

Southgate OMRC

Public Advisory Committee

Minutes from PAC Meeting #21

LYSTEK SOUTHGATE ORGANIC MATERIALS RECOVERY CENTRE

Tuesday, May 26 17, 2015

TIME: 7 pm

LOCATION: Southgate OMRC Facility – Eco Park

ATTENDEES:

Steve Redmond (Chair),

Mike Dougherty - Lystek, Simon Meulendyk– Lystek, David Hiscock,

Glen Irwin, John Woodbury - Township of Southgate Councillor

Guests: Mary Fowler, Regrets: Karen Cheeseman

AGENDA TOPICS:

Item	Description	Action By
1.	Welcome to New PAC Member – John Woodbury Steve welcomed John Woodbury as a new PAC member and representative of the Township of Southgate. John is a resident of Dundalk, has served as a Councillor in the past and has been re-elected to Council. He provided a signed copy of the Terms-of-Reference and agreed to abide by the Terms.	Steve
2.	Review of previous meeting minutes Steve provided a quick review of the minutes from the February PAC meeting.	Accepted by consent via email within two weeks of last meeting
3.	Approval of Agenda	Moved by David Hiscock Seconded by Glen Irwin
4.	Public and Media Attendance – Re: Question Period and Code of Conduct	Steve
5.	Operations Update During the winter months (February to April), the facility continued to operate up to 24 hours per day, 6-7 days per week, with three shifts of operators. In the middle of May the facility began to operate 2 shifts, 6 days per week as some of the Municipalities can elect to land apply their biosolids rather than transfer material to the Southgate OMRC.	Mike Dougherty

The facility has been receiving incoming material from six (6) municipalities (see summary at the end of the minutes). The sources continue to be similar to other periods.

Lystek has hired one part-time employee on a full time basis. One person has left the facility for personal reasons. Lystek is looking to hire one person who will assist with administration, quality control and operations.

Currently there are 11 full time employees at the OMRC.

Land Application:

Material was being pumped and land applied from the second lagoon in the third week of May. A second loading pump was added to speed up the loading of trucks.

Approximately 20,000 cubic metres (4.4 million gallons) of processed material was land applied on 1,500 - 2,000 acres. The rates applied were 3,000 – 4,000 gallons/acre for a corn crop and 2,000 gallon/acre if the intended crop was a small grain (oats or barley).

(Chair's note: The nutrient demand for a small grain crop is less than a corn crop.)

The processed material will be injected into hay crops this summer at a rate of 2,000 – 2,500 gallons per acre. The small disk injectors are able to apply manure with only minor damage to the hay crop. The applied nutrients and subsequent re-growth allows the hay crop to recover quickly.

2015 Research:

Two projects will be undertaken in 2015 to evaluate crop response to LysteGro:

- Andy VanNiekerk (independent crop consultant) & Dr. Dave Hume (Univ. of Guelph professor emeritus) will conduct small plot research trials.

The Ontario Soil & Crop Improvement Assoc. will conduct larger scale plots to evaluate crop growth after applications of LysteGro at two rates compared to commercial fertilizer and a control in four counties: Wellington, Dufferin, Simcoe and Grey.

6.	<p>Community Concerns</p> <p>Odour Complaints: Lystek received one complaint concerning land application. This complaint was inspected by Jim Bromley (<i>MOE Senior Environmental Officer</i>). In addition, one complaint was received at the OMRC facility. (see also MOE notes on odour complaints)</p>	Mike Dougherty, Steve Redmond
7.	<p>Monitoring Reports</p> <p>The PAC reviewed the 2015 first quarter monitoring report. The consistency of the material and constituent levels is consistent with previous reports and is well below regulated limits in all monitored metals and pathogens.</p> <p>The following reports are attached:</p> <ul style="list-style-type: none"> • 4th quarter 2014 • 1st quarter 2015 	Mike
8.	<p>Action Items:</p> <ol style="list-style-type: none"> 1. Add Township of Southgate Mayor to the distribution list for the minutes of the PAC meeting. 2. Request that the Township of Southgate place the dates of PAC meetings on the Southgate calendar. 3. Role of the regulated metals selenium and molybdenum in plants, and animals. 	Steve
	<p>Next meeting is planned for Tuesday, August 25, 2015 at 7 pm in the Southgate Organic Materials Recovery Centre boardroom.</p>	
	<p>Adjourn Meeting</p>	Moved by Glen Irwin Seconded by David Hiscock

Incoming Material Summary		
Type	Volume (trucks) per day	Municipality
Cake (solid)	6-8	Toronto, Halton, Guelph,
Liquid	3-4	Orangeville, Owen Sound and Tay Township

Attachments:

- Monitoring Reports for 4th quarter 2014 and 1st quarter 2015

Odour Complaints

The following are comments from an email to the Chair from Jim Bromley (Senior Environmental Officer Ministry of the Environment and Climate Change) on May 26, 2015:

Since the start of 2015 to date, the Ministry has received complaints on 21 days (32 complaints) regarding odours associated with operations in the Eco Park. The Ministry conducted field responses on 9 of these dates and was unable to substantiate any significant offsite odours.

The Ministry's approach to compliance and enforcement seeks to safeguard the public interest by ensuring that the Ministry's response to an incident is proportionate to the severity of the incident. For incidents that are determined to be more severe in nature staff are required to consider a mandatory abatement response. For less severe incidents staff can consider a voluntary abatement response.

Incidents reported to the Ministry or identified by the ministry vary significantly in severity. Each incident is evaluated by staff on a case-by-case basis.

The ministry continues to take action on odour concerns in Dundalk through both proactively assessing the area and responding to complaints.

When assessing a complaint staff look at a number of factors including; number of complaints, wind speed, wind direction, nature of the odour, current activities taking place at the facilities along with other factors.

Ministry staff will continue to respond to complaints as appropriate. If the ministry determines a facility to be in non-compliance with our legislation or regulations or the terms and conditions as set out in their Environmental Compliance Approval ministry staff, through application of appropriate compliance and enforcement tools will work to bring these facilities into compliance.

Complaints can be made to the ministry's Spills Action Centre at 1-800-268-6060.

Regards

Jim Bromley

Senior Environmental Officer

Ministry of the Environment and Climate Change

Ministère de l'Environnement et de l'Action en matière de changement climatique

Owen Sound District Office

519-376-4358

The Southgate OMRC PAC is a condition of the MOE's Environmental Compliance Approval to create an open flow of information to local 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 4 - 2014

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

Constituent	Oct 6 - 10	Oct 13 - 17	Oct 20 - 24	Oct 27 - 31	Nov 3 - 7	Nov 10 - 14	Nov 17 - 21	Nov 24 - 28	Dec 1 - 5	Dec 8 - 12	Dec 15 - 19	Dec 22 - 26	Dec 29 - Jan 2	Quarterly Average	Maximum Allowable Concentration ^a	Units
Metals																
Arsenic	3.94	3.22	4.50	2.59	2.47	3.39	3.51	3.08	3.08	3.84	2.74	4.40	3.99	3.40	170	mg/kg
Cadmium	2.31	2.32	2.19	2.60	2.27	2.08	2.15	2.37	2.33	2.08	2.09	2.81	2.30	2.30	34	mg/kg
Cobalt	3.92	3.68	2.98	4.77	4.35	3.27	3.71	4.04	4.20	3.47	3.34	4.47	3.23	3.85	340	mg/kg
Chromium	68.50	64.30	65.80	57.50	60.80	74.35	71.10	65.60	69.65	71.85	84.05	65.50	83.55	68.25	2,800	mg/kg
Copper	852.90	662.70	653.70	636.30	670.80	744.00	588.30	492.15	620.40	454.75	672.90	541.50	729.60	632.53	1,700	mg/kg
Mercury	0.41	0.29	0.27	0.41	0.45	0.45	0.37	0.40	0.37	0.42	0.38	0.16	0.20	0.37	11	mg/kg
Molybdenum	11.80	10.80	10.60	9.20	8.70	9.20	9.40	9.70	9.80	8.20	8.60	11.60	10.80	9.80	94	mg/kg
Nickel	26.12	17.20	20.19	21.78	21.35	22.16	21.87	22.86	22.89	25.27	26.73	18.64	27.51	22.26	420	mg/kg
Lead	42.44	31.80	30.15	34.18	31.66	38.80	32.02	29.04	34.50	33.47	30.95	24.69	29.69	32.81	1,100	mg/kg
Selenium	2.91	1.96	2.86	1.47	1.89	2.70	2.21	1.84	1.79	2.10	2.81	1.32	2.36	2.16	34	mg/kg
Zinc	950.10	767.70	666.90	844.20	804.90	757.20	680.40	683.10	789.30	569.50	663.60	743.40	702.00	743.36	4,200	mg/kg
Nutrients and Physical Properties																
Total Moisture	86.09	86.84	85.22	87.10	85.91	86.31	87.03	87.24	86.14	86.70	86.63	86.80	87.02	86.50	n/a	%
Total Organic Carbon	314,700	309,700	310,600	314,500	318,600	317,500	291,700	300,600	310,600	297,200	317,000	322,300	331,900	310,417	n/a	mg/kg
Total Kjeldahl Nitrogen	32,600	33,200	33,600	33,600	39,500	37,400	33,600	42,600	38,200	35,500	35,300	42,200	39,200	36,442	n/a	mg/kg
Ammonium - N	43,100	44,500	45,000	42,500	47,400	48,400	41,100	42,700	46,600	42,400	45,700	52,300	50,000	45,142	n/a	mg/kg
Nitrate and Nitrite-N	22.60	43.80	28.20	25.20	28.20	20.40	50.40	87.40	52.80	66.80	22.40	11.48	18.40	38.31	n/a	mg/kg
Total Potassium	27,200	18,400	18,300	21,700	22,400	24,100	34,100	23,200	23,900	21,200	23,200	15,700	19,100	22,783	n/a	mg/kg
Total Phosphorus	27,200	25,200	22,700	29,100	30,800	30,300	27,000	29,700	33,300	27,800	34,700	37,900	27,900	29,642	n/a	mg/kg
Pathogens																
E.coli	<3	<3	<3	<3	<3	<3	<3	<3	<3	65	<3	<3	<3	n/a	n/a	MPN/g
Fecal Coliform	<3	<3	<3	<3	<3	<3	<3	<3	<3	>1000	<3	<3	<3	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

^a As per Section 14.2 of Environmental Compliance Approval No. 8850-8V657Z

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.

n/a - not available

NEG - negative

Processed Product Analysis Form
Quarter 1 - 2015

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

Constituent	JAN 5 - 9	JAN 12 - 16	JAN 19 - 23	JAN 26 - 30	FEB 2 - 6	FEB 9 - 13	FEB 16 - 20	FEB 23 - 27	MAR 2 - 6	MAR 9 - 13	MAR 16 - 20	MAR 23 - 27	MAR 30 - APR 3	Quarterly Mean	Maximum Allowable Metal Concentration ^a	Units
Metals																
Arsenic	BDL	3.63	2.68	3.06	1.22	3.65	2.29	2.83	3.18	3.23	2.84	3.15	3.22	2.92	170	mg/kg
Cadmium	2.07	2.42	1.88	2.10	2.54	1.90	2.20	1.65	2.01	2.47	1.61	1.81	1.68	2.03	34	mg/kg
Cobalt	3.10	3.50	2.70	2.49	3.10	2.67	3.26	2.79	2.60	3.08	2.29	2.70	2.76	2.85	340	mg/kg
Chromium	67.25	78.25	64.60	67.25	75.60	65.60	69.90	67.90	71.35	69.20	69.80	88.25	71.65	71.28	2,800	mg/kg
Copper	695.70	768.90	789.00	549.50	596.10	471.35	691.50	654.90	705.30	646.50	512.50	689.70	697.50	651.42	1,700	mg/kg
Mercury	0.20	0.35	0.34	0.20	0.17	0.17	0.26	0.20	0.17	0.22	0.22	0.33	0.28	0.24	11	mg/kg
Molybdenum	9.70	10.70	9.60	9.40	9.50	9.40	9.30	9.40	9.40	9.40	8.00	9.40	8.30	9.35	94	mg/kg
Nickel	21.35	21.04	20.98	17.92	20.15	17.41	20.08	22.17	16.08	24.97	23.38	28.42	18.43	20.95	420	mg/kg
Lead	27.56	29.22	28.16	24.95	26.85	22.45	27.10	30.07	25.29	28.70	27.75	32.62	33.10	27.99	1,100	mg/kg
Selenium	BDL	1.47	1.55	2.21	1.20	2.03	2.39	2.59	1.61	1.49	1.29	2.84	2.21	1.91	34	mg/kg
Zinc	719.40	811.50	738.25	695.50	671.70	588.00	710.10	711.90	696.60	719.10	648.60	758.40	748.80	709.07	4,200	mg/kg
Nutrients and Physical																
Ammonium - N	12,212.99	12,032.00	12,939.24	11,703.96	11,539.42	9,466.80	11,517.47	11,855.82	13,772.17	12,425.35	13,252.39	13,229.33	13,167.21	12,239.55	n/a	%
Total Moisture	86.98	86.75	87.41	86.62	86.96	87.71	86.89	86.59	88.97	89.43	88.91	86.76	85.18	87.32	n/a	mg/kg
Total Organic Carbon	330,300	341,300	338,800	337,600	330,200	329,300	334,000	339,200	331,200	335,400	329,300	322,500	337,700	333,600	n/a	mg/kg
Total Kjeldahl Nitrogen	40,700	41,600	40,300	41,200	50,600	40,000	36,400	40,500	50,900	49,300	38,600	37,100	38,000	41,938	n/a	mg/kg
Nitrate and Nitrite-N	13.76	15.60	6.50	26.60	12.60	42.60	16.66	48.00	34.80	56.00	27.40	69.00	8.66	29.09	n/a	mg/kg
Total Potassium	16,100	15,800	17,700	17,300	19,000	20,300	18,800	16,500	19,900	18,200	18,000	15,900	18,300	17,831	n/a	mg/kg
Total Phosphorus	29,800	35,800	28,000	32,900	33,900	31,500	37,700	32,000	32,800	36,600	33,100	40,100	34,500	33,746	n/a	mg/kg
Pathogens																
E.coli	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	61	n/a	MPN/g
Fecal Coliforms	<3	<3	<3	<3	<3	<3	<3	66	<3	<3	<3	<3	<3	61	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

^a As per Section 14.2 of Environmental Compliance Approval No. 8850-8V657Z

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