

# Southgate OMRC

## Public Advisory Committee

### Minutes from PAC Meeting #31

LYSTEK SOUTHGATE ORGANIC MATERIALS RECOVERY CENTRE

Thursday, November 28, 2019

**TIME:** 7 pm

**LOCATION:** Southgate OMRC Facility – Eco Park

#### ATTENDEES:

Steve Redmond (Chair), David Hiscock, Connie Hiscock  
Christina Rittwage,  
Simon Meulendyk, Adrienne Van Dyk – Lystek,  
Michael Sherson – Township of Southgate Councillor

Guest: Sherifa Carmichael – Resident of Dundalk

#### AGENDA TOPICS:

Item	Description	Action By
1.	<b>Welcome</b>	Steve
2.	<b>Review of previous meeting minutes</b> Steve provided a review of the minutes from the May 2019 PAC meeting.	Accepted by consent via email within two weeks of last meeting
3.	<b>Approval of Agenda</b>	Moved by David Hiscock Seconded by Christina R.
4.	<b>Public and Media Attendance – Re: Question Period and Code of Conduct</b>	Steve
5.	<b>Operations Update – Simon Meulendyk</b> The OMRC continues to operate with 2-3 shifts per day. 2019 has been the most consistent year of operation for the facility. New contracts signed with various new municipalities & customers has created a consistent incoming stream of material for processing. This helps maintain regular work hours for the 10 employees. A summary of incoming material for the previous two quarters can be found at the end of the minutes.  <b>Organizational Notes:</b> Lystek currently has 10 full time employees and employee retention has been excellent since the OMRC was commissioned.  <b>Land Application:</b>	

	<p>It has been a record year for land applications of LysteGro. The outgoing volume was approximately 120,000 cubic metres – versus 70,000 m<sup>3</sup> in 2018 – and applying to approximately 8,000 acres of farmland. The revenue generated is approximately \$42/1,000 gallons, or \$126/ac when applied at 3,000 gal/ac. If compared to the retail value of NPK (not including micros or organic matter), LysteGro has a value of ~\$150/ac in the first year and a total of ~\$270/ac. The farmer can essentially allocate this fertilizer expense over two cropping seasons as only a portion of the nutrients are crop available in the year of application. The remaining nutrients are released in successive seasons as the organic material breaks down in the soil.</p> <p>The land application of LysteGro results in approximately 6 – 9 direct jobs as there are two - three applicator teams with 3 employees in each team. These contractor jobs are in addition to the full time Lystek employees.</p> <p><b>2019 Hay Trial:</b> An internal study to evaluate LysteGro applications on hay was replicated in 2019. Initial indications are that the hay crop had a better response to the LysteGro applications than in the dry summer of 2018. The results of the trial continue to be compiled and will be released in 2020.</p> <p><b>Environmental Compliance Approval (ECA):</b> Lystek is still awaiting the response from the MECP in regard to the amendment to the Air ECA submitted in June 2019. The ECA amendment was in regard to the additional air treatment stage for the reservoir storage installed in the summer of 2018.</p>
<p>6.</p>	<p><b>Community Concerns</b></p> <p><b>Odour Observations:</b></p> <p>PAC members shared their experiences with odour in Dundalk. Some indicated the lack of odour observations in the community while others noted it appears that they are detecting odours early morning and/or early evening. Odour detection continues to be subjective in nature and the identification of the source of the odour is a challenge due to changes in temperature and wind directions throughout the day.</p> <p>Several Lystek employees are trained in the use of the nasal ranger for odour detection and take readings on the OMRC property on a regular basis. This is a proactive measure undertaken by Lystek to determine if there are any issues at the facility. The Nasal Ranger readings have consistently reported a lack of evidence for off-site odours from the OMRC in 2019. The readings are taken early morning ranging from 7:00 – 9:00 am.</p> <p>In June, the Chair wrote to MECP with a question about methods the community could use to monitor and record odour events. In response to this question Rick Chappell (MECP District Manager, Owen Sound) responded:</p> <p><i>“In the case of odours from the Lystek Facility, and based on the ministry’s current understanding of the situation based on a risk assessment following several site visits by ministry staff and measures undertaken by the facility to meet applicable Ministry standards, it has been concluded that odour incidents are low risk with no actual or potential for human health impacts. As such, under normally operating conditions no further actions will be taken by the ministry at this time. The ministry would direct complainants to contact the Municipality of Southgate about their concerns”.</i></p>

	<p><b>Note: the full text of the letter can be found as an appendix to the minutes.</b></p>	
<p><b>7.</b></p>	<p><b>Product Monitoring Reports - Simon</b></p> <p>The PAC reviewed the monitoring reports for the 2<sup>nd</sup> &amp; 3<sup>rd</sup> quarters of 2019. (<i>attached to PAC minutes</i>). The reports appear differently as the quarterly reports now represent the new sampling frequencies under the amended ECA. The areas in black are periods where sampling is no longer required.</p> <p>Note on Monitoring Reports:</p> <ul style="list-style-type: none"> <li>- The monitoring reports continue to demonstrate the consistency of the processed product at the facility. This is in large part to wastewater treatment plants' ability to treat and deliver consistent &amp; reliable biosolids.</li> <li>- This consistency has resulted in a consistent crop response to LysteGro which has resulted in increasing demand for the processed product.</li> </ul>	
<p><b>8.</b></p>	<p><b>New Business:</b></p> <ol style="list-style-type: none"> <li>1. Sherifa Carmichael has a strong interest in waste management/recycling and will join the PAC. The Chair will forward the Terms-of-Reference and the Code-of-Conduct for Sherifa to review.</li> <li>2. The current PAC has four (4) members who are all residents of Dundalk. It was decided that the PAC will operate with the existing membership for the next few meetings. New members who have a strong interest in learning more about Lystek and the use of the product for crop production in Southgate are encouraged to contact the Chair. There will be no active advertisement for additional members.</li> <li>3. A healthy discussion on the need to "Inform &amp; Educate" residents and the wider community on recycling nutrients from waste occurred. The PAC members discussed other initiatives that have taken place such as the "Grown in Grey". The discussion resulted in a conclusion that Lystek has been successful at building a strong relationship with the farm community, as the sales volume of LysteGro continues to increase and farmers are seeing value, however the benefits to the community - and society as a whole – have not been clearly communicated. Discussion on the use of Southgate's Facebook page or some other type of social media platform were discussed. NO consensus was reached on how to clearly direct Lystek to improve the relationships with the "non-farming" residents of Southgate (see Action Items # 2)</li> <li>4. 2019 Plant and Field Tour: The tour was postponed due to weather and finally cancelled for 2019. A Tour will be arranged for July 2020.</li> </ol>	
<p><b>9.</b></p>	<p><b>Action Items:</b></p> <ol style="list-style-type: none"> <li>1. The Chair will again plan a meeting with the new MECP manager in Owen Sound and the Southgate Mayor to maintain an open dialogue between the MECP, the PAC and the Township of Southgate.</li> <li>2. Research methods to "Inform &amp; Educate" additional residents of Southgate on the benefits of the OMRC</li> </ol>	<p>Steve to contact the new MECP Manager in Owen Sound to obtain information.</p>

	facility especially the social benefits of recycling waste material generated.	All PAC members to think about opportunities before the May 2020 meeting.
	<b>Next meeting</b> is planned for Thursday, May 28, 2020 at 7 pm in the Southgate Organic Materials Recovery Centre boardroom.	
	<b>Adjourn Meeting</b>	Moved by Connie Hiscock

<b>Incoming Material Summary</b>		
Type	Volume (trucks) per day	Municipality
Cake (solid)	5-6	Toronto (Ashbridges Bay & Highland Creek WWTPs), Guelph, Muskoka (Huntsville and Gravenhurst), Hamilton, Halton, & Kitchener/Waterloo
Liquid	2-3	Orangeville, Durham, Arthur, Mono, Teeswater, LCBO

Attachments:

- *Monitoring Reports for 2<sup>nd</sup> & 3<sup>rd</sup> quarter 2019.*
- *Email response to Chair's question on odour monitoring from June 2019*

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

- *David & Connie Hiscock, residents of Dundalk*
- *Christina Rittwage, resident of Dundalk*
- *Michael Sherson, a Township of Southgate Councillor*
- *The committee is chaired by Stephen Redmond. He is a certified crop advisor, a former Environmental Specialist with OMAFRA and former resident of Southgate.*

Table 15

Processed Product Analysis Form  
Quarter 2 - 2019

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



Constituent	APRIL 1 - 5	APRIL 8	APRIL 15	APRIL 22	APRIL 29	MAY 6 - 10	MAY 13	MAY 21	MAY 28	JUNE 3 - 7	JUNE 10	JUNE 17	JUNE 24	Quarterly Average	Maximum Allowable Concentration <sup>a</sup>	Units <sup>b</sup>
<b>Metals</b>																
Arsenic	BDL					BDL				BDL				BDL	170	mg/kg
Cadmium	3.65					3.08				2.49				3.07	34	mg/kg
Cobalt	4.90					5.00				4.60				4.83	340	mg/kg
Chromium	79.05					77.05				69.70				75.27	2,800	mg/kg
Copper	496.00					521.50				535.00				517.50	1,700	mg/kg
Mercury	0.60					0.50				0.20				0.43	11	mg/kg
Molybdenum	11.70					9.20				10.20				10.37	94	mg/kg
Nickel	27.48					28.35				25.67				27.17	420	mg/kg
Lead	BDL					BDL				27.88				27.88	1,100	mg/kg
Selenium	BDL					BDL				BDL				BDL	34	mg/kg
Zinc	784.00					709.00				758.00				750.33	4,200	mg/kg
<b>Nutrients and Physical Properties</b>																
Total Moisture	87.21					85.42				87.87				86.83	n/a	%
Volatile Solids	7.38					8.51								7.95	n/a	mg/kg
Total Organic Carbon	320,500					324,500				337,100				327,367	n/a	mg/kg
Total Kjeldahl Nitrogen	48,100					44,100				48,000				46,733	n/a	mg/kg
Ammonium - N	14,146.36					12,082.30				13,108.57				13,112	n/a	mg/kg
Nitrate and Nitrite-N	5.16					4.20				5.82				5.06	n/a	mg/kg
Total Potassium	17,100					10,600				13,200				13,633	n/a	mg/kg
Total Phosphorus	33,200					30,400				29,900				31,167	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	<1.8	<1.8	<1.8	n/a	1,000	MPN/g
Salmonella	NEG	NEG	NEG	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. 8850-8V657Z

<sup>b</sup> Results presented on a dry weight basis

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

NOTE - Each sample represents a composite of a minimum of 3 grab samples collected directly from the discharge point of the process reactor on a daily basis.

n/a - not available

NEG - negative

Table 16

Processed Product Analysis Form  
 Quarter 3 - 2019



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

Constituent	JULY 2	JULY 8	JULY 15 - 19	JULY 23	JULY 29	AUG 5 - 9	AUG 12	AUG 19	AUG 26	SEPT 3	SEPT 9 - 13	SEPT 19	SEPT 23	SEPT 30	Quarterly Average	Maximum Allowable Concentration <sup>a</sup>	Units <sup>c</sup>
<b>Metals</b>																	
Arsenic			BDL			BDL					BDL				BDL	170	mg/kg
Cadmium			3.53			3.43					3.01				3.32	34	mg/kg
Cobalt			6.62			5.49					7.52				6.54	340	mg/kg
Chromium			72.45			87.75					79.35				79.85	2,800	mg/kg
Copper			658.00			710.00					485.90				617.97	1,700	mg/kg
Mercury			0.40			0.30					0.30				0.33	11	mg/kg
Molybdenum			14.20			12.90					14.80				13.97	94	mg/kg
Nickel			26.69			33.09					32.54				30.77	420	mg/kg
Lead			26.66			27.00					27.27				26.98	1,100	mg/kg
Selenium			BDL			BDL					BDL				BDL	34	mg/kg
Zinc			855.50			785.00					1,077.00				905.83	4,200	mg/kg
<b>Nutrients and Physical Properties</b>																	
Total Moisture			88.31			86.66					86.94				87.30	n/a	%
Volatile Solids			7.07			7.91					7.89				7.62	n/a	mg/kg
Total Organic Carbon			335,900			329,200					335,800				333,633	n/a	mg/kg
Total Kjeldahl Nitrogen			50,700			48,300					41,000				46,667	n/a	mg/kg
Ammonium - N			12,654.32			14,020					12,644				13,106	n/a	mg/kg
Nitrate and Nitrite-N			107.53			48.40					7.10				54.34	n/a	mg/kg
Total Potassium			19,300			15,800					12,200				15,767	n/a	mg/kg
Total Phosphorus			41,700			31,900					30,300				34,633	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	<1.8	<1.8	<1.8	<1.8	n/a	1,000	MPN/g
Salmonella	NEG	NEG	NEG	NEG	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. 8850-8V6572

<sup>b</sup> Due to interferences in the sample, accurate results were unattainable. Dilutions were below detection limits.

<sup>c</sup> Results presented on a dry weight basis

NOTE: Analysis completed by A&L Canada Laboratories Inc.

NOTE: Each sample represents a composite of a minimum of 1 grab sample collected directly from the discharge point of the process reactor on a daily basis.

n/a - not available

NEG - negative

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**From:** Chappell, Rick (MECP) <[Rick.Chappell@ontario.ca](mailto:Rick.Chappell@ontario.ca)>  
**Sent:** June 6, 2019 3:19 PM  
**To:** Stephen Redmond <[stevered@isp.ca](mailto:stevered@isp.ca)>  
**Cc:** Gass, Scott (MECP) <[Scott.gass@ontario.ca](mailto:Scott.gass@ontario.ca)>; Ritchie, John (MECP) <[John.S.Ritchie@ontario.ca](mailto:John.S.Ritchie@ontario.ca)>; Bromley, Jim (MECP) <[Jim.Bromley@ontario.ca](mailto:Jim.Bromley@ontario.ca)>  
**Subject:** RE: Lystek Public Advisory Committee - Ideas for Odour Monitoring

Mr. Redmond,

My understanding is that the amount of odour complaints concerning Lystek have significantly dropped.

Generally, when an incident is brought to the Ministry's attention, compliance staff will undertake an assessment of the incident to determine the level of risk associated with that incident and in particular whether the incident has the potential to cause human health or environmental impacts, or whether impacts are limited to nuisance type impacts. How the Ministry undertakes a risk assessment of an incident is also determined on a case by case basis which may or may not involve a site visit by Ministry staff.

If ministry compliance staff determine an incident is low risk, ministry staff may determine that no further actions by the ministry will be taken. The ministry may refer the public to another level of government more suited for dealing with the matter, such as the local municipality or planning authority. All incidents reported to the ministry are documented and kept on file.

In the case of odours from the Lystek Facility, and based on the ministry's current understanding of the situation based on a risk assessment following several site visits by ministry staff and measures undertaken by the facility to meet applicable Ministry standards, it has been concluded that odour incidents are low risk with no actual or potential for human health impacts. As such, under normally operating conditions no further actions will be taken by the ministry at this time. The ministry would direct complainants to contact the Municipality of Southgate about their concerns.

Also for your information, the ministry is undertaking a review to assess opportunities for modernizing approaches to responding to low risk complaints and incidents related to land use compatibility. Further information about this review can be found at <https://ero.ontario.ca/notice/019-0042>

Sincerely,

Rick Chappell  
District Manager  
Owen Sound District Office  
Drinking Water & Environmental Compliance Division

Ministry of the Environment, Conservation and Parks  
Ministère de l'Environnement, de la Protection de la nature et des Parcs

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