

# Southgate OMRC

## Public Advisory Committee

### Minutes from PAC Meeting #29

LYSTEK SOUTHGATE ORGANIC MATERIALS RECOVERY CENTRE

Thursday, November 29, 2018

**TIME:** 7 pm

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

#### ATTENDEES:

Steve Redmond (Chair), Karen Cheeseman, David Hiscock  
Simon Meulendyk, Adrienne Van Dyk – Lystek,  
Guest: Barbara Dobreen - Township of Southgate Councillor  
Guest: Anne Marie Fosbrooke, Township of Southgate, Mayor  
Regrets: Glen Irwin, John Woodbury - Township of Southgate Councillor

#### AGENDA TOPICS:

| Item | Description   | Action By  |
|------|---|--|
| 1.   | <b>Welcome</b>  | Steve  |
| 2.   | <b>Review of previous meeting minutes</b><br>Steve provided a review of the minutes from the May 31, 2018 PAC meeting.  | Accepted by consent via email within two weeks of last meeting |
| 3.   | <b>Approval of Agenda</b>   | Moved by K. Cheeseman<br>Seconded by David Hiscock             |
| 4.   | <b>Public and Media Attendance – Re: Question Period and Code of Conduct</b>  | Steve  |
| 5.   | <b>Operations Update</b><br>The OMRC continues to operate with 2-3 shifts per day with consistent numbers for production and volume of material.<br><br>A summary of incoming material can be found at the end of the minutes.<br><br>There are no organization changes to report since last meeting (May 31, 2018).<br>Lystek currently has 9 full time employees. | Simon Meulendyk  |

**Land Application:**

The total land applications of LysteGro for 2018 (spring, summer & fall) was 70,000 cubic metres. This have been land applied on approximately 5,500 acres.

The dry summer weather had an impact on the growth of hay, and this was noted in the response of hay fields to LysteGro applications.

**2018 Hay Trial:**

An internal study to evaluate LysteGro applications on hay was conducted by Lystek in 2018.

Applications of 2,000 and 3,000 gallons per acre were applied after the first cut of hay. These applications were compared to equivalent amounts of commercial fertilizer.

The study included 3 fields and data was gathered using a random "hula-hoop" method of sampling plant material. The fresh and dry weights of the samples were measured samples as well sent away for third party analysis for further assessment.

Overall, despite being unable to collect data from one field, there is evidence that the LysteGro treatments were of comparable or higher quality than the commercial fertilizer, though the yields were slightly lower. Samples from the same fields will be collected from the same sites in 2019 in order to quantify the residual effect of LysteGro compared to commercial fertilizer the year after application.

The study will be repeated in 2019.

**Environmental Compliance Approval (ECA):**

The EBR posting for the two amendments to the existing ECA has been posted. (see May 2018 minutes for details of amendment).

The comment period for the EBR posting ended on December 3, 2018.

(see Notes in New Business for further discussion)

|                  |  |              |
|------------------|--|--------------|
| <p><b>6.</b></p> | <p><b>Community Concerns</b></p> <p><b>Odour Observations:</b></p> <p>Councillor Dobreen continues to receive occasional phone calls and is copied in on emails to the MECP District Office in Owen Sound from Southgate residents regarding odours in Dundalk.</p> <p>The source of the odours during the period of September – November 2018 was not confirmed.</p> <p><b>Lystek comments on Odours in May 2018:</b></p> <p>In late May, higher levels of Hydrogen Sulfide (H<sub>2</sub>S) in an incoming feedstock was determined to be the source of an increase in odours.</p> <p>The contract for this incoming material was terminated and shipments of the material to the Lystek facility stopped in May. An additional step in the odour treatment train was added to deal with the residual effects of this material. The performance of this additional system upgrade has been effective and Lystek is satisfied with the results as is the MECP.</p> <p><b>Recent Monitoring Frequency/New Feedstock ECA Amendment:</b></p> <p>An issue was raised concerning the process for communication of ECA amendments. It was felt that the public did not have enough notice for the recent request for amendments. Also, there was also an inquiry of the content of the “Additional Information” that is referred to on the EBR posting.</p> <p>(see further comments and Lystek response under New Business section).</p> |              |
| <p><b>7.</b></p> | <p><b>Monitoring Reports</b></p> <p>The PAC reviewed the monitoring reports for the 2<sup>nd</sup> and 3<sup>rd</sup> quarter 2018. (<i>attached to PAC minutes</i>). The consistency of the material and constituent levels is similar to previous reports and are well below regulated limits in all monitored metals and pathogens.</p>   | <p>Simon</p> |
| <p><b>8.</b></p> | <p><b>New Business:</b></p> <ol style="list-style-type: none"> <li>1. The PAC needs new members. Glen Irwin has notified the PAC of his resignation. The Chair has acknowledged his resignation and will solicit new members through local papers and selected social media outlets in early 2019.</li> </ol>  |              |

|                  |   |   |
|------------------|---|---|
|                  | <p>2. An additional amendment is required for an upgrade to the odour abatement system that is inclusive of a scrubber container that is adding additional benefit in the treatment train. Observations over winter will be conducted prior to proceeding with the amendment.</p> <p><b>Lystek Comments on EBR Posting:</b><br/> The August amendment - for Monitoring Frequency and New Feedstocks - is “minor” and does not require the same public outreach as a major amendment. Public notification was brought forward in the May PAC meeting and letters were sent to adjacent landowners and the Township of Southgate in August. The “Additional Information” includes information necessary to justify the amendment. Some information is considered proprietary and hence why it is not readily accessible to the public unless requested.</p> |   |
| <p><b>9.</b></p> | <p><b>Action Items:</b></p> <ol style="list-style-type: none"> <li>1. The Chair will plan a meeting with the MECP manager in Owen Sound to obtain some clarity around the complaint process and what information can be obtained under the Freedom of Information Act to pass on to both residents of Southgate and Township of Southgate Councillors and staff.</li> <li>2. Due to the success and information exchanged in the LysteGro Field Application Tour in July 2018, the Chair would like to plan another tour in 2019. A “Delegation request” will be made to Council in early 2019 to speak to Council about this event.</li> </ol>   | <p>Steve to contact MECP Manager in Owen Sound to obtain information.</p> <p>Steve to prepare “Delegation Request” and send to Joanne Hyde at Township office</p> |
|                  | <p><b>Next meeting</b> is planned for Thursday, May 30<sup>th</sup>, 2019 at 7 pm in the Southgate Organic Materials Recovery Centre boardroom.</p>   |   |
|                  | <p><b>Adjourn Meeting</b></p>   | <p>Moved by David Hiscock</p>   |

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

Attachments:

) *Monitoring Reports for 2<sup>nd</sup> and 3<sup>rd</sup> quarters 2018.*

*The Southgate OMRC PAC is a condition of the MOE'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 four times per year, or more often if deemed necessary. Currently, there are four volunteer community members and a chairperson on the committee. Members of the PAC include:*

- ) *Glen Irwin, a local business person and former Southgate Twp. Councillor*
- ) *Karen Cheeseman, a local graphic artist*
- ) *David Hiscock, a resident of Dundalk*
- ) *John Woodbury, 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 Dundalk.*

Processed Product Analysis Form  
 Quarter 2 - 2018      Apr May June

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

| Constituent                              | APR 2 - 6 | APR 9 - 13 | APR 16 - 20 | APR 23 - 27 | APRIL 30 - MAY 4 | MAY 7 - 11 | MAY 14 - 18 | MAY 21 - 25 | MAY 28 - JUNE 1 | JUNE 4 - 8 | JUNE 11 - 15 | JUNE 18 - 22 | JUNE 25 - 29 | Quarterly Average | Maximum Allowable Metal Concentration <sup>a</sup> | Units   |
|--|-----------|------------|-------------|-------------|------------------|------------|-------------|-------------|-----------------|------------|--------------|--------------|--------------|-------------------|--|---------|
| <b>Metals</b>                            |           |            |             |             |                  |            |             |             |                 |            |              |              |              |                   |  |         |
| Arsenic                                  | 2.06      | 3.19       | 2.68        | 3.40        | 3.15             | 2.23       | 2.94        | 2.87        | 2.38            | 3.06       | 4.00         | 3.00         | 3.00         | 2.92              | 170  | mg/kg   |
| Cadmium                                  | 1.30      | 2.05       | 2.04        | 1.44        | 1.56             | 1.17       | 1.51        | 2.15        | 2.01            | 3.70       | 2.52         | 2.45         | 2.71         | 2.05              | 34   | mg/kg   |
| Cobalt                                   | 2.34      | 2.86       | 2.82        | 2.49        | 2.40             | 1.95       | 2.56        | 2.60        | 2.11            | 2.70       | 2.87         | 2.75         | 3.09         | 2.58              | 340  | mg/kg   |
| Chromium                                 | 40.70     | 38.89      | 44.66       | 31.66       | 36.16            | 38.66      | 43.19       | 38.72       | 32.83           | 44.53      | 43.31        | 44.49        | 42.68        | 40.04             | 2,800  | mg/kg   |
| Copper                                   | 326.20    | 400.15     | 375.70      | 351.90      | 338.45           | 368.85     | 348.75      | 366.85      | 336.50          | 464.50     | 468.95       | 459.60       | 439.80       | 388.17            | 1,700  | mg/kg   |
| Mercury                                  | 0.30      | 0.40       | 0.50        | 0.50        | 0.40             | 0.40       | 0.30        | 1.60        | 0.30            | 0.50       | 0.40         | 0.50         | 0.20         | 0.48              | 11   | mg/kg   |
| Molybdenum                               | 5.40      | 6.30       | 5.50        | 5.50        | 4.70             | 7.20       | 5.50        | 5.50        | 4.80            | 6.80       | 7.30         | 8.10         | 7.30         | 6.15              | 94   | mg/kg   |
| Nickel                                   | 14.32     | 13.71      | 15.33       | 12.29       | 13.59            | 14.15      | 15.43       | 14.19       | 12.54           | 15.84      | 15.54        | 13.71        | 15.82        | 14.34             | 420  | mg/kg   |
| Lead                                     | 43.53     | 61.45      | 59.25       | 55.55       | 33.62            | 20.09      | 45.02       | 52.10       | 33.24           | 58.55      | 61.00        | 64.00        | 65.00        | 50.18             | 1,100  | mg/kg   |
| Selenium                                 | 4.80      | 7.01       | 8.68        | 5.91        | 4.48             | 3.61       | 7.63        | 7.40        | 5.91            | 9.75       | 8.66         | 8.08         | 6.22         | 6.78              | 34   | mg/kg   |
| Zinc                                     | 386.25    | 421.25     | 390.20      | 358.30      | 348.85           | 368.60     | 381.90      | 400.75      | 332.65          | 487.20     | 484.65       | 502.50       | 489.75       | 411.76            | 4,200  | mg/kg   |
| <b>Nutrients and Physical Properties</b> |           |            |             |             |                  |            |             |             |                 |            |              |              |              |                   |  |         |
| Total Moisture                           | 76.34     | 83.73      | 81.96       | 84.07       | 76.62            | 77.96      | 77.50       | 78.97       | 74.11           | 82.40      | 84.52        | 84.86        | 84.36        | 80.57             | n/a  | %       |
| Total Organic Carbon                     | 332,900   | 312,300    | 315,400     | 304,900     | 339,800          | 358,200    | 317,100     | 315,100     | 350,600         | 305,800    | 298,100      | 301,100      | 292,100      | 318,723           | n/a  | mg/kg   |
| Total Kjeldahl Nitrogen                  | 23,000    | 28,900     | 29,500      | 30,000      | 23,700           | 24,300     | 22,600      | 23,400      | 23,800          | 32,800     | 41,000       | 42,000       | 43,800       | 29,908            | n/a  | mg/kg   |
| Ammonium - N                             | 7,881     | 11,435     | 9,769       | 1,323       | 9,065            | 11,332     | 7,786       | 9,384       | 9,543           | 11,334     | 13,199       | 10,425       | 13,805       | 9,714             | n/a  | mg/kg   |
| Nitrate and Nitrite-N                    | 3.02      | 2.94       | 7.18        | 4.82        | 17.72            | 6.56       | 12.26       | 2.60        | 13.36           | 4.82       | 4.92         | 5.82         | 28.80        | 8.83              | n/a  | mg/kg   |
| Total Potassium                          | 13,400    | 19,000     | 17,900      | 17,200      | 9,300            | 7,300      | 18,000      | 21,200      | 12,900          | 23,100     | 24,800       | 28,200       | 31,900       | 18,785            | n/a  | mg/kg   |
| Total Phosphorus                         | 19,000    | 23,100     | 22,600      | 21,200      | 18,100           | 18,300     | 17,900      | 18,000      | 16,600          | 23,600     | 23,300       | 26,500       | 24,600       | 20,985            | 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               | <1000  | 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. 8850-8V6S7Z

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

Note - Each sample represents a composite of a minimum of 5 grab samples collected directly from the discharge point of the process reactor on a daily basis.

BDL- Below Detectable Level

n/a - not available

NEG - negative

Processed Product Analysis Form  
 Quarter 3 - 2018 Jul Aug Sept

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

| Constituent                              | JULY 2 - 6 | JULY 9 - 13 | JULY 16 - 20 | JULY 23 - 27 | JULY 30 - AUG 3 | AUG 6 - 10 | AUG 13 - 17 | AUG 20 - 24 | AUG 27 - 31 | SEPT 3 - 7 | SEPT 10 - 14 | SEPT 17 - 21 | SEPT 24 - 28 | Quarterly Average | Maximum Allowable Metal Concentration <sup>a</sup> | Units   |
|--|------------|-------------|--------------|--------------|-----------------|------------|-------------|-------------|-------------|------------|--------------|--------------|--------------|-------------------|--|---------|
| <b>Metals</b>                            |            |             |              |              |                 |            |             |             |             |            |              |              |              |                   |  |         |
| Arsenic                                  | 3.00       | 2.00        | 3.00         | 3.00         | 2.75            | 4.00       | 3.00        | 3.00        | 4.00        | 5.00       | 2.00         | 2.88         | 4.00         | 3.20              | 170  | mg/kg   |
| Cadmium                                  | 2.53       | 2.69        | 3.54         | 2.71         | 3.13            | 2.25       | 2.25        | 2.60        | 2.20        | 2.07       | 2.66         | 2.29         | 2.09         | 2.54              | 34   | mg/kg   |
| Cobalt                                   | 3.80       | 4.65        | 4.30         | 4.36         | 4.23            | 3.42       | 4.58        | 4.36        | 5.78        | 5.34       | 5.60         | 3.79         | 4.41         | 4.51              | 340  | mg/kg   |
| Chromium                                 | 49.66      | 52.65       | 50.85        | 53.10        | 54.25           | 47.35      | 50.15       | 55.60       | 53.50       | 73.05      | 58.00        | 51.62        | 61.40        | 54.71             | 2,800  | mg/kg   |
| Copper                                   | 509.00     | 502.00      | 513.00       | 480.30       | 463.65          | 545.00     | 473.60      | 608.00      | 570.50      | 618.00     | 555.50       | 712.70       | 509.00       | 543.10            | 1,700  | mg/kg   |
| Mercury                                  | 0.30       | 0.40        | 0.40         | 0.40         | 0.50            | 0.60       | 0.60        | 0.20        | BDL         | 0.30       | 0.40         | 0.30         | 1.30         | 0.48              | 11   | mg/kg   |
| Molybdenum                               | 8.70       | 10.60       | 10.20        | 10.40        | 10.00           | 9.60       | 10.20       | 11.20       | 11.80       | 11.50      | 13.00        | 11.80        | 12.90        | 10.92             | 94   | mg/kg   |
| Nickel                                   | 17.51      | 19.77       | 19.80        | 21.31        | 21.37           | 17.74      | 21.03       | 22.41       | 24.35       | 29.22      | 23.21        | 23.84        | 20.91        | 21.73             | 420  | mg/kg   |
| Lead                                     | 60.00      | 49.00       | 67.00        | 51.00        | 52.55           | 56.00      | 46.00       | 30.00       | 27.00       | 41.00      | 24.00        | 38.40        | 23.00        | 43.46             | 1,100  | mg/kg   |
| Selenium                                 | 6.99       | 6.40        | 9.96         | 7.63         | 6.69            | 7.94       | 6.59        | 5.80        | 4.73        | 6.06       | 4.01         | 5.48         | 3.73         | 6.31              | 34   | mg/kg   |
| Zinc                                     | 560.50     | 604.00      | 600.00       | 585.00       | 523.00          | 562.00     | 569.00      | 703.00      | 669.50      | 714.00     | 673.50       | 700.47       | 690.00       | 627.23            | 4,200  | mg/kg   |
| <b>Nutrients and Physical Properties</b> |            |             |              |              |                 |            |             |             |             |            |              |              |              |                   |  |         |
| Total Moisture                           | 83.50      | 84.14       | 84.25        | 85.06        | 84.85           | 84.69      | 85.50       | 86.92       | 87.94       | 85.79      | 87.33        | 87.33        | 88.44        | 85.83             | n/a  | %       |
| Total Organic Carbon                     | 295,900    | 307,000     | 299,100      | 298,900      | 299,300         | 301,500    | 298,800     | 322,000     | 341,600     | 304,000    | 326,200      | 326,200      |              | 310,042           | n/a  | mg/kg   |
| Total Kjeldahl Nitrogen                  | 41,300     | 33,700      | 46,100       | 42,900       | 46,900          | 41,700     | 42,200      | 49,200      | 52,300      | 42,800     | 50,300       | 51,200       |              | 45,050            | n/a  | mg/kg   |
| Ammonium - N                             | 12,025     | 9,022       | 1,884        | 12,166       | 12,661          | 11,245     | 12,316      | 16,112      | 18,268      | 12,854     | 13,149       | 16,041       |              | 12,312            | n/a  | mg/kg   |
| Nitrate and Nitrite-N                    | 7.96       | 8.10        | 2.98         | 5.52         | 11.48           | 22.60      | 11.66       | 13.56       | 7.38        | 5.36       | 42.40        | 8.76         |              | 12.31             | n/a  | mg/kg   |
| Total Potassium                          | 27,800     | 20,500      | 25,500       | 20,200       | 23,400          | 28,800     | 25,500      | 16,000      | 15,700      | 14,800     | 16,000       | 14,500       |              | 20,725            | n/a  | mg/kg   |
| Total Phosphorus                         | 28,000     | 27,400      | 28,300       | 24,700       | 25,100          | 29,700     | 25,500      | 31,900      | 28,900      | 31,700     | 28,800       | 30,500       |              | 28,375            | 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               | <1000  | 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. 8850-8V6S7Z

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

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