Comments Re ERO# 019-1444 and ERO# 019-1446

This is a complex proposal that requires public information session(s) in order for the residents to better understand the proposal, receive clarification, and to be able to submit informed comments regarding the possible impacts on the community.

I have concerns with the potential impacts expected to result from the substantial number of additional transportation trucks and other vehicles travelling on the local roads from Hwy 401 to and from the proposed facility during the operating hours - 24 hours per day, 7 days per week, 365 days per year.

Please note that the Design and Operation Report indicates the number of vehicles that are expected to be either 1) delivering or 2) exporting material, as well as staff and maintenance vehicles that will be on site. However, it fails to mention that each vehicle will travel both directions, and therefore, the amount of neighbourhood “traffic” is actually double that of the values shown.

The same report indicated that because the proposed facility is in an area zoned industrial, the impact of the vehicle traffic was expected to be insignificant. However, the streets between Hwy 401 and the proposed facility is primarily residential neighbourhoods. The report provides no information regarding the expected route(s) travelled by each of the vehicles from Hwy 401 to the proposed facility, and from the proposed facility back to Hwy 401 again. It is imperative that there be a comprehensive traffic assessment to determine impacts from the vehicles on any of the streets that may be a potential route, as well as environmental impacts with increase in noise, air pollution, and general safety risk to the neighbourhood.

Based on the proponent’s proposal to operate 24 hours per day, 7 days per week, 365 days per year, the traffic assessment should consider each of the impacts during different times of the day and night, during weekdays, weekends, seasons, statutory holidays, etc.

I have reviewed the Design and Operation Report, and have the following questions and comments:

1. *All receiving of feedstock will take place inside the building. But the digestate export will take place in a covered exterior loading area where it will be loaded into the liquid trucks via a cam-lock connection.*

Question: Can loading the digestate for export take place inside the building to confine odours and spillage?

1. *The area has wash-down capabilities, and has sloped floor with drainage in case of spill.*

Question: Where does the drainage go? Does it go to the sewer system? Surge tank? Both?

1. *OPC has an area for isolation/quarantine bay for CFIA prior to use as a feedstock in the AD.*

Question: What organic residues require CFIA inspection? Why is this needed? What is the frequency of these CFIA inspections? What is the estimated quantity of organics that would require CFIA inspection?

1. *Dock Receiving – for small/medium loads and for specialty loads eg pelletized out of date goods. Forklift unloading and sorting in the elevated sorting floor.*

Question: Please explain why a small or medium load would be delivered, unless it was only specialty loads. The report states that all inbound loads would arrive in 20-25 cu yd roll-off containers. Please confirm that this volume will be fully utilized per vehicle to ensure efficiency and reduction of environmental impacts resulting from excess vehicle traffic.

1. *Genecis Demo Plant is located at this site with a lab-scale facility that converts organic waste into bio-plastics. Over the next 3 years, the plan is to increase processing to up to 3 tonnes of organic waste/week at the facility. Measures will be put in place to ensure odour management plan grows with them as their process grows, with a combination of physical barriers, activated carbon filters and wet scrubbers.*

Question: Is this demo plant located within the existing GFL facility, or is it currently a separate building located at this site? How will this operation be incorporated into the planned OPF design to facilitate the transfer of 3 tonnes organic waste/week from OPF to the Genecis demo plant facility without release of odours during the loading process at OPF, transportation of the organic waste, or the unloading process at Genecis? Will it be transferred in an open truck?

1. *Feedstocks and Products -* *The OPF can receive approx. 452,000 T/yr of material (1,240 T/day) and can be sourced anywhere within the province of Ontario, although the majority is expected to be sourced from within a reasonable transportation radius of the facility.*

Question: To minimize the environmental impact of long distance hauling of the feedstock from anywhere within Ontario, can the sources of feedstock be defined within geographic boundaries or a maximum distance from the OPF? For example, within the GTA, or 100 km radius, etc.

1. *The organics will not include human biosolids.*

Question: Will the feedstock contain animal waste, such as dog feces and kitty litter? If so, does this feedstock need pasteurization, as with diaper waste?

1. *Truck Traffic -* *The site is also used by GFL Environmental Inc and for construction and demolition waste diversion. The new project will be integrated within the existing activities on site, which is currently set up for truck traffic.*

Question: How many trucks does GFL currently have coming and going for the existing operations? In addition to GFL’s operations, the proposed OPF operations will have numerous trucks coming and going from the site every day of the year, as well as staff vehicles over 3 shifts.

1. *The surrounding area is a mixture of other heavy-industrial activities. Trucks coming and leaving the site will generally travel south/north from/to Hwy 401.*

Question/Comment: The location of the proposed OPF on Coronation Drive is industrial, but the north and south routes to and from Hwy 401 are primarily residential neighbourhoods. Please explain the possible route(s) that the trucks will take to get from Hwy 401 to Coronation Drive and return.

1. *Given that the area is zoned for heavy industrial use, it is not anticipated that the increase in truck traffic will cause a nuisance.*

Comment: In reviewing Table 1 – Truck Traffic, I feel there has been a calculation error as it only counts the number of Inbound trucks one direction, and the number of Outbound trucks one direction. However, each vehicle, regardless of its purpose, must arrive and also leave the site, therefore the amount of “traffic” in the neighbourhood is actually double what is stated in the report.

Question: Please confirm if employee traffic is based on a total of 20 employees per day, or if it is 20 employees per each of the 3 shifts covering the 24 hour operation.

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|  | **Proponent’s anticipated Trucks/day** | **Resulting neighbourhood traffic (both directions)** | **\*Based on 20 employees X 3 shifts** |
| Incoming substrate  (20-24 T roll-off trucks) | 50-62 | 100-124 |  |
| Outgoing digestate  (34 T tractor trailers) | 23-28 | 46-56 |  |
| Outgoing inorganics, waste, etc | 2-7 | 4-14 |  |
| Employee traffic | 20 cars | 40 cars | 20 X 2 directions = 40  \*40 X 3 shifts = 120 cars as neighbourhood traffic per 24 hr period. |
| Maintenance; supplies | 2 vans or trucks/week (on average)  \* Not counted in daily total | 4 vehicles/week  (on average)  \*Not counted in daily total |  |
|  | 95 – 117 per day | 190 – 234 per day |  |

The additional truck traffic is significant. An additional 190 – 234 trucks and at least 40 cars per day, travelling to/from Hwy 401 and the proposed OPF site through residential neighbourhoods and school zones is more than a nuisance. This warrants a complete traffic assessment. In addition to safety concerns, it seems plausible that there would be some amount of environmental impact to the air quality, noise, and odour due to the additional traffic to and from the site; and therefore it would be prudent to study these environmental impacts prior to the approval of this application. The proponent had stated that they hoped to take advantage of the off-peak traffic times to receive and deliver loads. I am concerned that the noise from the large volume of trucks travelling the routes as they arrive and leave the site during the late night/early morning hours will be amplified as residents are trying to sleep.

Heavy Metals Test Procedure on Feedstock

Please explain the 3 different testing frequencies that are mentioned in the Design and Operation Report – ECA Application.

1. *Feedstocks will be tested for heavy metals prior to delivery and used at the facility.*

If it is tested prior to delivery of the feedstock, does this mean that the supplier is providing their own test results? If so, how would you verify that the testing for the load was accurate to meet the standards? For example, if 3 test samples failed and one passed, the supplier could provide the results of the 1 sample that passed, but ship the entire load for processing.

1. *Tested once per 1000 cu m of that feedstock or 5 consecutive tests show positive metals results.*

Does “positive metals results” mean they are within the acceptable level, or they were over the acceptable level? If it means the tests are over the acceptable level, then this does not seem to be strict enough.

1. *Once every 12 months.*

Does this mean each supplier would be tested every 12 months, or for the OPF overall?

If the OPF receives a year’s worth of feedstock, but only tests for heavy metals every 12 months, then is it possible that the OPF could have unknowingly processed 452,000 T of organics with excessive levels of heavy metals?

Is there additional testing for heavy metals on the digestate prior to shipment and/or use as fertilizer? If so, what happens to the contaminated digestate? If not, does this mean that farmers and other users could be contaminating their land with heavy metals in the fertilizer that originated from the digestate?

Given the importance of this issue, it seems prudent for the OPF to conduct frequent tests on all inbound feedstock and/or the digestate for heavy metals before shipment.

1. *If test results indicate that feedstock has heavy metals above the EMA limits, the feedstock will not be accepted at the facility.*

Question: Is the supplier testing the feedstock before shipping it, or is OPF testing the feedstock upon each load’s arrival? Due to the potential negative impacts of applying heavy metals in the fertilizer originating from digestate, shouldn’t the OPF test all feedstock and/or digestate to verify heavy metals do not exceed limits?

1. *Odour Assessment -* *Dispersion modelling indicates the resulting possible odours are below the MECP’s requirement of 1 ou at all 4 human receptors.*

Comment: The report addresses 4 human receptors (Coronation Drive, Factory on Chemical Court, Railway, and Factory Food Product Manufacturing Plant) that appear to be within 500 m radius from the site. However, area residents can attest that, depending on the weather conditions, unpleasant odours from the industrial area often dissipates north of Lawrence Ave E, as well as east toward West Hill, and west to Centennial Rd.

Please confirm that the dispersion modelling was based on the same stack height that will be used at the proposed OPF.

Please confirm that the odour dispersion modelling included the odours released into the environment when the bay doors open for each of the 50-62 inbound roll-off trucks to fully enter the building; and the odours released into the environment when the bay doors open for each of the 50-62 unloaded trucks to leave the building.

1. *560 tonnes/day of digestate will be produced by the digester.*

Comment: The AD can process up to 620 T of feedstock per day and produce 560 T/day of digestate. Please confirm that the 60 T difference from inbound feedstock and outbound digestate is the expected amount of inorganic waste received in the feedstock per day.

As per Table 1 – Truck Traffic, daily digestate shipments in 34 tonne tractor trailer loads is expected to be 23 trucks (782 T) to 28 trucks (952 T), but this is 222-392 tonnes more than the AD can process in a day. Please explain.

1. *Bay doors to OPC remain closed except for when a truck is entering or leaving the building.*

Comment: Therefore, odours will escape each time the bay doors open for each of the 50-62 inbound trucks to fully enter, and odours will escape each time the bay doors open for the same 50-62 outbound trucks to fully exit. Each time the bay doors open, odour from the organic waste will be released into the environment.

1. *Biogas will contain some mercaptans, so the vented tail gas from the biogas upgrader will be a source of odour.*

Comment: I am concerned that the combination of the odour released into the environment from the biogas in addition to the odour released into the environment from the bay doors opening 100-124 times/day will result in an unpleasant experience and impede the enjoyment of the nearby outdoor spaces.