



JOINT BIOSOLIDS ADVISORY COMMITTEE

WEDNESDAY, SEPTEMBER 19, 2019

CITY OF VERNON, KALAMALKA LAKE ROOM – 10 A.M.

A G E N D A

1. **ADOPTION OF AGENDA**
2. **ADOPTION OF MINUTES**
Wednesday, May 8, 2019 (attached)
3. **UNFINISHED BUSINESS**
 - a) Overview/status of Leachate and Odour Management Plans - update
 - b) Woody Biomass Project – staff report outlining next steps
4. **NEW BUSINESS**
 - a) Update on Provincial Government plan to amend organic matter recycling regulations
 - b) Future Biosolids Diversion Opportunities
5. **INFORMATION ITEMS**
 - a) Odour Reports
6. **NEXT MEETING**
The next meeting date to be announced.
7. **ADJOURNMENT**



MINUTES OF THE JOINT BIOSOLIDS ADVISORY COMMITTEE

HELD THURSDAY, MAY 8, 2019

PRESENT: VOTING

Kelowna Councillor Gail Given
Kelowna Councillor Ryan Donn
Kelowna Councillor Loyal Woodridge
Vernon Councillor Scott Anderson

ABSENT: Councillor Dalvir Nahal

STAFF: Shirley Koenig, Director, Operation Services, Vernon
Kevin Van Vliet, Utility Services Manager, Kelowna
Jose Garcia, Biosolids Supervisor, Kelowna
Serge Kozin, Manager, Water Reclamation Centre
Janice Nicol, Legislative Committee Clerk, Vernon

ORDER

The Chair called the meeting to order at 10:08 a.m.

**ELECTION OF CHAIR
AND VICE CHAIR**

Moved by Councillor Anderson, seconded by Councillor Given

THAT Councillor Donn be elected Chair of the Joint Biosolids Committee for 2019;

AND FURTHER that Councillor Anderson be elected Vice-Chair.

CARRIED.

**ADOPTION OF
AGENDA**

Moved by Councillor Woodridge, seconded by Councillor Anderson:

THAT the agenda for the Biosolids Advisory Committee meeting of Thursday, May 3, 2018 be adopted.

CARRIED.

**ADOPTION OF
MINUTES**

Moved by Councillor Anderson, seconded by Councillor Given:

THAT the minutes for the Biosolids Advisory Committee meeting of Thursday, May 3, 2018 be adopted.

CARRIED.

UNFINISHED BUSINESS:**OVERVIEW/STATUS OF
LEACHATE AND
ODOUR MANAGEMENT
PLANS**

The Biosolids Supervisor provided a brief overview of the facility and the Leachate/Odour Management Plans as follows:

- Ogogrow produced since 1995
- In 2006, both Cities joined forces and opened the Regional Compost Facility, which is operated by the City of Kelowna
- Facility was upgraded in 2009
- Capital and operating cost funded through a 70 (Kelowna)/30 (Vernon) split based on biosolids contribution
- Biosolids received are mixed in a ratio of 4 parts wood to 1 part biosolids, with approx. 2% wood ash by volume.
- Biosolids are received from Kelowna, Vernon, Lake Country, North Okanagan Regional District and Silver Star wastewater treatment facilities
- Mixed material proceeds to primary aeration for 28 days, then to secondary aeration for an additional 28 days. It is then screened, and finished material is stored and tested before releasing for purchase. If storage capacity is reached, excess is trucked to Glenmore Landfill for sale.
- Ogogrow meets Class A Compost Standards in BC's Organic Matter Recycling Regulation (OMRR)
- In 2016, the Province updated OMRR and a new permit was required. This was issued in 2017 and governs how leachate and odours are managed, the feedstock and reporting requirements, etc.

Leachate

The Biosolids Supervisor provided an update. The following points were noted:

- Required to submit leachate plan to Ministry of Environment (MOE) by March 2018 so a Consultant was hired
- Consultant evaluated multiple options and upon review, the City proposed to:

- Install liner in pond and trench to eliminate pathway into groundwater. The liner is designed to last ~25 years.
- Continue hauling out higher-strength leachate to NORD septage facility for treatment
- Explore case for on-site leachate treatment further (i.e. Rotating Biological Contactor)
- Obtained approval in 2018 for additional budget to match pond reconstruction estimate (800K)
- MOE responded April 2019, would like to see permit amended to reflect commitment to pond-relining and to build on-site leachate treatment (RBC) for re-use in process.
- Commitment was restated as presented in 2018, as affordability, feasibility, and suitability of on-site leachate treatment system needs further review.
- Exploring simple treatment (polishing) of low strength leachate before discharging to MacKay Reservoir.
- Need to make clear to MOE that facility does not discharge any leachate into the environment and hauls high-strength leachate to a permitted facility for disposal..

Odour Management Plan

MOE Permit required submission of:

- Odour Management Plan (Nov. 2017)
- Air Emissions Review Study (March 2018)
- Secondary odour control feasibility report (Oct. 2018)
 - Proposed to add zeolite to mix to absorb odours
 - Requested more time to enhance process and aeration system.

MOE Response in April 2019

- Disapproved of zeolite proposal, want focus on technology or cover
- Expand coverage of secondary odour treatment
- Flesh out triggers, actions and responses
- Select a secondary odour treatment technology by October 31, 2019, option of misting to control odours being looked into.
- Consolidate and submit updated OMP by June 2020

**UPDATE ON CLASS B
COMPOST LAND
APPLICATION TRIAL****Class B Compost Trial/Woody Biomass**

The Committee passed a motion at the November 23, 2017 to identify the feasibility of applying compost and the potential for woody biomass production on City of Vernon owned and managed lands in the Commonage Area. The following update was provided:

- Ogogrow meets Class A Compost standards
- Midway through process compost meets Class B Compost standards (following 28 days in primary aeration)
- Consultant proposed a trial application of Class B Compost
- Could reduce cost of production, remove material from site sooner, open new market
- Postponed due to timing in 2018, and budget limitations in 2019.
- This trial would be a great deal more complicated and riskier than selling or applying Class A Compost, so it will need more permits and investigation.
- There are budget restrictions this year, preferable to postpone to 2020.

Class A Compost**Application on Vernon Lease Lands**

- Land application project done on Mission Road, hoping to be green by June/July from marketing perspective
- Trial was a one-time application but every three years could be applied.
- Approximately 11,000 yards of Class A Compost were applied.
- Application rate was well within level recommended by consultants retained by the City of Vernon

Woody Biomass

- Looked at planting willow to replace hog fuel and using reclaimed water to irrigate trees.
- Would mean an increase in operating costs, seems like a significant investment.
- Willow may not be a good replacement for hog fuel because of different biological traits
- Pilot can be still be investigated, carbon credits available and possible grants
- Would allow for a circle of life process,
- Recommendation to have a Request for Proposal so there is an arms-length estimate.
- This item to be discussed in detail at the next meeting.

Moved by Councillor Anderson, seconded by Councillor Wooldridge:

THAT the Joint Biosolids Advisory Committee recommend to their respective Councils that each Administration continue investigation of the Woody Biomass Project on City of Vernon lands

AND FURTHER that a staff report outlining the next steps be considered by the Joint Biosolids Advisory Committee in the Fall of 2019.

CARRIED.

NEW BUSINESS:

IMPACT OF BYLAW CHANGES ON SALES OF COMPOST

Impact to bylaw changes on sales of compost (2018)

- Last year moved ~63,500m³ of Ogotrow and eliminated pre-2018 surplus inventory
- Sales, special projects and out-of-market area deals
- Revenue \$227,500 – 50% of previous years

2019 budget (Final budget)

- Decreased contract purchases budget to offset asphalt repairs (\$200k)
- Decreased revenue budget due to bulk sales
- Piles need to be turned and watered as there is a possibility of spontaneous combustion, when surplus material increases, so do costs of hauling, watering, etc.

Compost sales promotion

- Want to expand wholesale market with promotion of Bulk Sale 2019
- Hired Waterkind Consultants to:
 - Explore current product use levels, current barriers and interest in alternative purchasing programs
 - Explore incentive to improve product sales (i.e. bylaw amendments, delivery options, cost structure)
 - Tie-ins with water conservation initiatives and relevant target group (landscapers, developers, farmers)

Design and Operating Plan Update

- Required by permit by May 30, 2019
- Working on final edits.

INFORMATION ITEMS:

Jose Garcia, Biosolids Supervisor for the City of Kelowna reviewed odour reports including odour complaints from residents. The following points were noted:

- Continued 5-year decreasing trend in number of odour complaints
- Reports in 2018 (34) just over half of those reported in 2017 (65)
- 2018 had the fewest number of odour reports on record for the facility.
- Will be interesting to see if the opening of the Rail Trail result in any complaints
- High incidence of odour reports on municipal election years of 2011 and 2014
- Proactively reaching out to residents, giving a heads up of upcoming projects (i.e needing to mix outside) has been welcomed and effective

Odour mitigation efforts:

- 2018 – operator compost training
- Substantial air leak repairs
- Aeration of leachate trench (fountain)
- Amendment and irrigation scheduling trials
- OdoWatch hardware and software upgrades
- 2019 - aeration system audit. – designers to study possible upgrade
- Plan to upgrade comptroller software in 2019
- More automation = more responsive and proactive
- Exploring misting system trial as “secondary” layer of odour treatment.
- Evaluating eEnviroSuite odour monitoring service for 2020+.
- Occasional visits to most impacted neighbourhoods
- Respond to complaints as soon as possible
- Open communication with neighbours.

Other business of note:

- MOE came through for a tour and questioned the use of ash in the compost mix. Reasoning for its use as a carbon source, conditioner and deodorizer were given, and an email response supported by a third-party qualified professional (ECS) were submitted earlier this year.

- Provided feedback to MOE regarding proposed changes to the Organic Matter Recycling Regulation that would require considerable investment from the Cities of Kelowna and Vernon (particularly to cover the entire facility to mitigate odours) if the changes are approved as proposed in their intentions paper from 2018.
- Need to define ash in technical detail and keep arguing for its beneficial use as part of a regional waste diversion program.
- There is a risk that requirements (i.e. forcing coverage entire property) would be extremely costly, potentially in the tens of millions of dollars.
- Upgraded electrical system to improve energy efficiency and avoid Power-Factor Correction surcharges, 2.5 year payback.

NEXT MEETING

The next meeting is tentatively scheduled for mid-September 2019.

ADJOURNMENT

The meeting of the Biosolids Advisory Committee adjourned at 11:49 a.m.

CERTIFIED CORRECT:

_____ Chair