Concepts 92 Utilities Kingston Regional Biosolids & Biogas Facility - Environmental Study Report August 2024 - 22-4641 administered by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). NASM-regulated products are subject to specific hauling, storage, and disposal requirements listed under the Ontario Environmental Protection Act (EPA) and must have a land application plan. ... **Based on information available at this time it is expected** that sludge and SSO quality should allow a CFIA fertilizer product to be produced for both alternatives. Ongoing testing will be necessary to confirm sludge quality continues to meet current CFIA standards.

5.5.1.5.

The proposal to combine source separated organics with wastewater sludge will contaminate the source separated organics stream, which has market value.

It is already known that the source separated organics *plus* wastewater sludge material cannot be used on food-producing land.

By the completion of the facility, predicted for 2030, the use of materials contaminated by wastewater sludge may be tightly controlled and the materials might not be usable anywhere creating a disposal problem and cost. It's a risk.

4. How likely is the flaring of the methane produced on site?

Currently, methane produced at Utilities Kingston's two main wastewater treatment plants is flared off. This option is considered in the Report although the preference is to produce renewable natural gas. (5.3.1)

Although not an energy use application, **a fourth option**, (4) **methane destruction via flaring, could be considered**. Option (4) isolates the methane emission avoidance benefit, which, consequently, enables the evaluation of the incremental and standalone energy benefit of energy end uses (1) through (3). (5.3.1)

Is it possible that flaring methane will occur frequently in the as-yet untested process? How much is known about this eventuality? It is a risk.

5. What is the impact of the increased truck traffic on road wear, pedestrians, and cyclists?

The City's Official Plan sets this goal for transportation in section 4.6:

To promote an integrated and diverse transportation system for the City through the encouragement of land use patterns, density, road and site design that supports walking, cycling, and transit, as well as commercial traffic, inter-regional travel, and

private vehicles. It is the intent of the transportation policies that the system is safe, convenient, affordable, efficient and energy-conserving, while minimizing environmental impacts. This will ensure that community resources are accessible to all residents and the City's health and sustainability are fostered.

The Report discounts the use of Perth Road by pedestrians and cyclists, which is not consistent with City policies and strategic goals.

Traffic counts undertaken in the fall of 2022 indicated that there were no pedestrians observed. Two cyclists were counted travelling north/south on Division Street/Perth Road through the study area, which includes the Perth Road at Highway 401 Ramp terminals and the Perth Road at McAdoo's Lane intersection. (4.2.3)

Table 5-17 estimates a total of 34 trucks a day in summer and 30 trucks a day in winter will be using Perth Road to go to Knox Farm. The Report also proposes taking on more waste from other local sources and nearby communities. (3.1). This would increase the truck traffic.

The Report also foresees the possibility of larger trucks. (5.4)

It is not practical for cyclists to use Montreal Street or Sydenham Road when they want to get to Glenburnie or commute into downtown Kingston, for example.

Road safety is critically important. The Report does not adequately account for all road users or address the City's active transportation policies.

Without (uncosted) road infrastructure improvements, the significant increase in truck traffic puts cyclists using Perth Road at risk.

6. Is Knox Farm a suitable location?

The advantage of the Knox Farm location is that it is land owned by the City.

The disadvantages include:

- Proximity to a watercourse that discharges into Little Cataraqui Creek which discharges into Lake Ontario, the source of Kingston's drinking water.
- Its location on the top of a hill, where runoff and any leaks or breaks in the liquid biosolids storage lagoon will flow downhill to vulnerable areas, including the Environmental Protection Area of the Little Cataraqui Creek Conservation Area
- Possible contamination of groundwater (Figure 4-5) and the 39 wells within 500 m of the site (4.3.3).
- The presence of 11 species of conservation concern.

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Wednesday, September 11, 2024 3:28 PM
To: [REDACTED]
Subject: RE: Biosolids Facility on Knox Farm

Hi [REDACTED]

On behalf of the project team, we are confirming receipt of your comments below. Thank you very much for providing feedback on the proposed Biosolids and Biogas Facility Class EA project.

Kind Regards,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

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P.O. Box 790, Kingston, ON K7L 4X7
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From: [REDACTED]
Sent: 11 September 2024 10:23 AM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Subject: Biosolids Facility on Knox Farm

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This subject property is another attempt as before to put a garbage dump near or on the Conservation Authority Land by the City of Kingston. I am surprised that the Conservation authority would not stand up to disagree with this facility being permitted there on the property so close to the Conservation Land. I am concerned that the City Fathers should be ashamed to even consider selling this property for this use as it seems they can't get rid of it fast enough as it appears to be an albatross around their neck. Years ago the Conservation Authority expropriated land from the nearby farms to create this area, and from farmers who needed it to keep their farms going and lost out in the end to the authority. I disagree with this development and it should not even be considered.

[REDACTED]

From: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Sent: Wednesday, September 11, 2024 12:21 PM
To: [REDACTED]
Subject: RE: Feedback regarding the Environmental Study Report, August 2024 at Knox Farm

Hi [REDACTED]

On behalf of the project team, we are confirming receipt of your comments below. Thank you very much for providing feedback on the proposed Biosolids and Biogas Facility Class EA project.

Kind Regards,

Lauren.



Lauren Scanlan, M.A.Sc., P.Eng., PMP

Project Advisor - Risk & Research
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From: [REDACTED]
Sent: 11 September 2024 7:56 AM
To: Scanlan,Lauren <lscanlan@utilitieskingston.com>
Subject: Feedback regarding the Environmental Study Report, August 2024 at Knox Farm

Caution: This email is from an external source. Please exercise caution when opening attachments or clicking links, especially from unknown senders.

Lauren Scanlan
Utilities Kingston
lscanlan@utilitieskingston.com

September 10, 2024

Dear Ms. Scanlan,

I am writing to provide feedback on the Environmental Study Report (ESR), August 2024 that examined the feasibility of a Regional Biosolids & Biogas Facility for the City of Kingston and other regions, located at Knox Farm which is adjacent to Little Cataraqui Creek Conservation Area (Little Cat).

I spent my career employing the latest scientific and technological advances in my work and I appreciate innovation, especially if it promotes protection of our environment. I commend the City of Kingston and Utilities Kingston (UK) for their progressive planning in considering eco-friendly and renewable methods of dealing with Biosolids; however, I have grave concerns about choosing Knox Farm as a viable site.

It seems City Council and Utilities Kingston were committed to the Knox Farm location from the beginning because the City already owns the land. As such, Dillon Consulting delivered on their mandate to support the construction of such a facility at Knox Farm by finding ways to justify and in some cases circumvent arguments to the contrary. There are two areas within the proposed site that are designated as Environmental Protection Areas. Construction of the proposed facility is not permitted within an EPA (Kingston Official Plan 3.10.2). However Section 3.10.3 notes that new public or private works or utilities may be permitted where such facilities are not feasible outside of the EPA (City of Kingston, 2022). There are countless alternative sites that would be feasible.

According to the ESR, the City of Kingston is planning to change the zoning of those EPAs, possibly to General Rural Area Zones, thus bypassing restrictions designed to protect Environmental areas of concern. However, changing the zoning to General Rural Area Zone (RU) invokes restrictions on gross floor area, height and number of rural use buildings: the proposed buildings would far exceed the provisions for RU. The ESR then states that although the proposed facility is not identified under the permitted uses for General Rural Area Zone, the facility may be permitted in "Uses Permitted in All Zones" (4.9.1). However, "Uses Permitted in All Zones" explicitly states that "All Zones" does not include EPA sites. So the strategy appears to be:
Site not eligible as EPA => change zoning to General Rural Area
Site not eligible as General Rural Area => invoke "Uses Permitted in All Zones"
Even though EPAs not permitted in All Zone exemption, the zoning has been changed to General Rural Area so environmental restrictions no longer apply

Surely the responsibility of UK and City Council is not to use its power to avoid environmental legislation, but to adhere to it in both the particulars and the spirit of the law.

Priorities identified in Kingston's Strategic Plan 2023-2026 are:

1. **"Complete a new Natural Heritage Study...** to identify natural and significant wildlife areas, as a background study to support the Official Plan Project (2.3.1)": Knox Farm and Little Cat are identified as Areas of Natural and Scientific Interest (ANSI). The ESR stated that several confirmed and potential sensitive natural heritage features were identified as occurring within the property such as Cataraqui Clay Creek Ridges and Earth Science Area of Natural and Scientific Interest, significant woodlands, a watercourse and unevaluated wetlands as well as potential Species At Risk (SAR) habitat and candidate Significant Wildlife Habitat (SWH).

2. **"Develop a Biodiversity Conservation Strategy.** Establish a strategy for protecting and enhancing biodiversity in the city, by reviewing models such as the Montreal Biodiversity Pledge" (MBP). One of the 15 concrete actions of the MBP is to "Conserve existing natural environments through protected areas and other effective and equitable measures". How can we say we are aspiring to follow this Pledge while intentionally ignoring legislation put in place to protect vulnerable and sensitive ecological regions?

The ESR states that "Environmental Assessments generally consider sensitive receptors in locations where human activities may regularly occur". It is imperative that wildlife be included as a "Sensitive Receptor" when considering the construction of a Facility built adjacent to a Conservation Area. The Reservoir Trail is one of many hiking/skiing trails at Little Cat. The report specifies that the trail is "within 100m" but studying maps of the proposed building locations and the proximity of the trail it seems to be within 40-50 meters of the property line. The Reservoir Trail is considered a sensitive receptor to odour for the purposes of the air quality review, however trails are not considered a receptor under the noise assessment "given the transient nature of the trail users". I cannot state more strongly that **wildlife are not transient users of the environment**, they are susceptible to odour, noise, light, and vibration every moment of every day and deserve consideration.

Dillon Consulting did attempt to identify and quantify Species of Risk (SAR) on and around the Knox Hill site; however, the purpose of The Endangered Species Act, 2007 is to also protect SAR and their habitats; to promote the recovery of SAR; and to promote stewardship activities to assist in the protection and recovery of SAR in Ontario. Surely while planning construction of a much more expensive eco-friendly Biosolids and Biogas Facility, we should follow the same principles: this purpose cannot be achieved if drilling and blasting limestone to construct a facility is required; nor can it be achieved by increasing the burning of diesel fuel as trucks travel in and out; nor by increasing noise pollution through machinery and backup tones from reversing trucks; nor from light pollution that can affect navigation for birds and seasonal or diurnal patterns of animals; nor by releasing noxious gases that, in human standards may be acceptable, but for animals whose sense of smell and susceptibility to noxious particulate in the air is thousands or a million times more sensitive, could result in fear, illness, reduced reproduction, fleeing from familiar territory and even death.

Little Cat. has served as an educational resource in this community for decades. Countless busloads of school children travel to Little Cat to learn about our eco-system, wildlife, and plants. They learn how to harvest sap and make maple syrup and most importantly, they learn about stewardship of the precious natural resources this site has to offer. What message are we sending to the citizens of tomorrow when they look up and see a huge waste management facility practically on top of Little Cat?

I encourage Utilities Kingston and the City to delay the finalization of phase 4 until further public consultation has occurred. Although UK asserts that due diligence was achieved in informing the public, the messaging was effective since only 35 people responded to their survey and very few attended the drop-in sessions. And although UK states that they used social media, only 3% of the population of Kingston follow UK on Facebook, only 7% follow on Twitter, and I doubt many people check the UK website on a regular basis. Readership of the Whig Standard is estimated at 17% of the population. Sunnyside Road residents, although they are directly north of the Little Cat, were not directly informed of the project. I did an informal door-to-door survey on Sunnyside Road, Perth Road north of McAdoo's Lane and McAdoo's Lane itself, and only two of the dozen or so residents were even aware of the project, and they thought it was a green bin recycling centre: I believe this misconception is due to a lack of transparency since the informational material from UK never defined the term Biosolids as "sewage sludge" and the only specific mention of any substance at all was green bin contents. In contrast, a petition asking for a halt in construction of a biosolid facility near Little Cat received over 200 signatures in just one week.

I am all in favour of innovation and technology and look forward with interest to see how this relatively new means of dealing with the community's waste is achieved. But please do your duty as community leaders, do not build the plant adjacent to one of Kingston's most precious resources. If, or rather when, an unforeseen accident occurs, or the predictive models regarding environmental effects prove to be wrong, the ramifications could be lifelong and devastating for our generation and generations to follow. Please do not build this Facility on Knox Farm.

Respectfully submitted,

[REDACTED]
[REDACTED]
[REDACTED]

Public Review Response Table

Public Review

Comment Response Table

Document Reviewed: Regional Biosolids & Biogas Facility Environmental Study Report (August 2024)

Proponent: Utilities Kingston

Date: October 2, 2024

Utilities Kingston completed an Environmental Study Report (ESR) for a Regional Biosolids and Biogas Facility proposed to be located at a City-owned site referred to as the Knox Farm property. The ESR was issued for public review from August 13 to September 11, 2024. During that time, comments were received from members of the general public and interested parties. The following table provides a summary of the main themes that emerged from the comments and responses to the comment themes. All feedback received during the public review period has been reviewed and is included in the consultation record contained in Appendix F of the Final ESR.

Comment Theme	Response
Concerns about the high capital and operating costs proposed for the facility	<p>Anaerobic digestion of green waste and wastewater sludge to produce biogas is a well-established technology. The sale of renewable natural gas (upgraded biogas) and digestate produced from the anaerobic digestion process can be used to offset the overall facility costs. There may be precedent for renewable natural gas to be sold at a substantial premium compared to natural gas rates (e.g., Enbridge prices RNG at \$24/GJ or \$0.90/m³). Further, should additional tonnages be accepted at the facility from regional sources, this would also result in additional income from tipping fees from customers, along with sale of greater biogas volumes and digestate product.</p> <p>We recognize that the estimated capital and operating expenses for the proposed facility are large, and they are being evaluated further within the context of a separate business case analysis for the project. The results from the business case analysis will be used in conjunction with the Class Environmental Assessment (EA) information to form the 'go / no-go' recommendations to Utilities Kingston management and City Council.</p>
<p>Concerns if the liquid end product from the facility is safe and proven to be land applied on farms.</p> <p>Are there testing requirements?</p>	<p>Digestate is the semi-solid by-product left over from the anaerobic digestion process which contains high nutrient loads that can make it valuable as a fertilizer product, following proper treatment and testing.</p> <p>Ontario's guidelines for the use of biosolids (including digestate) are designed to ensure that they are managed and applied in a manner that protects human health and the environment. The regulatory framework includes stringent requirements for pathogen reduction, contaminant limits, land application rates, and monitoring. The regulation also includes requirements for storage, handling, and record-keeping. As new contaminants are</p>

Comment Theme	Response
	<p>identified and better understood, Ontario continues to update its guidelines and regulations to ensure the safe and beneficial use of biosolids.</p> <p>In Ontario, biosolids and digestate left over from wastewater treatment processes can be used for agricultural land application based on two levels of treatment and testing. The NASM (non-agricultural source materials) standard is the basic standard governing the treatment and testing of bio-solids destined for agricultural land application and is the standard currently in use for biosolids generated by Kingston's wastewater treatment plants. The CFIA (Canadian Food Inspection Agency) standard is the other level to which biosolids and digestate may be subject to for re-use as a fertilizer product that is of a higher quality than NASM and is typically sold to agricultural operators.</p> <p>Digestate quality can be analyzed by an accredited laboratory and is completed by using samples representative of the digestate at the time of application. An accredited laboratory can test for the full list of parameters as specified by federal and provincial legislation. Utilities Kingston manages biosolids in accordance with its Environmental Compliance Approval for each wastewater treatment plant (WWTP). Of note, biosolids from the UK WWTPs are sampled twice monthly for total solids, total phosphorus, total ammonia nitrogen, nitrate as nitrogen and heavy metals to demonstrate compliance. A rolling monthly biosolids quality report is submitted to the company contracted to haul biosolids to licensed agricultural fields during the land application season.</p> <p>As of 2020, over 1.2 million tonnes of digestate are being produced annually by biogas plants across the country (Canadian Digestate Management Guide, March 2023, Canadian Biogas Association). Common uses for digestate are land application and crop fertilizer use. See examples below:</p> <ul style="list-style-type: none"> • Digestate from Kingston's wastewater treatment plants are treated to NASM requirements and land-applied. • The City of Hamilton upgraded their biosolids management process with thermal drying to produce an end product that could be sold as fertilizer under the Canadian Food Inspection Agency (CFIA). • City of Guelph treats their municipal biosolids to CFIA-regulations and produces a fertilizer for sale. • Many farm-based anaerobic digesters land apply treated biosolids derived from degradation of animal manure.
<p>Concerns that processing the intended waste streams (raw, dewatered biosolids, green bin organics) and</p>	<p>Anaerobic digestion technology has been used in wastewater treatment to process sludges since the early 1900s (Gunnerson and Stuckey, 1986, https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=6fb88e3fcc3738ed2fefdb3d0a8b0496aaff0296). Anaerobic digestion involves the use of microorganisms to break down organic matter in the absence of</p>

Comment Theme	Response
<p>producing a renewable natural gas through this technology is proven</p>	<p>oxygen to produce biogas. Biogas can be burned directly with little processing or can be upgraded to renewable natural gas (RNG) quality to be used as an electricity and heat source, or even as a vehicle fuel. In 2021, Canada had nearly 300 active biogas and RNG plants (source: https://biogasassociation.ca/resources/page/2023_canadian_biogas_and_rng_market_report/). RNG injection into the pipeline in Canada began in 2003 (https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/market-snapshots/2023/market-snapshot-two-decades-growth-renewable-natural-gas-canada.html).</p> <p>Anaerobic digestion can also be used to process food waste. For example, Stormfisher is Canada's largest anaerobic digestion facility, located in London, Ontario. This facility can process up to 225,000 tonnes of organic waste and produces enough RNG to heat 2,500 homes.</p> <p>Combining food waste and wastewater sludge for co-digestion has been implemented and scaled up in various parts of the world, demonstrating its viability and effectiveness. Some examples of co-digestion projects are listed below (https://archive.epa.gov/region9/organics/web/pdf/epa-600-r-14-240-food-waste-to-energy.pdf):</p> <ul style="list-style-type: none"> • Central Marin Sanitation Agency - San Rafael, California • Hill Canyon Wastewater Treatment Plant – California • West Lafayette Wastewater Treatment Utility – Indiana • Janesville Wastewater Treatment Facility - Wisconsin <p>In Canada, many municipalities have or are undertaking feasibility studies to co-digest sewage sludge with food waste (e.g., Petawawa, City of Cornwall, City of Windsor, City of Timmins, City of Penticton, BC). It is noted that wastewater treatment approaches have been in place much longer than green bin programs and with wastewater treatment infrastructure requiring upgrading, these municipalities are now considering the integration of managing the two material streams.</p>
<p>Concern that if this facility takes the City's green bin organics, then the compost created from the City's current green bin organic processor will not be available to residents.</p>	<p>The City's current green bin organics processor creates soil compost from green bin and other waste organics and leaf and yard wastes. The operation may continue to generate a compost product without the addition of the City of Kingston's green bin organics.</p>

Comment Theme	Response
<p>Concern that the proposed facility will generate methane emissions that will be released into the atmosphere.</p>	<p>It is the intention of the proposed project to produce as much biogas (methane) as possible from the anaerobic digestion of the biosolids and SSO wastes received so that it can be used as a biogenic renewable natural gas in place of petroleum derived natural gas. Biogas that is cleaned and converted to renewable natural gas is a valuable product that could be sold to offset the capital and operating costs of the project while providing reductions in greenhouse gas emissions by displacing the use of fossil fuel natural gas. The loss of unburned methane through leakage would be detrimental to the feasibility of the proposed facility and so the design and operations would be undertaken with the intention to avoid such losses.</p> <p>Further, the facility will maintain a standby biogas flaring system to combust the biogas in emergency instances only, as per provincial regulatory requirements.</p>
<p>Concerns that the Knox Farm site is not suitable for the proposed facility</p>	<p>A component of the project was to assess the suitability of the municipally-owned Knox Farm property. This involved assessments from the following technical disciplines: land use, air quality, archaeology, cultural heritage, hydrogeology, natural environment, noise, site servicing, stormwater management and traffic. No major barriers were identified for Knox Farm as a potential location for the proposed facility and the study did not identify any significant risks of impact to neighbouring properties. The Knox Farm Suitability Assessment was completed in April 2023. The findings were discussed at a March 2023 public drop-in event and the display boards and report are available on the project website.</p>
<p>Concern about impacts to trees, woodlands and impact on wildlife</p>	<p>The majority of the Proposed Site Location was found to contain areas of low natural environmental value based on desktop analysis and on-site field investigations completed by biologists in 2022 and 2023; specifically, the centre of the Proposed Site Location is dominated by a disturbed meadow known as the former site of the Cataraqui River Dredged Material Storage and Dewatering Facility. It should be noted that although Schedule 8-B of the City Official Plan identifies the wooded areas within the Proposed Site Location to be significant woodland, on-site Ecological Land Classification (ELC) surveys in 2022 revealed that most of these wooded areas were actually Buckthorn Deciduous Shrub Thicket (THDM2-5) communities which are not considered woodland. Common Buckthorn (<i>Rhamnus cathartica</i>) was found to dominate the deciduous thicket communities and is recognized as an invasive shrub in Ontario and can harm the environment, as this invasive plant outcompetes native plants, reduces biodiversity, degrades the quality of wildlife habitat, and impacts a wide range of industries (Invasive Species Centre, 2024).</p> <p>A Landscaping and Planting Plan may be prepared during detailed design of proposed development to protect or off-set vegetation removal and propose enhancements (i.e., net gain of tree cover in the area) to natural areas where possible (e.g., woodland restoration or an ecological offsetting plan). Furthermore, impacts to wildlife in the area are anticipated to be low and will be mitigated by measures outlined in the ESR such as, vegetation and</p>

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	<p>tree removals outside wildlife active seasons and the incorporation of landscape plantings along the boundary of the Project footprint to provide a buffer/shield for woodland areas where operational indirect anthropogenic impacts (i.e., noise, light, vibration and human presence) are anticipated.</p> <p>Where impacts to woodlands are proposed based on the preferred Concept Design, they are limited to a small portion (approximately 0.01 ha) of an isolated deciduous woodland identified by ELC as Cottonwood Deciduous Forest (FODM8-3) within the southern extent of the project footprint. Impacts to this woodland and natural vegetation in the area in general will be minimized to the extent practical and may be compensated by native tree and shrub plantings and seeded with native forbs and graminoid that offset removals.</p>
<p>Concern is that Kingston should be focusing on finding solutions to combat climate change.</p> <p>How does this facility support that? Shouldn't we be looking at wind and solar energy sources?</p>	<p>A biosolids management and biogas system offers a multifaceted approach to reducing GHG emissions and transitioning away from fossil fuel-based energy sources. In Ontario, there has been motivation to pursue resource recovery options to manage diverted food and organic waste. Anaerobic digestion of organics is amongst these options and is currently used to treat sludge from the wastewater treatment process.</p> <p>This project supports the City's current goals of creating sufficient capacity to process future wastewater sludge loadings and managing food and organic waste, whilst producing a renewable natural gas to offset use of fossil fuels. The City remains committed, through its Climate Leadership Plan, to exploring and supporting all viable means of reducing our impact on global climate change including significant investments and support for solar PV, geothermal, electrification and other methods of energy and emission reduction and fuel switching.</p>
<p>Is this facility permitted in an EPA zone?</p>	<p>The proposed facility is not within an EPA Zone. The City of Kingston's planning department has confirmed that the area designated as Open Space in the Official Plan (which spans the majority of the Proposed Site Location) was incorrectly zoned as an EPA Zone. The Knox Farm lands were rezoned from EPA to OS2 (General Open Space Zone) and RU (General Rural Area Zone) by By-law 2024-332 on July 9, 2024, as part of a housekeeping amendment. No appeals were received to the amendment and as such, it is in full force and effect.</p> <p>With respect to the OS2 Zone, the proposed facility is not permitted (Section 18 of the Zoning By-law), but may be permitted according to Section 4.9.1 of the Zoning By-law (Uses Permitted in all Zones). With respect to the RU Zone, the proposed facility is not permitted (Section 8 of the Zoning By-law), but may be permitted according to Section 4.9.1 of the Zoning By-law. Therefore, the proposed facility may be permitted in the OS2 and RU Zones.</p>
<p>Odour concerns</p>	<p>The Environmental Study Report concluded that impacts from odour could be managed through the use of standard odour Best Management Practice Plans that, should the project proceed, would be required to support an application to the province for an Environmental Compliance Approval needed to build and operate the</p>

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	<p>Facility. Final design of odour mitigation systems would be assessed to target off-site odour compliance prior to construction. These mitigative measures would be typical of normal operations of a waste management facility, be consistent with industry best practices and conform to existing environmental laws.</p>
<p>Concerns that there was insufficient public consultation completed for the project.</p>	<p>In 2020, Utilities Kingston completed a Master Plan for Enhanced Biosolids Management and Biogas Utilization (the 2020 Master Plan) where the recommendation was to develop an integrated biosolids and source separated organics (i.e., green bin organics) processing facility within the Knox Farm property. The 2020 Master Plan met the requirements for Phases 1 and 2 of the Municipal Class Environmental Assessment (MCEA) process as outlined in the MCEA document, Municipal Class Environmental Assessment (MCEA) October 2000, as amended in 2007, 2011 and 2015, the Municipal Engineers Association (MEA). As part of the 2020 Master Plan, consultation took place with the public and interested parties with website posting and a public information session which was held in January 2020.</p> <p>In 2022, Utilities Kingston proceeded with two additional studies: (1) a reconfirmation study of the previously identified preferred solution (Dillon, 2022; Phase 1 and 2 Reconfirmation: Problem/Opportunity Statement and Screening Process and Results Memo); and (2) a Knox Farm Suitability Assessment, to conduct a detailed assessment of the Knox Farm property to determine if it is a suitable site for the proposed use. The following points of consultation were included as part of the two studies:</p> <ul style="list-style-type: none"> • Public drop-in session #1: held March 28, 2023 to discuss the project and the results of the Knox Farm Suitability Assessment. Notice of the public drop-in session was distributed to those on the project contact list and in the Kingston Whig Standard two times; and • Public survey #1: open from late March to mid April 2023 to get feedback on the project and the results of the Knox Farm Suitability Assessment. <p>It is noted that consultation on the results of the Knox Farm Suitability Assessment were not required as part of the Class EA consultation process however, Utilities Kingston added this additional consultation point to seek feedback on the proposed site location.</p> <p>Utilities Kingston then proceeded with the next phase of planning to further assess the environmental, technical and financial feasibility of implementing the Master Plan recommendation through the Schedule 'C' Municipal Class EA project which commenced in September 2023 and completed in September 2024. The Class EA followed the Schedule 'C' requirements for consultation and included the following points of consultation:</p>

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	<ul style="list-style-type: none"> • Class EA Notice of Commencement: the Notice of Commencement was released on September 19th, 2023 and was published on the project website, distributed to those on the project contact list and in the Kingston Whig Standard two times. • Public drop-in session #2: held March 27, 2024 both in-person and a separate virtual event to discuss the alternative design concepts and preliminary preferred alternative. Notice of the public drop-in session was distributed to those on the project contact list and in the Kingston Whig Standard two times. • Public survey #2: open from late March to mid April 2024 to get feedback on the project, the alternative design concepts and the preliminary preferred alternative. • Class EA Notice of Completion: the Notice of Completion was released on August 13, 2024 and was published on the project website, distributed to those on the project contact list and in the Kingston Whig Standard two times. • Public Review Period on the Environmental Study Report: the ESR was posted on the project website and available via hard copy at Kingston City Hall for the 30-day public review. Those on the project contact list were notified via email or mail and a notice was published in the Kingston Whig Standard two times. <p>All consultation efforts are recorded within the Appendix F of the MCEA Environmental Study Report (ESR) and available for review on the Project website at: https://utilitieskingston.com/Projects/Detail/RegionalBiosolidsBiogasFacility</p>
<p>Concerns with damage to water wells in the area and with source water protection</p>	<p>A hydrogeology assessment was completed as part of the Knox Farm Suitability Assessment that included a review of background hydrogeology records and borehole drilling, monitoring well installation, groundwater sample collection and hydrogeological testing.</p> <p>There are 39 well records, based on the Ministry of Environment, Conservation and Parks water well record database, within 500 metres of the Knox Farm property with depths ranging from 3 m to 54. 2 m. A drilling program was completed in 2022 and hydrogeological and environmental investigations were subsequently completed and the groundwater analytical results were compared to the Ministry's Table 6: Generic Site Condition Standards for Shallow Soils in a Potable Ground Water Condition. All samples met the reference MECP Table 6 criteria which would be applicable for the proposed development.</p> <p>According to the Source Protection Atlas by the MECP, the Knox Farm property is located within the Cataraqui Source Protection Area (SPA) and is identified to be within a Significant Groundwater Recharge Area (SGRA) and a Highly Vulnerable Area (HVA); of which, the majority of the Cataraqui SPA is identified. The Official Plan</p>

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	<p data-bbox="548 232 1898 342">indicates that new developments that constitute a drinking water threat within a SGRA and HVA “may be required to incorporate measures to adequately mitigate and manage any risk to source water” to the satisfaction of the City in consultation with the Cataraqui Source Protection Authority.</p> <p data-bbox="548 375 1898 662">Potential/inferred karst topography was noted in the City’s Official Plan for the Knox Farm property. Karst formations are formed when rock is dissolved in water, creating features that can act as underground drainage systems; creating a pathway for contaminants on the surface to reach groundwater. A preliminary karst assessment was completed in November 2023 and based on the desktop background information review and the field-based visual observations, the likelihood of significant karst features at the proposed site location is low. The majority of the site location is overlain by low permeability soils, which limits the karstification of the underlying limestone. Karstic features (e.g., sinkholes, caves, disappearing streams), were not observed during the field visit and where surface limestone bedrock was found, it was observed to be minimally weathered.</p> <p data-bbox="548 695 1898 841">If a significant karst feature appears during construction, construction activities would need to be adapted in order to evaluate the risk (environmental, geotechnical, etc.) associated with the newly identified karst feature. Should karst features appear or become visible as a result natural processes, further studies could be required to improve the understanding of the identified karst.</p> <p data-bbox="548 873 1898 945">Lastly, it is assumed that process wastewater would be hauled offsite with domestic wastewater being accommodated by a small onsite septic system.</p>