

## Public Advisory Committee

### Minutes from PAC Meeting #34

LYSTEK SOUTHGATE ORGANIC MATERIALS RECOVERY CENTRE

**Date:** Thursday December 15, 2022

**TIME:** 7:00 pm

**LOCATION:** Teams Video Conference Call

#### ATTENDEES:

Chair: Merv McLeod  
Members: Joan John (Councillor, Township of Southgate)  
Michael Sherson (Community Member)  
Christina Rittwage (Community Member)  
Simon Meulendyk (Lystek)  
Adrienne Van Dyk (Lystek)  
Regrets: Sherifa Carmichael (Community Member)

#### AGENDA TOPICS:

Item	Description	Action By
1.	Roll call and round table introductions	Merv M.
2.	<b>Review of previous meeting minutes</b> Simon provided a review of the minutes from last meeting on January 31, 2022. As minutes were passed by consensus via email, the review was for information purposes.	
3.	<b>Approval of Agenda</b> Clarification Questions: <b>What is the community Representative Definition?</b> <i>A community member is defined as a taxpayer of the Township of Southgate or a resident who lives within 5 km of the OMRC facility.</i> <b>What is status of the members not attending?</b> <i>There has been no letter of resignation and there has been no contact, we have assumed the person is no longer interested.</i> <b>Since, formal meeting is once per year, how do we learn more?</b> <i>If there is demand for information further public meetings can be planned, tours and information session at sit can done for up to 10 participants. It was suggested that the newly elected council should be offered a tour, as community complaints are usually taken to their local councilor as a first step.</i>	Adopted Moved by Michael Shearson Seconded by Joan John Carried.

4.	<p><b>Public and Media Attendance – Re: Question Period and Code of Conduct</b></p> <p>Clarification on Delegations</p> <ul style="list-style-type: none"> <li>• <i>Two weeks’ notice for public for decision to allow presentation</i> <ul style="list-style-type: none"> <li>◦ <i>2 days for written copy of submission to chair</i></li> </ul> </li> <li>• <i>10 minutes allowed for presentation</i></li> <li>• <i>PAC members only allowed questions of clarifications</i></li> </ul> <p>No media/public attendance</p> <p>It was suggested that a link be requested on the township website to the Minutes of PAC meetings which are publicly available on the Lystek Southgate Organic Material Recovery Centre website.</p>	<p>Moved by Joan John Seconded by Mike Sherson Carried</p>
5.	<p><b>Operations Update – Simon Meulendyk</b></p> <p>The OMRC continues to operate with 2-3 shifts per day (3 in winter months, 2 in summer months). 2022 has been another consistent year of operation for the facility. Reliably maintained contracts signed with various municipalities &amp; customers has created a consistent incoming stream of material for processing. The facility typically receives larger incoming volumes in the winter months. The summer months, although less busy with incoming volume, is occupied by the LysteGro fertilizer land application program. This allows for the maintenance of year-round regular work hours for the 12 employees. Lystek added 1 additional staff in 2022, Pat Dixon started as a Plant Operator in May.</p> <p>A summary of incoming material for the previous four quarters can be found at the end of the minutes.</p> <p>The big site project for the year was the Reservoir 1 cover upgrade. The project ran from the end of May to the middle of October. With communication to the local MECP, the reservoir’s original cover was removed in May to allow site staff to begin emptying the contents. Without the cover removal, emptying the contents below the reservoir’s outlet pipe would not be practical. By the end of August, the reservoir was empty, and the cover installers completed the job by the middle of the October. The upgraded cover included larger cover floats to better overcome the Dundalk snow and ice that accumulates over the winter. This will reduce the stress on the cover, extending its lifespan and providing superior air collection properties.</p> <p><b>Land Application:</b></p> <p>Outgoing volumes was approximately 149,000 cubic meters (m3), making for the fourth straight year of &gt;100,000 m3 for the application season and an all-time high for the facility. Approximately 10,000 acres of farmland were applied to. Highland Custom Farming (Proton Station, ON) and Saugeen Agri Service (Kenilworth, ON) continue to be the site’s land application service providers to which provides an additional 12 direct jobs (drivers, injector operators, admin/coordinators). 2022 had an earlier spring, like 2021. This allowed for consistent land application to begin in the first week of April (other years have seen as late as first week of May). There continues to be reliable demand for hay ground applications and abundant interest for application after crops are harvested. The program ceased in December due to inclement weather. It is anticipated the program will resume in April 2023, weather permitting</p>	

	<p><b>2022 Trial:</b></p> <p>Field trials were started again after the last two years of not completing due to the complexity of the pandemic. Lystek partook in field trials with the Michigan Biosolids team at the Michigan Agri Expo. Corn was evaluated where LysteGro yielded 235 bu/ac compared to the commercial fertilizer rate of 216 bu/ac. Lystek recently commissioned its newest technology deployment in Michigan (SHVUA WWTP, south of Detroit).</p>
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6.	<p><b>Community Correspondence:</b></p> <p>The following concerns were raised by PAC members:</p> <p><b>There is a smell coming into town when there is an east wind; is this being dealt with?</b>  <i>Simon expressed that the Reservoir 1 cover upgrade is one stage in the site air collection/treatment upgrade. The next stage involving updating air treatment is awaiting MECP ECA amendment approval and work is expected to begin in Spring 2023. Equipment is currently being purchased and will be installed in May or June 2023. Simon mentioned that overall, since new cover installation, complaints are down significantly</i></p> <p><i>.  It was mentioned the smell is higher in town depending on wind direction. It was suggested the community should be made of aware of work being done and new equipment being installed to mitigate the smell as to keep the public informed.</i></p> <p><b>Is the storage pit on HWY #10 owned by Lystek?</b> <i>No, although it is owned by a Lystek customer.</i></p> <p><b>A transport truck flipped last summer when leaving the Lystek site, can you clarify?</b> <i>The truck was carrying Lystek product, however, liability is with the trucking firm. Township emergency services responded, and the paramedic performed an extraction from the vehicle. MECP Spills Action Centre was involved assuring the site was left in the condition it was before the accident. Lystek did not put out a public response and there was no comment or response from the public.</i></p> <p><b>Were there any calls from the Fire Department to Lystek regarding smells in town?</b> <i>There were no calls from the Fire Department regarding smells in town that may have been emanating from the recovery centre.</i></p>	<p>Moved by Mike Sherson  Seconded by Christina Rittwage  Carried</p>
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7.	<p>Product Monitoring Reports - Simon</p> <p>Reports Attached</p>	<p>Moved by Joan John  Seconded by Christina Rittwage  Carried</p>
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8.	<p><b>New Business/Action Items</b></p> <p><b>New Members:</b>  Mike Sherson has joined as community member following his 4-year term as a councillor.  Joan John has been appointed by Southgate as the Council representative.</p> <p><b>Actions:</b>  Joan John will check with Council to determine interest in a site visit and information session for new council members.</p> <p>All members to inform any community members that may approach them of the PAC and Lystek contact info.</p> <p>Chair asked about methods of getting information to the public in the area. social media, the Herald and word of mouth beginning with PAC members seems to be the best. Simon will advise on potential other methods of local information. Simon will follow up on an electronic link be placed on township website to the PAC minutes which are located on the Southgate Organic Materials Recovery Centre website.</p> <p>It is asked why the Public Advisory Committee only has one meeting per year. It was noted that meeting /interest/attendance has been a struggle in the past and hence the reduction to one meeting. However, if there is enough interest, there is a possibility of having a second meeting around mid-year. It was agreed to reconvene via email in May if there was interest for another meeting in June/July.</p> <p>Date of next meeting will be Tuesday November 21<sup>st</sup>, 2023, 7:00 PM.</p>	<p>Moved by Joan John  Seconded by Mike Sherson</p>
9.	<p><b>Adjourn Meeting</b></p>	<p>Moved by Joan John  Seconded by Mike Sherson  Carried.</p>

Incoming Material Summary		
Type	Volume (trucks) per day	Municipality
Cake (solid)	5-6	Toronto, Guelph, Muskoka (Huntsville and Gravenhurst), Hamilton, Halton, Paris, Kitchener/Waterloo, Peel
Liquid	2-3	Orangeville, Durham, Arthur, LCBO, Mono, Fergus, Shelburne, Reinhart Foods

Attachments:

- *Monitoring Report for LysteGro fertilizer and LysteGro fertilizer Composition Sheet*

*The Southgate OMRC PAC is a condition of the MECP's Environmental Compliance Approval to create an open flow of information to residents about the biosolids processing centre in Dundalk.*

*Members of the PAC meet once each year, or more often if deemed necessary. Currently, there are three volunteer community members, a Township of Southgate Councillor and a chairperson on the committee. Members of the PAC include:*

- *Christina Rittwage, resident of Dundalk*
- *Sherifa Carmicheal, resident of Dundalk*
- *Michael Sherson, resident of Dundalk*
- *Joan John. Township of Southgate Councillor*
- *The committee is chaired by Merv McLeod. A consultant with the firm McLeod Wood Associates Inc.*

Stored Product Analysis  
2022



Lystek Southgate Organic Materials Recovery Centre (OMRC)  
191 Eco Park Way, Dundalk, Ontario

Constituent	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Average	Maximum Allowable Concentration <sup>a</sup>	Units
<b>Metals</b>															
Arsenic	BDL	2.00	2.00	BDL	BDL	BDL	BDL	BDL	BDL	BDL			BDL	170	mg/kg
Cadmium	2.27	2.51	2.17	2.59	1.13	1.12	1.11	1.45	1.86	2.20			1.84	34	mg/kg
Cobalt	5.38	5.30	5.15	5.19	5.35	5.86	5.12	5.02	5.21	5.99			5.36	2,800	mg/kg
Chromium	84.75	84.40	78.25	78.45	80.45	90.65	81.30	77.05	73.85	89.85			81.90	340	mg/kg
Copper	752.00	749.50	685.50	667.50	765.00	793.50	756.00	693.50	755.00	821.50			743.90	1,700	mg/kg
Mercury	0.40	0.30	0.40	0.70	0.10	0.40	0.40	BDL	1.70	0.70			0.57	1,100	mg/kg
Molybdenum	13.70	13.30	12.80	12.30	12.90	14.50	14.20	13.10	13.10	13.10			13.30	11	mg/kg
Nickel	31.70	31.34	28.99	25.72	30.23	37.94	32.93	36.14	29.92	33.65			31.86	94	mg/kg
Lead	20.00	21.00	21.00	20.00	23.00	27.00	30.00	40.00	25.00	30.00			25.70	420	mg/kg
Selenium	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			BDL	34	mg/kg
Zinc	825.50	838.00	1,010.50	801.50	945.00	777.00	692.00	760.50	958.50	1,137.50			874.60	4,200	mg/kg
<b>Nutrients and Physical Properties</b>															
Total Solids	11.77	10.33	11.16	10.09		11.49	12.78	13.19	11.75	12.23			11.64	n/a	%
Volatile Solids	5.73	5.90		5.76		6.45	7.31	7.16	6.31	6.45			6.38	n/a	%
Total Organic Carbon	319,800	312,700	325,400	317,300	332,000	311,700	318,000	301,800	298,100	293,100			312,990	n/a	mg/kg
Total Kjeldahl Nitrogen	54,600	55,000	56,000	62,800	32,500	57,600	52,600	36,500	58,000	54,000			51,960	n/a	mg/kg
Ammonium - N	24,582	24,804	25,796	33,256	5,538	28,356	25,125	10,238	31,195	27,010			23,590	n/a	mg/kg
Nitrate and Nitrite-N	4.16	3.68	5.86	4.54	2.06	3.34	3.84	3.58	2.84	3.08			3.70	n/a	mg/kg
Total Potassium	15,700	16,700	16,300	15,900	14,200	16,200	16,100	15,400	14,300	18,700			15,950	n/a	mg/kg
Total Phosphorus	40,200	34,700	36,000	23,600	28,300	34,300	30,200	31,700	28,600	33,500			32,110	n/a	mg/kg
<b>Pathogens</b>															
Fecal Coliforms	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8			n/a	<1000	MPN/g
Salmonella	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG			n/a	<1	CFU/25g

<sup>a</sup> As per Section 14.2 of Environmental Compliance Approval No. 8850-8V6S7Z

Note - Each sample collected consists of a minimum of 1 grab sample collected directly from the discharge point of the process reactor.

Note - Analysis completed by A&L Canada Laboratories Inc.

n/a - not available

ND - Not detected

NEG - negative



### LysteGro Fertilizer Composition

	LysteGro Average <sup>a</sup>	Maximum Allowable Concentration <sup>b</sup>	Units
Organic Matter Content	6.27		% on a wet weight basis
Total Organic Carbon	3.64		% on a wet weight basis
<b>Total Nutrient Content</b>			
Total Nitrogen (TKN)	5.20		% on a dry weight basis
Total Available Nitrogen (Ammonium + Nitrate)	2.36		% on a dry weight basis
Total Phosphorus (P <sub>2</sub> O <sub>5</sub> )	7.35		% on a dry weight basis
Total Potassium (K <sub>2</sub> O)	2.02		% on a dry weight basis
<b>Metals Regulated by MOE</b>			
Arsenic	BDL	170	mg/kg
Cadmium	1.84	34	mg/kg
Cobalt	5.36	340	mg/kg
Chromium	81.90	2,800	mg/kg
Copper	743.90	1,700	mg/kg
Mercury	0.57	11	mg/kg
Molybdenum	13.30	94	mg/kg
Nickel	31.86	420	mg/kg
Lead	25.70	1,100	mg/kg
Selenium	BDL	34	mg/kg
Zinc	874.60	4,200	mg/kg
<b>Relevant Micronutrients</b>			
Calcium	40.23		lbs/1,000 gallons
Copper	0.87		lbs/1,000 gallons
Iron	112.12		lbs/1,000 gallons
Magnesium	6.96		lbs/1,000 gallons
Manganese	0.64		lbs/1,000 gallons
Selenium	BDL		lbs/1,000 gallons
Sulphur	19.75		lbs/1,000 gallons
Zinc	1.02		lbs/1,000 gallons
<b>Total and Available Nutrients (during 1st growing season) - Imperial</b>			
Total Nitrogen	60.49		lbs/1,000 gallons
Total Available Nitrogen <sup>c</sup>	40.67		lbs/1,000 gallons
Total Phosphorus (P <sub>2</sub> O <sub>5</sub> )	85.53		lbs/1,000 gallons
Total Available Phosphorus (P <sub>2</sub> O <sub>5</sub> ) <sup>d</sup>	34.21		lbs/1,000 gallons
Total Potassium (K <sub>2</sub> O)	22.37		lbs/1,000 gallons
Total Available Potassium (K <sub>2</sub> O) <sup>e</sup>	20.13		lbs/1,000 gallons
<b>Pathogens</b>			
Fecal coliform	<1.8 <sup>f</sup>		MPN/g(mL)
Salmonella spp.	NEG <sup>f</sup>		P-A/25g(mL)

<sup>a</sup> Values represent the mean of samples collected on a monthly basis throughout January - October 2022

<sup>b</sup> As per Ontario Regulation 338/09, Schedule 5

<sup>c</sup> The sum of Ammonium + Nitrate + assume 40% mineralization of Organic Nitrogen during first growing season

<sup>d</sup> Assume 40 % availability of Phosphorus

<sup>e</sup> Assume 90% availability of Potassium during first growing season

<sup>f</sup> Results were consistent for all sampling events

BDL - Below Detectable Limit