



MINUTES OF THE JOINT BIOSOLIDS ADVISORY COMMITTEE

HELD THURSDAY, NOVEMBER 23, 2017

PRESENT: VOTING

Kelowna Councillor Gail Given
Kelowna Councillor Brad Sieben (via telephone)
Vernon Councillor Scott Anderson
Vernon Mayor Mund

ABSENT: Kelowna Councillor Ryan Donn

STAFF: Shirley Koenig, Director, Operation Services, Vernon
Kevin Van Vliet, Utility Services Manager, Kelowna
Gord Light, Former Biosolids Supervisor, Kelowna
Jose Garcia, Biosolids Supervisor, Kelowna
Serge Kozin, Manager, Vernon Water Reclamation Centre
Rod McLean, Utility Planning Manager, Kelowna
Joe Creron, Deputy City Manager, Kelowna
Janice Nicol, Legislative Committee Clerk, Vernon

ORDER

The Chair called the meeting to order at 10:05 a.m.

**ADOPTION OF
AGENDA**

Moved by Councillor Given, seconded by Mayor Mund:

THAT the agenda for the Biosolids Advisory Committee meeting of Thursday, November 23, 2017 be adopted.

CARRIED.

**ADOPTION OF
MINUTES**

Moved by Councillor Given, seconded by Mayor Mund:

THAT the minutes for the Biosolids Advisory Committee meeting of Thursday, October 26, 2017 be adopted.

CARRIED.

UNFINISHED BUSINESS:

**DRAFT STRATEGIC
REVIEW BIOSOLIDS
MANAGEMENT STUDY**

At their October 26, 2017 meeting, the Joint Biosolids Advisory Committee discussed the Strategic Review and requested the opportunity to review the draft Biosolids Management Study prior to presentation to respective Councils. A PowerPoint was presented and the following points were noted:

- The development of a Biosolids Management Strategy was started two years ago by the Consultant, Opus International, to address a number of challenges.
- The purpose of the study – how to sustainably and affordably manage Biosolids for the long term. The Commonage facility is currently at capacity.
- Objectives:
 - increase capacity to treat solids
 - align compost facility operations
 - address long term market risk by ensuring end products are safe and marketable, and address input market risks (e.g. hog fuel)
 - financially sustainable solutions.
- Process (summarized at April 4, 2017 meeting):
 - TM#1 - review existing facility and constraints, examine pretreatment options including digestion, thermal drying lime stabilization, composting and incineration. Consider three final disposal methods – land applications, compost sales and thermal destruction
 - TM#2 – evaluation options – subject of workshop
 - TM#3 – Market Review – inputs land application, compost market, biogas recovery. Public Engagement with community and stakeholders held. Plan to bring forward to respective Councils in 2018.
- Conclusions from report:
 1. Digestion at one or both wastewater treatment plants – reduces volume leaving plants, less odour in solids, can produce Class A Biosolids (potential for direct land application), large capital cost - 30 to 60M;
 2. Compost and/or land application of residuals – less compost, potential woody biomass production could help address market risks of inputs as well as compost sales.
- Next steps – develop concepts of digestion in Kelowna – may present technical challenges/details, environmental issues (odour, plant operation, etc.), cost - \$300,000 proposed in 2018 (Kelowna funded), It will be important to understand

operating and financial impact to RBCF and how it will affect contributions.

- Need further review to pursue woody biomass production.

Moved by Councillor Given, seconded by Mayor Mund :

THAT the Joint Biosolids Advisory Committee recommends that the Biosolids Facility investigate the feasibility of applying compost and the potential for woody biomass production using the City of Vernon owned and managed lands in the Commonage Area.

CARRIED.

**PROGRESS REPORT
ON LEACHATE AND
ODOUR MANAGEMENT
PLAN**

An overview PowerPoint was presented on the Leachate and Odour Management Plan. The Ministry of Environment requires a plan and solution to be selected by November 30, 2017.

- **Leachate**
 - Existing system – water & leachate quality, downstream impact assessment
 - Option 1 – Status Quo plus Upgrades
 - Option 2 – Pre-treatment & Re-use of High-Strength Leachate
 - Option 3 – Full Treatment & On-site Re-use
 - Option 4 – Full Aerated Lagoon & On-Site Re-use
 - Option 4a – Convert Drainage Pond
 - Option 4b – New Lagoon South of Pond
 - Option 4c – New Lagoon to North
 - Option Evaluation Criteria (using matrix) assessed:
 - Impacts on existing infrastructure
 - Environmental
 - Odour Control
 - Operations and maintenance
 - Total Lifecycle costs
 - Conclusions:
 - High-strength and low-strength can be treated and re-used on site
 - Lining of the drainage trench required
 - Lining or replacement of drainage pond required
 - If drainage pond is replaced it will have to be decommissioned
 - Estimated costs were reviewed
 - Next Steps
 - Cities to review finds and provide weights to evaluation criteria

- Confirm best-preferred option
- Opus to provide estimate of pond decommissioning costs
- City of Kelowna to submit final report to Ministry of Environment
- **Odour Management Plan Update**
 - The Consulting firm WSP is writing the update to the Odour Management Plan. This update reviews:
 - Potential odour sources
 - Preventative measures
 - On-site odour monitoring and aeration plan
 - Thresh-hold actions
 - Off-site odour monitoring
 - Staff have provided comments to consultant
 - Waiting for final draft
 - Will submit to Ministry of Environment

INFORMATION ITEMS:

NEXT MEETING

The next meeting is tentatively scheduled April 2018.

ADJOURNMENT

The meeting of the Biosolids Advisory Committee adjourned at 11:40 a.m.

CERTIFIED CORRECT:



Chair