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Energy from Waste Advisory Committee (EFWAC) Agenda Meeting #22

**Friday, June 27, 2025
10:00 a.m. to 12:00 p.m.**

**The Regional Municipality of Durham Headquarters Building
605 Rossland Road East, Whitby**

Please note: The Region of Durham continues to hold electronic meetings for Advisory Committees with limited in-person attendance at this time. Members of the public may [view the Committee meeting](#) via live streaming.

- 1. Welcome and Introductions**
 - 2. [Durham York Energy Centre \(DYEC\) 2024 Annual Compliance Report \(ECA\)](#)**
The Project Team will respond to questions by EFWAC members regarding the DYEC 2024 Annual Compliance Report.
 - 3. Updates**
 - a. Automated Cart Pilot
 - b. Multi Residential Organics Presentation
 - 4. Next Meeting – June 26, 2026**
 - 5. Meeting Adjourns**
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Energy from Waste Advisory Committee (EFWAC) Meeting #21

Date: Friday, December 6, 2024

Location: Microsoft Teams (virtual) from 10 a.m. to noon

Facilitator: Bruce Withrow, Meeting Facilitators International

Archive: Available at: <https://www.durham.video/>

Attendees: Please see page 13 of 13

The meeting of the EFWAC will meet the obligations as detailed under Section 8 of the Notice of Approval to proceed with the Undertaking. This meeting objective is to review the 2023 Durham York Energy Centre (DYEC) Annual Report as submitted in accordance with Condition 15(1) of the Environmental Compliance Approval (ECA) #7306-8FDKNX, which states the following:

By March 31st following the end of each operating year, the Owner shall prepare and submit to the District Manager and to the Advisory Committee, an Annual Report summarizing the operation of the Site covering the previous calendar year.

Durham York Energy Centre Environmental Compliance Approval Annual Report – 2023 (Annual Report)

1. It was requested that the Annual Report include page numbers for ease of reference going forward.
 - Staff will include page numbers in future Annual Reports.
2. It was questioned whether the description found under Section 8 regarding Soil Testing adequately assesses, represents, and informs members of what occurred in 2023, with additional consideration that the ECA Annual Report is presented on behalf of Reworld and Durham and York Regions.
 - Staff advised Reworld is not responsible for soil monitoring and that the Annual Report is intended to summarize 2023 facility operations. Additionally, the section summary provides for further details which are made available in the [supplementary soil report](#) for this program in year 2023.

3. With regard to the facility shutdowns (cold-iron outages) referenced under Section 11 regarding Operational Issues and Mitigation Measures and listed facility outages, it was questioned with only one major fall outage listed, if there was a previous outage event for spring maintenance in 2023.
 - Staff confirmed there were two major outages in 2023, the first in January and the second in November.
4. It was questioned the reason why the first outage was not included in the table found on electronic page 44 of the Annual Report, with consideration to the forthcoming increase in annual waste to be processed and the importance of the maintenance activities, related performance guarantee comparison and existing and future waste availability, and timing of the earlier outage. It was noted that a summary of all dates should be included per Section 15 of the ECA, which does not specify reporting outage type (e.g. cold iron), and concern that not all information is being reported.
 - In addition to the Fall Major Outage from November 4 to 20, the Spring Major Outage which occurred in January was not a cold-iron outage and included each boiler being taken offline for 16 days in sequence, not concurrently, with one boiler taken down followed by the next.
5. A member reiterated above concern regarding missing information from the table which lists 2023 outages and concern that not all necessary information is being included in the Annual Report. It was requested from staff that a commitment be made to identify all boiler down times in future annual reports, as well as advise whether staff will commit to issuing a corrected version of the Annual Report to address this matter.
 - Staff confirmed as the table captures cold-iron outages, unscheduled trips, no correction is required to be made in this Annual Report, however, staff will take under consideration the members' suggestions to review how outages may be best captured in future annual reports, per ECA guidelines.
6. With regard to the importance of soil monitoring being raised earlier and in relation to the exceedance of the Soil Standards recorded downwind (August 17 for Benzo(a)pyrene), Regarding elevated Dioxin Furan in soil sampling, staff were asked if Durham and York Regions would consider revising the Soil Testing Plan to identify a protocol to address this concern and include a related section in the Annual Report should such event(s) occur outlining implementation of such a protocol addressing health risk exceedances. Staff were also asked if consideration to performing more frequent testing would be made, and questioned how the Regions will address elevated Dioxin and Furan results.
 - Staff advised that ambient air measuring is not solely for the facility, and there isn't a method to determine all factors which are contributing to the measured results. The

Regions will continue to monitor to see if a trend is being established, acknowledging that due to the nature of soil composition the tests have previously experienced elevated results. Staff confirmed that at the appropriate time a plan would be created along with abatement activity, however, at this time there is no need for further action.

7. With consideration to the importance placed on the Soil Testing Plan during the HHERA, and where both soil sampling and ambient air monitoring occur at the same locations, regarding the increase since preconstruction levels to having more than doubled, the member noted it seemed inappropriate to not complete a soil test for another three years. Additional concern was raised that the results of both upwind and downwind stations, which are reaching historical ambient levels, were not referenced in the Annual Report. It was also requested that the process for soil testing be explained here to better understand the reason staff are advising it is not required to revisit the soil testing and monitoring schedule.
 - Staff advised soil receptors are captured within a sampling grid, and the testing and monitoring protocols are clearly identified in the [Soil Testing Plan](#). As referenced in the associated [Reports](#) issued every three years, testing results are below the highest levels recorded during pre-construction, and the parameters are well within the table limits for soil levels. There is a general awareness as to the potential sources impacting emission levels, which the Ministry of the Environment, Conservation and Parks (MECP) reviews, comments, and addresses on an as-required basis.
8. With regard to reducing the amount of processed waste at the DYEC and relying heavily on the success of the organics program, staff were asked to explain the decrease in Green Bin participation rates from 61 per cent participation in 2022 to 53 per cent in 2023 as reported in Durham's waste management curbside and multi-residential waste and Green Bin audit ([2023-INFO-96](#)).
 - Staff advised that province-wide, a 50 to 60 per cent participation rate in Green Bin programs is relatively normal. Durham recently created the Enhanced Green Bin Program making it easier for residents by expanding the number of acceptable items and subsidizing the purchase of additional Green Bins. Staff continue to promote the Program, noting that Green Bins have not been around for the same length of time as the Blue Bins and Durham also has a large rural area where many of these residents have site compost piles for agricultural activities, which challenges Green Bin set out in these areas. More recently, the Multi-Residential Organics Program was approved with more information forthcoming on this Agenda with a presentation by Angela Porteous.
9. Durham staff were asked of the impacts, if any, from the City of Oshawa and Town of Whitby not participating in Region-wide waste management Programs, additionally

questioning Oshawa and Whitby meeting participants the reason for the decision at the local levels.

- Staff identified the challenge of not having access to these materials, and that both local tiers were looking at respective solutions. Durham continues to share data with both local area municipalities.
 - The Whitby Representative advised they are reviewing direction from the MECP-issued policy statement regarding parameters of program implementation, with additional information forthcoming. Due to a conflict in timing when Durham Region's contract was being tendered and Whitby was reporting to their Council, among other factors including expiry of existing contracts, it is anticipated that it will be built into the next front-end contract with pricing to be identified, and tendered for start in Fall 2026.
 - The Oshawa Representative advised they are currently in the planning phase with no additional updates at this time.
 - Staff were questioned as to the reason why the bar graph in Section 5.6 of the Annual Report regarding Long-Term Dioxin and Furan Sampling System (LTSS) AMESA shows a 12-month rolling average in 2023, however, no AMESA results were recorded in November and December as detailed in the DYEC Long-Term Sampling System Q4 Report (October 2023-January 2024) for Boiler 1. It was noted that while it is captured in the text in the graph of the Annual Report, it should also be referenced below the bar graph the missing AMESA results for Dioxins and Furans monitoring.
10. In follow up to above, it was noted that other locations do not invalidate data. When data is not made available for two months starting November 4 concern the AMESA system is malfunctioning which prompts the need for transparency, and that all underlying reports and data sheets should be made publicly available to determine what may be happening. It was also noted that the LTSS (AMESA) quarterly reports that are produced are not sufficient as they do not include the associated reports, making it impossible for the public to determine what taking place. Mention of the priority to measure concentration and stack test, and further that reporting needs to include the duration of these tests over a period of one year, and that in comparing the data reported in the Q3 LTSS report, AMESA calculated results were high (55 pg TEQ/Rm3) which doesn't translate into the same information provided in the graph included in the Annual Report—it is not a complete picture. It was requested whether staff would consider including the additional data made available for the year, for more accurate context to report on the duration of the tests over that one-year period.

Additional clarification regarding reference to other systems without the issue of invalidated data was provided, including reading the [ToxicoWatch](#), the Harris Report,

noting while the AMESA data sheets help explain certain issues, it doesn't account for entire months being invalidated. It was mentioned, more broadly, the European Union is requiring the inclusion of Best Available Techniques (BAT) and further regulating long-term sampling systems BAT emission levels by applying associated compliance limits (to stack tests); while France sets data recovery rates required for LTSS.

- Staff will review and investigate references to specific locations identified that don't experience issues with data invalidation including any additional locations provided post-meeting but that the system is being operated in accordance with the facility operating plans.
11. With consideration to Durham Region's continued efforts to address Climate Change in communities, it was asked in relation to any facilities that are classified as 'emitters' for comments regarding the DYEC's CO₂ emission levels.
- Staff advised that facility reporting is done at a provincial level and also captured in Durham Region's Annual Climate Change Progress Reports, acknowledging challenges with emissions from the waste industry which includes the DYEC, landfills, etc. For this reason, programs are in place to ensure that materials, given their total lifecycle, are diverted from the waste stream, which is currently the best of the available options. Continued reporting on landfills is anticipated for another 10 to 20 plus years, as these are still a significant source of emissions, and practices around solid waste and collection are continuously reviewed to identify further improvements.
12. Staff were asked with regard to differing waste generation rates reported between Durham and York Regions, with York Region rates much lower, if there is any intention to standardize reporting in order to be able to directly compare each Region's rates, or whether staff from each Region, as DYEC Owners, could respond in a similar manner in order to better identify what is included and how it is being calculated, as it relates providing respective data for tonnage going into the facility.
- Staff advised that reporting is not standardized across municipalities and with the loss of Datacall reporting with the implementation of Extended Producer Responsibility (EPR), municipalities are losing access to that data. Priorities differ between Durham and York Regions which may impact reporting; however, the Owners can take this under advisement and also address any follow up questions to the Regions' responses issued regarding respective waste generation rates. Any future province-wide reporting program would also need to be identified by the province.
13. With consideration to facility trends, staff were asked about Greenhouse Gas (GHG) emissions and the DYEC.

- Staff advised UNFCCC methodology recently changed, biogenic and non-biogenic with material composition variations, to determine contribution of CO₂ emission measurements with GHG emissions trending upward over the last few years. This doesn't mean it is worse, but instead identifies a change in the waste that is being generated. The rise in GHG emissions most notably occurred during the pandemic with the increased disposal of personal protective equipment (PPE) and plastics, the affordability crisis which followed, and as organics programs shift in and out which drive up CO₂. This trend is found to be consistent across municipalities in Ontario.

Durham Region Waste Management Services Program Update Presentation

Angela Porteous, Supervisor, Waste Operations, the Regional Municipality of Durham (Durham Region), provided a Program Update on Durham's waste management services.

Blue Box Transition Update and Business Improvement Area (BIA) Recycling Services 2026

Durham Region transitioned on July 1, 2024, with Circular Materials Ontario (CMO) taking over responsibility of the Blue Box for Durham's residents, with no change in service levels. CMO continues to use the same collection contractors throughout Durham with GFL in Oshawa and Whitby, and Miller Waste in the remaining six local area municipalities. Replacements and new boxes are being directed to GFL and Miller Waste, and continued updates on the transition are being communicated to Durham residents, in agreement with and on behalf of CMO during the transition by Durham Region. For a short period, a supply shortage was experienced, and Durham Region's inventory is also now since depleted. Residents are still able to access information online, in schools, and on the Know Before You Throw App at this time, which will continue until the transition deadline of December 31, 2025, during the province-wide rollout. However, as of January 2026, Durham Region will no longer have any involvement, and any possible future involvement will need to be determined after that time. In accordance with current provincial regulations, CMO, as owner, may make changes to the program and are looking to create a province-wide list of common items, with additional materials to be included, and will review single or dual-stream and collection day changes.

Durham Region will continue to service the BIA across Durham until December 31, 2025, after which time, as the MECP's regulation for Extended Producer Responsibility it does not fall under CMO's responsibility and will cease. Along with other municipalities, Durham Region is in communication with the province regarding concern around this matter, as it is currently unknown what will transpire in future iterations of the regulation. Using planned and targeted communication, Durham Region strives to ensure Durham's BIA are made aware of the timing for current program end.

-end of first presentation-

The following discussion ensued:

- Staff advised Durham Region will continue to monitor and advocate for recycling materials to be sorted and sent to correct locations for appropriate processing.
- Staff noted from a DYEC perspective, there will be no residues from Material Recovery Facility tonnages, however, tonnage may start to decrease in the future. Staff clarified in response to a question, that there is a concern that businesses may dispose of recycling in the waste stream if recycling is no longer an available option, or businesses may add to either the Green Bin or black garbage bag which may also include those residents who reside below a business, as example.
- Staff mentioned concern that it will be harder for residents to recycle, bringing attention to concern of institutional, commercial and industrial (IC&I) waste.
- Staff confirmed there are approximately 3,500 businesses within the BIAs and downtowns, which produces a relatively small amount of tonnage to the DYEC and is rated by stops and addresses, not separate loads.
- Staff advised, with regard to a question referencing York Region's Annual Waste Diversion Report and the section on transitioning of the Blue Box Program, there is push back on the five additional identified items, however, the Extended Producer Responsibility Act of 2022 includes the acceptance of plastic cutlery, flexible plastic pouches, beverage cups, plastic bags, and polystyrene foam, for which companies must implement policies for the proper management of this waste which will start to be accepted in January 2026.
- Staff advised that separately, they would provide an alternate CMO contact for Whitby's Representative to reach out to discuss Whitby's questions around new locations, multi-residential and private laneways. Durham Region staff confirmed that for buildings that are not eligible for services, such as apartments, CMO is expected to be going into these sites starting in 2026.

Enhanced Organics Program

Durham Region launched the Green Bin Program for curbside collection in 2006, with a 30 per cent diversion rate at the time and a goal to meet 51 per cent. By 2008, this goal was surpassed, and Durham increased the new goal to a 70 per cent diversion rate which remains in effect today. Since its inception, the Green Bin Program has been very successful at keeping food waste out of the black garbage bag. Durham Region had been looking at how to remove additional organics from waste, and as of July 1, 2024, the implementation of the Enhanced Program allowed residents to include diapers, pet waste, pet litter, and

incontinence products in their Green Bins for weekly collection to be processed by anaerobic digestion at a contracted third-party facility creating renewable natural gas and digestate. With only four months of Enhanced Green Bin Program-specific data, Durham Region has identified a 12 per cent increase in organics diversion, year-over-year, compared to this time last year, and continues to track data. Durham Region has also offered a subsidized bin to residents at a cost of \$10 from \$18 until December 31, improved the sales program to provide an online order system, in addition to walk-in service, where bins will be delivered between five to ten days to a resident's door by courier, and plans to continue to promote this new Program into 2025 to include any new developments to the Enhanced Green Bin Program to ensure residents are made aware of the Program's opportunities. The leaf and yard waste continues to be processed by aerobic digestion under a different vendor contract.

-end of second presentation-

The following discussion ensued:

- Staff advised, in response to a question regarding energy and renewable output, the grade of compost and application of end use including land type, that the material is certified by the Canadian Food Inspection Agency (CFIA) and is used on agricultural lands in the vicinity of the facility.
- Staff confirmed, in response to a question regarding specifications for levels required for application on agricultural land, noting concern for plastic and metal contamination, that testing is performed to verify no long-term buildup of metal along with an advanced system for removal of contaminants before material is put into the digesters.
- Staff responded, with regard to a question about the amount of tonnage that is screened out such as cat litter and plastic residue, to advise that this value is not accounted for as it is processed by a third-party using other contractors' materials which doesn't provide for determining what would be attributable to Durham versus other operations.
- Staff confirmed, with consideration to a comment that having to move and pay for a lot of tonnage to be screened, etc. whether Durham Region will consider collecting only cat feces and not the litter being that only the feces is the organic material, that with regard to litter, it is dependent on the type of litter residents use with a number of options now available, however, not at this time as part of the service level to drive odorous materials into one stream, maintain costs, and increase participation in the Enhanced Program, collected materials from the curbside are processed at one site.

Multi-Residential Organics Program

This is a forthcoming program to be implemented July 1, 2025, for which Durham Region has now received Council approval to move forward with contracting the service to Miller Waste

at multi-residential buildings where Durham Region collects waste for 124 properties and approximately 10,000 units. The City of Oshawa and Town of Whitby will be providing their own services.

Staff are currently working on a one-year implementation plan, unique to Durham needs, which will include a phased-in approach with extensive promotion and education for both residents and property managers, having assessed all Regionally serviced buildings last year. From the assessment, staff found that 64 per cent of the multi-residential properties were ready to implement an organics program and will start right away (as of July 1, 2025), with 32 per cent of buildings needing only minor changes with a requirement to follow at a later time during the implementation period, and only four per cent needing major changes and who will be phased in last.

Program participation will be mandatory, not voluntary, in order to receive Regional services with the [Waste Management By-law](#) having been updated as of July 1, 2024 to reflect all program changes, including consideration to requirements for future builds for multi-residential buildings, and in order to meet Durham Region's obligations under the [Food and Organic Waste Policy Statement](#).

-end of third presentation-

The following discussion ensued:

- Staff confirmed, in response to whether it is mandatory for existing builds and current design standards and will be enforced, that once the Program is rolled out, it is the intention that each site receiving Regional services must comply.
- Staff clarified, in response to whether it is applicable to all new builds or those requesting Regional services, that for any multi-residential building requesting Regional services will need to meet all requirements of the Program and for those not participating and/or denied Regional services will need to seek private collection. Further, all applications processed via Durham Region's Development Approvals must meet all Program requirements.
- Staff noted that under regulations for multi-residential buildings, there exists a grey area whether waste is considered institutional, commercial and industrial (IC&I) or residential. Property/building managers are not mandated by Durham Region to participate in this Program and can opt out at any time, and a few have. Durham Region offers to provide diversion services and is quickly catching up to existing multi-residential standards in other municipalities/regions and continues to work with property/building managers and developers to ensure long-term service opportunities with many residents looking to see diversion services in current and future buildings.

Roundtable

14. Regarding Section 5.5 for Source Testing, it was recently noticed that the reports posted online do not include referenced Consultant reports to identify who was present and reviewed the Source Test. For example, in Sub-Section 5.5.2 of the Annual Report, it does not mention that Dioxins and Furans testing was not completed concurrently due to boiler issues, however, reference in future separate reports, such as those included in Durham's Council Information Packages (CIPs), provide information that during the same Source Test, testing of Dioxins and Furans was stopped part way through, coming out of steady state, and then results were combined to form the required four hours between start and stop. Staff were asked if the additional Consultant reports that have been included in subsequent CIPs are submitted to the MECP with the Source Test Reports, and will staff in future Source Test Reports also include Consultant reports for this group, with consideration to the information being valuable in addition to identifying the number of times during operations that the boilers are deviating from steady state.
- Staff reviewed the differences between the submissions to the MECP and to Durham Region Council, advising that the MECP are aware of the reporting that is provided to Council. Staff will consider the request for inclusion of the supplemental reporting information. In terms of operations, process requirements are defined under the Source Testing Code as to how the facility is operated which includes being unable to back off that rate in order to add natural gas, which from an emissions point is slowing down and the Source Test needs to be at full load. The Ontario Source Testing Code is issued by the MECP, and the testing methodology prepared by the Consultant was approved by the MECP. Often, MECP staff are on site during the source tests.
15. Staff were asked to identify where in the Code reference was made that allowed two pieces of the test to be patched together.
- It was confirmed that the facility must be at full load with deviation being at the Source Test discretion, which is how the facility gets back to steady state.
16. Staff were asked to confirm the timing of when the ECA amendment application would be filed, and asked in the interest of transparency, that this ECA application be posted online for members to review and monitor.
- Staff advised submission would not occur until the new year (2025) and as studies need to be completed, timing had not yet been determined.
17. Staff were questioned about the approvals and permits required by the Regions to proceed with the increase to 160,000 tonnes of processed waste per year, from 140,000 tonnes, and asked, since the last public information centre was held during the initial

Environmental Assessment in 2019, if staff would be agreeable to posting the EBR online even though it is not a requirement.

- Staff advised the file was out for consultation during 2021, submission of the screening report is complete, and that posting beyond that would be at the MECP's direction.
18. Acknowledgement that all interested public parties need access to view the applications and supporting documents to view what will be submitted, staff were asked if they would be posting the ECA application and backup documents on the project website, making reference to public comments in 2011 and additional reference to the hard copies that were made available to the members of the public by direction of Durham Council at that time, mentioning that posting online would not be difficult and considered basic transparency.
- Staff confirmed the updated Emission Summary and Dispersion Modelling (ESDM) will be reported, and further direction would be required by the MECP in this regard.
19. Staff were requested, further to reporting completed in 2009 specific to processing 140,000 tonnes of waste per year and subsequent reporting completed in 2021 identifying small variations, with consideration to the rise in GHG emissions, and well beyond what is predicted for both 140,000 and 160,000 tonnes and the impacts to changes in materials processed, to include GHG data to the report as part of the facility's story, while also noting the need to update the lifecycle analysis completed in 2007, to ensure current data informs way forward.
- Staff will take this under advisement, reiterating Durham's report includes the GHG emissions relating to the facility.
20. It was requested that as this meeting occurs only once per year, and with regard to the number of questions still to be asked and responded to, that consideration be made to scheduling future meetings for three hours.
- Staff advised they are conscious of time and quorum.
 - **The next scheduled meeting (virtual) will be held on Friday, June 27, 2025 at 10 a.m.**

Meeting adjourned.

Enclosed: December 2024 Program Update - A. Porteous, Supervisor, Waste Operations, Waste Management Services, The Regional Municipality of Durham

Meeting attendees:

A. Evans, Director, Waste Management Services, The Regional Municipality of Durham (member)

M. Fareed, Contract Management Engineer, Waste Management, The Regional Municipality of York (alternate)

L. Akesson, Manager, Waste Services, Town of Whitby (member)

J. Bishop, Manager, Waste Services, City of Oshawa (alternate)

C. Jones, Director, Planning Regulation, Central Lake Ontario Conservation Authority (member)

L. Gasser, Zero Waste for Zero Burning (member)

W. Bracken, Durham Environment Watch (alternate)

N. Ratnasingam, Climate Change Response Coordinator, Municipality of Clarington (member)

B. Withrow, Facilitator, Meeting Facilitators International

A. Porteous, Supervisor, Waste Operations, The Regional Municipality of Durham (guest)

B. Parayankuzhiyil, DYEC Facility Manager, Reworld

S. Kaur, Environmental Specialist, Reworld

K. Ching, Supervisor, Technical Operations, Waste Management, York Region

R. Jagannathan, Commissioner, Works, The Regional Municipality of Durham

L. Saha, Manager, Waste Services, The Regional Municipality of Durham

K. Dykman, Supervisor, Waste Services, The Regional Municipality of Durham

N. Williams, Project Manager, Waste Services, The Regional Municipality of Durham

L. Waller, Works Technician, Waste Management Services, The Regional Municipality of Durham

R. McCormick, Works Technician, Waste Management Services, The Regional Municipality of Durham

M. Smart, Administrative Assistant, Works Department, The Regional Municipality of Durham

R. Inacio, Corporate Services – Information Technology, The Regional Municipality of Durham