Southgate OMRC

Public Advisory Committee

Minutes from PAC Meeting #18

LYSTEK SOUTHGATE ORGANIC MATERIALS RECOVERY CENTRE

August 26, 2014 **TIME**: 7 pm

LOCATION: Southgate OMRC Facility – Eco Park

ATTENDEES:

Steve Redmond (Chair), Glen Irwin, Mary Fowler, Sarah Mason, Karen Cheeseman
Mike Dougherty – Lystek

Additional Attendees – David Hiscock

Regrets: Grant Preston

AGENDA TOPICS:

Item	Description	Action By
1.	**Review of previous meeting minutes**	Accepted by consent via email within two weeks of last meeting
2.	**Approval of Agenda**	Moved by Mary Fowler Seconded by Sarah Mason
3.	**Public and Media Attendance – Re: Question Period and Code of Conduct**	Steve
4.	**Operations Update** On May 29, 2014 Lystek received their CFIA fertilizer certification and have since been applying their product as a fertilizer rather than a NASM material. They are applying based on soil needs and are sampling fields as suggested by OMAF regulations and following the setback distances as suggested by OMAF Best Management Practices. Simon Meulendyk was hired as a Quality Control Technician but is also transitioning into the role of Land Application Coordinator. The LysteGro is being applied by Saugeen Agri and Highland Custom Farming of Proton Station. Highland Custom Farming has purchased tankers with injectors specifically for the LysteGro product	Mike Dougherty

	and Lystek is very happy with their service. Lystek is committed to utilizing injection application methods rather than top dressing the product as there is a significant improvement in nitrogen retention in the soil and a reduction in odour when the LysteGro is injected versus a surface broadcast application. **Amendment to CofA for Upgrades:** An amendment application to the CofA for the Southgate OMRC to allow a second lagoon and an earthen-lined storage facility for liquid biosolids (incoming material) has been submitted to the MOE. The PAC toured the partially completed second storage lagoon and viewed the location of the proposed storage for incoming material. The ability to view the installation of the liner is important to understand the containment system and monitoring used by Lystek at the OMRC facility. **Incoming and Outgoing Material:** (See summary chart for incoming material) Incoming material amounts are variable in the summer as Municipalities are opting to land apply biosolids under their own NASM Plans rather than have the material further processed. Incoming material volumes will increase again during wet weather and the winter months when direct land application is no longer an option for waste water treatment plants. A number of other surrounding municipalities are listing the Southgate OMRC facility in their contingency plan if they are in need of extra storage at their waste water treatment facility. Approximate outgoing volumes amount to about 500 – 1,000 cubic meters per day depending on weather. Application rates of LysteGro are 13.6 – 18 cubic meters per acre (3,000 - 4,000 gallons/acre) depending on crop needs. Approximately 35 – 55 acres of land are fertilized at these volumes on a daily basis. The plan is to apply the material to a field once every three years. In the spring the LysteGro product was being sold	

	for $12.50/1,000 Imperial gallon within a 20 km radius of the facility (price includes transportation and application costs). It is currently being sold for $15.00 – 25.00/1,000 Imperial gallon based on current market value and demand. Note: the price for LysteGro increases if fields are further than 20 km from the Lystek facility. Cost to land owner for application is $45 – $75 per acre. Equivalent commercial fertilizer value of the available Nitrogen/Phosphorus/Potassium nutrients is $150/acre. **New Staff:** Lystek has hired Peter McLean - a local resident as an operator. In addition, a local Co-op student, Shilah LeFeuvre was hired to work in the lab. Shilah who is training to be an Environmental Technician at Georgian College. The OMRC is currently operating 24 hours per day, 5 days a week and running three shifts. **Grand Opening:** The grand opening of the OMRC is September 17, 2014 and is invite only. Local businesses, municipalities from across Ontario and a number of industry professionals have been invited. Lystek reminds us that any community member wishing to tour the OMRC should contact Mike Dougherty and he will gladly show them around the facility.	
5.	**Community Concerns** *Spreading odour in spring 2014* On May 23, 2014, an odour issue was noticed by several residents of Southgate after one of Saugeen Agri's tanker injector systems became damaged. The application continued as a broadcast application with the intent to incorporate the material as soon as possible. The material was incorporated by the end of the day; however the odour from broadcast application was experienced by the neighbours. Lystek commits to utilize the injection equipment as a standard practice to minimize odour. The LysteGro material was land applied for the remainder of the summer without further odour complaints.	Mike Dougherty *The CFIA registration does NOT require the LysteGro product to be incorporated, however it is a Best Management Practice that Lystek will follow for all future applications.*

6.	**Monitoring Reports** *Review of 2nd quarter product analysis results* March 31, 2014 to June 23, 2014 Twelve weekly samples were taken and sent for analysis at A&L Canada Labs. The lab is investigating the regulated metals and nutrient content as well as other physical properties and pathogens. The PAC reviewed the product levels of each sample taken as well as the quarterly average levels. Similar to previous summaries, the levels of metals are well below regulated levels with pathogens levels below detection. Analysis results are attached.	Mike
7.	**New Business:** Definition of a Spill: A legal document by WeirFoulds LLP was briefly reviewed that addresses the responsibilities of a company who may have had a spill. The quantity that determines whether a spill has occurred is based on a risk assessment of the material. The material must not cause an Adverse Effect in any situation. Several pieces of legislation exist that deal with Spills, including: 1. Ontario Regulation 224/07: Spill Prevention and Contingency Plans 2. Ontario Regulation 675/98: Classification and Exemption of Spills and Reporting Discharges *New Member Discussion* David Hiscock attended the meeting to determine what is involved with being a PAC member and to view a meeting. He has expressed interest in joining the PAC and has signed the Code-of-Conduct.	Steve Redmond
8.	**Action Items** Discuss 2015 PAC meeting frequencies. This topic will be discussed at next meeting.	Steve

	Next meeting is planned for Tuesday, October 28, 2014 at 7 pm in the Southgate Organic Materials Recovery Centre boardroom.	
	Adjourn Meeting	Moved by Karen Cheeseman Seconded by Mary Fowler

Incoming Material Summary		
Type	Volume (trucks) per day	Municipality (s)
Cake (solid)	2-3	Toronto, Halton, Guelph, Kitchener
Liquid	2-3	Orangeville, Tay Township

Attachment: Lystek – Processed Product Analysis, 2nd Quarter 2014

The Southgate OMRC PAC is now 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, Ontario. Members of the PAC meet on a bi-monthly basis. Currently, there are five volunteer community members and a chairperson on the committee. Members of the PAC include Grant Preston a retired farmer and former Reeve of Proton Twp., Glen Irwin, a local business person and Southgate Twp. councillor, Mary Fowler, a freelance reporter and former editor of The Dundalk Herald, Sarah Mason, a local university student and Karen Cheeseman, a local graphic artist. 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 - 2014

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

Constituent	Mar 31- Apr 4	Apr 7-11	Apr 14-18	Apr 21-25	Apr 28- May 2	May 5-9	May 12-16	May 19 - 23	May 26-30	June 9 - 13	June 16-20	June 23-27	Quarterly Average	Maximum Allowable Metal Concentration[1]	Units
Metals															
Arsenic	3.60	3.40	2.40	2.40	2.30	5.20	4.20	4.10	3.00	2.80	2.70	3.40	3.33	170	mg/kg
Cadmium	2.09	2.55	2.07	2.26	2.10	2.35	2.22	2.42	2.15	2.33	1.84	1.21	2.12	34	mg/kg
Cobalt	2.82	3.04	2.84	2.87	2.56	2.77	2.42	2.30	3.03	4.26	3.18	3.54	2.98	340	mg/kg
Chromium	87.10	95.34	72.45	86.60	80.20	78.00	83.30	77.70	78.35	78.85	66.10	61.80	78.53	2,800	mg/kg
Copper	756.25	848.71	951.00	890.00	911.63	444.85	806.60	542.00	769.30	756.60	802.70	480.45	740.20	1,700	mg/kg
Mercury	0.28	0.36	0.48	0.35	0.30	0.29	0.26	0.24	0.56	0.41	0.45	0.25	0.35	11	mg/kg
Molybdenum	9.00	9.90	8.90	9.30	8.80	8.20	8.20	9.10	7.90	8.20	7.90	8.80	8.58	94	mg/kg
Nickel	22.26	25.74	22.56	25.92	24.67	18.42	20.02	17.33	21.83	21.71	21.07	21.43	21.89	420	mg/kg
Lead	35.78	51.01	48.49	36.72	43.22	18.50	31.54	34.43	44.11	42.21	44.21	33.19	39.62	1,100	mg/kg
Selenium	2.00	1.90	2.00	1.10	1.70	1.70	1.60	1.60	1.30	1.60	2.70	2.20	1.80	34	mg/kg
Zinc	743.25	710.70	711.25	745.00	731.85	546.00	535.50	613.50	708.90	640.00	773.40	498.85	671.52	4,200	mg/kg
Nutrients and Physical Properties															
Total Moisture	86.66	86.14	86.30	86.37	85.86	86.08	86.82	85.10	85.84	86.68	85.42	83.77	85.84	n/a	%
Total Organic Carbon	322,500	317,500	318,200	321,900	317,200	313,300	314,000	313,800	316,200	314,600	316,100	280,900	312,350	n/a	mg/kg
Total Kjeldahl Nitrogen	38,300	32,400	35,900	34,400	33,800	35,200	36,000	34,500	37,700	37,500	31,900	28,000	34,450	n/a	mg/kg
Ammonium - N	13,459.45	14,436.66	16,119.78	13,738.89	16,701.77	9,548.28	12,872.64	10,445.50	15,071.12	11,210.29	11,068.60	11,148.49	12,926.71	n/a	mg/kg
Nitrate and Nitrite-N	13.16	9.68	15.98	7.20	13.09	19.60	13.94	11.92	15.02	16.96	16.34	20.40	14.35	n/a	mg/kg
Total Potassium	23,600	20,900	25,200	19,300	24,900	25,500	21,700	20,400	22,300	25,000	23,700	18,200	22,633	n/a	mg/kg
Total Phosphorus	29,700	36,100	29,500	34,800	31,400	34,900	29,400	35,800	32,200	27,500	30,000	23,600	31,192	n/a	mg/kg
Pathogens															
E.coli	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3		n/a	MPN/g
Fecal Coliforms	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3		1,000	MPN/g
Salmonella	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG		<1	CFU/25g

[1] As per Section 14.2 of Environmental Compliance Approval No. 8850-8V6S72

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 valve of the process reactor on a daily basis.

n/a - not available

NEG - negative