



## The Regional Municipality of Durham

### Works Committee Agenda

Council Chambers  
Regional Headquarters Building  
605 Rossland Road East, Whitby

**Wednesday, June 2, 2021**

**9:30 AM**

---

Please note: In an effort to help mitigate the spread of COVID-19, and to generally comply with the directions from the Government of Ontario, it is requested in the strongest terms that Members participate in the meeting electronically. Regional Headquarters is closed to the public, all members of the public may view the Committee meeting via live streaming, instead of attending the meeting in person. If you wish to register as a delegate regarding an agenda item, you may register in advance of the meeting by noon on the day prior to the meeting by emailing [delegations@durham.ca](mailto:delegations@durham.ca) and will be provided with the details to delegate electronically.

**1. Roll Call**

**2. Declarations of Interest**

**3. Adoption of Minutes**

A) Works Committee meeting – May 5, 2021

Pages 5 - 11

**4. Statutory Public Meetings**

There are no statutory public meetings

**5. Delegations**

5.1 Rob Cook, on behalf of the Ontario Waste Management Association,  
re: Support for Bill 197 Changes – Municipal Veto

5.2 Councillor Deborah Kiezebrink, re: Correspondence from the  
Township of Scugog dated April 28, 2021 re: Bus Stops on Dead End  
Roads [Item 8.1 A)]

## 6. Presentations

- 6.1 Ron Trewin, Senior Project Manager, Transportation Design, re: Management of Excess Soils from Regional Projects
- 6.2 Krista Chomicki, Great Lakes Scientist, Toronto Region Conservation Authority (TRCA), re: Participation in the Toronto and Region Conservation Authority's Western Durham Nearshore Water Quality Monitoring Program (2021-W-23) [Item 8.2 C]

## 7. Waste

### 7.1 Correspondence

- A) Correspondence received from the Municipality of Clarington dated May 4, 2021, re: City of Toronto Request to use Energy-From-Waste (EFW) Facilities in Ontario 12 - 14  
Recommendation: Receive for Information

### 7.2 Reports

- A) Update on the Blue Box Lid Implementation (2021-WR-8) 15 - 24
- B) Update on Municipal Hazardous or Special Waste (MHSW) transition to Extended Producer Responsibility (EPR) and request to extend Standing Agreements C002769 and C002745 with Photech Environmental Solutions Inc. (2021-WR-9) 25 - 29
- C) Durham York Energy Centre Operations – Long-Term Sampling System Reporting (2021-WR-10) 30 - 51

## 8. Works

### 8.1 Correspondence

- A) Correspondence from the Township of Scugog dated April 28, 2021 re: Bus Stops on Dead End Roads 52 - 54

**Pulled from the April 30, 2021 Council Information Package by Councillor Drew**

Recommendation: Receive for Information

- B) Correspondence from the Town of Ajax dated May 19, 2021, re: Westney Road Noise Study 55

Recommendation: Refer to staff for a response

## 8.2 Reports

- |  |          |
|--|----------|
| A) Declaration of Lands as Surplus and Approval to Convey the Surplus Lands to the Adjacent Landowner as part of a Land Exchange for Regional Requirements (2021-W-21)   | 56 - 60  |
| B) Amendment and Extension of Lease Agreement for Premises Occupied by Durham Region Transit Located at 419 King Street West, in the City of Oshawa (2021-W-22)  | 61 - 65  |
| C) Participation in the Toronto and Region Conservation Authority's Western Durham Nearshore Water Quality Monitoring Program (2021-W-23)  | 66 - 70  |
| D) Reallocation of Funding for Sanitary Sewer Replacement on Admiral Road from Roosevelt Avenue to North of Parry Road, in the Town of Ajax (2021-W-24)  | 71 - 75  |
| E) Approval of Additional Unbudgeted Capital Works and Financing to be Incorporated into a Servicing Agreement with the Kedron East Landowners Group Inc. (Kedron East), Including Cost Sharing in Accordance with the Region Share Policy, for the Extension and Oversizing of a Trunk Sanitary Sewer, Watermains and Regional Storm Sewers on Harmony Road (Regional Road 33), in the City of Oshawa (2021-W-25) | 76 - 83  |
| F) Shared Service Connection Replacement Policy including Disconnection of Existing Common Water and Sanitary Sewer Service Connections on James Street and Centre Street South in the Town of Whitby (2021-W-26)  | 84 - 95  |
| G) Request from Hamilton Oshawa Port Authority for the Assumption of Ownership of Farewell Street (Regional Road 56) south of Harbour Road, City of Oshawa (2021-W-27)   | 96 - 101 |

## 9. Advisory Committee Resolutions

There are no advisory committee resolutions to be considered

## 10. Confidential Matters

There are no confidential matters to be considered

**11. Other Business**

**12. Date of Next Meeting**

Wednesday, September 8, 2021 at 9:30 AM

**13. Adjournment**

Notice regarding collection, use and disclosure of personal information:

Written information (either paper or electronic) that you send to Durham Regional Council or Committees, including home address, phone numbers and email addresses, will become part of the public record. This also includes oral submissions at meetings. If you have any questions about the collection of information, please contact the Regional Clerk/Director of Legislative Services.

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2097.

## **The Regional Municipality of Durham**

### **MINUTES**

#### **WORKS COMMITTEE**

**Wednesday, May 5, 2021**

A regular meeting of the Works Committee was held on Wednesday, May 5, 2021 in Council Chambers, Regional Headquarters Building, 605 Rossland Road East, Whitby, Ontario at 9:30 AM. Electronic participation was offered for this meeting.

#### **1. Roll Call**

Present: Councillor Mitchell, Chair  
Councillor Marimpietri, Vice-Chair  
Councillor Barton  
Councillor Crawford  
Councillor McLean  
Councillor John Neal  
Councillor Smith  
Regional Chair Henry

Also

Present: Councillor Dies  
Councillor Drew  
Councillor Foster  
Councillor Pickles  
Councillor Wotten

Absent: None

Staff

Present: E. Baxter-Trahair, Chief Administrative Officer  
G. Anello, Director of Waste Management  
J. Demanuele, Director of Business Services, Works Department  
J. Hunt, Regional Solicitor/Director of Legal Services, Corporate Services –  
Legal Services  
R. Jagannathan, Director of Transportation and Field Services  
J. Presta, Director of Environmental Services  
R. Inacio, Systems Support Specialist, Corporate Services – IT  
S. Siopis, Commissioner of Works  
S. Glover, Committee Clerk, Corporate Services – Legislative Services  
C. Tennisco, Committee Clerk, Corporate Services – Legislative Services

#### **2. Declarations of Interest**

There were no declarations of interest.

**3. Adoption of Minutes**

Moved by Councillor Barton, Seconded by Councillor Smith,  
(49) That the minutes of the regular Works Committee meeting held on  
Wednesday, April 7, 2021, be adopted.  
CARRIED

**4. Statutory Public Meetings**

There were no statutory public meetings.

**5. Delegations**

5.1 Wendy Bracken, Durham Resident, re: Information Report #2021-INFO-35:  
Durham York Energy Centre Source Test Update

Wendy Bracken, Durham resident, provided a PowerPoint presentation regarding Information Report #2021-INFO-35: Durham York Energy Centre Source Test Update.

W. Bracken referenced Section 4.2 of Report #2021-INFO-35 and stated her concerns regarding the language that was used in the report completed by HDR and their review of the ORTECH report.

W. Bracken expressed her concerns that the AMESA data has been withheld for four years. She stated that all data, past and present, with underlying reports should be provided on a monthly basis as available. She added that the Municipality of Clarington's resolution and requests should be honoured, and the public requests should be honoured as well.

Moved by Councillor Marimpietri, Seconded by Councillor John Neal,  
(50) That the Rules of Procedure be suspended to grant W. Bracken a 5-minute extension in order to finish her delegation.  
CARRIED on a 2/3rds VOTE

W. Bracken raised further concerns that the annual stack tests are only a snapshot of emissions; hundreds of toxic pollutants are only measured at the stack a few hours every year; there is only continuous monitoring for a very small number of pollutants; and that the ambient air monitoring is only for select pollutants.

Moved by Councillor Marimpietri, Seconded by Councillor John Neal,  
(51) That the Rules of Procedure be suspended to grant W. Bracken an additional 2-minute extension in order to finish her delegation.  
CARRIED on a 2/3rds VOTE

W. Bracken referenced additional documents such as the Chandler Memo to Durham staff regarding the Fall 2016 Testing at the Durham York Energy Centre (DYEC) dated November 22, 2016; the Best Available Techniques (BAT) Reference Document (BREF Document); and the Dioxin/Furan Ambient Air Exceedance graph that outlined an exceedance that occurred on May 26, 2018 on a calm day.

W. Bracken responded to questions from the Committee.

## 6. Presentations

There were no presentations.

## 7. Waste

### 7.1 Correspondence

#### A) Information Report #2021-INFO-35: Durham York Energy Centre Source Test Update

This item was dealt with later in the meeting. [See Item 7.1 A) on pages 3 and 4 of these minutes.]

#### B) Correspondence from Linda Gasser, Durham Resident dated May 4, 2021, re: Information Report #2021-INFO-35: Durham York Energy Centre Source Test Update

Moved by Councillor Barton, Seconded by Councillor Smith,  
(52) That Correspondence from Linda Gasser, Durham Resident dated May 4, 2021, re: Information Report #2021-INFO-35: Durham York Energy Centre Source Test Update be referred to consideration of Item 7.1 A) Information Report #2021-INFO-35: Durham York Energy Centre Source Test Update.

CARRIED

#### A) Information Report #2021-INFO-35: Durham York Energy Centre Source Test Update

Discussion ensued regarding the nitrogen dioxide levels noted in Report #2021-INFO-35 and staff clarified how those levels were attained; the delegates concerns being addressed through Report #2021-INFO-35; and, when a report will be brought to the Works Committee regarding the AMESA data.

Further discussion ensued regarding St. Marys Cement being a contributor to readings that may appear on the air monitoring reports, as well as other environmental factors such as wind.

Staff advised that if any concerns arose regarding exceedances at the DYEC that they would report this to Committee and Council.

Moved by Councillor Marimpietri, Seconded by Councillor Barton,  
(53) That Information Report #2021-INFO-35: Durham York Energy Centre Source Test Update of the Commissioner of Works be received for information.

CARRIED

## 7.2 Reports

### A) Update on the Request to Extend Contract C002275 with Miller Waste Systems for the Collection of Recyclables from Multi-Dwelling Units within the Cities of Pickering and Oshawa and the Towns of Ajax and Whitby (2021-WR-6)

Report #2021-WR-6 from S. Siopis, Commissioner of Works, was received.

Staff responded to questions from the Committee regarding whether there was an update on extended producer responsibility (EPR) and when the Committee could expect final regulations to be released from the Province regarding EPR.

Moved by Regional Chair Henry, Seconded by Councillor McLean,  
(54) That we recommend to Council:

- A) That this status update on negotiations related to the extension of Standing Agreement C002275 with Miller Waste Systems for the collection of recyclable Blue Box materials including the addition of multi-residential buildings for garbage, organic and blue box collection services in the Municipality of Clarington and the Townships of Brock, Scugog and Uxbridge be received; and
- B) That the negotiated amendment to Standing Agreement C002275 with Miller Waste Systems for the collection of recyclable Blue Box material from multi-residential dwelling units in the Cities of Pickering and Oshawa and the Towns of Ajax and Whitby for a two-year period commencing October 1, 2021, ending on September 30, 2023, with the option to extend up to two additional one-year periods, be approved at a revised cost of \$905,000\* (\$452,500\* annually) to be funded from the approved annual Solid Waste Management Operating Budget.  
(\* before applicable taxes and including disbursements

CARRIED

### B) Material Recovery Facility Options (2021-WR-7)

Report #2021-WR-7 from S. Siopis, Commissioner of Works, was received.



Moved by Regional Chair Henry, Seconded by Councillor McLean,  
(55) That Report #2021-WR-7 of the Commissioner of Works be received for information.

CARRIED

**8. Works**

8.1 Correspondence

There were no items of communications to be considered.

8.2 Reports

A) Approval to Release a Regional Easement (2021-W-18)

---

Report #2021-W-18 from S. Siopis, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor McLean,  
(56) That we recommend to Council:

- A) That the easement on the property identified as Part of Lots 28 and 29, Broken Front Concession and Part of the Road Allowance Between Lots 28 and 29, Broken Front Concession, (Closed by By-Law Number 352, Instrument Number VN1339) (Geographic Township of Clarke) now in the Municipality of Clarington, Subject to an Easement as in N112243 and N117502 be released from title;
- B) That Corporate Services Department – Legal Services be authorized to register a Release of Easement on title to the subject property; and
- C) That the Regional Chair and Clerk be authorized to execute all documents associated with this agreement.

CARRIED

B) Telecommunications First License Amending and Renewal Agreements with Bell Mobility Inc. Antennas located at 2173 Concession Road 9, Hampton, in the Municipality of Clarington (2021-W-19)

---

Report #2021-W-19 from S. Siopis, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor McLean,  
(57) That we recommend to Council:

- A) That a First License Amending and Renewal Agreement with Bell Mobility Inc. be executed to allow the Durham Regional Police Services to occupy space on a tower owned by Bell Mobility Inc. for the operation of the NexGen system with the following terms and conditions:

- i) The term is for a period of five years commencing on October 1, 2018 and ending on September 30, 2023 with an option to extend for two successive renewal terms of five years;
  - ii) The annual rental rate for this agreement is \$20,973.74 payable in equal monthly instalments of \$1,747.81 plus applicable taxes subject to an annual escalation of three per cent;
- B) That a First License Amending and Renewal Agreement with Bell Mobility Inc. be executed to allow the Regional Municipality of Durham Works Department to occupy space on a tower owned by Bell Mobility Inc. for the operation of their Supervisory Control and Data Acquisition system for water supply purposes:
- i) The term is for a period of five years commencing on March 1, 2021 and expiring on February 28, 2026 with an option to extend for one successive renewal term of five years; and
  - ii) The annual rate for this agreement is \$24,245.19 payable in equal monthly instalments of \$2,020.43 plus applicable taxes subject to an annual escalation of three per cent.

CARRIED

- C) Approval to Award a Sole Source Agreement to Continue the Provision of Bioxide and Associated Chemical Dosing System to Reduce Odour and Corrosion in the Trunk Sanitary Sewer located in Lord Elgin Park, in the Town of Ajax (2021-W-20)

Report #2021-W-20 from S. Siopis, Commissioner of Works, was received.

Moved by Regional Chair Henry, Seconded by Councillor McLean,  
(58) That we recommend to Council:

- A) That a sole source agreement to continue the provision of Bioxide and the associated chemical dosing system be executed with Evoqua Water Technologies effective June 1, 2021 for a term not to exceed one year to reduce odour and corrosion in the trunk sanitary sewer located in Lord Elgin Park, in the Town of Ajax at an upset limit of \$200,000\*, with financing provided from the approved 2021 Sanitary Sewerage Operating Budget and future year's Annual Business Plans and Budgets; and
- B) That the Commissioner of Finance be authorized to execute the necessary documents related to this sole source agreement.  
(\* before applicable taxes.

CARRIED

**9. Advisory Committee Resolutions**

There were no advisory committee resolutions to be considered.

**10. Confidential Matters**

There were no confidential matters to be considered.

**11. Other Business**

**11.1 Completion of Construction Work on Regional Road 13, in the Township of Brock**

In response to a question from Councillor Smith regarding the schedule for completion of the work on Regional Road 13 in the Township of Brock, S. Siopis advised that staff would prepare a schedule summary and forward to Councillor Smith directly.

**11.2 Upper York Sewage Solution Update**

In response to a question regarding an update with respect to the Upper York Sewage Solution, staff advised that they have not received any further updates.

**12. Date of Next Meeting**

The next regularly scheduled Works Committee meeting will be held on Wednesday, June 2, 2021 at 9:30 AM in Council Chambers, Regional Headquarters Building, 605 Rossland Road East, Whitby.

**13. Adjournment**

Moved by Councillor Barton, Seconded by Councillor Crawford,  
(59) That the meeting be adjourned.

CARRIED

The meeting adjourned at 10:25 AM

Respectfully submitted,

---

D. Mitchell, Chair

---

S. Glover, Committee Clerk

# Clarington

If this information is required in an alternate format, please contact the Accessibility Co-Ordinator at 905-623-3379 ext. 2131

May 4, 2021

The Honourable Doug Ford, M.P.P.  
Premier of Ontario  
Via Email: [premier@ontario.ca](mailto:premier@ontario.ca)

Dear Premier:

**Re:** City of Toronto Request to use Energy-From-Waste (EFW) Facilities in Ontario

**File Number:** PG.25.06

---

At a meeting held on May 3, 2021, the Council of the Municipality of Clarington passed the following Resolution #C-162-21:

Whereas the City of Toronto's Infrastructure and Environment Committee passed a recommendation, at their April 28, 2021 meeting, seeking authority for the General Manager, Solid Waste Management Services to negotiate sending the City of Toronto waste to Energy-from-Waste (EFW) facilities in Ontario;

And whereas the City of Toronto Council will be considering the Committee's recommendation at their Wednesday, May 5, 2021 Council meeting;

And whereas the Municipality of Clarington is concerned about waste being imported into Clarington from other municipalities;

And whereas the Durham York Energy Centre (DYEC) Environmental Compliance Approval (ECA) only permits waste from Durham and York Regions;

And whereas the Host Community Agreement (HCA) between Durham Region and the Municipality of Clarington for the DYEC restricts the waste source to those identified in the EA Terms of Reference, which the ECA reflects; and

And whereas, the HCA outlines that, in the event that at any subsequent time City of Toronto waste would be processed at the DYEC, then Clarington shall be paid the sum of Ten Dollars (\$10.00) per tonne;

Now therefore be it resolved:

That the correspondence from Wendy Bracken, regarding the City of Toronto's plan for their waste, be received;

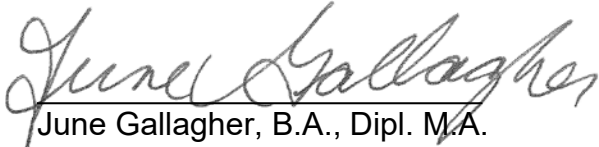
That the Municipality of Clarington notify the City of Toronto that its waste is not welcome in Clarington;

That the Region of Durham be requested to notify the City of Toronto and the Province of Ontario that City of Toronto waste in not welcome in Clarington or anywhere in Durham Region;

That the Province of Ontario, and Clarington's MPPs, be asked to formally acknowledge and provide a response to the Municipality of Clarington's concerns; and

That a copy of Council's decision be forwarded to the Premier of Ontario, Clarington's MPPs, the Region of Durham, the DYEC, the City of Toronto, and Wendy Bracken.

Yours sincerely,



June Gallagher, B.A., Dipl. M.A.  
Municipal Clerk

JG/cm

c: see attached list of interested parties

**Interested Parties**

The Honourable Lindsey Park, M.P.P., Durham - [lindsey.park@pc.ola.org](mailto:lindsey.park@pc.ola.org)

The Honourable David Piccini, M.P.P., Northumberland-Peterborough South -  
[david.piccini@pc.ola.org](mailto:david.piccini@pc.ola.org)

Gioseph Anello, Director, Waste Management Services, The Regional Municipality of  
Durham – [giosoph.anello@durham.ca](mailto:gioseph.anello@durham.ca)

John Elvidge, Acting City Clerk, City of Toronto – [clerk@toronto.ca](mailto:clerk@toronto.ca)

Matt Keliher, General Manager, Solid Waste Management Services –  
[matt.keliher@toronto.ca](mailto:matt.keliher@toronto.ca)

Christopher Raynor, Regional Clerk, Regional Municipality of York -  
[regional.clerk@york.ca](mailto:regional.clerk@york.ca)

Kong Seto, Acting Director, Infrastructure & Resource Management, Solid Waste  
Management Services, City of Toronto – [kong.seto@toronto.ca](mailto:kong.seto@toronto.ca)

Susan Siopis, Commissioner of Works, The Regional Municipality of Durham –  
[susan.siopis@durham.ca](mailto:susan.siopis@durham.ca)

Ralph Walton, Regional Clerk, The Regional Municipality of Durham -  
[clerks@durham.ca](mailto:clerks@durham.ca)

Darryl Yaworski, Acting Director, Transfer Station & Landfill Operations, Solid Waste  
Management Services – [Darryl.Yaworski@toronto.ca](mailto:Darryl.Yaworski@toronto.ca)

Durham York Energy Centre - [info@durhamyorkwaste.ca](mailto:info@durhamyorkwaste.ca)

Wendy Bracken

R. Windle, Director of Planning and Development Services

B. Radomski, Corporate Communications Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



# The Regional Municipality of Durham Report

---

To: Works Committee  
From: Commissioner of Works  
Report: #2021-WR-8  
Date: June 2, 2021

---

**Subject:**

Update on the Blue Box Lid Implementation

---

**Recommendations:**

That the Works Committee recommends to Regional Council:

- A) That Council be requested to rescind its previous direction on the implementation of a blue box lid program, as adopted by Council on June 26, 2019 in Recommendation (A) of Report # 2019-WR-8 in order make blue box lids available to Regional Municipality of Durham residents on a full cost recovery basis; and
  - B) That staff be directed to make blue box lids available to Regional Municipality of Durham residents on a full cost recovery basis; and
  - C) That staff include the negotiated final price with Pliteq for the lids in the Regional Fees and Charges Schedule for Waste Management operations and update all applicable by-laws; and
  - D) That the Commissioner of Finance be authorized to execute all documents related to the voluntary provision of blue box lids.
- 

**Report:**

**1. Purpose**

- 1.1 This report provides an update to the Motion passed by Regional Council related to Report #2019-WR-8 “Blue Box Litter Pilots”.

## **2. Background**

- 2.1 On June 5, 2019, the Works Committee received Report #2019-WR-8 and passed a Motion directing staff to:
- a. Confirm that staff have completed whatever work is necessary to secure a patent for the Blue Box lid with our partner Emterra (as identified in Report #2019-WR-8 of the Commissioner of Works);
  - b. That staff commence work to secure a sponsor for advertising on the lid that would reduce or eliminate the costs of providing the lids to all residents and provide the results of this;
  - c. That staff investigate and report back on the possibility of amending the waste management by-law to make it mandatory for all residents to set out blue boxes at the curb with a lid to prevent litter and investigate enforcement and fines for not complying;
  - d. That, regardless of transition of the Blue Box to full Extended Producer Responsibility (EPR), all Blue boxes will still be required to have lids and enforcement will continue; and
  - e. That staff provide an update on the approximate percentage of non-compliant blue box containers in the Region and an estimated cost to provide a new large blue box to every resident along with two blue box lids and any other information Regional Council may need to make a proper decision on this important initiative.
- 2.2 The Regional Municipality of Durham (Region) has budgeted \$0.9 million in 2021 for blue box lids, financed from the Solid Waste Management Reserve Fund. This budget assumed roughly 30 per cent of households requiring new blue boxes, providing two lids per households at \$3.75 per lid, and the Region receiving \$2 per lid for advertising. This report provides an update to these assumptions and recommends an alternate plan to include blue box lids in Durham's Blue Box program that meets the needs of all Durham residents.

## **3. Previous Reports and Decisions**

- 3.1 Report #2019-WR-8 "Blue Box Litter Pilots."



#### **4. Status Update on Blue Box Lid Implementation**

##### **Securing a Patent**

- 4.1 Corporate Services - Legal Services sought external legal advice on the highly specialized process of applying for a patent. External counsel assisted staff from Corporate Services - Legal Services and Works with negotiations and development of an agreement with PliTeq that would address intellectual property issues surrounding the lid. PliTeq is the actual developer and manufacturer of the lid, not Emterra, as originally reported. A confidential memo from Legal Services to Council is provided as an attachment to this report, which directly addresses the issue of patenting the lid.

##### **Advertising Sponsorship**

- 4.2 Staff issued Request for Tender (RFT) #T-1040-2021, "Advertising on Regionally Issued Blue Box Lids" on March 24, 2021 to solicit advertising on the lids that would reduce or eliminate the costs of providing the lids to all residents. In consideration that the audience of this RFT is not aware of the Region's bidding platform, staff increased exposure of the RFT by sharing it with Stewardship Ontario and the Municipal Waste Association for distribution to their membership and affiliated organizations and companies. Despite this additional effort, the RFT closed on April 22, 2021 with no bids.

##### **Mandating the Use of Lids**

- 4.3 Legal staff has reviewed the Region's jurisdiction and concludes that, under the current municipal program, the Region can mandate the use of the blue box lids, but only on those households which voluntarily choose to participate in the Region's curbside blue box program. Ontario's Blue Box program is governed by Regulation 101/94: RECYCLING AND COMPOSTING OF MUNICIPAL WASTE under Environmental Protection Act, R.S.O. 1990 which mandates municipalities with populations over 5,000 to provide a Blue Box program, but it does not make it mandatory for residents to participate in any blue box program. The following sections highlight several post-2024 jurisdictional, operational, and financial implications that support a voluntary rather than a mandated blue box lid program approach.
- 4.4 Residents that use non-standard bins will be required to purchase new Blue Boxes to participate in the program. In addition, residents that use more than two Blue Boxes will be required to purchase additional lids to participate.

## **Blue Box Lids and Extended Producer Responsibility**

- 4.5 As previously reported, the Province's draft new blue box regulation schedules the Region's transition out of the blue box program in 2024. Once transition occurs, any mandatory aspect of the Region's blue box program would be unenforceable after 2024. Additionally, any capital investments in the program above approved cost-recovery would add to stranded assets once the Region transitions out of the Blue Box program in 2024.

### **Non-compliant blue box containers**

- 4.6 Staff randomly surveyed approximately 30,000 households in 2020 and found that about 7 percent, or about 15,000 households, recycle with non-compliant containers or with compliant containers that are not Region issued blue boxes.

## **5. Risks and Issues Related to a Mandated Lid Program**

- 5.1 The Region can mandate blue box lids, however, doing so has risks. By-law 46-2010's blue box definition currently includes alternate containers onto which the blue box lid may not fit. Mandating blue box lids will require amending the definition to include only blue boxes supplied by the Region. The 15,000 or so households that are not using Region issued blue boxes will need to purchase new blue boxes to allow them to comply with the amended by-law.
- 5.2 The Region's 2020 blue box lid pilot experienced only 50 per cent initial uptake of the blue box lid by pilot project households even when they were provided extensive information on its benefits. A follow-up survey earlier this year saw the usage had dropped to less than 16 percent. Based on these findings, distribution to all households in the Region may be considered wasteful.
- 5.3 Further, the lids lay flat across the top of blue boxes. In doing so, it has been found that they limit how much recycling residents can put in their boxes to only what can fit below the upper edge of the box. Most households fill their recyclables vertically, protruding up over the top of their boxes. Mandating the use of lids may require the Region to make up for this lost capacity by providing residents with extra boxes which would also require lids.
- 5.4 Some households who are on the fringe about recycling may see the mandatory use of lids as a reason to stop recycling. Residents who already have difficulty with the weight of full blue boxes will have additional difficulty with the added weight of the lids.

- 5.5 Of note, the Region's Waste Management Call Centre received only 41 complaints related to blue box litter in 2020. It is recognized that the complainants may have called on behalf of their neighbours and not only for themselves. However, this represents a relatively small number of blue box litter related complaints.
- 5.6 The Region is expected to transition out of the blue box program in mid 2024. Obtaining the necessary by-law amendment approvals and executing the required education and compliance program could take up to one year from the approval of a mandatory blue box lid program. This would result in any mandatory program being in place for about two years before the Region transitions out of the blue box program and can no longer enforce the use of lids.
- 5.7 Mandating the use of lids to every household may have collection contract implications as current study shows that handling two lids per household can add up to three seconds of collection time per household. Every household on a collection route having two lids can add 35 to 50 minutes to each recycling collector's day.
- 5.8 Finally, a mandatory blue box lid program will require ongoing annual funding for the replacement of lost lids and the supply of lids to new developments. Staff estimates a ten percent loss rate and a growth rate of about 5,000 households per year. This equates to an ongoing purchase of about 27,000 lids annually.

## **6. Education on reducing Blue Box Litter**

- 6.1 Staff provide tips to residents to reduce material blowing out of Blue Boxes on windy days. Tips are provided in targeted education campaigns and in abbreviated version on the Garbage and Recycling page of the Region's website.
- 6.2 Litter reduction tips include:
- a. Stack the Blue Boxes at the curb with the containers box holding down papers in the fibres box.
  - b. Don't overfill the Blue Box, keep material below the rim. There is no limit on the number of Blue Boxes allowed at the curb and additional boxes are available for purchase at Region facilities.
  - c. Bundle cardboard and newspapers separately and use the bundle as a lid for the Blue Box.

- d. Crush your cans down into the containers Blue Box and flatten boxes down into the fibres Blue Box.
- e. Place your Blue Boxes at the curb at 7 a.m. the morning of collection rather than the night before.
- f. On windy days, consider holding your Blue Box material until the following collection day.

## **7. Use of Blue Box Lids in Other Municipalities**

- 7.1 The use of blue box lids is not a new concept to Ontario municipalities. Attachment #2, "Ontario Municipalities using Blue Box lids" provides a list of municipalities that use blue box lids and a list of municipalities that have tested various blue box lid designs and chose not to proceed with implementation. No municipality has made the use of lids mandatory and demand for lids is limited. Most lids are made available on a cost recovery basis if requested by residents.

## **8. Financial Implications**

- 8.1 A final price for a bulk lid purchase has not yet been negotiated with Pliteq. However, based on lids purchased to date, staff estimates the cost to provide two blue box lids to the 215,000 households serviced by the Region is about \$2.2 million. Also, at \$7 per blue box, the cost to provide one additional large blue box to every household to make up for the lost capacity because of using the lid is an additional \$1.5 million, not including distribution. These additional blue boxes would also require lids under a mandatory lid policy.
- 8.2 Additionally, staff anticipate a support program of approximately \$0.3 million annually may be required to replace lost lids and to supply lids to new developments until the Region transitions out of the Blue Box program in 2024.
- 8.3 The total cost of the above to implement a mandatory lid program is approximately \$4 million, not including distribution and associated education costs. Unfortunately, RFT #T-1040-2021 was unsuccessful in securing advertising revenue to offset this cost.
- 8.4 Providing lids on a full cost recovery basis would mean a net zero impact on the Region's Solid Waste Management Business Plans and Budget with no contribution from the Solid Waste Management Reserve Fund being required for this initiative in 2021.

**9. Conclusion**

- 9.1 A Region-wide distribution and mandatory use of blue box lids given the operational, jurisdictional, diversion and financial issues as identified above is not recommended. Staff recognizes the need to control blue box litter, but there is little strategic or financial benefit to support a mandated Blue Box lid program and the distribution of blue box lids to every Durham Region household.
- 9.2 If a blue box lid program is Council direction, staff recommend making blue box lids available to Regional Municipality of Durham residents who want them on a full cost recovery basis as a voluntary part of the Regional Municipality of Durham's Blue Box and litter management programs.
- 9.3 This report has been reviewed by the Finance Department and Legal Services – Corporate Services Department.
- 9.4 For additional information, please contact Gioseph Anello, Director, Waste Management, at 905-668-7711, extension 3445.

**10. Attachments**

Attachment #1: Confidential Memo from Legal Services to Regional Council  
(under separate cover)

Attachment #2: Ontario Municipalities using Blue Box Lids

Respectfully submitted,

**Original signed by:**

---

Susan Siopis, P.Eng.  
Commissioner of Works

Recommended for Presentation to Committee

**Original signed by:**

---

Elaine Baxter-Trahair  
Chief Administrative Officer

## Appendix A – Ontario Municipalities using Blue Box lids

Table 1: Municipalities Currently Using Recycling Blue Box With Covers

| Municipality   | Manufacturer/<br>Cover Type  | Method of<br>Purchase   | Additional Comments  |
|--|--|---|--|
| <b>Oxford County</b><br>(population 110,862)   | <ul style="list-style-type: none"> <li>- Peninsula Plastics</li> <li>- Hard plastic cover</li> <li>- Fits a 16 and 22 gallon blue box</li> </ul> | <ul style="list-style-type: none"> <li>- Covers sold at municipal offices only</li> <li>- Sold for \$2.70 each (price not subsidized)</li> </ul>                            | <ul style="list-style-type: none"> <li>- Contractor has issues with covers not coming off</li> <li>- Residents complain about drivers throwing covers</li> <li>- County ordered 1,000 covers, and make available upon request</li> </ul>   |
| <b>Richmond Hill</b><br>(population 201,125)   | <ul style="list-style-type: none"> <li>- Busch 32 gal. bin with cover</li> </ul>   | <ul style="list-style-type: none"> <li>- Bins with lids available for \$42.04 (incl. HST)</li> <li>- No warranty</li> </ul>   | <ul style="list-style-type: none"> <li>- 32 gal. bin with lid available for purchase since 2019.</li> </ul>  |
| <b>Ottawa Valley Waste Recovery Center (incl.)<br/>Pembroke</b><br>(population 13,882)<br><b>Town of Petawawa</b><br>(population 17,187)<br><b>Township of Laurentian Valley</b><br>(population 9,387) | <ul style="list-style-type: none"> <li>- VIP Group EnviroWeb Mesh Nets</li> </ul>  | <ul style="list-style-type: none"> <li>- Available at Ottawa Valley Waste Recovery Centre for \$6 and available through municipal offices and at special events.</li> </ul> | <ul style="list-style-type: none"> <li>- No pilot program but chose to make them available at cost</li> <li>- Uptake by residents is not known as it is handled by each municipality</li> <li>- Feedback on material spilling out from overfilled bins when lid is removed.</li> </ul> |
| <b>Greater Sudbury</b><br>(population 161,531)   | <ul style="list-style-type: none"> <li>- Busch 32 gal. bin with cover</li> </ul>   | <ul style="list-style-type: none"> <li>- Online ordering available at \$10 per bin</li> </ul>   | <ul style="list-style-type: none"> <li>- Tender in 2017 included lidded blue boxes and continue to be the main bin used and sold</li> </ul>  |

Table 2: Municipalities Which Considered Using Recycling Box Covers

| Municipality                                     | Reasons for Not Pursuing Recycling Box Covers   |
|--|---|
| <b>Town of Markham</b><br>(population: 328,966)  | <p>The Town decided not to provide recycling box covers for the following reasons:</p> <ol style="list-style-type: none"> <li>1) The contractor found the blue box covers unsuitable, as residents tended to overfill them, and material would spill when cover was removed; and</li> <li>2) In winter, the covers became sticky from residue and material would stick to them, especially if snowing and freezing.</li> </ol> <p>The Town will also not be allowing residents to use blue bags for recycling, as the York Region Material Recovery Facility will not accept bags.</p>  |
| <b>Region of Peel</b><br>(population: 1,382,000) | <p>The Region decided not to provide recycling box covers for the following reasons:</p> <ol style="list-style-type: none"> <li>1) The areas with the blue box covers had the highest collection time with an increase in up to 5 seconds per household, in comparison with a standard recycling box;</li> <li>2) Improper use of netted recycling boxes including overloaded netted boxes;</li> <li>3) Significant annual increase in collection costs for mesh nets and plastic bonnets (\$3.6 million); and</li> <li>4) Covers were least favourite of three container type options (other two were 121 litre container and blue plastic bags) by collection staff.</li> </ol> <p>The Region of Peel switched to a bi-weekly cart-based collection system as part of its new collection contract, which commenced in 2016.</p> |
| <b>City of Kingston</b><br>(population: 129,653) | <p>The City tested three types of covers in a 2013 pilot of 100 households:</p> <ol style="list-style-type: none"> <li>1) Peninsula Plastics snap-on cover, which can only be used with Peninsula Plastic brand recycling boxes;</li> <li>2) The EnviroWeb mesh net, which can be used on most standard curbside recycling boxes; and</li> <li>3) The KITEE fabric cover, produced by a local resident, which can be used on most standard curbside recycling boxes.</li> </ol> <p>Based on the results of this pilot, it was determined that it would not be feasible to introduce the covers due to the extra time that would be added to collection routes and the potential for increased costs for collection. The City would not consider allowing covers as part of their next contract.</p>                               |
| <b>Simcoe County</b><br>(population: 305,516)    | <p>The County made lids available for sale for \$5/lid and distributed in areas when issues escalated but did not advertise use of a Orbis lid for their 22 gal. blue boxes.</p> <p>On November 1, 2021 Simcoe County will move to a cart-based system for all waste material and a single stream recycling program similar to Toronto.</p>   |

| Municipality   | Reasons for Not Pursuing Recycling Box Covers   |
|--|---|
| <b>Region of Halton</b><br>(population: 548,435)       | <p>The Region considered doing a pilot project in 2010, but decided against it for the following reasons:</p> <ol style="list-style-type: none"> <li>1) The research the Region did on available covers at the time was not conclusive; and</li> <li>2) The cost and time involved in doing a study was prohibitive.</li> </ol> <p>Instead, the Region decided to focus on promotion and education measures to educate residents on how to avoid litter issues.</p> |
| <b>City of Kawartha Lakes</b><br>(population: 190,000) | <p>The City of Kawartha Lakes offered hard metal recycling box covers to residents for purchase for \$5. The City stopped offering this service as their supplier (Green Marketing Co.) for the hard metal covers stopped producing this product. The City of Kawartha Lakes noted that there was minimal interest from residents in purchasing these lids.</p>   |
| <b>County of Essex</b><br>(population: 181,53)         | <p>The County of Essex conducted a 3-month pilot project on 200 houses in the County and City. The pilot tested using the plastic, elasticized Bonnet to cover the Blue Box. The project was completed in 2008. At the time the product was not available by retail and cost approximately \$4.50 for a package of three. The County of Essex does not currently offer Blue Box covers or lids.</p>   |



If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



# The Regional Municipality of Durham Report

---

To: Works Committee  
From: Commissioner of Works  
Report: #2021-WR-9  
Date: June 2, 2021

---

**Subject:**

Update on Municipal Hazardous or Special Waste (MHSW) transition to Extended Producer Responsibility (EPR) and request to extend Standing Agreements C002769 and C002745 with Photech Environmental Solutions Inc.

---

**Recommendation:**

That the Works Committee recommends to Regional Council:

- A) That details of the Regional Municipality of Durham's Municipal Hazardous or Special Waste (MHSW) program transition to Extended Producer Responsibility (EPR), effective October 1, 2021, be received for information;
- B) That Standing Agreements C002769 and C002745 with Photech Environmental Solutions Inc. for MHSW collection and haulage be extended for to accommodate EPR transition, effective July 1, 2021 to September 30, 2022 at an estimated total cost of \$451,216.25 \*, to be funded from the approved annual Solid Waste Management Operating Business Plans and Budget; and
- C) That the Commissioner of Finance be authorized to execute all documents related to these contract amendments.

**Report:****1. Purpose**

- 1.1 The purpose of this report is to request authority to extend agreements with Photech Environmental Solutions Inc. (Photech) to allow enough time for producers to develop their product stewardship programs under new regulatory requirements.
- 1.2 The Region will retender this service with the newly established Producer Responsibility Organization (PRO's) prior to the expiry date of the extension

**2. Background**

- 2.1 The *Waste Free Ontario Act, 2016* shifts the responsibility of managing designated waste materials from municipalities to producers of the designated materials under an EPR scheme. Transitions completed to date include Used Tires (2019), Used Batteries (July 1, 2020) and Waste Electrical and Electronic Equipment or WEEE (January 1, 2021).
- 2.2 On February 11, 2021, the Ministry of Environment, Conservation and Parks (MECP) released for consultation a proposed Hazardous and Special Products regulation under the Resource Recovery and Circular Economy Act (RRCEA), 2016. The new regulation supports the transition from Stewardship Ontario's (SO) Orange Drop Program to EPR, effective October 1, 2021.
- 2.3 Under the current Hazardous and Special Products (HSP) program, Stewardship Ontario (SO), Product Care Association (PCA) and Automotive Material Stewardship (AMS) oversee the hauling/processing/recycling/disposal of obligated HSP. SO will cease operations on September 30, 2021, but PCA and AMS will continue managing the obligated HSP, likely as Producer Responsible Organizations (PROs). Non-obligated HSP will continue to be managed by the Region.

**3. Previous Reports and Decisions**

- 3.1 Report #2021-INFO-27, "Staff Comments on Proposed Hazardous and Special Products (HSP) Regulation ERO #019-2826," dated March 12, 2021, provided an update on the proposed EPR regulation for Hazardous Special Products and implications to the Regional MHSW program.

- 3.2 Report #2018-INFO-73, Update on the Transition of Diversion Programs under the *Waste-Free Ontario Act*, dated May 18, 2018 provided an update on the transition of diversion programs for tires, WEEE and MHSW under the *Waste-free Ontario Act*.
- 3.3 Report #2017-COW-178, provided an “Update on the Regional Municipality of Durham’s Participation and Opportunities to Influence the Implementation of the *Waste Diversion Transition Act, 2016*, the *Resource Recovery and Circular Economy Act, 2016*, and the Ministry of the Environment and Climate Change’s Strategy for a Waste-Free Ontario: Building the Circular Economy.”

#### **4. Current MHSW Program and Transition**

- 4.1 Durham Region operates HSP (formerly known as Municipal Hazardous and Special Waste - MHSW) programs at three Waste Management Facilities (WMFs), one HSP depot and one privately contracted site. Additionally, five Regional Works Depots generate HSP internally from equipment/automotive maintenance and repairs. A small amount of HSP is also set aside for Regional disposal prior to processing at the Durham-York Energy Centre and Material Recovery Facility.
- 4.2 The Region also provides four HSP public drop-off events annually with locations rotating throughout the Region’s eight lower tier municipalities.
- 4.3 Photech provides collection, recycling, and disposal of non-obligated HSP from the Regional facilities under Standing Agreement C002745 and from collection events under Standing Agreement C002769. These agreements expire on June 30, 2021, currently with no extensions.
- 4.4 Effective October 1, 2021, HSP producers will be responsible for managing obligated materials under a new HSP regulation. However, the Region will require collection, recycling and disposal services for obligated materials beyond July 1, until HSP PROs have had enough time to establish themselves. A similar prolonged process occurred when the Used Batteries program transitioned on July 1, 2020 and the Waste Electrical and Electronic Equipment program transitioned on January 1, 2021. Staff is still finalizing agreements and processes with those respective PROs. A one-year contract extension with Photech will allow for the seamless continuity of HSP collection, recycling and disposal services until the transition of the HSP program is finalized.

## **5. General Market Analysis**

- 5.1 The Region continues to move HSP through Photech, Product Care Association (PCA), Automotive Material Stewardship (AMS) and Stewardship Ontario until the new HSP program is in place. Upon transition to EPR, it is expected that PCA and AMS will become the new HSP PROs. Region staff will monitor transition and report back, as required, on the proposed future HSP management strategy for the Region.

## **6. Financial Implications**

- 6.1 Section 1.2 of Appendix C to the Purchasing By-law #16-2020 allows for direct negotiations in circumstances where additional deliveries by the original supplier for goods/services, not including initial procurement, are required, if a change of supplier cannot be made, would cause significant inconvenience or would result in substantial duplication of costs.
- 6.2 In 2020, Photech provided collection, recycling, and disposal of non-obligated HSP for the Region's HSP programs under Standing Agreement C002745 at a net cost of \$334,854.\*
- 6.3 In 2020, Photech provided the same services for special collection events under Standing Agreement C002769 at an additional net cost of \$26,119.\*
- 6.4 Photech and Regional staff have reviewed the agreements and are satisfied with a contract extension on existing terms, with the exception of a singular pricing change for mercury containing devices. Pricing pressures include regulatory changes, reduction of treatment options to a singular market, and a general decline in the overall demand for mercury.
- 6.5 Current pricing of \$55\* per pail and \$550\* per drum would increase to \$85\* per pail and \$850\* per drum respectively. In 2020, the Region collected only two (2) drums of mercury switches from WMFs. Assuming mercury-containing device tonnages stay consistent with previous years, additional costs to the Region will be minimal totalling \$600\* over the one-year extension period.
- 6.6 Under new EPR legislation, Producers will no longer be responsible for the collection, management and recycling/disposal of fertilizers and propane tanks. In 2020, the Region collected 8 tonnes of fertilizers and 78 tonnes of propane tanks. Staff are investigating alternative recycling methods of these materials, such as a fertilizer re-use and propane tank exchange programs.

6.7 Under the new legislation, the Region will receive payment commencing October 2021 for the services covered by EPR. The amount and established payment schedule would be negotiated.

## 7. Relationship to Strategic Plan

7.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- Goal #1 – Environmental Sustainability: Increase waste diversion and resource recovery
- Goal #5 – Service Excellence: Collaborate for a seamless service experience

## 8. Conclusion

8.1 Regional staff recommends an extension of the existing Standing Agreement with Photech Environmental Solutions Inc. for Municipal Hazardous or Special Waste collection and haulage for fifteen months, effective July 1, 2021 to September 30, 2022, inclusive of pricing changes for mercury containing devices as noted in this report.

8.2 Regional staff will continue to monitor the transition of the HSP program and will report back to Regional Council once the HSP PRO's are registered and their operating structures are in place.

8.3 This report has been reviewed by the Finance Department.

8.4 For additional information, please contact Gioseph Anello, Director of Waste Management Services, at 905-668-7711, extension 3445.

Respectfully submitted,

### Original signed by:

---

Susan Siopis, P.Eng.  
Commissioner of Works

Recommended for Presentation to Committee

### Original signed by:

---

Elaine C. Baxter-Trahair  
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



# The Regional Municipality of Durham Report

---

To: Works Committee  
From: Commissioner of Works  
Report: #2021-WR-10  
Date: June 2, 2021

---

**Subject:**

Durham York Energy Centre Operations – Long-Term Sampling System Reporting

---

**Recommendation:**

That the Works Committee recommends to Regional Council:

- a) That staff report quarterly on the Long-Term Sampling System at the Durham York Energy Centre;
  - b) That responses to all inquiries related to operations at the Durham York Energy Centre be included in the quarterly reports.
- 

**Report:**

**1. Purpose**

- 1.1 This information report provides additional details with respect to the reporting of data related to the Long-Term Sampling System at the Durham York Energy Centre (DYEC) in response to discussion at Regional Council and recent correspondence from the Municipality of Clarington (Clarington) dated April 14, 2021, and included in the [Council Information Package of April 23, 2021](#).
- 1.2 The request from Clarington includes: the release of previous non-correlated AMESA data; release of monthly laboratory reports and AMESA data; the release of the AMESA investigation checklist, data recovery rates and the reason for any data that has been invalidated.

## 2. Background

### DYEC Sampling and Analysis Programs

- 2.1 The DYEC is required to operate a Long-Term Sampling System (LTSS) as per the Environmental Compliance Approval (ECA) section 7(3), for the monitoring for dioxins and furans which forms part of the extensive surveillance system that includes:
- a. Emissions: Source Tests and Continuous Emissions Monitors (CEMs);
  - b. Ambient Air: two stations with CEMS and non-continuous monitors; and
  - c. Groundwater, Soil, Odour, Noise and Operational parameters.
- 2.2 Durham Region and York Region (Regions) oversee all sampling that occurs at the DYEC. There are multiple sampling programs in place each with its own protocol and reporting requirements. These are all detailed on the Environmental Monitoring page of the DYEC website: <https://www.durhamyorkwaste.ca/en/environmental-monitoring/environmental-monitoring.aspx> . This site also includes all of the reports providing data analysis and summaries.
- 2.3 The Region's contract with third party consultants to conduct sampling programs for ambient air, soil and groundwater. The consultants meet MECP requirements for sampling programs and provides sampling reports directly to the Region for review and submission to the MECP and posting on the DYEC webpage.
- 2.4 Stack sampling or source testing is conducted twice annually. Prior to testing, the proposed testing plan is provided to the MECP for review including identification of sampling methodologies. The sampling is conducted by a third-party source testing firm with oversight by two Regional consultants, consisting of an engineering firm and an air specialist consulting firm. The MECP is informed in advance of the testing dates, and regularly observes portions of the testing.
- 2.5 Analysis of stack testing samples is completed by an independent testing laboratory that is certified to perform the analysis. After internal laboratory Quality Assurance and Control (QA/QC), the data is provided to the third-party source testing firm for review and reporting to the Region and Covanta. The reports are also reviewed by the Region's oversight consultants. Consultants are chosen and used based on their professional experience in the field of air

monitoring and familiarity with plant operations. Completed test results are provided to the MECP for review.

- 2.6 Continuous Emissions Monitoring is conducted using automated equipment with readings taken every few seconds or minute as prescribed by MECP and the equipment capabilities. This data is reviewed daily by both Covanta and the Region and data anomalies addressed at the time of occurrence. Testing of the CEMS systems and instrumentation occurs annually at minimum, with results provided to the MECP.
- 2.7 Sampling of DYEC bottom ash and fly ash is completed by Covanta personnel as per an approved sampling protocol with samples submitted to a certified, third party laboratory for analysis. Results of the analysis are provided to the Regions for review. Regional staff periodically observe sample collection to ensure protocols are being followed.

### **AMESA Background**

- 2.8 To meet the requirements of the ECA, the Adsorption Method for Sampling Dioxins and Furans (AMESA) LTSS, a continuous sampling system, is installed on each of the two boiler units. The operation of the AMESA system was initiated in 2015 and has been maintained in accordance with current guidance from the AMESA manufacturer, Environment S.A. Deutschland (ESAD, the European manufacturer of the AMESA system), the North American vendor ENVEA and the AMESA Technical Manual.
- 2.9 The AMESA system is used only for the purpose stated in ECA Condition 7(3), which relates to Dioxins and Furans emissions trend analysis and evaluation of Air Pollution Control equipment performance. The AMESA results themselves do not constitute a compliance point for the facility operations.
- 2.10 ECA Condition 7. (3). Testing, Monitoring and Auditing Long-Term Sampling for Dioxins and Furans states:
- (a) The Owner shall develop, install, maintain and update as necessary a long-term sampling system, with a minimum monthly sampling frequency, to measure the concentration of Dioxins and Furans in the Undiluted Gases leaving the (Air Pollution Control) APC Equipment associated with each Boiler. The performance of this sampling system will be evaluated during the annual Source Testing programs in accordance with the principles outlined by 40 CFR 60, Appendix B, Specification 4.



- (b) The Owner shall evaluate the performance of the long-term sampling system in determining Dioxins and Furans emission trends and/or fluctuations as well as demonstrating the ongoing performance of the APC Equipment associated with the Boilers.
- 2.11 The performance of the AMESA was initially evaluated during the annual Source Testing programs commencing in 2015. However, the correlation of the AMESA results to the Source Test results was not achieved until 2020 following the implementation of several workplans that were developed with input from the MECP, Owners, manufacture, consultants and Covanta. All the AMESA data prior to correlation was not reliable and could not be used for the evaluation of performance or trend analysis. As a result of poor correlation testing there is no confidence in the AMESA data prior to 2020, therefore, release of this information will not be useful and may lead to inaccurate conclusions.
- 2.12 Annual Adsorption Method for Sampling Dioxins and Furans system results for the 2020 were reported as part of the Annual Report as required by Environmental Compliance Approval Condition 15, and posted to the website at [2020 DYEC Annual Report](#).
- 3. Development of the AMESA data**
- 3.1 The AMESA cartridge continuously collects a sample of the DYEC flue gas over a 28-day period. The sample is prepared and sent to the laboratory for analysis in accordance with the AMESA Technical Manual and Standard Operating Procedures. A review of the lab analysis is undertaken by the lab, which includes:
- an evaluation of the Quality Assurance and Quality Controls (QA/QC) in place during the sample run;
  - a review of the “method blanks” which document potential contamination resulting from the analytical process;
  - duplicate sample values to determine repeatability; and
  - sample recovery values using known calibrations standards at the beginning and the end of the sample run to ensure calibration stability.
- 3.2 The results of the Region’s consultant (AirZone), audit of the laboratory procedures indicates that:

- a. The initial processing of sample documentation was appropriate and accurate, initial processing (transfer, extraction and clean-up steps) were carried out according to the method. At each step in the extraction and clean-up step, all glassware and transfer pipettes were segregated to eliminate the possibility of contamination. This ensures the traceability of the entire process. Comprehensive checks were included in the form of labeled surrogate compounds at each step. Additional verification was undertaken at analysis and data processing steps to ensure that QA/QC criteria, in terms of recoveries of surrogates at each stage, were appropriate. Moreover, a final 2-analyst review of the data handling and calculations was undertaken to verify that all steps were executed accurately. All of the procedures as outlined in the ALS method, based on Method 23, were followed.
- 3.3 A laboratory report is sent to Covanta approximately one month after the lab received the AMESA sample. An example of the laboratory report is included as Attachment # 1. This report provides the total Dioxins and Furans measured in the AMESA cartridge.
  - 3.4 Following receipt of the laboratory report, the AMESA operational data is reviewed to determine the gas flow that passed through the system while the sample was being collected. This allows the calculation of the quantity of Dioxins and Furans in a reference metre cube of flue gas. The AMESA data as illustrated in Attachment # 2, provides this gas quantity value for input into the calculation.
  - 3.5 Standard temperature, pressure and oxygen correction factors must also be applied to the AMESA results to obtain a value for regulatory comparison. An example is included as Attachment #3.
  - 3.6 The laboratory data provides values for each of the 17 dioxin and furan congeners. The respective toxic equivalency factor (TEF) for each dioxin and furan congener is applied to each value to obtain a total dioxin and furan total toxic equivalence (TEQ). The ECA for the DYEC specifies the use of the NATO classification scheme and therefore the NATO TEF factors are applied to the TEQ calculation.
  - 3.7 The above process demonstrates the complexity of analysis and calculation necessary to provide the monthly AMESA value. To meet the ECA directed objectives for the AMESA data, the laboratory report must be combined with the

AMESA operational data and then converted utilizing the appropriate standardization calculations.

#### **4. Monthly Data Review by Covanta and the Region**

- 4.1 On a monthly basis, Covanta and the Region review the lab results which are reported in picograms (pg) and undertake the following review:
- a. the AMESA laboratory report
  - b. application of the temperature, pressure and oxygen correction factors as recorded on the AMESA system and/or Digital Acquisition System (DAS) for the time period the AMESA cartridge was in-situ;
  - c. application of the gas flow rate and percent oxygen that was recorded at the time the cartridge was in situ for each of 17 dioxin and furan congeners;
  - d. review of the AMESA operations for each sampling period to ensure the system was operating under the proper conditions in accordance with the operating specifications and the 2018 AMESA workplan.
  - e. the final TEQ values for each boiler are validated and reported as a total dioxin and furan TEQ. The calculated TEQ value is reported monthly in the annual report.

#### **5. Reporting of AMESA Data**

- 5.1 All AMESA records required by ECA conditions 14(3) through 14(8) are held at the Facility and are available for MECP inspection. Monthly data is summarized and presented in the annual ECA report.
- 5.2 The AMESA data is used to evaluate the Dioxins and Furans emission trends and/or fluctuations as well as demonstrating the ongoing performance of the APC Equipment associated with the Boilers. The data will be used to prompt due diligence investigations and the appropriate corrective action as necessary. This AMESA data is not intended to be used to evaluate compliance.
- 5.3 AMESA data is not intended to be used as a tool to indicate environmental performance. The system is used as a tool along with continuous emissions data and other facility operational performance indicators related to combustion efficiency which all work together to indicate potential issues.

- 5.4 In order to respect the intension of the ECA requirements, data is released to demonstrate trends and plant performance. The request for monthly data will not meet that intent. Staff suggest a quarterly release of the AMESA results to allow for more frequent reporting while maintaining the intent and purpose of the system. In addition, any inquiries that arise related to the operation of the DYEC between quarterly reporting will be addressed in the quarterly reports. However, any significant issues that arise related to the operation of the DYEC between reporting periods will be brought to Councils attention at the earliest opportunity, regardless of the quarterly reporting cycle.
- 5.5 The annual results and analysis as part of the ECA report will continue with releases March 31 for each previous year.
- 5.6 The data recovery rates will be included in the annual report.
- 5.7 The rationale for the invalidation of any AMESA data will be included in the annual ECA report as was done in 2020.
- 5.8 As requested, the AMESA investigation checklist has been included as Attachment #4.

## **6. Relationship to Strategic Plan**

- 6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Goal 1: Environmental Sustainability
    - 1.3 Protect, preserve and restore the natural environment, including greenspaces, waterways, parks, trails, and farmlands
  - b. Goal 5: Service Excellence
    - 5.3 Demonstrate commitment to continuous quality improvement and communicating results

## **7. Conclusion**

- 7.1 The Durham York Energy Centre continues to operate the Adsorption Method for Sampling Dioxins and Furans system in keeping with the requirements of ECA Condition 7. (3). regarding a Long-Term Sampling System and the 2018 AMESA Sampling Workplan.

- 
- 7.2 The correlation of the AMESA results to the Source Test results was not achieved until 2020. AMESA data prior to correlation were not reliable and could not be used for the evaluation of performance or trend analysis. As a result of poor correlation testing there is no confidence in the AMESA data prior to 2020 and therefore, release of this information would not be useful and may lead to inaccurate conclusions.
- 7.3 Validated AMESA data, in accordance with the 2018 AMESA workplan, will be utilized to evaluate trends in the performance of the facility's Air Pollution Control Equipment. Staff suggest a quarterly release of the AMESA results to allow for more frequent reporting while maintaining the intent and purpose of the system. In addition, any inquiries that arise related to the operation of the DYEC between quarterly reporting will be addressed in the quarterly reports. However, any significant issues that arise related to the operation of the DYEC between reporting periods will be brought to Councils attention at the earliest opportunity, regardless of the quarterly reporting cycle.
- 7.4 The annual results and analysis as part of the ECA report will continue with releases March 31 for each previous year.
- 7.5 The data recovery rates and the reason for any data that has been invalidated will be included in the annual report to provide sufficient investigation time.
- 7.6 As requested, the AMESA investigation checklist has been included as Attachment #4.
- 7.7 This report has been reviewed by Legal Services – Corporate Services Department.

7.8 For additional information, please contact Gioseph Anello, Director, Waste Management Services, at 905-668-7711, extension 3445.

**8. Attachments**

Attachment #1: Sample of AMESA monthly laboratory report

Attachment #2: Sample of AMESA flow document

Attachment #3: Sample of AMESA data conversion document

Attachment #4: AMESA investigation checklist

Respectfully submitted,

**Original signed by:**

---

Susan Siopis, P.Eng.  
Commissioner of Works

Recommended for Presentation to Committee

**Original signed by:**

---

Elaine C. Baxter-Trahair  
Chief Administrative Officer



1435 Norjohn Court, Unit 1, Burlington, ON, Canada L7L 0E6  
 Phone: 905-331-3111, FAX: 905-331-4567

## Certificate of Analysis

|   |   |
|---|---|
| <p><b>ALS Project Contact:</b> Lynne Wrona<br/> <b>ALS Project ID:</b> 24244<br/> <b>ALS WO#:</b> L2557117<br/> <b>Date of Report:</b> 4-Mar-21<br/> <b>Date of Sample Receipt:</b> 11-Feb-21</p> | <p><b>Client Name:</b> Covanta - Durham York Renewable Energy LP<br/> <b>Client Address:</b> 1835 Energy Drive<br/>         Courtice, ON<br/>         L1E 2R2<br/> <b>Client Contact:</b> Lydia Kwan<br/> <b>Client Project ID:</b></p> |
|---|---|

**COMMENTS:** PCDD/F by EPA M23

Sample extracts were prepared for GC/HRMS analysis using chromatography columns that included Florisil and carbon, both capable of removing chlorinated diphenylethers. Peaks were observed in the diphenylether (DPE) parent masses. However, based on prior results, it is not believed that the peaks are due to chlorinated diphenylethers. The peaks in the parent DPE masses do not result in peaks in the native PCDF masses.

Certified by:

A handwritten signature in black ink, appearing to read "Steve Kennedy", is written over a horizontal line.

Steve Kennedy  
 Technical Supervisor

Results in this certificate relate only to the samples as submitted to the laboratory.

This report shall not be reproduced, except in full, without the written permission of ALS Canada Ltd.

# Attachment #1 to Report #2021-WR-10

## ALS Life sciences

### Sample Analysis summary Report

| Sample Name   | UNIT 1. 210210-57A<br>(XAD ONLY) | UNIT 2. 210210-57B<br>(XAD ONLY) |                      |                       |                           |                      |
|---|----------------------------------|----------------------------------|----------------------|-----------------------|---------------------------|----------------------|
| ALS Sample ID                                       | L2557117-1                       | L2557117-2                       |                      |                       |                           |                      |
| Sample Size   | 1                                | 1                                |                      |                       |                           |                      |
| Sample size units                                   | Sample                           | Sample                           |                      |                       |                           |                      |
| Percent Moisture                                    | n/a                              | n/a                              |                      |                       |                           |                      |
| Sample Matrix                                       | AMESA trap                       | AMESA trap                       |                      |                       |                           |                      |
| Sampling Date                                       | 10-Feb-21                        | 10-Feb-21                        |                      |                       |                           |                      |
| Extraction Date                                     | 19-Feb-21                        | 19-Feb-21                        |                      |                       |                           |                      |
| <b>Target Analytes</b>                              | <b>pg</b>                        | <b>pg</b>                        |                      |                       |                           |                      |
| 2,3,7,8-TCDD  | <22                              | 28.6                             |                      |                       |                           |                      |
| 1,2,3,7,8-PeCDD                                     | 203                              | 198                              |                      |                       |                           |                      |
| 1,2,3,4,7,8-HxCDD                                   | 483                              | <290                             |                      |                       |                           |                      |
| 1,2,3,6,7,8-HxCDD                                   | 1410                             | 806                              |                      |                       |                           |                      |
| 1,2,3,7,8,9-HxCDD                                   | 858                              | 538                              |                      |                       |                           |                      |
| 1,2,3,4,6,7,8-HpCDD                                 | 11900                            | 5980                             |                      |                       |                           |                      |
| OCDD  | 10600                            | 6980                             |                      |                       |                           |                      |
| 2,3,7,8-TCDF  | 151                              | 114                              |                      |                       |                           |                      |
| 1,2,3,7,8-PeCDF                                     | 252                              | 208                              |                      |                       |                           |                      |
| 2,3,4,7,8-PeCDF                                     | 664                              | 468                              |                      |                       |                           |                      |
| 1,2,3,4,7,8-HxCDF                                   | 693                              | 404                              |                      |                       |                           |                      |
| 1,2,3,6,7,8-HxCDF                                   | 636                              | 384                              |                      |                       |                           |                      |
| 2,3,4,6,7,8-HxCDF                                   | <1000                            | 675                              |                      |                       |                           |                      |
| 1,2,3,7,8,9-HxCDF                                   | 301                              | <150                             |                      |                       |                           |                      |
| 1,2,3,4,6,7,8-HpCDF                                 | 3930                             | 1680                             |                      |                       |                           |                      |
| 1,2,3,4,7,8,9-HpCDF                                 | 526                              | 189                              |                      |                       |                           |                      |
| OCDF  | 2680                             | 897                              |                      |                       |                           |                      |
| <b>Field Spike Standards</b>                        | <b>% Rec</b>                     | <b>% Rec</b>                     |                      |                       |                           |                      |
| 37Cl4-2,3,7,8-TCDD                                  | 102                              | 105                              |                      |                       |                           |                      |
| 13C12-1,2,3,4,7,8-HxCDD                             | 109                              | 108                              |                      |                       |                           |                      |
| 13C12-2,3,4,7,8-PeCDF                               | 104                              | 104                              |                      |                       |                           |                      |
| 13C12-1,2,3,4,7,8-HxCDF                             | 101                              | 101                              |                      |                       |                           |                      |
| 13C12-1,2,3,4,7,8,9-HpCDF                           | 80                               | 88                               |                      |                       |                           |                      |
| <b>Extraction Standards</b>                         |                                  |                                  |                      |                       |                           |                      |
| 13C12-2,3,7,8-TCDD                                  | 60                               | 53                               |                      |                       |                           |                      |
| 13C12-1,2,3,7,8-PeCDD                               | 65                               | 54                               |                      |                       |                           |                      |
| 13C12-1,2,3,6,7,8-HxCDD                             | 62                               | 58                               |                      |                       |                           |                      |
| 13C12-1,2,3,4,6,7,8-HpCDD                           | 63                               | 54                               |                      |                       |                           |                      |
| 13C12-OCDD  | 44                               | 40                               |                      |                       |                           |                      |
| 13C12-2,3,7,8-TCDF                                  | 66                               | 57                               |                      |                       |                           |                      |
| 13C12-1,2,3,7,8-PeCDF                               | 65                               | 53                               |                      |                       |                           |                      |
| 13C12-1,2,3,6,7,8-HxCDF                             | 69                               | 66                               |                      |                       |                           |                      |
| 13C12-1,2,3,4,6,7,8-HpCDF                           | 66                               | 57                               |                      |                       |                           |                      |
| <b>Cleanup Standard</b>                             |                                  |                                  |                      |                       |                           |                      |
| 13C12-1,2,3,7,8,9-HxCDF                             | 74                               | 70                               |                      |                       |                           |                      |
| <b>Lower Bound Estimated Homologue Group Totals</b> | <b>All Homologues</b>            | <b>2,3,7,8 Homologues</b>        | <b>non-2,3,7,8's</b> | <b>All Homologues</b> | <b>2,3,7,8 Homologues</b> | <b>non-2,3,7,8's</b> |
|   | <b>pg</b>                        | <b>pg</b>                        | <b>pg</b>            | <b>pg</b>             | <b>pg</b>                 | <b>pg</b>            |
| Total-TCDD  | 7670                             | <22                              | 7670                 | 7940                  | 28.6                      | 7910                 |
| Total-PeCDD   | 13100                            | 203                              | 12900                | 11000                 | 198                       | 10800                |
| Total-HxCDD   | 31500                            | 2750                             | 28800                | 20300                 | 1340                      | 19000                |
| Total-HpCDD   | 26800                            | 11900                            | 14900                | 13300                 | 5980                      | 7320                 |
| OCDD  | 10600                            | 10600                            |                      | 6980                  | 6980                      |                      |
| Total-TCDF  | 6890                             | 151                              | 6740                 | 5110                  | 114                       | 5000                 |
| Total-PeCDF   | 7850                             | 916                              | 6930                 | 5780                  | 676                       | 5100                 |
| Total-HxCDF   | 7150                             | 1630                             | 5520                 | 5140                  | 1460                      | 3680                 |
| Total-HpCDF   | 7090                             | 4460                             | 2630                 | 2540                  | 1870                      | 670                  |
| OCDF  | 2680                             | 2680                             |                      | 897                   | 897                       |                      |
| <b>Total</b>  | <b>121000</b>                    | <b>35300</b>                     | <b>86100</b>         | <b>79000</b>          | <b>19500</b>              | <b>59500</b>         |
| <b>Toxic Equivalency - (WHO 2005)</b>               |                                  |                                  |                      |                       |                           |                      |
| <b>Lower Bound PCDD/F TEQ (WHO 2005)</b>            | 1030                             |                                  |                      | 746                   |                           |                      |
| <b>Mid Point PCDD/F TEQ (WHO 2005)</b>              | 1150                             |                                  |                      | 790                   |                           |                      |
| <b>Upper Bound PCDD/F TEQ (WHO 2005)</b>            | 1150                             |                                  |                      | 790                   |                           |                      |
| <b>Toxic Equivalency - (NATO)</b>                   |                                  |                                  |                      |                       |                           |                      |
| <b>Lower Bound PCDD/F TEQ (NATO)</b>                | 1080                             |                                  |                      | 750                   |                           |                      |
| <b>Mid Point PCDD/F TEQ (NATO)</b>                  | 1200                             |                                  |                      | 794                   |                           |                      |
| <b>Upper Bound PCDD/F TEQ (NATO)</b>                | 1200                             |                                  |                      | 794                   |                           |                      |



| <b>ALS Life Sciences</b>                 |              |              |                           |
|--|--------------|--------------|---------------------------|
| <b>Quality Control Summary Report</b>    |              |              |                           |
| Sample Name                              | Method Blank | Method Blank | Laboratory Control Sample |
| ALS Sample ID                            | WG3487423-1  | WG3487423-4  | WG3487423-2               |
| Sample Size                              | 1            | 1            | 1                         |
| Sample size units                        | n/a          | n/a          | n/a                       |
| Percent Moisture                         | n/a          | n/a          | n/a                       |
| Sample Matrix                            | MEDIA        | REAGENT      | QC                        |
| Sampling Date                            | n/a          | n/a          | n/a                       |
| Extraction Date                          | 19-Feb-21    | 19-Feb-21    | 19-Feb-21                 |
| <b>Target Analytes</b>                   | <b>pg</b>    | <b>pg</b>    | <b>% Rec</b>              |
| 2,3,7,8-TCDD                             | <3.7         | <2.3         | 97                        |
| 1,2,3,7,8-PeCDD                          | <2.4         | <2.0         | 107                       |
| 1,2,3,4,7,8-HxCDD                        | <2.8         | <4.6         | 106                       |
| 1,2,3,6,7,8-HxCDD                        | <2.1         | <3.5         | 111                       |
| 1,2,3,7,8,9-HxCDD                        | <2.2         | <3.8         | 119                       |
| 1,2,3,4,6,7,8-HpCDD                      | <4.7         | <4.2         | 99                        |
| OCDD                                     | 57.4         | <66          | 91                        |
| 2,3,7,8-TCDF                             | <1.5         | <1.4         | 90                        |
| 1,2,3,7,8-PeCDF                          | <1.8         | <1.5         | 103                       |
| 2,3,4,7,8-PeCDF                          | <1.7         | <1.4         | 98                        |
| 1,2,3,4,7,8-HxCDF                        | <1.5         | <1.7         | 110                       |
| 1,2,3,6,7,8-HxCDF                        | <1.2         | <1.4         | 118                       |
| 2,3,4,6,7,8-HxCDF                        | <1.4         | <1.6         | 113                       |
| 1,2,3,7,8,9-HxCDF                        | <1.7         | <1.9         | 112                       |
| 1,2,3,4,6,7,8-HpCDF                      | <2.2         | <2.3         | 99                        |
| 1,2,3,4,7,8,9-HpCDF                      | <3.0         | <3.0         | 88                        |
| OCDF                                     | <5.5         | <7.1         | 92                        |
| <b>Field Spike Standards</b>             | <b>% Rec</b> | <b>% Rec</b> | <b>% Rec</b>              |
| 37Cl4-2,3,7,8-TCDD                       | NS           | NS           | NS                        |
| 13C12-1,2,3,4,7,8-HxCDD                  | NS           | NS           | NS                        |
| 13C12-2,3,4,7,8-PeCDF                    | NS           | NS           | NS                        |
| 13C12-1,2,3,4,7,8-HxCDF                  | NS           | NS           | NS                        |
| 13C12-1,2,3,4,7,8,9-HpCDF                | NS           | NS           | NS                        |
| <b>Extraction Standards</b>              |              |              |                           |
| 13C12-2,3,7,8-TCDD                       | 59           | 70           | 61                        |
| 13C12-1,2,3,7,8-PeCDD                    | 56           | 71           | 65                        |
| 13C12-1,2,3,6,7,8-HxCDD                  | 59           | 71           | 62                        |
| 13C12-1,2,3,4,6,7,8-HpCDD                | 58           | 67           | 59                        |
| 13C12-OCDD                               | 48           | 50           | 47                        |
| 13C12-2,3,7,8-TCDF                       | 59           | 75           | 62                        |
| 13C12-1,2,3,7,8-PeCDF                    | 57           | 70           | 64                        |
| 13C12-1,2,3,6,7,8-HxCDF                  | 65           | 75           | 61                        |
| 13C12-1,2,3,4,6,7,8-HpCDF                | 68           | 75           | 63                        |
| <b>Cleanup Standard</b>                  |              |              |                           |
| 13C12-1,2,3,7,8,9-HxCDF                  | 68           | 72           | 73                        |
| <b>Homologue Group Totals</b>            | <b>pg</b>    | <b>pg</b>    |                           |
| Total-TCDD                               | <3.7         | <2.3         |                           |
| Total-PeCDD                              | <2.4         | <2.0         |                           |
| Total-HxCDD                              | <2.8         | <4.6         |                           |
| Total-HpCDD                              | <4.7         | <4.2         |                           |
| Total-TCDF                               | <1.5         | <1.4         |                           |
| Total-PeCDF                              | <1.8         | <1.5         |                           |
| Total-HxCDF                              | <1.7         | <1.9         |                           |
| Total-HpCDF                              | <3.0         | <3.0         |                           |
| <b>Toxic Equivalency - (WHO 2005)</b>    |              |              |                           |
| <b>Lower Bound PCDD/F TEQ (WHO 2005)</b> | 0.0172       | 0.00         |                           |
| <b>Mid Point PCDD/F TEQ (WHO 2005)</b>   | 4.12         | 3.45         |                           |
| <b>Upper Bound PCDD/F TEQ (WHO 2005)</b> | 8.22         | 6.87         |                           |
| <b>Toxic Equivalency - (NATO)</b>        |              |              |                           |
| <b>Lower Bound PCDD/F TEQ (NATO)</b>     | 0.0574       | 0.00         |                           |
| <b>Mid Point PCDD/F TEQ (NATO)</b>       | 3.75         | 3.15         |                           |
| <b>Upper Bound PCDD/F TEQ (NATO)</b>     | 7.44         | 6.23         |                           |

ALS Life Sciences

Sample Analysis Report

**Sample Name** UNIT 1. 210210-57A (XAD ONLY)  
 ALS Sample ID L2557117-1  
 Analysis Method EPA M23  
 Analysis Type Sample  
 Sample Matrix AMESA trap

Sampling Date 10-Feb-21  
 Extraction Date 19-Feb-21  
 Sample Size 1 Sample  
 Percent Moisture n/a  
 Split Ratio 3

Approved:  
 E. Sabljic  
 --e-signature--  
 03-Mar-2021

**Run Information** Run 1  
 Filename 7-210302A14  
 Run Date 02-Mar-21 17:50  
 Final Volume 20 uL  
 Dilution Factor 1  
 Analysis Units pg  
 Instrument - Column HRMS-7 DB5MSUSO287821H

| Target Analytes               | TEF (WHO 2005) | Ret. Time       | Conc. pg      | EDL pg | Flags | EMPC pg | LQL |
|-------------------------------|----------------|-----------------|---------------|--------|-------|---------|-----|
| 2,3,7,8-TCDD                  | 1              | 27.63           | <22           | 6.2    | J,R   | 22      | 30  |
| 1,2,3,7,8-PeCDD               | 1              | 32.06           | 203           | 7.0    |       |         | 150 |
| 1,2,3,4,7,8-HxCDD             | 0.1            | 34.16           | 483           | 21     |       |         | 150 |
| 1,2,3,6,7,8-HxCDD             | 0.1            | 34.21           | 1410          | 16     |       |         | 150 |
| 1,2,3,7,8,9-HxCDD             | 0.1            | 34.34           | 858           | 17     |       |         | 150 |
| 1,2,3,4,6,7,8-HpCDD           | 0.01           | 35.81           | 11900         | 29     |       |         | 150 |
| OCDD                          | 0.0003         | 37.26           | 10600         | 64     |       |         | 300 |
| 2,3,7,8-TCDF                  | 0.1            | 26.69           | 151           | 4.5    |       |         | 30  |
| 1,2,3,7,8-PeCDF               | 0.03           | 31.07           | 252           | 4.9    |       |         | 150 |
| 2,3,4,7,8-PeCDF               | 0.3            | 31.84           | 664           | 4.5    |       |         | 150 |
| 1,2,3,4,7,8-HxCDF             | 0.1            | 33.66           | 693           | 10     |       |         | 150 |
| 1,2,3,6,7,8-HxCDF             | 0.1            | 33.74           | 636           | 8.2    |       |         | 150 |
| 2,3,4,6,7,8-HxCDF             | 0.1            | 34.07           | <1000         | 9.6    | R     | 1000    | 150 |
| 1,2,3,7,8,9-HxCDF             | 0.1            | 34.51           | 301           | 12     |       |         | 150 |
| 1,2,3,4,6,7,8-HpCDF           | 0.01           | 35.25           | 3930          | 13     |       |         | 150 |
| 1,2,3,4,7,8,9-HpCDF           | 0.01           | 36.05           | 526           | 17     |       |         | 150 |
| OCDF                          | 0.0003         | 37.35           | 2680          | 19     |       |         | 300 |
| <b>Field Spike Standards</b>  | <b>pg</b>      | <b>% Rec</b>    | <b>Limits</b> |        |       |         |     |
| 37Cl4-2,3,7,8-TCDD            | 400            | 27.63           | 102           | 70-130 |       |         |     |
| 13C12-1,2,3,4,7,8-HxCDD       | 4000           | 34.15           | 109           | 70-130 |       |         |     |
| 13C12-2,3,4,7,8-PeCDF         | 4000           | 31.83           | 104           | 70-130 |       |         |     |
| 13C12-1,2,3,4,7,8-HxCDF       | 4000           | 33.65           | 101           | 70-130 |       |         |     |
| 13C12-1,2,3,4,7,8,9-HpCDF     | 4000           | 36.05           | 80            | 70-130 |       |         |     |
| <b>Extraction Standards</b>   |                |                 |               |        |       |         |     |
| 13C12-2,3,7,8-TCDD            | 6000           | 27.60           | 60            | 40-130 |       |         |     |
| 13C12-1,2,3,7,8-PeCDD         | 6000           | 32.05           | 65            | 40-130 |       |         |     |
| 13C12-1,2,3,6,7,8-HxCDD       | 6000           | 34.20           | 62            | 40-130 |       |         |     |
| 13C12-1,2,3,4,6,7,8-HpCDD     | 6000           | 35.80           | 63            | 25-130 |       |         |     |
| 13C12-OCDD                    | 12000          | 37.26           | 44            | 25-130 |       |         |     |
| 13C12-2,3,7,8-TCDF            | 6000           | 26.69           | 66            | 40-130 |       |         |     |
| 13C12-1,2,3,7,8-PeCDF         | 6000           | 31.06           | 65            | 40-130 |       |         |     |
| 13C12-1,2,3,6,7,8-HxCDF       | 6000           | 33.73           | 69            | 40-130 |       |         |     |
| 13C12-1,2,3,4,6,7,8-HpCDF     | 6000           | 35.25           | 66            | 25-130 |       |         |     |
| <b>Cleanup Standard</b>       | <b>pg</b>      |                 |               |        |       |         |     |
| 13C12-1,2,3,7,8,9-HxCDF       | 6000           | 34.48           | 74            | 40-130 |       |         |     |
| <b>Homologue Group Totals</b> | <b># peaks</b> | <b>Conc. pg</b> | <b>EDL pg</b> |        |       |         |     |
| Total-TCDD                    | 13             | 7670            | 6.2           |        |       |         | 30  |
| Total-PeCDD                   | 8              | 13100           | 7.0           |        |       |         | 150 |
| Total-HxCDD                   | 8              | 31500           | 21            |        |       |         | 150 |
| Total-HpCDD                   | 2              | 26800           | 29            |        |       |         | 150 |
| Total-TCDF                    | 19             | 6890            | 4.5           |        |       |         | 30  |
| Total-PeCDF                   | 16             | 7850            | 4.9           |        |       |         | 150 |
| Total-HxCDF                   | 10             | 7150            | 12            |        |       |         | 150 |
| Total-HpCDF                   | 4              | 7090            | 17            |        |       |         | 150 |

**Toxic Equivalency - (WHO 2005)**  
 Lower Bound PCDD/F TEQ (WHO 2005) 1030  
 Mid Point PCDD/F TEQ (WHO 2005) 1150  
 Upper Bound PCDD/F TEQ (WHO 2005) 1150

**Toxic Equivalency - (NATO)**  
 Lower Bound PCDD/F TEQ (NATO) 1080  
 Mid Point PCDD/F TEQ (NATO) 1200  
 Upper Bound PCDD/F TEQ (NATO) 1200

EDL Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.  
 TEF Indicates the Toxic Equivalency Factor TEQ Indicates the Toxic Equivalency

J Indicates that a target analyte was detected below the calibrated range.  
 R Indicates that the ion abundance ratio for this compound did not meet the acceptance criterion.

LQL Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.  
 EMPC Estimated Maximum Possible Concentration - elevated detection limit due to interference or positive id criterion failure

ALS Life Sciences

Sample Analysis Report

**Sample Name** UNIT 2. 210210-578 (XAD ONLY)  
 ALS Sample ID L2557117-2  
 Analysis Method EPA M23  
 Analysis Type Sample  
 Sample Matrix AMESA trap

Sampling Date 10-Feb-21  
 Extraction Date 19-Feb-21  
 Sample Size 1 Sample  
 Percent Moisture n/a  
 Split Ratio 3

Approved:  
 E. Sabljic  
 --e-signature--  
 03-Mar-2021

**Run Information** **Run 1**  
 Filename 7-210302A15  
 Run Date 02-Mar-21 18:32  
 Final Volume 20 uL  
 Dilution Factor 1  
 Analysis Units pg  
 Instrument - Column HRMS-7 DB5MSUSO287821H

| Target Analytes               | TEF<br>(WHO 2005) | Ret.<br>Time | Conc.<br>pg         | EDL<br>pg         | Flags | EMPC<br>pg | LQL |
|-------------------------------|-------------------|--------------|---------------------|-------------------|-------|------------|-----|
| 2,3,7,8-TCDD                  | 1                 | 27.61        | 28.6                | 7.2               | J     | 30         |     |
| 1,2,3,7,8-PeCDD               | 1                 | 32.06        | 198                 | 9.8               |       | 150        |     |
| 1,2,3,4,7,8-HxCDD             | 0.1               | 34.16        | <290                | 18                | R     | 290        | 150 |
| 1,2,3,6,7,8-HxCDD             | 0.1               | 34.21        | 806                 | 14                |       | 150        |     |
| 1,2,3,7,8,9-HxCDD             | 0.1               | 34.34        | 538                 | 15                |       | 150        |     |
| 1,2,3,4,6,7,8-HpCDD           | 0.01              | 35.81        | 5980                | 28                |       | 150        |     |
| OCDD                          | 0.0003            | 37.26        | 6980                | 63                |       | 300        |     |
| 2,3,7,8-TCDF                  | 0.1               | 26.69        | 114                 | 5.6               | M     | 30         |     |
| 1,2,3,7,8-PeCDF               | 0.03              | 31.07        | 208                 | 42                |       | 150        |     |
| 2,3,4,7,8-PeCDF               | 0.3               | 31.84        | 468                 | 39                |       | 150        |     |
| 1,2,3,4,7,8-HxCDF             | 0.1               | 33.66        | 404                 | 15                |       | 150        |     |
| 1,2,3,6,7,8-HxCDF             | 0.1               | 33.74        | 384                 | 12                |       | 150        |     |
| 2,3,4,6,7,8-HxCDF             | 0.1               | 34.07        | 675                 | 14                |       | 150        |     |
| 1,2,3,7,8,9-HxCDF             | 0.1               | 34.51        | <150                | 17                | R     | 150        | 150 |
| 1,2,3,4,6,7,8-HpCDF           | 0.01              | 35.25        | 1680                | 11                |       | 150        |     |
| 1,2,3,4,7,8,9-HpCDF           | 0.01              | 36.05        | 189                 | 14                |       | 150        |     |
| OCDF                          | 0.0003            | 37.35        | 897                 | 19                |       | 300        |     |
| <b>Field Spike Standards</b>  | <b>pg</b>         |              | <b>% Rec</b>        | <b>Limits</b>     |       |            |     |
| 37Cl4-2,3,7,8-TCDD            | 400               | 27.63        | 105                 | 70-130            |       |            |     |
| 13C12-1,2,3,4,7,8-HxCDD       | 4000              | 34.16        | 108                 | 70-130            |       |            |     |
| 13C12-2,3,4,7,8-PeCDF         | 4000              | 31.83        | 104                 | 70-130            |       |            |     |
| 13C12-1,2,3,4,7,8-HxCDF       | 4000              | 33.65        | 101                 | 70-130            |       |            |     |
| 13C12-1,2,3,4,7,8,9-HpCDF     | 4000              | 36.05        | 88                  | 70-130            |       |            |     |
| <b>Extraction Standards</b>   |                   |              |                     |                   |       |            |     |
| 13C12-2,3,7,8-TCDD            | 6000              | 27.60        | 53                  | 40-130            |       |            |     |
| 13C12-1,2,3,7,8-PeCDD         | 6000              | 32.05        | 54                  | 40-130            |       |            |     |
| 13C12-1,2,3,6,7,8-HxCDD       | 6000              | 34.20        | 58                  | 40-130            |       |            |     |
| 13C12-1,2,3,4,6,7,8-HpCDD     | 6000              | 35.80        | 54                  | 25-130            |       |            |     |
| 13C12-OCDD                    | 12000             | 37.26        | 40                  | 25-130            |       |            |     |
| 13C12-2,3,7,8-TCDF            | 6000              | 26.68        | 57                  | 40-130            |       |            |     |
| 13C12-1,2,3,7,8-PeCDF         | 6000              | 31.06        | 53                  | 40-130            |       |            |     |
| 13C12-1,2,3,6,7,8-HxCDF       | 6000              | 33.73        | 66                  | 40-130            |       |            |     |
| 13C12-1,2,3,4,6,7,8-HpCDF     | 6000              | 35.25        | 57                  | 25-130            |       |            |     |
| <b>Cleanup Standard</b>       | <b>pg</b>         |              |                     |                   |       |            |     |
| 13C12-1,2,3,7,8,9-HxCDF       | 6000              | 34.48        | 70                  | 40-130            |       |            |     |
| <b>Homologue Group Totals</b> | <b># peaks</b>    |              | <b>Conc.<br/>pg</b> | <b>EDL<br/>pg</b> |       |            |     |
| Total-TCDD                    | 11                | 7940         | 7.2                 | 30                |       |            |     |
| Total-PeCDD                   | 8                 | 11000        | 9.8                 | 150               |       |            |     |
| Total-HxCDD                   | 6                 | 20300        | 18                  | 150               |       |            |     |
| Total-HpCDD                   | 2                 | 13300        | 28                  | 150               |       |            |     |
| Total-TCDF                    | 19                | 5110         | 5.6                 | 30                |       |            |     |
| Total-PeCDF                   | 11                | 5780         | 42                  | 150               |       |            |     |
| Total-HxCDF                   | 12                | 5140         | 17                  | 150               |       |            |     |
| Total-HpCDF                   | 3                 | 2540         | 14                  | 150               |       |            |     |

**Toxic Equivalency - (WHO 2005)**  
 Lower Bound PCDD/F TEQ (WHO 2005) 746  
 Mid Point PCDD/F TEQ (WHO 2005) 790  
 Upper Bound PCDD/F TEQ (WHO 2005) 790

**Toxic Equivalency - (NATO)**  
 Lower Bound PCDD/F TEQ (NATO) 750  
 Mid Point PCDD/F TEQ (NATO) 794  
 Upper Bound PCDD/F TEQ (NATO) 794

EDL Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.  
 TEF Indicates the Toxic Equivalency Factor  
 M Indicates that a peak has been manually integrated.  
  
 J Indicates that a target analyte was detected below the calibrated range.  
 R Indicates that the ion abundance ratio for this compound did not meet the acceptance criterion.  
  
 LQL Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.  
 EMPC Estimated Maximum Possible Concentration - elevated detection limit due to interference or positive id criterion failure

ALS Life Sciences

Laboratory Method Blank Analysis Report

|                    |                     |                  |           |   |
|--------------------|---------------------|------------------|-----------|---|
| <b>Sample Name</b> | <b>Method Blank</b> | Sampling Date    | n/a       | Approved:<br>E. Sabljic<br>--e-signature--<br>03-Mar-2021 |
| ALS Sample ID      | WG3487423-1         | Extraction Date  | 19-Feb-21 |   |
| Analysis Method    | EPA M23             | Sample Size      | 1 n/a     |   |
| Analysis Type      | Blank               | Percent Moisture | n/a       |   |
| Sample Matrix      | MEDIA               | Split Ratio      | 3         |   |

|                        |                        |
|------------------------|------------------------|
| <b>Run Information</b> | <b>Run 1</b>           |
| Filename               | 7-210302A12            |
| Run Date               | 02-Mar-21 16:26        |
| Final Volume           | 20 uL                  |
| Dilution Factor        | 1                      |
| Analysis Units         | pg                     |
| Instrument - Column    | HRMS-7 DB5MSUSO287821H |

| Target Analytes     | TEF<br>(WHO 2005) | Ret.<br>Time | Conc.<br>pg | EDL<br>pg | Flags | EMPC<br>pg | LQL |
|---------------------|-------------------|--------------|-------------|-----------|-------|------------|-----|
| 2,3,7,8-TCDD        | 1                 | NotFnd       | <3.7        | 3.7       | U     | 30         |     |
| 1,2,3,7,8-PeCDD     | 1                 | NotFnd       | <2.4        | 2.4       | U     | 150        |     |
| 1,2,3,4,7,8-HxCDD   | 0.1               | NotFnd       | <2.8        | 2.8       | U     | 150        |     |
| 1,2,3,6,7,8-HxCDD   | 0.1               | NotFnd       | <2.1        | 2.1       | U     | 150        |     |
| 1,2,3,7,8,9-HxCDD   | 0.1               | NotFnd       | <2.2        | 2.2       | U     | 150        |     |
| 1,2,3,4,6,7,8-HpCDD | 0.01              | NotFnd       | <4.7        | 4.7       | U     | 150        |     |
| OCDD                | 0.0003            | 37.27        | 57.4        | 22        | J     | 300        |     |
| 2,3,7,8-TCDF        | 0.1               | NotFnd       | <1.5        | 1.5       | U     | 30         |     |
| 1,2,3,7,8-PeCDF     | 0.03              | NotFnd       | <1.8        | 1.8       | U     | 150        |     |
| 2,3,4,7,8-PeCDF     | 0.3               | NotFnd       | <1.7        | 1.7       | U     | 150        |     |
| 1,2,3,4,7,8-HxCDF   | 0.1               | NotFnd       | <1.5        | 1.5       | U     | 150        |     |
| 1,2,3,6,7,8-HxCDF   | 0.1               | NotFnd       | <1.2        | 1.2       | U     | 150        |     |
| 2,3,4,6,7,8-HxCDF   | 0.1               | NotFnd       | <1.4        | 1.4       | U     | 150        |     |
| 1,2,3,7,8,9-HxCDF   | 0.1               | NotFnd       | <1.7        | 1.7       | U     | 150        |     |
| 1,2,3,4,6,7,8-HpCDF | 0.01              | NotFnd       | <2.2        | 2.2       | U     | 150        |     |
| 1,2,3,4,7,8,9-HpCDF | 0.01              | NotFnd       | <3.0        | 3.0       | U     | 150        |     |
| OCDF                | 0.0003            | NotFnd       | <5.5        | 5.5       | U     | 300        |     |

| Field Spike Standards     | pg | % Rec | Limits |
|---------------------------|----|-------|--------|
| 37C14-2,3,7,8-TCDD        | 0  | NS    |        |
| 13C12-1,2,3,4,7,8-HxCDD   | 0  | NS    |        |
| 13C12-2,3,4,7,8-PeCDF     | 0  | NS    |        |
| 13C12-1,2,3,4,7,8-HxCDF   | 0  | NS    |        |
| 13C12-1,2,3,4,7,8,9-HpCDF | 0  | NS    |        |

| Extraction Standards      | pg    | Conc. pg | EDL pg    |
|---------------------------|-------|----------|-----------|
| 13C12-2,3,7,8-TCDD        | 6000  | 27.61    | 59 40-130 |
| 13C12-1,2,3,7,8-PeCDD     | 6000  | 32.06    | 56 40-130 |
| 13C12-1,2,3,6,7,8-HxCDD   | 6000  | 34.21    | 59 40-130 |
| 13C12-1,2,3,4,6,7,8-HpCDD | 6000  | 35.81    | 58 25-130 |
| 13C12-OCDD                | 12000 | 37.27    | 48 25-130 |
| 13C12-2,3,7,8-TCDF        | 6000  | 26.69    | 59 40-130 |
| 13C12-1,2,3,7,8-PeCDF     | 6000  | 31.07    | 57 40-130 |
| 13C12-1,2,3,6,7,8-HxCDF   | 6000  | 33.74    | 65 40-130 |
| 13C12-1,2,3,4,6,7,8-HpCDF | 6000  | 35.26    | 68 25-130 |

| Cleanup Standard        | pg   | Conc. pg | EDL pg    |
|-------------------------|------|----------|-----------|
| 13C12-1,2,3,7,8,9-HxCDF | 6000 | 34.49    | 68 40-130 |

| Homologue Group Totals | # peaks | Conc. pg | EDL pg    |
|------------------------|---------|----------|-----------|
| Total-TCDD             | 0       | <3.7     | 3.7 U 30  |
| Total-PeCDD            | 0       | <2.4     | 2.4 U 150 |
| Total-HxCDD            | 0       | <2.8     | 2.8 U 150 |
| Total-HpCDD            | 0       | <4.7     | 4.7 U 150 |
| Total-TCDF             | 0       | <1.5     | 1.5 U 30  |
| Total-PeCDF            | 0       | <1.8     | 1.8 U 150 |
| Total-HxCDF            | 0       | <1.7     | 1.7 U 150 |
| Total-HpCDF            | 0       | <3.0     | 3.0 U 150 |

| Toxic Equivalency - (WHO 2005)    | pg     |
|-----------------------------------|--------|
| Lower Bound PCDD/F TEQ (WHO 2005) | 0.0172 |
| Mid Point PCDD/F TEQ (WHO 2005)   | 4.12   |
| Upper Bound PCDD/F TEQ (WHO 2005) | 8.22   |

| Toxic Equivalency - (NATO)    | pg     |
|-------------------------------|--------|
| Lower Bound PCDD/F TEQ (NATO) | 0.0574 |
| Mid Point PCDD/F TEQ (NATO)   | 3.75   |
| Upper Bound PCDD/F TEQ (NATO) | 7.44   |

|      |  |
|------|--|
| EDL  | Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.          |
| TEF  | Indicates the Toxic Equivalency Factor   |
| U    | Indicates that this compound was not detected above the EDL.   |
| J    | Indicates that a target analyte was detected below the calibrated range.   |
| LQL  | Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.       |
| EMPC | Estimated Maximum Possible Concentration - elevated detection limit due to interference or positive id criterion failure |
| NS   | Indicates that this standard has not been added.   |

ALS Life Sciences

Laboratory Method Blank Analysis Report

|                    |                     |                  |           |   |
|--------------------|---------------------|------------------|-----------|---|
| <b>Sample Name</b> | <b>Method Blank</b> | Sampling Date    | n/a       | Approved:<br>E. Sabljic<br>--e-signature--<br>03-Mar-2021 |
| ALS Sample ID      | WG3487423-4         | Extraction Date  | 19-Feb-21 |   |
| Analysis Method    | EPA M23             | Sample Size      | 1 n/a     |   |
| Analysis Type      | Blank               | Percent Moisture | n/a       |   |
| Sample Matrix      | REAGENT             | Split Ratio      | 3         |   |

|                        |                        |
|------------------------|------------------------|
| <b>Run Information</b> | <b>Run 1</b>           |
| Filename               | 7-210302A13            |
| Run Date               | 02-Mar-21 17:08        |
| Final Volume           | 20 uL                  |
| Dilution Factor        | 1                      |
| Analysis Units         | pg                     |
| Instrument - Column    | HRMS-7 DB5MSUSO287821H |

| Target Analytes     | TEF<br>(WHO 2005) | Ret.<br>Time | Conc.<br>pg | EDL<br>pg | Flags | EMPC<br>pg | LQL |
|---------------------|-------------------|--------------|-------------|-----------|-------|------------|-----|
| 2,3,7,8-TCDD        | 1                 | NotFnd       | <2.3        | 2.3       | U     | 30         |     |
| 1,2,3,7,8-PeCDD     | 1                 | NotFnd       | <2.0        | 2.0       | U     | 150        |     |
| 1,2,3,4,7,8-HxCDD   | 0.1               | NotFnd       | <4.6        | 4.6       | U     | 150        |     |
| 1,2,3,6,7,8-HxCDD   | 0.1               | NotFnd       | <3.5        | 3.5       | U     | 150        |     |
| 1,2,3,7,8,9-HxCDD   | 0.1               | NotFnd       | <3.8        | 3.8       | U     | 150        |     |
| 1,2,3,4,6,7,8-HpCDD | 0.01              | NotFnd       | <4.2        | 4.2       | U     | 150        |     |
| OCDD                | 0.0003            | 37.28        | <66         | 8.3       | J,R   | 66         | 300 |
| 2,3,7,8-TCDF        | 0.1               | NotFnd       | <1.4        | 1.4       | U     | 30         |     |
| 1,2,3,7,8-PeCDF     | 0.03              | NotFnd       | <1.5        | 1.5       | U     | 150        |     |
| 2,3,4,7,8-PeCDF     | 0.3               | NotFnd       | <1.4        | 1.4       | U     | 150        |     |
| 1,2,3,4,7,8-HxCDF   | 0.1               | NotFnd       | <1.7        | 1.7       | U     | 150        |     |
| 1,2,3,6,7,8-HxCDF   | 0.1               | NotFnd       | <1.4        | 1.4       | U     | 150        |     |
| 2,3,4,6,7,8-HxCDF   | 0.1               | NotFnd       | <1.6        | 1.6       | U     | 150        |     |
| 1,2,3,7,8,9-HxCDF   | 0.1               | NotFnd       | <1.9        | 1.9       | U     | 150        |     |
| 1,2,3,4,6,7,8-HpCDF | 0.01              | NotFnd       | <2.3        | 2.3       | U     | 150        |     |
| 1,2,3,4,7,8,9-HpCDF | 0.01              | NotFnd       | <3.0        | 3.0       | U     | 150        |     |
| OCDF                | 0.0003            | NotFnd       | <7.1        | 7.1       | U     | 300        |     |

| Field Spike Standards      | pg | % Rec | Limits |
|----------------------------|----|-------|--------|
| 37Cl4-2,3,7,8-TCDD         | 0  | NS    |        |
| 13Cl12-1,2,3,4,7,8-HxCDD   | 0  | NS    |        |
| 13Cl12-2,3,4,7,8-PeCDF     | 0  | NS    |        |
| 13Cl12-1,2,3,4,7,8-HxCDF   | 0  | NS    |        |
| 13Cl12-1,2,3,4,7,8,9-HpCDF | 0  | NS    |        |

| Extraction Standards       | pg    | Conc. pg | EDL pg    |
|----------------------------|-------|----------|-----------|
| 13Cl12-2,3,7,8-TCDD        | 6000  | 27.61    | 70 40-130 |
| 13Cl12-1,2,3,7,8-PeCDD     | 6000  | 32.06    | 71 40-130 |
| 13Cl12-1,2,3,6,7,8-HxCDD   | 6000  | 34.21    | 71 40-130 |
| 13Cl12-1,2,3,4,6,7,8-HpCDD | 6000  | 35.81    | 67 25-130 |
| 13Cl12-OCDD                | 12000 | 37.27    | 50 25-130 |
| 13Cl12-2,3,7,8-TCDF        | 6000  | 26.69    | 75 40-130 |
| 13Cl12-1,2,3,7,8-PeCDF     | 6000  | 31.07    | 70 40-130 |
| 13Cl12-1,2,3,6,7,8-HxCDF   | 6000  | 33.74    | 75 40-130 |
| 13Cl12-1,2,3,4,6,7,8-HpCDF | 6000  | 35.26    | 75 25-130 |

| Cleanup Standard         | pg   | Conc. pg | EDL pg    |
|--------------------------|------|----------|-----------|
| 13Cl12-1,2,3,7,8,9-HxCDF | 6000 | 34.49    | 72 40-130 |

| Homologue Group Totals | # peaks | Conc. pg | EDL pg    |
|------------------------|---------|----------|-----------|
| Total-TCDD             | 0       | <2.3     | 2.3 U 30  |
| Total-PeCDD            | 0       | <2.0     | 2.0 U 150 |
| Total-HxCDD            | 0       | <4.6     | 4.6 U 150 |
| Total-HpCDD            | 0       | <4.2     | 4.2 U 150 |
| Total-TCDF             | 0       | <1.4     | 1.4 U 30  |
| Total-PeCDF            | 0       | <1.5     | 1.5 U 150 |
| Total-HxCDF            | 0       | <1.9     | 1.9 U 150 |
| Total-HpCDF            | 0       | <3.0     | 3.0 U 150 |

| Toxic Equivalency - (WHO 2005)    | pg   |
|-----------------------------------|------|
| Lower Bound PCDD/F TEQ (WHO 2005) | 0.00 |
| Mid Point PCDD/F TEQ (WHO 2005)   | 3.45 |
| Upper Bound PCDD/F TEQ (WHO 2005) | 6.87 |

| Toxic Equivalency - (NATO)    | pg   |
|-------------------------------|------|
| Lower Bound PCDD/F TEQ (NATO) | 0.00 |
| Mid Point PCDD/F TEQ (NATO)   | 3.15 |
| Upper Bound PCDD/F TEQ (NATO) | 6.23 |

|      |  |
|------|--|
| EDL  | Indicates the Estimated Detection Limit, based on the measured background noise for this target in this sample.          |
| TEF  | Indicates the Toxic Equivalency Factor   |
| U    | Indicates that this compound was not detected above the EDL.   |
| J    | Indicates that a target analyte was detected below the calibrated range.   |
| R    | Indicates that the ion abundance ratio for this compound did not meet the acceptance criterion.                          |
| LQL  | Lower Quantification Limit, based on the lowest calibration level corrected for sample size, splits and dilutions.       |
| EMPC | Estimated Maximum Possible Concentration - elevated detection limit due to interference or positive id criterion failure |
| NS   | Indicates that this standard has not been added.   |

# ALS Life Sciences

## Laboratory Control Sample Analysis Report

|                    |                                  |                  |           |  |
|--------------------|----------------------------------|------------------|-----------|--|
| <b>Sample Name</b> | <b>Laboratory Control Sample</b> | Sampling Date    | n/a       | Approved:<br><i>E. Sabljic</i><br>--e-signature--<br>03-Mar-2021 |
| ALS Sample ID      | WG3487423-2                      | Extraction Date  | 19-Feb-21 |  |
| Analysis Method    | EPA M23                          | Sample Size      | 1 n/a     |  |
| Analysis Type      | LCS                              | Percent Moisture | n/a       |  |
| Sample Matrix      | QC                               | Split Ratio      | 3         |  |

|                        |                        |
|------------------------|------------------------|
| <b>Run Information</b> | <b>Run 1</b>           |
| Filename               | 7-210302A09            |
| Run Date               | 02-Mar-21 14:22        |
| Final Volume           | 20 uL                  |
| Dilution Factor        | 1                      |
| Analysis Units         | %                      |
| Instrument - Column    | HRMS-7 DB5MSUSO287821H |

| Target Analytes              | pg        | Ret. Time | % Rec        | Limits        | Flags |
|------------------------------|-----------|-----------|--------------|---------------|-------|
| 2,3,7,8-TCDD                 | 600       | 27.66     | 97           | 70-130        |       |
| 1,2,3,7,8-PeCDD              | 3000      | 32.08     | 107          | 70-130        |       |
| 1,2,3,4,7,8-HxCDD            | 3000      | 34.18     | 106          | 70-130        |       |
| 1,2,3,6,7,8-HxCDD            | 3000      | 34.24     | 111          | 70-130        |       |
| 1,2,3,7,8,9-HxCDD            | 3000      | 34.36     | 119          | 70-130        |       |
| 1,2,3,4,6,7,8-HpCDD          | 3000      | 35.82     | 99           | 70-130        |       |
| OCDD                         | 6000      | 37.28     | 91           | 70-130        |       |
| 2,3,7,8-TCDF                 | 600       | 26.75     | 90           | 70-130        |       |
| 1,2,3,7,8-PeCDF              | 3000      | 31.10     | 103          | 70-130        |       |
| 2,3,4,7,8-PeCDF              | 3000      | 31.86     | 98           | 70-130        |       |
| 1,2,3,4,7,8-HxCDF            | 3000      | 33.68     | 110          | 70-130        |       |
| 1,2,3,6,7,8-HxCDF            | 3000      | 33.75     | 118          | 70-130        |       |
| 2,3,4,6,7,8-HxCDF            | 3000      | 34.09     | 113          | 70-130        |       |
| 1,2,3,7,8,9-HxCDF            | 3000      | 34.50     | 112          | 70-130        |       |
| 1,2,3,4,6,7,8-HpCDF          | 3000      | 35.27     | 99           | 70-130        |       |
| 1,2,3,4,7,8,9-HpCDF          | 3000      | 36.06     | 88           | 70-130        |       |
| OCDF                         | 6000      | 37.37     | 92           | 70-130        |       |
| <b>Field Spike Standards</b> | <b>pg</b> |           | <b>% Rec</b> | <b>Limits</b> |       |
| 37Cl4-2,3,7,8-TCDD           | 0         |           | NS           |               |       |
| 13C12-1,2,3,4,7,8-HxCDD      | 0         |           | NS           |               |       |
| 13C12-2,3,4,7,8-PeCDF        | 0         |           | NS           |               |       |
| 13C12-1,2,3,4,7,8-HxCDF      | 0         |           | NS           |               |       |
| 13C12-1,2,3,4,7,8,9-HpCDF    | 0         |           | NS           |               |       |
| <b>Extraction Standards</b>  |           |           |              |               |       |
| 13C12-2,3,7,8-TCDD           | 6000      | 27.63     | 61           | 40-130        |       |
| 13C12-1,2,3,7,8-PeCDD        | 6000      | 32.07     | 65           | 40-130        |       |
| 13C12-1,2,3,6,7,8-HxCDD      | 6000      | 34.23     | 62           | 40-130        |       |
| 13C12-1,2,3,4,6,7,8-HpCDD    | 6000      | 35.82     | 59           | 25-130        |       |
| 13C12-OCDD                   | 12000     | 37.27     | 47           | 25-130        |       |
| 13C12-2,3,7,8-TCDF           | 6000      | 26.72     | 62           | 40-130        |       |
| 13C12-1,2,3,7,8-PeCDF        | 6000      | 31.09     | 64           | 40-130        |       |
| 13C12-1,2,3,6,7,8-HxCDF      | 6000      | 33.74     | 61           | 40-130        |       |
| 13C12-1,2,3,4,6,7,8-HpCDF    | 6000      | 35.26     | 63           | 25-130        |       |
| <b>Cleanup Standard</b>      | <b>pg</b> |           |              |               |       |
| 13C12-1,2,3,7,8,9-HxCDF      | 6000      | 34.49     | 73           | 40-130        |       |

NS Indicates that this standard has not been added.

210111\_1143\_S.txt

AMESA measurement summary

COVANTA CANADA - STACK UNIT 2

File ident: Amesa\_860154-P86.020.6-16.02.2021-10:30

Sampled using P86.020.6

Cartridge box no. 1 - COVANTA - STACK 2 Measurement no. 57

Start: 11.1.2021/11:43 Leakage rate (112.0hPa) 0.000m<sup>3</sup>/hEnd.: 10.2.2021/09:59 Leakage rate (109.4hPa) 0.000m<sup>3</sup>/h

|   |               |                 |                  |
|---|---------------|-----------------|------------------|
| Measurement duration .....              | MDurat:       | 718:00          | h:min            |
| Sample gas volume norm MFM dry .....    | TGVN MDM:     | 491.928         | m <sup>3</sup>   |
| Sample gas volume norm MFM humid .....  | TGVN MDM:     | 551.292         | m <sup>3</sup>   |
| Sample gas volume norm gasmeter dry ... | TGVN GU:      | 302.521         | m <sup>3</sup>   |
| Sample gas volume norm gasmeter humid.. | TGVN GU:      | 339.028         | m <sup>3</sup>   |
| Condensate volume of sampling .....     | CONVOL:       | 27.43           | l                |
| Operating density factor .....          | BDFAKT:       | 0.771           |                  |
| Mean H2O in flue gas .....              | MH2O:         | 97.0            | g/m <sup>3</sup> |
| Mean O2 .....                           | MO2:          | 7.8             | %                |
| Mean CO2 .....                          | MCO2:         | 10.9            | %                |
| Mean PSTAT .....                        | MPSTAT:       | 992.5           | hPa              |
| Mean TRG .....                          | MTRG:         | 140.6           | °C               |
| Mean vH .....                           | MVH:          | 16.83           | m/s              |
| Maximum TKT .....                       | MAXTKT:       | 36.1            | °C               |
| Mean TKT .....                          | MTKT:         | 29.5            | °C               |
| Stack cross section .....               | QRK:          | 1.48            | m <sup>2</sup>   |
| Stack diameter .....                    | DRK:          | 1.37            | m                |
| Substitutes .....                       |               |                 |                  |
| Last parameter access time .....        | PARAMACCTIME: | 11.1.2021/11:38 |                  |

Events during measurement 8:

|                |   |                  |                       |                  |
|----------------|---|------------------|-----------------------|------------------|
| 15-01-21/11:39 | X | No fire          |                       |                  |
| 15-01-21/11:41 | X | Break terminated | FAZeit: 0 12:01:28 AM | FA time: 0:01:27 |
| 15-01-21/11:45 | L | Start of period  |                       |                  |
| 26-01-21/09:26 | X | No fire          |                       |                  |
| 26-01-21/09:27 | X | Break terminated | FAZeit: 0 12:01:05 AM | FA time: 0:01:05 |
| 26-01-21/09:32 | L | Start of period  |                       |                  |
| 10-02-21/09:55 | X | Manual command   |                       |                  |
| 10-02-21/09:56 | X | Shutdown command |                       |                  |

FA events during measurement: 2

Total FA time .....

0:02 h:min

Total Fire on time : 718:14 h:min

Attachment #3 to Report #2021-WR-10

Run 57B

| UNIT 2 AMESA                        |      | D/F catch | sample vol     | sample vol      | dry ref conc | O2    | dry ref adj conc        | TEQ   | dry ref adj conc  |
|-------------------------------------|------|-----------|----------------|-----------------|--------------|-------|-------------------------|-------|-------------------|
| 11 JAN 2021 TO 10 FEB 2021          |      | pg        | m3 @1 atm, O°C | m3 @1 atm, 25°C | pg/Rm3       | %     | pg/Rm3 @11% O2          | value | pgTEQ/Rm3 @11% O2 |
| 2378-tetrachlorodibenzo-p-dioxin    | <29  | 491.928   | 536.952        | 0.053           | 7.8          | 0.040 | 1.000                   | 0.040 | 0.040             |
| 12378-pentachlorodibenzo-p-dioxin   | 198  | 491.928   | 536.952        | 0.369           | 7.8          | 0.279 | 0.500                   | 0.139 | 0.139             |
| 123478-hexachlorodibenzo-p-dioxin   | <290 | 491.928   | 536.952        | 0.540           | 7.8          | 0.408 | 0.100                   | 0.041 | 0.041             |
| 123678-hexachlorodibenzo-p-dioxin   | 806  | 491.928   | 536.952        | 1.501           | 7.8          | 1.134 | 0.100                   | 0.113 | 0.113             |
| 123789-hexachlorodibenzo-p-dioxin   | 538  | 491.928   | 536.952        | 1.002           | 7.8          | 0.757 | 0.100                   | 0.076 | 0.076             |
| 1234678-heptachlorodibenzo-p-dioxin | 5980 | 491.928   | 536.952        | 11.137          | 7.8          | 8.416 | 0.010                   | 0.084 | 0.084             |
| Octachlorodibenzo-p-dioxin          | 6980 | 491.928   | 536.952        | 12.999          | 7.8          | 9.824 | 0.001                   | 0.010 | 0.010             |
| 2378-tetrachlorodibenzofuran        | 114  | 491.928   | 536.952        | 0.212           | 7.8          | 0.160 | 0.100                   | 0.016 | 0.016             |
| 12378-pentachlorodibenzofuran       | 208  | 491.928   | 536.952        | 0.387           | 7.8          | 0.293 | 0.050                   | 0.015 | 0.015             |
| 23478-pentachlorodibenzofuran       | 468  | 491.928   | 536.952        | 0.872           | 7.8          | 0.659 | 0.500                   | 0.329 | 0.329             |
| 123478-hexachlorodibenzofuran       | 404  | 491.928   | 536.952        | 0.752           | 7.8          | 0.569 | 0.100                   | 0.057 | 0.057             |
| 123678-hexachlorodibenzofuran       | 384  | 491.928   | 536.952        | 0.715           | 7.8          | 0.540 | 0.100                   | 0.054 | 0.054             |
| 234678-hexachlorodibenzofuran       | 675  | 491.928   | 536.952        | 1.257           | 7.8          | 0.950 | 0.100                   | 0.095 | 0.095             |
| 123789-hexachlorodibenzofuran       | <150 | 491.928   | 536.952        | 0.279           | 7.8          | 0.211 | 0.100                   | 0.021 | 0.021             |
| 1234678-heptachlorodibenzofuran     | 1680 | 491.928   | 536.952        | 3.129           | 7.8          | 2.364 | 0.010                   | 0.024 | 0.024             |
| 1234789-heptachlorodibenzofuran     | 189  | 491.928   | 536.952        | 0.352           | 7.8          | 0.266 | 0.010                   | 0.003 | 0.003             |
| Octachlorodibenzofuran              | 897  | 491.928   | 536.952        | 1.671           | 7.8          | 1.262 | 0.001                   | 0.001 | 0.001             |
|                                     |      |           |                |                 |              |       | total pgTEQ/Rm3 @11% O2 |       | 1.118             |





## DYEC AMESA – Investigation Checklist

| SAMPLE VERIFICATION         |  |
|-----------------------------|--|
| <b>Date</b><br>(DD/MM/YYYY) |  |
| _____                       | Verify date of receipt of XAD traps and hardware   |
| _____                       | Verify installation date for XAD trap and hardware   |
| _____                       | Verify removal date for XAD trap and hardware  |
| _____                       | Verify date XAD trap and hardware received at the test lab   |
| _____                       | Verify date XAD trap processed at the test lab   |
| LAB FACTORS                 |  |
| <input type="checkbox"/>    | Review proof certificate from lab  |
| <b>Y / N</b>                | Is lab proof <20 pgTEQ for the monthly sample? Value _____   |
| DATA CALCULATION FACTORS    |  |
| <input type="checkbox"/>    | Check AMESA flow report for test period and confirm correct period   |
| <input type="checkbox"/>    | Confirm calculations leading to table of TEQ's   |
| AMESA FACTORS               |  |
| <input type="checkbox"/>    | Review AMESA measurement summary log (unusual events or alarms)  |
| <b>Y / N</b>                | Review AMESA logbook for maintenance activities performed or issues noted.<br>Has the AMESA chiller operated within acceptable limits? Y/N<br>If No: _____ |
| <b>Y / N</b>                | AMESA operating in non-isokinetic conditions (black plant)<br>If YES, provide reason:<br>_____<br>_____<br>_____<br>_____                                  |
| <b>Y / N</b>                | AMESA chiller operating nominally and holding the correct temperature setpoint<br>Temperature SP: _____ °C   |
| <b>Y / N</b>                | Were there any AMESA system faults during the run?   |


| OPERATIONAL FACTORS      |   |
|--------------------------|---|
|                          | Gather paper based operational data for the period of investigation |
| <input type="checkbox"/> | Shift Supervisor log  |
| <input type="checkbox"/> | CRO log   |
|                          | Review Operational Data for the period of investigation             |
| <input type="checkbox"/> | Review boiler feed stops  |
| <input type="checkbox"/> | Review any boiler cleaning activities                               |
| <input type="checkbox"/> | Review combustion trends  |
| <input type="checkbox"/> | Review Combustion Trends  |

## DYEC AMESA – Investigation Checklist

| OPERATIONAL FACTORS       |   |
|---------------------------|---|
|                           | Tertiary Air Operation  |
| Y / N                     | Airflow consistently above 9,000 m3?  |
| Y / N                     | Flow balanced to both sides of the boiler (damper in correct position)  |
| Y / N                     | Port plugging   |
| <input type="checkbox"/>  | Trend tertiary air pressure (left/right)  |
| DATE: (DD/MM/YY)<br>_____ | Date of last cleaning - ONLINE / OFFLINE  |
| <input type="checkbox"/>  | Review economizer inlet and outlet temperature trends   |
|                           | Combustion Air Operation  |
| <input type="checkbox"/>  | Damper control or mechanical issues?  |
| <input type="checkbox"/>  | Plugged underfire air hoppers?  |
| <input type="checkbox"/>  | Feed chute water leaks (leading to poor combustion)   |
| <input type="checkbox"/>  | Trend overfire air pressure – front/rear  |
| <input type="checkbox"/>  | Trend CO, O <sub>2</sub> , and combustion air temperature   |
|                           | Review reagents   |
| <input type="checkbox"/>  | Carbon feed rate <ul style="list-style-type: none"> <li>• trend flows, ensure injection points are clear, not slagged over</li> </ul>   |
| <input type="checkbox"/>  | Lime feed rate <ul style="list-style-type: none"> <li>• trend flows, ensure injection points are clear, not slagged over</li> </ul>   |
| <input type="checkbox"/>  | Quality of reagents – supplier, physical characteristics,   |
| <input type="checkbox"/>  | Trend APC ash analysis trends (titrator)  |
| <input type="checkbox"/>  | Test for residual carbon in both APC fly ash streams  |
| <input type="checkbox"/>  | Trend dust monitor results on Citect (excessive dust emission may indicate bag failure)   |
| <input type="checkbox"/>  | Open baghouse compartment covers and examine for fugitive dust.   |
| <input type="checkbox"/>  | Visolite compartments   |
| <input type="checkbox"/>  | Open baghouse hopper doors (dirty side) and look for plugged rows   |
| <input type="checkbox"/>  | Open baghouse inlet duct and inspect baffle plates for plugging   |
|                           | Review baghouse trends  |
| <input type="checkbox"/>  | Trend Inlet and outlet temperatures. Were there any excursions?   |
| <input type="checkbox"/>  | Trend BH DP. Were there periods of excessively low (poor cake thickness) or excessively high (plugged bags) pressure drop?  |
| <input type="checkbox"/>  | Trend pulse system operation (non-functional solenoids leading to plugged rows and reduced baghouse efficiency). Were there periods of significant solenoid failures or reduced air pressure? |
|                           | Review recirculation hopper trends  |
| <input type="checkbox"/>  | Trend temperature deviation trends between recirculation hoppers  |
| <input type="checkbox"/>  | Trend airflow vs recirculation rate. Excessively high airflow will overrun the ability of the APC to recirculate sufficient fly ash.  |

| <b>OPERATIONAL FACTORS</b> |   |
|----------------------------|---|
| <input type="checkbox"/>   | Look for periods of time where combustion airflow caused the recirculation hopper rotary feeders to operate at > 50% speed each or << 40% (recirc rotaries run in the range of 43-49%) at normal combustion air flows |
| <input type="checkbox"/>   | Inspect rotary valves and verify no indication of plugged vanes   |
| <input type="checkbox"/>   | Review quench tower trends (inlet/outlet temperature, results of spray lance inspection and cleaning frequency)   |
| <input type="checkbox"/>   | Review APC physical operation (status of reactor, quench tower, lime addition equipment, carbon addition equipment)   |
| <b>EQUIPMENT FACTORS</b>   |   |
|                            | Air leakage into process ductwork   |
| <b>Y / N</b>               | Plattco valves (superheaters and economizer)  |
| <b>Y / N</b>               | Hopper doors, rod out ports   |
| <input type="checkbox"/>   | Trend economizer outlet O <sub>2</sub> and stack O <sub>2</sub> (Δ)   |
|                            | Excessive hopper pluggage (from Shift Reports)  |
| <b>Y / N</b>               | 2 <sup>nd</sup> pass hopper   |
| <b>Y / N</b>               | A1 / A2 / A3 hoppers (Superheaters)   |
| <b>Y / N</b>               | APC Recirculation hoppers   |
| <input type="checkbox"/>   | Review history of draft fluctuations on superheater and 2 <sup>nd</sup> pass hoppers (with Plattco cycles)  |
| <input type="checkbox"/>   | Review feedwater to steam ratio to determine any potential steam leaks  |



|   |  |
|---|--|
| <br>Corporate Services Department<br><b>Legislative Services Division</b> |  |
| Date & Time Received:   | April 29, 2021<br>9:16 am                              |
| Original To:  | CIP  |
| Copies To:  |  |
| Take Appropriate Action   | <input type="checkbox"/> File <input type="checkbox"/> |
| Notes/Comments:   |  |

April 28, 2021

Minister Stephen Lecce  
 Minister of Education  
 Sent via email to: [minister.edu@ontario.ca](mailto:minister.edu@ontario.ca)

**Re: Bus Stops on Dead End Roads**

Dear Minister:

At the last regular Council meeting of the Township of Scugog held April 26, 2021, the above captioned matter was discussed and I wish to advise that the following resolution was passed:

**That** Dead-End Road delegations be received: from parents, video, site [www.durhamdeadendroadkids.ca](http://www.durhamdeadendroadkids.ca) and attached correspondence and;

**Whereas** Dead-End Road kids (cul-de-sacs, private roads) busing being moved from long-time residential to highspeed (some 80km) common stop pickups; percentage of 830,000 Ontario bused students impacted as Student Transportation Services (STS) citing buses shouldn't access private roads, do 3-point-turns, or back up; kids expected to walk 1-2km twice daily (caregivers 4x) in morning dark, on narrow road shoulders, with no "bus stop ahead" warning signage;

**Whereas** Parents report employment/housing at risk. Must leave work to drop off/pick up children to avoid safety hazards of kids walking on highways unsupervised; secondary school youth reporting education at risk as missing class/affecting grades; children with disabilities not helped like double amputee who needs stop moved 160ft; parents told it's their "responsibility to get kids to bus safely";

**Whereas** Parents being told busing policy is schoolboard's, but they say it's STS's, who say it's Governance Committee or Ministry of Transportation, but Ministry of Education say it's "transportation consortia who administer policy"; and trustee, governance say cannot change policies, so parents appealing to police, press, & councils re dangers then; oncoming car killed 12-yr-old Cormac and injured sister while waiting at newly relocated bus stop at the base of a hill;

**Whereas** STS have advised road improvements are responsibility of municipalities, yet municipalities don't own needed land, nor have \$ millions to create 77m bus turnarounds, meanwhile;

**Whereas** Ontario Transportation Funding is \$1 billion; Jan 27/20 Ministry said they'd improve student transportation, review funding formula; and given STS gets their funding by scoring well in reviews, and given Ministry establishing "Student Transportation Advisory Group" to hear STS sector expertise, experience and ideas;

**Now therefore be it resolved that the Municipality of Scugog requests:**

**THAT** exceptions to allow 3-point turns or backing up where necessary, to provide safer service to dead-end and private road kids, that policies be amended to reflect; when not possible;

**THAT** exceptions to allow indemnification agreements to access private land for bus turnarounds to keep bus stops safer and closer to prescribed 800m distance; when not possible;

**THAT** "Bus Stop Ahead" warning signage be required to notify oncoming traffic, prior to STS moving common stop to main roadway;

**THAT** STS be comprised of solutions like mini-buses, vans, taxis, or public transit, worked into funding formula so doesn't negatively impact STS funding stats;

**THAT** Kid KPI "Key Performance Indicator" be included for Ministry "Effectiveness & Efficiency Follow Up Reviews", establishing benchmarks for responsive-problem-solving for kids & parents' busing concerns, and this be an STS factor to receive funding;

**THAT** Province provide "Parent Portal" for ongoing busing feedback of their STS, so families and kids can review/provide comments, especially during Ministry STS reviews and revisions to funding;

**THAT** Province have GPS tracking software to notify parents when children picked up/dropped off, and

**THAT** this motion be distributed to Premier Doug Ford, Honorable Stephen Lecce (Minister of Education), Honorable Caroline Mulroney (Minister of Transport), Durham MPP Lindsey Park, Haliburton-Kawartha Lakes-Brock MPP Laurie Scott, all Durham MPPs, Durham Region, all Ontario Municipalities, Rural Ontario Municipal Association (ROMA), Ontario Good Roads Association (OGRA), and Association of Municipalities of Ontario (AMO).

Should you require any further information in regard to this matter, please do not hesitate to contact Carol Coleman, Director of Public Works and Infrastructure Services at 905-985-7346 ext.149.

Yours truly,



Becky Jamieson  
Director of Corporate Services/Municipal Clerk

Attachments

cc: Carol Coleman, Director of Public Works and Infrastructure Services  
Premier of Ontario, Honourable Doug Ford [premier@ontario.ca](mailto:premier@ontario.ca)  
Honorable Caroline Mulroney, Minister of Transport [minister.mto@ontario.ca](mailto:minister.mto@ontario.ca)  
Durham MPP Lindsey Park [lindsey.park@pc.ola.org](mailto:lindsey.park@pc.ola.org)  
Haliburton-Kawartha Lakes-Brock MPP Laurie Scott [laurie.scott@pc.ola.org](mailto:laurie.scott@pc.ola.org)  
All Durham MPP's -  
Rod Phillips, MPP Ajax [Rod.phillips@pc.ola.org](mailto:Rod.phillips@pc.ola.org)  
Lorne Coe, MPP Whitby [Lorne.coe@pc.ola.org](mailto:Lorne.coe@pc.ola.org)  
Jennifer French, MPP Oshawa [Jfrench-QP@ndp.on.ca](mailto:Jfrench-QP@ndp.on.ca)  
Lindsey Park, MPP, Durham [Lindsey.park@pc.ola.org](mailto:Lindsey.park@pc.ola.org)  
Laurie Scott, MPP Haliburton-Kawartha Lakes-Brock  
[Laurie.scott@pc.ola.org](mailto:Laurie.scott@pc.ola.org)  
Peter Bethlenfalvy, MPP Pickering-Uxbridge  
[Peter.bethlenfalvy@pc.ola.org](mailto:Peter.bethlenfalvy@pc.ola.org)  
Ralph Walton, Regional Clerk, Durham Region [clerks@durham.ca](mailto:clerks@durham.ca)  
All Ontario Municipalities  
Rural Ontario Municipal Association (ROMA) [roma@roma.on.ca](mailto:roma@roma.on.ca)  
Ontario Good Roads Association (OGRA) [info@ogra.org](mailto:info@ogra.org)  
Association of Municipalities of Ontario (AMO) [amo@amo.on.ca](mailto:amo@amo.on.ca)



**TOWN OF AJAX**  
65 Harwood Avenue South  
Ajax ON L1S 3S9 [www.ajax.ca](http://www.ajax.ca)

---

Corporate Services Department  
Legislative Services Department  
The Regional Municipality of Durham  
605 Rossland Road East  
Whitby, ON L1N 6A3  
[clerks@durham.ca](mailto:clerks@durham.ca)

**Sent by E-Mail**

May 19, 2021

Re: **Westney Road Noise Study**

The following resolution was passed by Ajax Town Council at its meeting held May 17, 2021:

**WHEREAS** resident safety is of the utmost concern to Ajax Council;

**AND WHEREAS** continued resident feedback has identified the area of Westney Road between Highway 2/Kingston Road and Ravenscroft Road as becoming more noisy, and observed traffic speeds increasing;

**NOW THEREFORE BE IT RESOLVED THAT:**

Ajax Council request that The Region of Durham initiate a weekend-to-weekend noise pollution study and speed study for the portion of Westney Road between Highway 2/Kingston Road and Delaney Drive in the Town of Ajax; and

That this motion be distributed to Durham Region Works Committee for consideration.

Please forward this correspondence to the members of the Durham Region Works Committee. If you require further information please contact me at 905-619-2529 ext. 3342 or [alexander.harras@ajax.ca](mailto:alexander.harras@ajax.ca).

Sincerely,

Alexander Harras  
Manager of Legislative Services/Deputy Clerk

Copy: Regional Councillor M. Crawford  
Councillor R. Tyler Morin



If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



# The Regional Municipality of Durham Report

---

To: Works Committee  
From: Commissioner of Works  
Report: #2021-W-21  
Date: June 2, 2021

---

**Subject:**

Declaration of Lands as Surplus and Approval to Convey the Surplus Lands to the Adjacent Landowner as part of a Land Exchange for Regional Requirements

---

**Recommendations:**

That Works Committee recommends to Regional Council:

- A) That property municipally known as 1897 Harmony Road in the City of Oshawa, legally described as Part of Lot 4, Concession 4, (Geographic Township of East Whitby) now in the City of Oshawa, further described as Part 2 and Part 4 on Registered Plan 40R-31350 be declared surplus to Regional requirements;
- B) That Regional staff be authorized to enter into a Land Exchange Agreement with the adjacent property owner as follows:
  - i) The Regional Municipality of Durham will provide lands legally described as Part of Lot 4, Concession 4, (Geographic Township of East Whitby) now in the City of Oshawa further described as Parts 2 and 4 on Registered Plan 40R-31350 for nominal consideration to 873201 Ontario Inc. (operating as Metrontario);
  - ii) 1229403 Ontario Limited (operating as Metrontario) will provide lands located at 1723 Harmony Road North, Oshawa identified as Part of Lot 4, Concession 4, (Geographic Township of East Whitby) now in the City of Oshawa, further described as Parts 1, 2 and 3 on Registered Plan 40R-31352 for nominal consideration; and



- 
- iii) That the Commissioner of Works be authorized to execute all documents associated with this land exchange.
- 

**Report:****1. Purpose**

- 1.1 The purpose of this report is to declare lands owned by the Regional Municipality of Durham (Region) surplus to the Region's requirements and to authorize staff to enter into a land exchange for Regional requirements to facilitate road widening work on Regional Road 33 (Harmony Road) from north of Coldstream Drive to Conlin Road in the City of Oshawa (Oshawa) with the adjacent property owner, 873201 Ontario Inc. and 1229403 Ontario Limited, operating as Metrontario (Metrontario).

**2. Background**

- 2.1 The 2,044 square metre (0.51 acre) property located at 1897 Harmony Road North (PINs 162720267 and 162720268) was acquired by the Region on June 17, 2014 to facilitate the widening of Harmony Road from north of Rossland Road to Conlin Road. Originally, the Region required a 6-metre-deep strip along the frontage of 1897 Harmony Road North, but as development in the area progressed, it was determined that the road Right-of-Way (ROW) needed to be further widened to accommodate a trunk sanitary sewer to a total width of 10.59 metres. This left an area of approximately 1,200 square metres (0.30 acres) of remnant land, with the Region having no future plans for the surplus property. These surplus lands are described as Parts 2 and 4 on Registered Plan 40R-31350.
- 2.2 Additional widening of Harmony Road was recently identified south of Greenhill Avenue. This requirement impacts four parts of a property located at 1723 Harmony Road North owned by a developer, Metrontario. The lands required from 1723 Harmony Road North are described further as being Part 2 on Registered Plan 40R-30791 totalling 1,290 square metres (0.31 acres), and Parts 1, 2 and 3 on Registered Plan 40R-31352 which total approximately 1,266 square metres (0.31 acres).

**3. Property Disposition**

- 3.1 The property at 1897 Harmony Road North is situated on the east side of Harmony Road North between Conlin Road to the north and Coldstream Drive to

the south in Oshawa. The property is in the vicinity of new and proposed low/medium-density residential development. (Attachment #1)

- 3.2 Regional By-law #52-95 established the procedures governing the sale of real property. Section 6 of the By-law states that where, in the opinion of the Commissioner of Works or a designate, a parcel of real property that is proposed to be sold has no general demand or market having regard to its size, location or nature, staff are authorized to negotiate directly with potential purchasers of the lands. Sections 2, 3 and 4 of the By-law are waived in these circumstances.
- 3.3 Internally, notice has been circulated and responses have confirmed that the Region does not require these lands. Therefore, the lands can be declared surplus and offered for sale.
- 3.4 Metrontario is the adjacent landowner to the Region's surplus lands at 1897 Harmony Road North and has expressed an interest in acquiring them as part of a land swap involving a portion of the Region's requirements from their lands at 1723 Harmony Road North for nominal consideration. The Region's surplus lands at 1897 Harmony Road North total approximately 0.30 acres while the lands required from 1723 Harmony Road North total approximately 0.62 acres.
- 3.5 The land swap agreement will involve the Region transferring Parts 2 and 4 on Registered Plan 40R-31350 for nominal consideration to Metrontario in exchange for Parts 1, 2 and 3 on Registered Plan 40R-31352. The remaining lands required from Metrontario, being Part 2 on Registered Plan 40R-30791 will be transferred to the Region as part of the subdivision agreement.

#### **4. Conclusion**

- 4.1 Regional staff recommends that the lands noted within this report be declared surplus to Regional needs, and that a land exchange agreement be entered into with Metrontario.
- 4.2 This report has been reviewed by the Corporate Services Department - Legal Services.
- 4.3 For additional information, please contact Jenni Demanuele, Director of Business Services, at 905-668-4113, extension 3456.

**5. Attachments**

Attachment #1: Location Map - Harmony Road Land Swap

Respectfully submitted,

**Original signed by:**

---

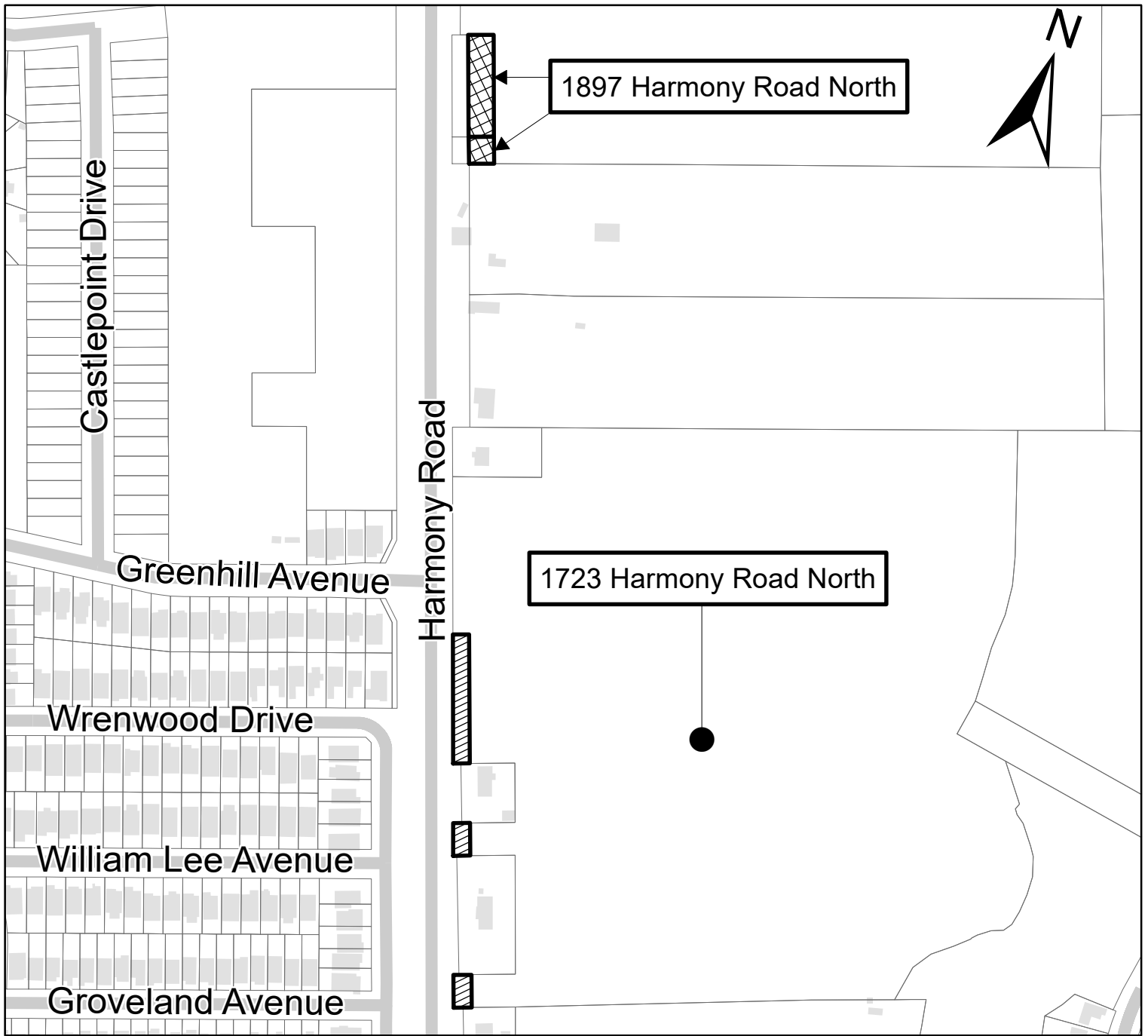
Susan Siopis, P.Eng.  
Commissioner of Works

Recommended for Presentation to Committee

**Original signed by:**




---

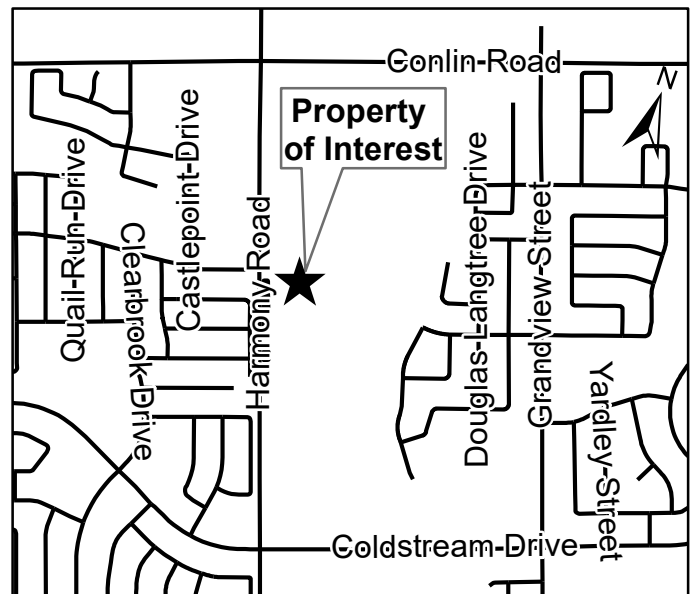
Elaine Baxter-Trahair  
Chief Administrative Officer



**Attachment #1 - Location Map  
Property of Interest  
Land Exchange  
Harmony Road North  
City of Oshawa**



-  Land Proposed to be Declared Surplus
-  Land Required for Road Widening
-  Assessment Parcels



GIS Data: Produced by Durham Region, 2019. 2017 Contours/2017 Drainage/2017 Orthophotography provided by © First Base Solutions Inc. © MPAC and its suppliers. All rights reserved. Not a Plan of Survey. © Teranet Enterprises Inc. and its suppliers. All rights reserved. Not a Plan of Survey. This map has been produced from a variety of sources. The Region of Durham does not make any representations concerning the accuracy, likely results, or reliability of the use of the materials. The Region hereby disclaims all representations and warranties. Flood Plain data is licensed "as is" © CLOCA, GRCA, KRCA, LSRCA and TRCA. This data is provided to the Region of Durham for internal use only, and excludes all representations, warranties, obligations and liabilities, whether express or implied, in relation to the information. For other uses, including spatial analysis, the respective Conservation Authority must be contacted.

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



# The Regional Municipality of Durham Report

---

To: Works Committee  
From: Commissioner of Works  
Report: #2021-W-22  
Date: June 2, 2021

---

**Subject:**

Amendment and Extension of Lease Agreement for Premises Occupied by Durham Region Transit Located at 419 King Street West, in the City of Oshawa

---

**Recommendations:**

That the Works Committee recommends to Regional Council:

- A) That the Amendment and Extension of the Lease Agreement between Ivanhoe Cambridge II Inc. and 7503067 Canada Inc. and the Regional Municipality of Durham for the premises, being Suite #995 on the first floor of the building located at 419 King Street West, in the City of Oshawa, be approved on the following terms and conditions:
  - i) The term to be for a period of five years commencing May 1, 2021 and ending April 30, 2026;
  - ii) The Regional Municipality of Durham shall have the option to terminate the lease at any time after the third year of the term, upon providing six months written notice;
  - iii) The annual semi-gross rental rate for the first three years of the term of the lease will be \$5,875\*, payable in monthly instalments of \$489.58\* based on the rate of \$134.56\* per square metre (\$12.50\* per square foot) per annum for the leased space;

- iv) The annual semi-gross rental rate for the final two years of the term of the lease will be \$6,110\* payable in monthly instalments of \$509.16\* based on the rate of \$139.95\* per square metre (\$13.00\* per square foot) per annum for the leased space;
  - v) A monthly rate of \$580\* for the provision of janitorial services for one hour each day to a maximum of six days weekly for the duration of the term, inclusive of all necessary materials and supplies for a total annual cost of \$6,960\*;
  - vi) The Regional Municipality of Durham shall remain responsible for its proportionate share of property taxes;
  - vii) The Landlord shall remain responsible for all other operating costs for the building, common areas and the demised premises;
- B) That the estimated annual janitorial and gross rental cost for the leased premises of \$12,875\* for years one through three of the five-year term, and \$13,070\* for years four and five of the five-year term as well as the Regional Municipality of Durham's share of property taxes estimated at \$2,086 annually be financed through the Durham Region Transit's 2021 and future years' Business Plans and Budgets; and
- C) That the Regional Chair and Clerk be authorized to execute all documents associated with this Lease Agreement.
- 

**Report:****1. Purpose**

- 1.1 The purpose of this report is to obtain approval to amend and extend the lease with Ivanhoe Cambridge II Inc. and 7503067 Canada Inc. as per the terms and conditions outlines herein. Dollar amounts followed by an asterisk (\*) are before applicable taxes.
- 1.2 A similar report will be presented to Durham Region Transit (DRT) Executive Committee.

## **2. Background**

- 2.1 DRT has occupied 419 King Street West (Oshawa Centre), owned by Oshawa Centre Holdings Inc. (OCHI), in the City of Oshawa since January 1, 2006, when the original lease for the subject premises was assigned from the Oshawa Transit Commission to the Regional Municipality of Durham (Region) as part of the Region's assumption of these services.
- 2.2 The subject facility is used as a crew room for the drivers and provides a location where DRT drivers can stop for lunch and washroom breaks.
- 2.3 The initial lease agreement expired in June of 2012 and OCHI requested that the Region's occupancy continue on a month-to-month basis due to the ongoing renovations and expansion at the Oshawa Centre. Regional staff and OCHI remained in contact throughout this period with negotiations on the new lease beginning in the fall of 2015. A new lease with a term beginning May 1, 2016 and ending April 30, 2021 was negotiated.
- 2.4 January 1, 2019, OCHI assigned all its interest in the Oshawa Centre to Ivanhoe Cambridge II Inc. and 7503067 Canada Inc.
- 2.5 Ivanhoe Cambridge updated the certified measurement of the space to 489 square feet in 2021. The previous leases were based upon a measurement of 470 square feet. Ivanhoe Cambridge has agreed to retain the previous measurement of 470 square feet as the basis for all per square foot calculations related to the amendment and extension of the lease.

## **3. Previous Reports and Decisions**

- 3.1 Report #2016-W-32 approved the renewal of the lease at this location starting May 1, 2016 and ending April 30, 2021.

## **4. Amendment and Extension of Lease**

- 4.1 The value of the previous lease agreement was \$5,875\* per annum based on a rate of \$134.56\* per square metre (\$12.50\* per square foot) plus a monthly rate of \$580\* for janitorial services based on one hour per day to a maximum of six days per week.
- 4.2 The negotiated amendment and extension of this lease provides for a term of five years commencing May 1, 2021 and ending April 30, 2026. The Region will have

the option to terminate the lease at any time after the third year of the term, upon providing six months written notice.

- 4.3 The Region is renewing the lease agreement at the same rate as the previous term for the first three years of the new term, being \$5,875\* per annum based on a rate of \$134.56\* per square metre (\$12.50\* per square foot). The rate for the final two years of the term of the lease will be \$6,110\* payable in monthly instalments of \$509.16\* based on the rate of \$139.95\* per square metre (\$13.00\* per square foot).
- 4.4 In addition to the cost per square metre for the space, the Region continues to be responsible for a monthly charge of \$580\* for the provision of janitorial services for one hour each day to a maximum of six days weekly for the duration of the term, inclusive of all necessary materials and supplies for a total annual cost of \$6,960\*. The Region will also remain responsible for a proportionate share of realty taxes, estimated at approximately \$2,086 annually.

## **5. Financial Implications**

- 5.1 Since approval of this offer to lease requires long term financial obligations for which payment is required beyond the term for which Council was elected, the Regional Treasurer has calculated an updated long-term debt/financial obligation limit and has determined that the limit has not been exceeded. Therefore, this project does not require the approval of the Local Planning Appeal Tribunal.
- 5.2 In accordance with Section 5.4 of the Budget Management Policy, a lease is deemed to be material where the term extends beyond the term of Regional Council. In these circumstances, approval of Works Committee and Regional Council is required.
- 5.3 The 2021 Durham Region Transit Business Plan and Budget includes approximately \$13,409 to finance the lease cost for this space. The estimated total cost for 2021 is \$13,061 including janitorial costs and net HST.

## **6. Relationship to Strategic Plan**

- 6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:



- a. To foster an exceptional quality of life with services that contribute to strong neighbourhoods, vibrant and diverse communities, and influence our safety and well-being.

## **7. Conclusion**

- 7.1 As Durham Region Transit have advised that they wish to renew the lease at 419 King Street West, Suite #995, in the City of Oshawa, it is recommended that the Amendment and Extension of Lease Agreement be approved based on the above noted terms and conditions.
- 7.2 A similar report will be presented to Durham Region Transit Executive Committee.
- 7.3 This report has been reviewed by the Corporate Services Department – Legal Services and the Finance Department. The Commissioner of Finance concurs with the financial recommendation.
- 7.4 For additional information, contact: Jenni Demanuele, Director, Business Services, at 905-668-7711, extension 3456.

Respectfully submitted,

### **Original signed by:**

---

Susan Siopis, P.Eng.  
Commissioner of Works

Recommended for Presentation to Committee

### **Original signed by:**

---

Elaine C. Baxter-Trahair  
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



# The Regional Municipality of Durham Report

---

To: Works Committee  
From: Commissioner of Works  
Report: #2021-W-23  
Date: June 2, 2021

---

**Subject:**

Participation in the Toronto and Region Conservation Authority's Western Durham Nearshore Water Quality Monitoring Program

---

**Recommendations:**

That the Works Committee recommends to Regional Council:

- A) That the Regional Municipality of Durham continue participation as a municipal partner with Toronto and Region Conservation Authority's Western Durham Nearshore Water Quality Monitoring Program;
- B) That a sole source service agreement be approved with Toronto and Region Conservation Authority for the continuation of the Western Durham Nearshore Water Quality Monitoring Program through 2022 at a cost of \$176,000\* in 2021 and \$155,000\* in 2022 for a total estimated value of \$331,000\*;
- C) That financing for this agreement be provided from the approved 2021 and future Business Plans and Budget for the York Durham Sanitary Sewerage System as follows; and

|               | Durham Region<br>Estimated Share<br>(18.67%) | York Region<br>Estimated Share<br>(81.33%) | Total Agreement<br>Value |
|---------------|--|--|--------------------------|
| 2021 Amount*  | \$32,859                                     | \$143,141                                  | \$176,000                |
| 2022 Amount*  | <u>\$28,939</u>                              | <u>\$126,061</u>                           | <u>\$155,000</u>         |
| <b>Total*</b> | <b><u>\$61,798</u></b>                       | <b><u>\$269,202</u></b>                    | <b><u>\$331,000</u></b>  |

- D) That the Commissioner of Finance be authorized to execute the sole source service agreement.
- 

**Report:****1. Purpose**

- 1.1 The purpose of this report is to continue participation in the Toronto and Region Conservation Authority's (TRCA) Western Durham Nearshore Water Quality Monitoring Program as a municipal partner with financing for this program to be funded by Durham Region and York Region as provided for within the annual Sanitary Sewerage System Operating Budget.

**2. Background**

- 2.1 The Western Durham Nearshore Water Quality Monitoring program has been collecting water quality data from the nearshore of Lake Ontario between the Rouge River and Carruthers Creek since 2006. The design of the water quality program has progressed through multiple iterations over this period to meet the evolving needs of the research scientists. The study design used from 2015 through to 2018 integrates the original survey designs in place up to 2014, with further refinements to the location of sampling sites, concentrating efforts on areas closer to the shoreline.
- 2.2 Where possible, sample collection for this program has been coordinated with the Ontario Ministry of the Environment, Conservation and Parks (MECP) nearshore surveys and Environment and Climate Change Canada's (ECCC) offshore surveys across the Western Durham waterfront, including maintaining one 5 km sampling site to bridge the gap between TRCA's nearshore sampling locations and ECCC's offshore water quality surveys.
- 2.3 TRCA publishes plain language reporting of water quality patterns through a series of technical reports. The content of these reports is based on existing data presented at conferences (available on the project [website](#)) with additional analyses being completed where applicable. The intended audience for these reports is the public, non-government organizations, regional staff and local stakeholders who have shown a great interest in water quality conditions in the nearshore of Lake Ontario within western Durham.

2.4 In addition to the plain language reporting, TRCA will explore the feasibility of communicating water quality results from this program to the public and key stakeholders through a virtual platform.

### 3. 2021 – 2022 Workplan

3.1 In partnership with TRCA the Western Durham Nearshore Monitoring program will build upon the results attained in previous years spatial and temporal trend analyses to further understand the importance of natural versus anthropogenic influences on nearshore water quality. Areas of focus are:

- Completing a scoped monitoring program that will inform long-term trends in water quality within the nearshore of Lake Ontario in Western Durham.
- Advancing research analysis and publication of the data collected in collaboration with academic and other partner organizations to help inform management decisions for Lake Ontario and its tributaries.
- Identifying the importance of wind and currents in the resuspension of suspended solids and impacts to phosphorus in the nearshore.
- Identifying if there is a relationship between longer term precipitation patterns, climate change and nearshore water quality.
- Advancing our understanding of the relationship between watershed loadings and shoreline concentrations/nearshore response.
- Determining strategic locations where stormwater treatment would benefit the nearshore water quality.
- Continue to provide technical and logistical support to partner organizations working on initiatives along the Western Durham waterfront of Lake Ontario, including providing subject matter expertise to committees and task teams.

3.2 In 2022, TRCA will work with the binational team of scientists planning work in Lake Ontario for the 2023 Lake Ontario Cooperative Science and Monitoring Initiative (CSMI). The CSMI, instituted under the Science Annex of the 2012 Great Lakes Water Quality Agreement, is an effort to coordinate science and monitoring activities in the Great Lakes for the purpose of providing detailed information to environmental management agencies. The initiative reviews data on each Great Lake on a five-year rotating basis.

3.3 The CSMI is an opportunity to provide the nearshore expertise gained through the Western Durham Nearshore Monitoring program with those involved in studying Lake Ontario.

#### 4. Justification for Sole Source

- 4.1 Durham has been a municipal partner in TRCA's Western Durham Nearshore Monitoring program since 2006. TRCA are experts in nearshore water quality and have an established a network of water quality monitoring locations across western Durham.
- 4.2 Currently, there is no other water quality monitoring program established in Durham that focuses on the nearshore area of Lake Ontario. Participating in this program will not require the purchase of additional equipment or extra staff to establish a new program.

#### 5. Financial Implications

- 5.1 Item 1.1 in Appendix C of the Purchasing By-law 16-2020 permits negotiated purchases in cases where there is an absence of competition for technical reasons. The by-law also requires approval of the Standing Committee and Regional Council for the award of sole source contracts that exceed \$100,000 in value.
- 5.2 The total estimated cost for this program is \$176,000\* in 2021 and \$155,000\* in 2022 for a total estimated value of \$331,000\*. Financing for this agreement is available within the approved 2021 and future Business Plans and Budgets for the York Durham Sanitary Sewerage System as follows:

|              | Durham Region<br>Estimated Share<br>(18.67%) | York Region<br>Estimated Share<br>(81.33%) | Total Agreement<br>Value |
|--------------|--|--|--------------------------|
| 2021 Amount* | \$32,859                                     | \$143,141                                  | \$176,000                |
| 2022 Amount* | <u>\$28,939</u>                              | <u>\$126,061</u>                           | <u>\$155,000</u>         |
| Total*       | <u>\$61,798</u>                              | <u>\$269,202</u>                           | <u>\$331,000</u>         |

- 5.3 The cost of this water quality monitoring program is shared with the Region of York through the operation of the Duffin Creek Water Pollution Control Plant based on annual actual plant flow for each Region. Durham's portion of this cost allocation is budgeted to be 18.67 per cent in 2021.

## 6. Relationship to Strategic Plan

- 6.1 Participation in the Western Durham Nearshore Monitoring program aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Goal 2: Community Vitality
    - 2.2 Enhance community safety and well-being
  - b. Goal 5: Service Excellence
    - 5.1 Optimize resource and partnerships to deliver exceptional quality services and value
    - 5.2 Collaborate for a seamless service experience
    - 5.3 Demonstrate commitment to continuous quality improvement and communicating results

## 7. Conclusion

- 7.1 It is recommended that Regional Council approve a sole source service agreement with Toronto and Region Conservation Authority for two years at a total estimated cost of \$331,000\*.
- 7.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.
- 7.3 For additional information, contact: Tavis Nimmo, Supervisor of Technical Support, at 905-668-7711, extension 3737.

Respectfully submitted,

**Original signed by:**

---

Susan Siopis, P.Eng.  
Commissioner of Works

Recommended for Presentation to Committee

**Original signed by:**

---

Elaine C. Baxter-Trahair  
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



# The Regional Municipality of Durham Report

---

To: Works Committee  
From: Commissioner of Works  
Report: #2021-W-24  
Date: June 2, 2021

---

**Subject:**

Reallocation of Funding for Sanitary Sewer Replacement on Admiral Road from Roosevelt Avenue to North of Parry Road, in the Town of Ajax

---

**Recommendation:**

That Works Committee recommends to Regional Council:

- A) That the total project budget for Admiral Road Sanitary Sewer Replacement (Project A1804) be increased by \$599,100, for a revised project budget of \$2,572,797 as follows:

| <b>Financing</b>              | <b>Approved Project Budget \$</b> | <b>Proposed Reallocation from M2103 \$</b> | <b>Proposed Reallocation from M2199 \$</b> | <b>Revised Project Budget \$</b> |
|-------------------------------|-----------------------------------|--|--|----------------------------------|
| User Revenue (Sanitary Sewer) | 1,026,000                         | 200,000                                    | \$399,100                                  | 1,625,100                        |
| User Revenue (Water Supply)   | 947,697                           | 0  | 0  | 947,697                          |
| <b>Total Financing</b>        | <b>1,973,697</b>                  | <b>200,000</b>                             | <b>\$399,100</b>                           | <b>2,572,797</b>                 |

**Report:****1. Purpose**

- 1.1 The purpose of this report is to obtain approval to reallocate funding within the 2021 Sanitary Sewerage System Budget to replace the existing sanitary sewer on Admiral Road from Roosevelt Avenue to north of Parry Road in conjunction with watermain replacement and the Town of Ajax's (Ajax) reconstruction of Admiral Road.
- 1.2 Dollar amounts followed by asterisk (\*) are before applicable taxes.

**2. Background**

- 2.1 Ajax intends to proceed with the reconstruction of Admiral Road from Roosevelt Avenue to Parry Road in the Summer of 2021.
- 2.2 The 2018 Sanitary Sewerage System and Water Supply System Capital Budgets identified replacement of the existing sanitary sewer and watermain on Admiral Road from Roosevelt Avenue to north of Parry Road (Item 11B and Item 17B, respectively).
- 2.3 The intention was that the existing watermain and sanitary sewer would be replaced as part of Ajax's road reconstruction contract to avoid unnecessary costs and impacts to the residents.
- 2.4 Ajax received tenders for Contract T-21005 Admiral Road Reconstruction on April 20, 2021, and the low compliant bidder is Sanscon Construction Ltd. Based on the tenders submitted, the Region's portion of the capital works, including sanitary sewer and watermain replacement, is \$1,788,234\*.
- 2.5 The tendered value is within the allocated budget for water supply, however there is a shortfall of funding for sanitary sewerage.
- 2.6 Due to a financing shortfall, Ajax was unable to award the tender for this work in 2020. Additional financing was secured and the project was retendered in 2021. Based on the new tender amounts, the capital cost of Regional sanitary sewerage infrastructure has increased by approximately 50 per cent.
- 2.7 It is expected that several factors contributed to the increased pricing. For example the Ministry of the Environment, Conservation and Parks introduced the first phase of changes to O.Reg. 406/19: On-site and Excess Soil Management. These



changes now require more stringent conditions on disposal of excess soils, including more handling and sampling of excavated materials. In addition, there may be financial impacts from the COVID-19 pandemic based on additional costs for material supply, construction operations and maintaining a safe work site.

### **3. Financial Implications**

- 3.1 Section 15.3 of the Budget Management Policy requires approval of the applicable Standing Committee and Regional Council to approve project financing in excess of \$250,000 prior to the award of the applicable contract.
- 3.2 Given the tendered value of the work, a total sanitary sewerage budget of \$1,625,100 is required. This budget includes detailed design, construction, contract administration, inspection, and contingencies. To date \$1,026,000 in funding has been allocated for the replacement of the sanitary sewer on Admiral Road from Roosevelt Avenue to north of Parry Road. Additional funding in the amount of \$599,100 is required.
- 3.3 Project financing can be provided from the following sources:
  - a. 2021 Sanitary Sewerage Budget: Item 6 Allowance for unknown requirements in conjunction with area Municipalities Road Programs in various locations Project ID# M2103
  - b. 2021 Sanitary Sewerage Budget: Item 7 Works to rectify identified system deficiencies independent of Road Programs in various locations Project ID# M2199
- 3.4 The following summary details the revised project budget resulting from the proposed reallocation:

| <b>Financing</b>               | <b>Approved Project Budget (\$)</b> | <b>Proposed Reallocation from M2103 (\$)</b> | <b>Proposed Reallocation from M2199 (\$)</b> | <b>Revised Project Budget (\$)</b> |
|--------------------------------|-------------------------------------|--|--|------------------------------------|
| User Revenue (Sanitary Sewer)  | 1,026,000                           | 200,000                                      | \$399,100                                    | 1,625,100                          |
| User Revenue (Watermain)       | 947,697                             | 0  | 0  | 947,697                            |
| <b>Total Financing (A1804)</b> | <b>1,973,697</b>                    | <b>200,000</b>                               | <b>\$399,100</b>                             | <b>2,572,797</b>                   |

#### **4. Relationship to Strategic Plan**

4.1 This report aligns with the following strategic goals and priorities in the Durham Region Strategic Plan:

Goal 5.1 and 5.2 - Service Excellence:

- Optimize resources and partnerships to deliver exceptional quality services and value; and
- Collaborate for a seamless service experience.

#### **5. Conclusion**

5.1 It is recommended that Regional Council approve additional financing in the amount of \$599,100 for the construction of the Admiral Road Sanitary Sewer as detailed in this report. Approval of the funding reallocation will ensure the sanitary sewer is constructed in conjunction with the Town of Ajax's Admiral Road reconstruction contract, thereby avoiding unnecessary costs and impacts to residents if the sanitary sewer were constructed in the future.

5.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the proposed recommendations.

5.3 For additional information, please contact Mike Hubble, Manager, Environmental Services Design, at 905-668-7711, extension 3460.

Respectfully submitted,

**Original signed by:**

---

Susan Siopis, P.Eng.  
Commissioner of Works

Recommended for Presentation to Committee

**Original signed by:**

---

Elaine Baxter-Trahair  
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



# The Regional Municipality of Durham Report

---

To: Works Committee  
From: Commissioner of Works  
Report: #2021-W-25  
Date: June 2, 2021

---

**Subject:**

Approval of Additional Unbudgeted Capital Works and Financing to be Incorporated into a Servicing Agreement with the Kedron East Landowners Group Inc. (Kedron East), Including Cost Sharing in Accordance with the Region Share Policy, for the Extension and Oversizing of a Trunk Sanitary Sewer, Watermains and Regional Storm Sewers on Harmony Road (Regional Road 33), in the City of Oshawa

---

**Recommendation:**

That the Works Committee recommends to Regional Council that:

- A) That additional unbudgeted capital works and financing estimated at \$6.78 million for the trunk sanitary sewer, watermains and Regional storm sewers in the Kedron Secondary Plan, in the City of Oshawa, be approved;
- B) That financing for the total additional unbudgeted capital works, estimated at \$6.78 million, be provided from the following sources:

**Developer's Additional Share – Sanitary Sewer**

|   |                    |
|---|--------------------|
| Kedron East Landowners Group Inc. (Kedron East) | <u>\$1,164,100</u> |
| Total Additional Developer's Share:             | <u>\$1,164,100</u> |

**Regional Additional Costs – Sanitary Sewer**

Reallocation of 2021 Sanitary Sewerage System Capital Budget Item 24, Project D2103, Thickson Rd. Sub-trunk sanitary sewer from Glengowan St. to Conlin Rd., Whitby (Region's share only)

|   |             |
|---|-------------|
| Residential Development Charge Reserve Fund | \$2,453,850 |
|---|-------------|

|  |                    |
|--|--------------------|
| Commercial Development Charge Reserve Fund | 152,950            |
| User Rate                                  | <u>718,200</u>     |
|  | <u>\$3,325,000</u> |

Reallocation of 2021 Sanitary Sewerage System Capital Budget Item 98, Project M2110, Allowance for Regional share for works in conjunction with residential development

|   |                  |
|---|------------------|
| Residential Development Charge Reserve Fund | \$201,300        |
| Commercial Development Charge Reserve Fund  | 12,500           |
| User Rate                                   | <u>58,900</u>    |
|   | <u>\$272,700</u> |

**Total Additional Regional Share – Sanitary Sewer \$3,597,700**

**Developer’s Additional Share - Watermains**

|   |                  |
|---|------------------|
| Kedron East Landowners Group Inc. (Kedron East) | <u>\$613,300</u> |
| <u>Total Additional Developer’s Share:</u>      | <u>\$613,300</u> |

**Regional Additional Costs – Watermains**

Reallocation of 2021 Water Supply System Capital Budget Item 122, Project M2110, Allowance for Regional share for works in conjunction with residential subdivision development

|   |                  |
|---|------------------|
| Residential Development Charge Reserve Fund | \$755,407        |
| Commercial Development Charge Reserve Fund  | 21,293           |
| User Rate                                   | <u>98,727</u>    |
|   | <u>\$875,427</u> |

2021 Water Supply System Capital Budget Item 124, Project M2114, Well Interference Works

|   |                 |
|---|-----------------|
| Residential Development Charge Reserve Fund | <u>\$92,473</u> |
|---|-----------------|

**Total Additional Regional Share – Watermains \$967,900**

**Developer’s Additional Share – Storm Sewer**

|   |                  |
|---|------------------|
| Kedron East Landowners Group Inc. (Kedron East) | <u>\$392,400</u> |
| <u>Total Additional Developer's Share:</u>      | <u>\$392,400</u> |

### **Regional Costs – Regional Storm Sewer**

Reallocation of 2021 Regional Roads Capital Budget Item 129, Project M2130  
Contingencies-Development Related:

|   |          |
|---|----------|
| Residential Development Charge Reserve Fund | \$31,150 |
| Commercial Development Charge Reserve Fund  | 3,560    |
| Industrial Development Charge Reserve Fund  | 8,900    |

|   |            |
|---|------------|
| Roads Capital Reserve – Special Growth Levy | <u>890</u> |
|---|------------|

|   |                        |
|---|------------------------|
| <b>Total Additional Regional Share – Regional Storm Sewer</b> | <b><u>\$44,500</u></b> |
|---|------------------------|

|  |                           |
|--|---------------------------|
| <b>Total Additional Regional Share</b> | <b><u>\$4,610,100</u></b> |
|--|---------------------------|

|   |                           |
|---|---------------------------|
| <b>Total Additional Developer's Share</b> | <b><u>\$2,169,800</u></b> |
|---|---------------------------|

|   |                           |
|---|---------------------------|
| <b>Total Project Additional Financing</b> | <b><u>\$6,779,900</u></b> |
|---|---------------------------|

### **Report:**

#### **1. Purpose**

- 1.1 The purpose of this report is to obtain approval for additional unbudgeted capital work and financing including cost sharing in accordance with the Regional Municipality of Durham's (Region) Share Policy, related to the construction of a proposed trunk sanitary sewer, storm sewers and watermains on Harmony Road (Regional Road 33), in the City of Oshawa.

#### **2. Background**

- 2.1 In June of last year, Council approved entering into a servicing agreement with the Kedron East Landowners Group with cost sharing in keeping with the Region Share Policy. Since that time, detailed design has proceeded, and costs have increased for both the Landowner's Group and the Region shares of the project. The design is complete, and the developer is now prepared to enter into the servicing agreement.
- 2.2 There are several reasons for these cost increases as follows:

- a. The following additional works have been added to the project:
- The sanitary trunk sewer has been extended via micro-tunneling an additional 165 metres (m) northerly with an additional creek crossing to service more developing lands.
  - A 130 m section of 150 millimetre (mm) diameter watermain along Conlin Road east of Harmony Road to address a well interference issue at an existing home.
  - A 35 m section of 200 mm diameter watermain crossing on Harmony Road to provide a secondary watermain feed to the landowners west of Harmony Road (Sorbara/Jeffery Homes)
  - A 300 m section of Regional storm sewer on Harmony Road to facilitate the construction of the Britannia Avenue and Harmony Road intersection.
- b. The following changes to the design have also been made:
- The sanitary trunk sewer alignment was originally proposed to be located within the boulevard, however due to conflicts with other utilities, the sewer has been relocated to within the travelled roadway requiring additional lengths of the installation to be completed via micro-tunnelling to avoid a lengthy full closure of Harmony Road.
  - In order to safely facilitate the proposed sanitary trunk sewer crossing under the existing 1200 mm diameter feedermain, additional micro-tunnelling is required at the southerly end of the project.
  - A section of the sanitary trunk sewer has been increased from 750mm diameter to 1350mm diameter to allow for flexibility to connect the future Britannia sanitary forcemain to the trunk sanitary sewer system.
  - Through consultations with Enbridge / TC Energy it was determined that a section of the proposed 900mm diameter feedermain is required to be installed via micro-tunnelling construction methodology to go under their respective oil/gas pipelines and under the existing Oshawa Creek crossing structure on Harmony Road.

2.3 These additional works and design changes have added to the overall project costs, with shares of the additional cost being split between the developers and the Region in keeping with the Region Share Policy.

### 3. Previous Reports and Decisions

3.1 The following previous reports/decisions are related to this report:

- a. [Works Committee Report #2020-W-33](#), approved by Regional Council on June 24, 2020, authorized the original cost sharing for the project in accordance with the Region's Share Policy.

### 4. Financing

- 4.1 Through Report 2020-W-33, Council approved total project costs of \$13.68 million, with \$3.47 million funded by the Developer and \$10.21 million funded by the Region. This report seeks approval to increase the total project by \$6.78 million to \$20.46 million, with \$2.17 million of this increase funded by the Developer and \$4.61 million funded by the Region.
- 4.2 Section 14.2.2 of the Region's Budget Management Policy requires approval of the applicable Standing Committee and Regional Council for purchases of unbudgeted capital expenditures in excess of \$50,000.
- 4.3 Section 15.3 of the Region's Budget Management Policy requires approval of the applicable Standing Committee and Regional Council for the reallocation of capital budget financing exceeding \$250,000.
- 4.4 The additional funding of \$6.78 million, including the Developer's share of \$2.17 million and the Region's share of \$4.61 million for the oversizing costs can be provided as follows:

#### Developer's Additional Share – Sanitary Sewer

|   |                    |
|---|--------------------|
| Kedron East Landowners Group Inc. (Kedron East) | <u>\$1,164,100</u> |
| <u>Total Additional Developer's Share:</u>      | <u>\$1,164,100</u> |

#### Regional Additional Costs – Sanitary Sewer

Reallocation of 2021 Sanitary Sewerage System Capital Budget Item 24, Project D2103, Thickson Rd. Sub-trunk sanitary sewer from Glengowan St. to Conlin Rd., Whitby (Region's share only)

|   |                    |
|---|--------------------|
| Residential Development Charge Reserve Fund | \$2,453,850        |
| Commercial Development Charge Reserve Fund  | 152,950            |
| User Rate                                   | <u>718,200</u>     |
|   | <u>\$3,325,000</u> |



Reallocation of 2021 Sanitary Sewerage System Capital Budget Item 98, Project M2110, Allowance for Regional share for works in conjunction with residential development

|   |                  |
|---|------------------|
| Residential Development Charge Reserve Fund | \$201,300        |
| Commercial Development Charge Reserve Fund  | 12,500           |
| User Rate                                   | <u>58,900</u>    |
|   | <u>\$272,700</u> |

**Total Additional Regional Share – Sanitary Sewer** **\$3,597,700**

**Developer’s Additional Share - Watermains**

|   |                  |
|---|------------------|
| Kedron East Landowners Group Inc. (Kedron East) | <u>\$613,300</u> |
| <u>Total Additional Developer’s Share:</u>      | <u>\$613,300</u> |

**Regional Additional Costs – Watermains**

Reallocation of 2021 Water Supply System Capital Budget Item 122, Project M2110, Allowance for Regional share for works in conjunction with residential subdivision development

|   |                  |
|---|------------------|
| Residential Development Charge Reserve Fund | \$755,407        |
| Commercial Development Charge Reserve Fund  | 21,293           |
| User Rate                                   | <u>98,727</u>    |
|   | <u>\$875,427</u> |

2021 Water Supply System Capital Budget Item 124, Project M2114, Well Interference Works

|   |                 |
|---|-----------------|
| Residential Development Charge Reserve Fund | <u>\$92,473</u> |
|---|-----------------|

**Total Additional Regional Share – Watermains** **\$967,900**

**Developer’s Additional Share – Storm Sewer**

|   |                  |
|---|------------------|
| Kedron East Landowners Group Inc. (Kedron East) | <u>\$392,400</u> |
| <u>Total Additional Developer’s Share:</u>      | <u>\$392,400</u> |

### **Regional Costs – Regional Storm Sewer**

Reallocation of 2021 Regional Roads Capital Budget Item 129, Project M2130  
Contingencies-Development Related:

|   |            |
|---|------------|
| Residential Development Charge Reserve Fund | \$31,150   |
| Commercial Development Charge Reserve Fund  | 3,560      |
| Industrial Development Charge Reserve Fund  | 8,900      |
| Roads Capital Reserve – Special Growth Levy | <u>890</u> |

**Total Additional Regional Share – Regional Storm Sewer** **\$44,500**

**Total Additional Regional Share** **\$4,610,100**

**Total Additional Developer’s Share** **\$2,169,800**

**Total Project Additional Financing** **\$6,779,900**

- 4.5 The developments which are immediately adjacent to, and will be directly serviced by, these Regional works will generate in excess of \$100 million in Regional Development Charges. Lands which will be indirectly serviced by these works such as the remainder of the Zone 4 water pressure service area, portions of the Kedron North Employment Area, and portions of urban areas in Columbus and Brooklin, will generate Regional Development Charges far in excess of this number.

## **5. Relationship to Strategic Plan**

- 5.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Goal 5 Service Excellence – to provide exceptional value to Durham taxpayers through responsive, effective and fiscally sustainable services delivery.
  - b. Priority 5.1 – Optimize resources and partnerships to deliver exceptional quality services and value.

## **6. Conclusion**

- 6.1 It is recommended that Regional Council enter into a Servicing Agreement with the Kedron East Landowners Group Inc. (Kedron East) containing the additional unbudgeted capital works and financing as identified in the report.

- 6.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendation.
- 6.3 For additional information, contact: Paul Gillespie, Manager Development Approvals, at 905-668-7711, extension 3443.

Respectfully submitted,

**Original signed by:**

---

Susan Siopis, P.Eng.  
Commissioner of Works

Recommended for Presentation to Committee

**Original signed by:**

---

Elaine C. Baxter-Trahair  
Chief Administrative Officer



# The Regional Municipality of Durham Report

---

To: Works Committee  
From: Commissioner of Works  
Report: #2021-W-26  
Date: June 2, 2021

---

**Subject:**

Shared Service Connection Replacement Policy including Disconnection of Existing Common Water and Sanitary Sewer Service Connections on James Street and Centre Street South in the Town of Whitby

---

**Recommendation:**

That the Works Committee recommends to Regional Council:

- A) That the Shared Service Connection Replacement Policy included with this report be adopted;
- B) That staff be authorized to negotiate with the property owners of 301, 303, 305 and 307 James Street and 1010 Centre Street South, in the Town of Whitby to facilitate the disconnection of existing common water and sanitary sewer connections and reconnection of those properties in a coordinated manner;
- C) That the Regional Municipality of Durham's Water Supply System By-Law #89-2003 and Sanitary Sewerage System By-Law #90-2003 be modified to offer reimbursement to property owners in the amount of the current connection charge rate for work completed on private property as well as increasing the period of time to reconnect from thirty days to six months; and
- D) That a copy of this report be forwarded to Town of Whitby and the property owners of 301, 303, 305 and 307 James Street and 1010 Centre Street South, in the Town of Whitby, for information.

**Report:****1. Purpose**

1.1 The purpose of this report is to:

- a. Provide Regional Council with an update to Works Committee Report #2019-W-101;
- b. Recommend that Regional Council adopt the Shared Service Connection Replacement Policy;
- c. Recommend that property owners be ordered to disconnect from the existing non-standard common service connections and connect to new individual services; and
- d. Recommend that the Regional Municipality of Durham (Region) Water Supply System By-Law #89-2003 and Sanitary Sewerage System By-Law #90-2003 be modified to offer a reimbursement to property owners in the amount of the current connection charge rate for work completed on private property as well as increasing the period of time to reconnect from thirty days to six months.

**2. Background**

2.1 Properties of 301, 303, 305 and 307 James Street and 1010 Centre Street South, in the Town of Whitby are currently serviced through common non-standard service connections constructed in 1947 which are partially located within an easement in favour of the Region across rear yards.

2.2 As the shared services are located in an easement in favour of the Region across adjacent private properties, they act as an encumbrance to property owners. Removing the easement and therefore the encumbrance would likely be of value.

2.3 In May 2018, one of the affected property owners requested that the Region undertake a water sample at their home. Water testing completed by the Region reported results for lead concentrations that were less than the minimum Ontario limit and Health Canada Guideline at the time.

2.4 The Town of Whitby (Town) reconstructed James Street in 2019. The Region partnered with the Town for the replacement of the existing watermain and

sanitary sewer, including new individual service connections to each property fronting James Street.

- 2.5 In November 2020, property owners on James Street were provided with water quality test kits. Two property owners submitted samples to the York-Durham Environmental Laboratory for testing. One of the samples reported results above Provincial limits and Health Canada guidelines.
- 2.6 Staff notified each property owner and provided an NSF-53 certified filter and water pitcher to each property owner as well as to known tenants.
- 2.7 Based on the age and material of the common service connections, there is a constantly increasing potential risk of failure. A break in the water service connection or collapse of the sanitary sewer connection will impact more than one customer. To mitigate this risk, each property should be serviced by individual connections which meets the Region's standards. The property owners were made aware of this issue by letter in October 2020.

### **3. Common Service Infrastructure Condition**

- 3.1 Regional staff obtained permissions to access private property to locate the alignment of the common water service (Attachment #1). It was determined through this site review that the existing common water service and sanitary service connections cannot be replaced in kind without severe disruption and/or demolition to existing landscaping features and structures (i.e. patios, decks, garages and sheds). The existing 3 metre (m) easement is insufficient in width for the access of construction equipment required to complete the work.
- 3.2 The water service connection is made of lead. The existing sanitary sewer connection is vitrified clay pipe and in poor condition. Both common services within the easement require replacement.

### **4. Proposed Approach**

- 4.1 Due to the unique existing conditions of multiple properties having non-standard service connections and the risk of failure, Regional staff reviewed potential options to resolve the existing servicing condition.
- 4.2 The November 2020 water test result that reported an exceedance of the Provincial limit and Health Canada guideline for lead concentration in drinking water is a concern given the common water service configuration on these

properties. A temporary shut-off is required to disconnect one or more of the homes, increasing the potential for elevated lead concentrations. Therefore, a simultaneous disconnection of all five properties is recommended to abandon the existing common service connections.

- 4.3 An efficiency in costs would be realized should property owners elect to disconnect from the existing non-standard common services at the same time as one contractor could mobilize onto private property and complete all works. Although the Region does not conduct work on private property, Region staff are prepared to meet with property owners to offer guidance if requested.

## 5. Works Required by Property Owners

- 5.1 Property owners are responsible for the cost of installing new service connections within the right-of-way. Both water and sanitary service connections have already been installed through the recent Town of Whitby Contract to 303, 305 and 307 James Street. Water service connections have been installed to 301 James Street and 1010 Centre Street south however new sanitary service connections are required.
- 5.2 Based on the anticipated impact to the property owners serviced by the common services, Regional staff have completed a preliminary design and estimated the costs for works on private property, and have verified the cost for service connections within the right-of-way, as follows:

| Address          | Private Property Estimated Construction Cost | Service Connection Cost within Right-of-Way | Total Upfront Property Owner Cost | Reimbursement Cost after Abandonment of Shared Service | Total Estimated Cost to Property Owner |
|------------------|--|---|-----------------------------------|--|--|
| 301 James Street | \$15,600                                     | \$6,410                                     | \$22,010                          | \$7,543  | \$14,467                               |
| 303 James Street | \$19,300                                     | \$4,396                                     | \$23,696                          | \$7,543  | \$16,153                               |

| Address                  | Private Property Estimated Construction Cost | Service Connection Cost within Right-of-Way | Total Upfront Property Owner Cost | Reimbursement Cost after Abandonment of Shared Service | Total Estimated Cost to Property Owner |
|--------------------------|--|---|-----------------------------------|--|--|
| 305 James Street         | \$19,500                                     | \$4,396                                     | \$23,896                          | \$7,543  | \$16,353                               |
| 307 James Street         | \$20,000                                     | \$4,396                                     | \$24,396                          | \$7,543  | \$16,853                               |
| 1010 Centre Street South | \$14,800                                     | \$6,053                                     | \$20,853                          | \$7,543  | \$13,310                               |
| Total Rounded            | \$89,000                                     | \$26,000                                    | \$115,000                         | \$37,715   | \$77,136                               |

- 5.3 Property owners have expressed concerns with the cost of completing this work. The adoption of a Shared Service Connection Replacement Policy which includes providing property owners with a credit for the Region's connection fees to assist with the cost of the work required on private property to decommission the existing shared services is being proposed in this report.
- 5.4 In order to facilitate the disconnection of the non-standard common service connections and based on the fact that the existing conditions within the easement do not allow the Region to resolve this servicing issue, it is recommended that the Region incentivize each property owner. It is proposed that each property owner would receive a reimbursement in the amount of the current connection charge rate once the common services have been properly abandoned and each property is serviced by individual connections. The current water service connection charge is \$3,700 for a 19mm diameter service and the current sanitary sewer service connection charge is \$3,843 for a 100 or 125mm diameter service.



5.5 It is also recommended that the deadline for the property owners to reconnect in order to resolve this servicing issue in a timely and coordinated manner be extended from thirty days to six months.

## **6. Shared Service Connection Replacement Policy**

6.1 Regional staff are recommending that a policy be adopted to address the disconnection of shared service connections and connection to individual services to meet current standards (Attachment #2).

6.2 The proposed policy recommends that in circumstances where the Region intends to abandon common services and has provided standard connections at the property line, the Region will reimburse the property owners for the value of the connection charge once the shared service has been abandoned. Property owners will have six months to connect to the standard services in these situations to be eligible. After the six-month period, the Region will consider the common service as abandoned and will no longer maintain the services. Regional staff will communicate on a regular basis with property owners in advance of the notice to disconnect until the shared service has been abandoned.

## **7. Financial Implications**

7.1 Financing for the reimbursement in the amount of the current connection charge rate for each property would be provided from the annual Water Supply and Sanitary Sewerage Business Plans and Budget.

## **8. Relationship to Strategic Plan**

8.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

Goal 5 – Service Excellence, optimize resources and partnerships to deliver exceptional quality services and value

## **9. Conclusion**

9.1 It is recommended that the Shared Service Connection Replacement Policy be adopted by Regional Council.

9.2 Staff recommend the disconnection and abandonment of common services between the owners of 301, 303, 305 and 307 James Street and 1010 Center Street South, in the Town of Whitby to provide individual standard service

connections to address lead concerns within the common water supply and non-standard sanitary sewer service for these properties.

- 9.3 To facilitate this, staff are seeking approval to negotiate with the affected property owners. Recognizing the cost to the property owners for work on private property necessary to address this condition, staff propose an incentive in the amount of the current connection charge rate.
- 9.4 This Report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.
- 9.5 This Report has been prepared in consultation with Corporate Services – Legal Services.
- 9.6 For additional information, contact: Mike Hubble, Manager, Environmental Services Design, at 905-668-7711, extension 3460.

## 10. Attachments

Attachment #1: Location Map

Attachment #2: Shared Service Connection Replacement Policy

Respectfully submitted,

### Original signed by:

---

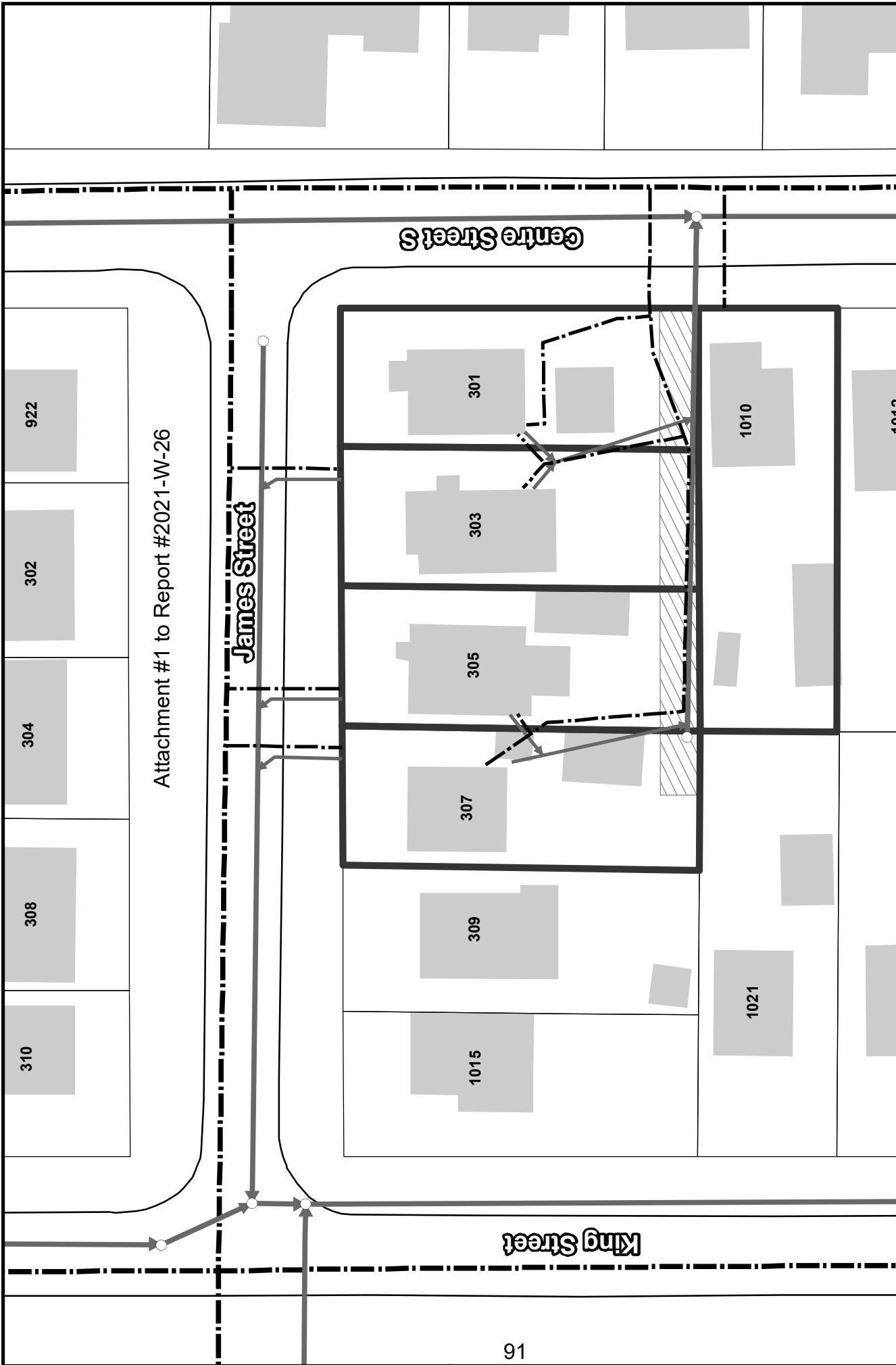
Susan Siopis, P.Eng.  
Commissioner of Works

Recommended for Presentation to Committee

### Original signed by:

---

Elaine C. Baxter-Trahair  
Chief Administrative Officer



Attachment #1 to Report #2021-W-26

The Regional Municipality of Durham  
 Works Department

This map has been produced from a variety of sources. The Region of Durham does not make any representations concerning the accuracy, likely results, or reliability of the use of the materials. The Region hereby disclaims all representations and warranties.

Map Date: March 1, 2021



# Location Map

# **Shared Service Connection Replacement Policy**

## **Purpose**

The Regional Municipality of Durham Water Supply System and Sewer System By-laws state that only one service shall be installed on each lot, block or parcel of land, and to each unit of semi-detached houses, street townhouses and street link houses, unless otherwise approved by the Commissioner of Works. However, some homes in the Region have common or shared service connections (water and sanitary sewerage) with neighbouring properties.

Where shared services exist, it is mutually beneficial to the Region and the property owner to abandon shared services in favour of individual service connections. The cost and liability to the Region to maintain and replace the shared services on private property can be significant, and in some cases not feasible. Costs for work on private property to connect to individual services can be costly to property owners as existing driveway, landscaping and/or lawn excavation and restoration, and potentially internal plumbing modifications requiring restoration of finished basement spaces may be required.

This policy provides a procedure for the abandonment of shared services, providing incentive to the private property owners to expedite connection to individual services once made available by the Region.

## **References**

- Regional Municipality of Durham Water Supply System By-law #89-2003
- Regional Municipality of Durham Sanitary Sewerage System By-law #90-2003

## **Policy**

Where more than one lot, block or parcel of land under separate ownership is served by a shared service, the Commissioner of Works may order the affected property owners to disconnect from the shared service and all costs, including those for installing new individual service connections, shall be borne by the property owners.

Shared service connections were typically installed to save on initial capital costs, without consideration for accessibility, maintenance, or replacement costs. Where

shared services do not exist within registered easements identifiable through a legal title search of a property during a sale, their existence and therefore their liabilities and complexities can be an unknown to a potential property owner.

In some instances, the shared services exist within an easement in favour of the Region. These easements are typically substandard in size to allow for proper maintenance or replacement relative to current Region Design Criteria for easement widths. In other instances, shared services are not located within a registered easement and in these cases the Region relies on the provisions of the *Municipal Act*, 2001 to enter private property to maintain and replace the shared services.

The Commissioner of Works may order the affected property owners to disconnect from the single service and all costs, including those for installing new service connections, shall be borne by the property owners in accordance with the Regional Municipality of Durham Water Supply System By-law #89-2003 and Sanitary Sewerage System By-law #90-2003.

### **Definition of Terms**

|                               |  |
|-------------------------------|--|
| Connection Fee                | Shall be the fee outlined in the latest version of the Regional Municipality of Durham Water Supply System and Sanitary Sewerage System Fees and Charges schedule, updated annually;   |
| Individual service connection | Shall refer to a water or sanitary service connection that services an individual property and is located within the municipal right-of-way;   |
| Shared service                | Shall refer to a water and/or sanitary pipe <u>on private property</u> that services more than one lot, parcel or block, or services more than one unit of semi-detached houses, street townhouses and street link houses; and |
| Works on Private Property     | Shall refer to all works outside of the municipal road right-of-way including, but not limited to, underground piping and internal and external plumbing in accordance with the Regional Municipality of Durham                |

Water Supply System By-law #89-2003 and Sanitary Sewerage System By-law #90-2003.

**Procedure**

1. As part of the Region's Asset Management Plan to renew infrastructure, the existing shared service connections will be examined to upgrade to current standards by providing service connections to each individual lot, block, or parcel of land where shared services currently exist.
2. Regional staff will review feasible alternatives for each shared service scenario and recommend the preferred solution to property owners for the implementation of individual service connections.
3. Where shared services exist and where such alternative Regional infrastructure exists or is made available, individual service connection(s) will be provided from the watermain or sanitary sewer to the property line only by the Region.
4. Once the individual service connections are constructed and available the Region will order each property owner affected to disconnect from the shared service within six (6) months of receiving such order. Additional time beyond the six (6) months will be considered on a case-by-case basis where exterior construction work may be hindered by seasonal weather conditions (i.e. winter).
5. The Region reserves the right to direct all owners connected to the shared service to disconnect simultaneously within the prescribed period, with no individual disconnections permitted in the interim.
6. Upon expiry of the disconnection period, the property owners still connected to the shared service will be informed in writing that the Region will no longer be responsible for the servicing or maintenance of the shared connection.
7. All costs for works on private property shall be the responsibility of each property owner.
8. Property owners will be required to complete all works on private property before the Region can properly abandon the existing shared service connections.
9. Prior to connecting to the new individual service connection, the property owner must apply for a new connection permit from the Region and pay the current applicable connection fees in accordance with Regional Municipality of Durham Water Supply System By-law #89-2003 and Sanitary Sewerage System By-law #90-2003.
10. Once the shared service is abandoned, reimbursement of costs for works on private property equal to the value of the current applicable connection fees shall be paid provided the property owner has disconnected from the shared service within the prescribed times as stipulated in paragraphs 4 and 5 above.

11. This Policy is not retroactive to any previous property owners where shared services were abandoned and/or where property owners constructed works on private property to connect to individual service connections.
12. This Policy does not apply to scenarios where non-shared, dedicated individual services to one property are routed through another property, either within or not within an easement (i.e. where a water and/or sanitary service to a home routes through the rear or side yard of a neighboring property before connecting to a mainline sanitary sewer or watermain within a typical road allowance).
13. Frontage charges are not applicable to new services installed by the Region to address non-standard service connection situations.

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



# The Regional Municipality of Durham Report

---

To: Works Committee  
From: Commissioner of Works  
Report: #2021-W-27  
Date: June 2, 2021

---

**Subject:**

Request from Hamilton Oshawa Port Authority for the Assumption of Ownership of Farewell Street (Regional Road 56) south of Harbour Road, City of Oshawa

---

**Recommendations:**

That Works Committee recommends to Regional Council:

- A) That Regional staff be authorized to examine the request from Hamilton Oshawa Port Authority for the assumption of ownership of Farewell Street (Regional Road 56) south of Harbour Road in the City of Oshawa, and report back with a recommendation and/or next steps;
  - B) That the examination of this request be based on due diligence consideration of the land use, legal and financial impacts associated with the transaction;
  - C) That a copy of this report be circulated to the City of Oshawa with a request for comments by September 30, 2021; and
  - D) That a copy of this report be provided to the Hamilton Oshawa Port Authority for information.
- 

**Report:**

**1. Purpose**

- 1.1 The purpose of this report is to advise Regional Council of a request (Attachment #1) from the Hamilton Oshawa Port Authority (HOPA) for their assumption of ownership of Farewell Street (Regional Road 56) south of Harbour Road (“subject



segment”), in the City of Oshawa (Oshawa). As described in the letter in Attachment #1, the request is primarily driven by HOPA’s interest to reconfigure the main entrance and allow truck staging on their access to the port lands.

## **2. Background**

- 2.1 The Regional Municipality of Durham’s (Region) 2021 Capital Budget and Nine-Year Forecast includes a proposed rehabilitation/reconstruction of Farewell Street from its southerly limit to Bloor Street, including the subject segment of interest to HOPA. Detail design for this project is currently under way, with the scope of work for the subject segment proposed to be a reconstructed rural two-lane road cross-section with 3.0 metre (m) shoulders. Subject to budget approval, this project is currently anticipated to go for construction in 2022.
- 2.2 During the course of detail design and stakeholder engagement, in late 2020, HOPA approached Regional staff indicating a desire for the Region to provide for a wider cross-section on the subject segment that would in essence allow for inbound truck staging on the entrance to the port lands and at the same time maintain a dedicated lane each for northbound and southbound through traffic. Regional staff made it clear that the scope of planned capital works on the road was limited to reconstruction of the existing cross-section and does not contemplate any road widening.
- 2.3 After multiple email exchanges, in April 2021, the Region received a formal correspondence (Attachment #1) from HOPA requesting the transfer of ownership for the subject segment to the Authority with a view to “allow for timely and strategic improvements to the main entrance to the port lands” and to “improve fluidity and safety within the port district”. The correspondence provides a potential conceptual plan for the subject segment outlining one changes to the roadway that HOPA would implement upon completion of the requested transfer. The request acknowledges and commits to ensuring that all existing accesses for businesses adjoining the subject segment will remain open. It should be noted that the property lines shown in the concept plan provided by HOPA is merely schematic for illustration purposes and requires further verification to match property records.

## **3. Preliminary Review**

- 3.1 There are multiple short-term and long-term land use, legal and financial considerations that need to be examined thoroughly to assess HOPA’s request. The necessary due diligence would require engagement of multiple internal and

external stakeholders including, but not limited to: Regional Divisions (Works, Planning and Economic Development, Legal Services, Finance), the City of Oshawa, adjacent property owners, utility agencies, emergency services and the Conservation Authority.

3.2 A preliminary review points to the following as key considerations:

- existing and future accesses to adjacent properties/parcels
- existing utilities and services (i.e. Bell, Enbridge Gas, OPUC)
- future utility and servicing needs and delivery mechanisms
- easement requirements
- land uses
- maintenance requirements
- legal requirements and liabilities
- financial considerations associated with transfer of a Regional asset to a private entity

3.3 Our initial discussion with Oshawa staff indicates their support for HOPA's request at a high level, subject to a further review of HOPA's planned land uses on their property and related implications.

3.4 Given the Region's planned project in 2022 for the reconstruction of Farewell Street (including the subject segment), it is imperative that a recommendation and decision on this matter be finalized latest by early 2022.

#### **4. Conclusion**

4.1 Regional staff have undertaken a preliminary review of Hamilton Oshawa Port Authority's request for the transfer of the subject segment of Farewell Street and identified a number of considerations that need to be examined to formulate a response. It is recommended that staff be authorized to complete the necessary due diligence in consultation and collaboration with Hamilton Oshawa Port Authority and other impacted stakeholders, including the City of Oshawa. Regional staff will report back in early 2022 with a recommendation and/or next steps.

- 4.2 As input to the Regional Municipality of Durhams's due diligence analysis, it is recommended that a copy of this report be circulated to the City of Oshawa for comments by September 30, 2021.
- 4.3 This report has been reviewed by Legal Services - Corporate Services Department.
- 4.4 For additional information, please contact Janet Mosher, Project Manager, at 905-668-4113, extension 3336.

**5. Attachments**

Attachment #1: Correspondence dated April 14, 2021 from Hamilton Oshawa Port Authority (HOPA) to Janet Mosher, Project Manager, Works Department, Regional Municipality of Durham

Respectfully submitted,

**Original signed by:**

---

Susan Siopis, P.Eng.  
Commissioner of Works

Recommended for Presentation to Committee

**Original signed by:**

---

Elaine Baxter-Trahair  
Chief Administrative Officer

*Via Email: [janet.mosher@durham.ca](mailto:janet.mosher@durham.ca)*

**Janet Mosher, M. Eng., P. Eng.**  
**The Regional Municipality of Durham**  
Works Department – Transportation Infrastructure  
605 Rossland Rd. E., Level 5  
Whitby, ON L1N 6A3

**APRIL 14, 2021**

**Dear Ms. Mosher,**

This letter is to confirm that Hamilton Oshawa Port Authority (HOPA) is supportive of a property transfer from the Region of Durham to HOPA for the portion of Farewell Street south of Harbour Road in Oshawa. We believe that this transfer would allow for timely and strategic improvements to the main entrance to the port lands, and will improve fluidity and safety within the port district.

Please refer to the attached conceptual plan for HOPA's use of the roadway. This represents one possible change to the roadway, and would allow for some truck staging as well as through traffic both northbound and southbound.

Furthermore, HOPA is committed to ensuring all existing accesses for businesses adjoining this part of Farewell Street remain open.

If you have any questions, please do not hesitate to email me at [bfitzgerald@hopaports.ca](mailto:bfitzgerald@hopaports.ca) or call me at 905-525-4338.

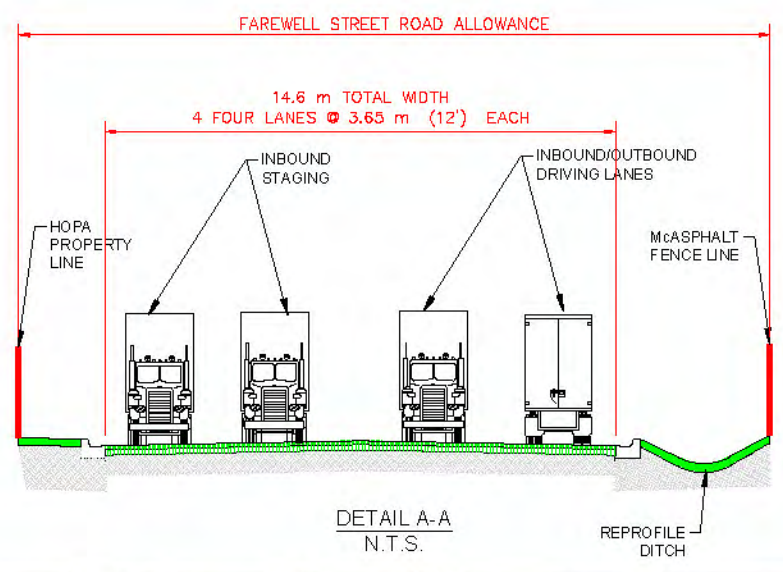
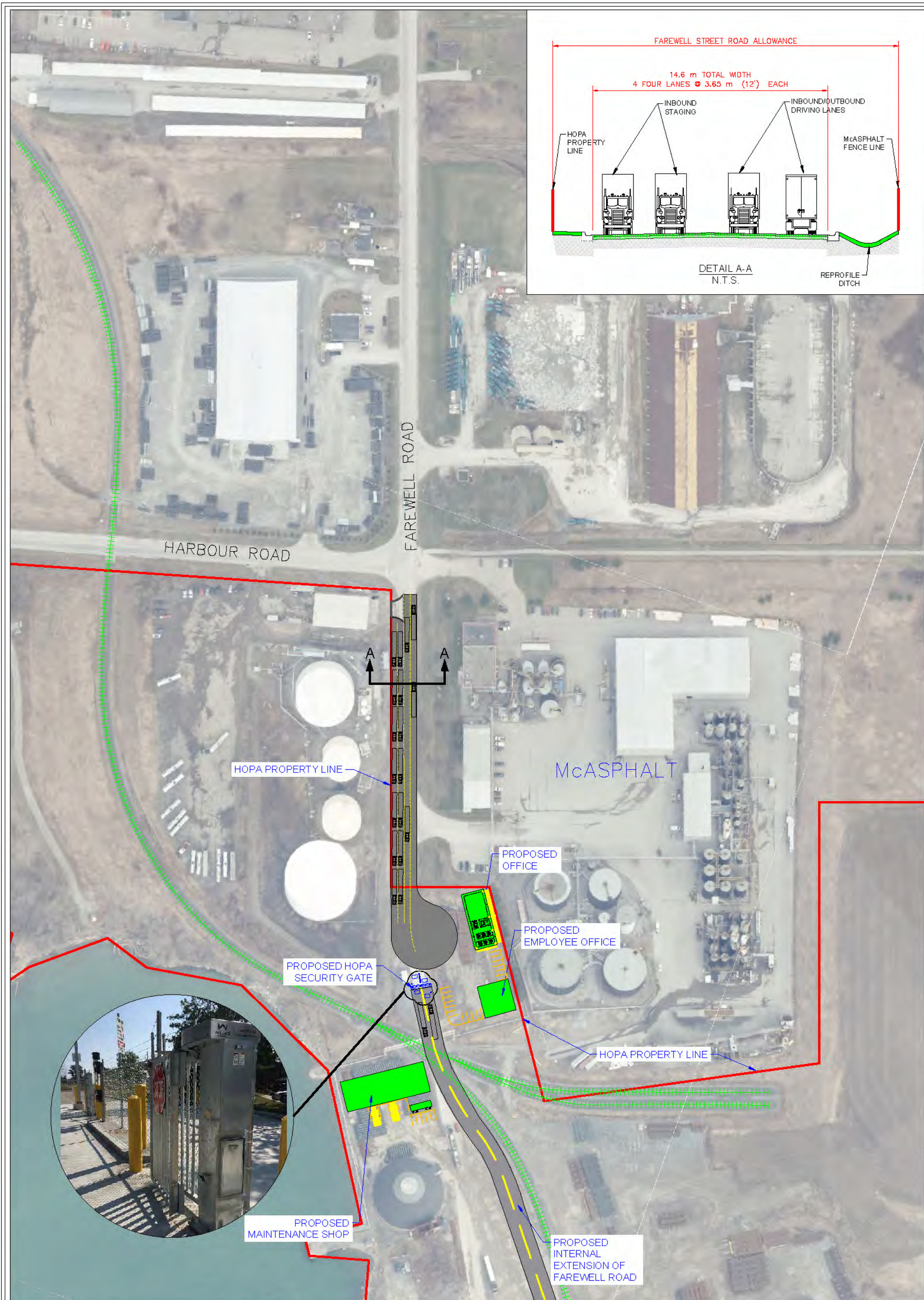
Sincerely,



**Bill Fitzgerald, P. Eng.**  
**Vice President Operations**







TITLE: PORT OF OSHAWA - PROPOSED TRUCK CUEING CONCEPT  
 SCALE: 1: 2000

DATE: September 2020  
 DRAWN BY: J.L.

REVISION. No: 0  
 LOCATION: S:\Engineering\DRAWINGS\Port Of Oshawa\SURFACE TRANSPORTATION\Port Of Oshawa - Truck Cueing Concept.dwg