

# **The Corporation of the City of Kawartha Lakes**

## **Agenda**

### **Lindsay-Ops Landfill Public Review Committee Meeting**

**2018-140**

**Wednesday, March 21, 2018**

**4:00 P.M.**

**Victoria Room**

**City Hall**

**26 Francis Street, Lindsay, Ontario K9V 5R8**

#### **Members:**

**Councillor Brian S. Junkin**

**Chris Appleton**

**Barry Hodgson**

**William McLaren**

**Lloyd Robertson**

**Larry Scrivens**

**Ken Trodd**

Accessible formats and communication supports are available upon request.

<b>1.</b>	<b>CALL TO ORDER</b>	
<b>2.</b>	<b>ADOPTION OF AGENDA</b>	
<b>3.</b>	<b>DISCLOSURES OF PECUNIARY INTEREST</b>	
<b>4.</b>	<b>APPROVAL OF THE MINUTES OF THE PREVIOUS MEETING</b>	<b>3 - 6</b>
<b>5.</b>	<b>REPORTS</b>	
<b>5.1</b>	PRC Activity Summary Spreadsheet	<b>7 - 7</b>
<b>6.</b>	<b>LANDFILL COMPLAINTS</b>	
<b>7.</b>	<b>LEACHATE OUTBREAKS</b>	
<b>8.</b>	<b>OTHER NEW BUSINESS</b>	
<b>8.1</b>	Tires	
<b>8.2</b>	Landfill Staff training	
<b>8.3</b>	Landfill Generator Proforma	<b>8 - 8</b>
<b>9.</b>	<b>PUBLIC COMMENT PERIOD</b>	
<b>10.</b>	<b>NEXT MEETING</b>	
<b>11.</b>	<b>ADJOURNMENT</b>	

**The Corporation of the City of Kawartha Lakes**  
**Minutes**  
**Lindsay-Ops Landfill Public Review Committee**  
**Meeting**

**2018-139**  
**Wednesday, February 21, 2018**  
**4:00 P.M.**  
**Weldon Room**  
**City Hall**  
**26 Francis Street, Lindsay, Ontario K9V 5R8**

**Members:**  
**Councillor Brian S. Junkin**  
**Chris Appleton**  
**Barry Hodgson**  
**William McLaren**  
**Lloyd Robertson**  
**Larry Scrivens**

**Accessible formats and communication supports are available upon request.**

**1. CALL TO ORDER**

The Chair called the meeting to order at 4:00 p.m.

**2. ADOPTION OF AGENDA**

**Moved By** B. Hodgson

**Seconded By** Councillor Junkin

**RESOLVED THAT** the agenda be approved with the addition of item 8.5 Blue Box education.

**Carried**

**3. DISCLOSURES OF PECUNIARY INTEREST**

There were no declarations of pecuniary interest noted.

**4. APPROVAL OF THE MINUTES OF THE PREVIOUS MEETING**

**Moved By** Councillor Junkin

**Seconded By** L. Scrivens

**RESOLVED THAT** the minutes from Wednesday January 17, 2018 be approved as circulated.

**Carried**

**5. REPORTS**

**5.1 PRC Activity Summary Spreadsheet**

See attached activity summary.

**6. LANDFILL COMPLAINTS**

No complaints.

**7. LEACHATE OUTBREAKS**

No leachate outbreaks.

**8. OTHER NEW BUSINESS**

**8.1 Oct 2016 to Sept 2017 Flare & Generator Report**

Staff reviewed the 2017 Flare & Generator Report with the committee. Items of note included that there are three main components to the system 1) flare, 2) well field and 3) generator. The flare and well field are required to remain

compliant. Recommendations include installation of new wells that require MOECC approval prior to installation.

## 8.2 Tires

Staff provided the committee with an update on the lack of movement for collected tires from the Lindsay Ops landfill and all City landfills since summer 2017. Current tire regulation is winding up and transitioning to new 100% producer responsible legislation. There have been several challenges with the wind-up of the program resulting in no tire collection. Staff continue to work with haulers to have tires collected to remain compliant.

## 8.3 Site Manual Updates

Golder Associates will be working to update both the Lindsay Ops Operation & Maintenance Manual as well as the Stormwater Management Manual required by MOECC for 2018. Final drafts will be circulated to committee for review and comment.

## 8.4 Habitat for Humanity Reuse Bin

A reuse bin has been available to divert materials from landfill that are in useable condition for local Habitat for Humanity to sell. The program has been going well and staff would like to recommend that the program continue. The following motion was made by the committee

**Moved By** C. Appleton

**Seconded By** L. Scrivens

**RESOLVED THAT** the Lindsay Ops landfill PRC support the continued use of the Habitat for Humanity Reuse bin on an ongoing basis at the Lindsay Ops landfill.

**Carried**

## 8.5 New Trigger Well Installation

Several trigger wells were decommissioned as a result of construction of cells 4 and 5 and required replacement. The City has advised the committee that four new wells will be installed in February. Committee asked for staff to circulate a map that showed the new well locations.

## 8.6 Blue Box Education

Committee discussed state of current blue box legislation and the various consultant meetings that have generated feedback by all stakeholders. The

transition of this program is now requested to December 31, 2018 to ensure all comments are considered and a clear program outline can be provided. Committee recommended that more education as to accepted items in the blue box could be done by the City to help with confusion.

**9. PUBLIC COMMENT PERIOD**

B. Wilson spoke regarding landfill gas and the circulated annual report as well as the soil that was moved as part of the compost pad relocation project.

**10. NEXT MEETING**

Wednesday March 21, 2018, Weldon Room, City Hall, commencing at 4:00 p.m.

**11. ADJOURNMENT**

**Moved By** C. Appleton

**Seconded By** L. Scrivens

**RESOLVED THAT** the meeting be adjourned at 5:45 pm.

**Carried**

**Lindsay Ops Landfill Public Review Committee  
Action List**

<b>Meeting Date of Activity</b>	<b>Action</b>	<b>Responsibility</b>	<b>Action Item Date:</b>	<b>Status</b>
15-May-13	PRC requested updates on the Landfill Gas Electricity Generation Project.	CKL	Monthly	<b>February 21 Meeting:</b> See agenda item
15-Jan-14	That the PRC is copied on Staff Reports to Council regarding the Lindsay Ops Landfill	CKL	As Available	<b>February 21 Meeting:</b> None
16-Jul-14	Provide updates to PRC on the progress of the clear bags program	CKL	Monthly	<b>February 21 Meeting:</b> Working to complete City's annual datacall for the blue box program that will show City's overall diversion rate.
21-Jan-15	Provide update on quarterly PCB testing (SW3/ SW13)	CKL	Quarterly	<b>February 21 Meeting:</b> Next sampling is in April 2018
17-Jun-15	MOECC Comments	CKL	As Available	<b>February 21 Meeting:</b> No further update.
18-Nov-15	Fenelon Pollinator Project Updates	CKL	As Available	<b>February 21 Meeting:</b> No further update.
17-Feb-16	Public Open House	CKL	As Available	<b>February 21 Meeting:</b> To review in spring 2018. In Waste Calendar for Wednesday October 10, 2018.
15-Jun-16	Litter Fencing	CKL	As Available	<b>February 21 Meeting:</b> With recent February snow melt staff are collecting any litter from onsite.
23-Nov-16	Biomonitoring	CKL	As Available	<b>February 21 Meeting:</b> Cambium is scheduled to be out onsite this week to collect required samples.
18-Jan-17	SW Results from the WPCP Outfall	CKL	As Available	<b>February 21 Meeting:</b> Next sampling is in April 2018
17-May-17	Waste Strategy Task Force Update	CKL	As Available	<b>February 21 Meeting:</b> There is no Waste Strategy Task Force meeting for February. Next meeting is scheduled for Wednesday March 21 at 1:00 PM in the William Street Boardroom.
17-Jan-17	Updates on Blue Box markets and Legislation	CKL	As Available	<b>February 21 Meeting:</b> Currently no reports to Council of proposed legislation changes. Dave Gordon from AMO is presenting on Feb 27 at 1:00 PM in Council Chambers. Members of the committee are welcome to attend.

Proforma for Electricity Generation Project (Updated March 12<sup>th</sup>, 2018)  
Lindsay/Ops Landfill Site, Lindsay, Ontario

Input Data																				
Plant Rating (MW)	0.335	Starting Electricity Price (\$/kW	\$0.1118		Total Project Cost	2,494,664		\$753,230 (original MOE funding amount for utilization)												
Parasitic Power (MW)	0.025	CPI (%)	2.00%		Provincial Grant	878,805		\$125,571 (left over from collection/flaring)												
NET Power (MW)	0.310	Electricity cost annual increase	3.00%		Total City Contribution	\$1,615,859		\$33,441 (total interest the City would have made if they had invested the capital from 2012 to 2016)												
Normalized Gas Quality (% methane)	50%																			
Plant Capacity (%)	see below																			
Years																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Plant Capacity		70%	75%	78%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Gas Flow (scfm)			86.25	89.7	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Energy (GJ)	actual CKL		18,114	19,592	20,610	20,610	20,610	20,610	20,610	20,610	20,610	20,610	20,610	20,610	20,610	20,610	20,610	20,610	20,610	20,610
Electricity (kWhr)	revenue	1,474,561	2,200,950	2,288,988	2,347,680	2,347,680	2,347,680	2,347,680	2,347,680	2,347,680	2,347,680	2,347,680	2,347,680	2,347,680	2,347,680	2,347,680	2,347,680	2,347,680	2,347,680	2,347,680
Electricity Price (\$/KWhr)	numbers used	\$0.1152	\$0.1186	\$0.1222	\$0.1258	\$0.1296	\$0.1335	\$0.1375	\$0.1416	\$0.1459	\$0.1502	\$0.1548	\$0.1594	\$0.1642	\$0.1691	\$0.1742	\$0.1794	\$0.1848	\$0.1903	\$0.1960
Revenue																				
Revenue <sup>3</sup>	222,629	184,854	261,052	279,639	295,413	304,275	313,404	322,806	332,490	342,465	352,739	363,321	374,220	385,447	397,010	408,921	421,188	433,824	446,839	460,244
Total Revenue	222,629	184,854	261,052	279,639	295,413	304,275	313,404	322,806	332,490	342,465	352,739	363,321	374,220	385,447	397,010	408,921	421,188	433,824	446,839	460,244
Operating Expenses																				
O&M Annual Contract for Generator Only	124,400	156,400	159,528	162,719	165,973	169,292	172,678	176,132	179,654	183,248	186,912	190,651	194,464	198,353	202,320	206,366	210,494	214,704	218,998	223,378
Call-Outs and unexpected maintenance	20,000	55,621	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	24,380	24,867	25,365	25,872	26,390	26,917	27,456	28,005
Major engine overhaul										175,000										
Total Operating Expenses	144,400	212,021	179,528	183,119	186,781	190,517	194,327	198,213	202,178	381,221	210,346	214,553	218,844	223,221	227,685	232,239	236,883	241,621	246,453	251,383
General and Administrative Expenses																				
Other G&A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total G&A Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating Cashflow	78,229	(27,167)	81,524	96,520	108,632	113,759	119,077	124,592	130,312	(38,757)	142,393	148,768	155,377	162,226	169,325	176,682	184,305	192,203	200,385	208,861
Interest Costs <sup>4</sup>	27,874	27,005	25,505	23,552	21,426	19,120	16,850	14,437	11,874	9,155	9,292	6,292	3,117	-	-	-	-	-	-	-
Net Cashflow	- \$1,649,300	50,356	(54,172)	56,018	72,968	94,639	102,226	110,155	118,438	(47,912)	133,101	142,476	152,259	162,226	169,325	176,682	184,305	192,203	200,385	208,861
Simple Balance <sup>6</sup>		(1,598,944)	(1,653,116)	(1,597,098)	(1,524,130)	(1,436,923)	(1,342,284)	(1,240,058)	(1,129,903)	(1,011,464)	(1,059,376)	(926,275)	(783,799)	(631,540)	(469,313)	(299,988)	(123,306)	60,999	253,202	453,587
Internal Rate of Return over 20 year Project Lifetime:		2.62%																		

Notes:  
1 - Total Project Cost is for Electricity Generation Component only  
2 - Earnings shown are EBITDA (earnings before interest, tax, depreciation and amortization)  
3 - Actual revenue (Jan to July 2016) is \$129,867.16 - use monthly avg of \$18,552.45 for 2016. 2017 assume reduced Hydro trips, after 2017 wellfield expansion will increase gas flows  
4 - Interest costs are calculated using a rate of 1.725% per year.  
5 - Calculated by subtracting net cashflow from total city contribution (\$1,615,859) + total interest lost (\$33,441). Time value of money not incorporated to the calculation.

Future Improvements to Help Performance  
New gas wells (install 2018/2019) Approval pending  
Working with WPCP to Ensure Less Shut Downs  
Improve SCADA System