



Agenda No: 5.1

Mtg. Date: May 14, 2015

Governance and Services Report

TO: Governance and Services Committee

FROM: Chris Radford
Director of Community Services

DATE: May 14, 2015

SUBJECT: Biosolids Management- Technical Briefing

Purpose:

To provide an overview of biosolids management in the Okanagan Valley and specifically the history of biosolids management with regard to the Westside Regional Wastewater Treatment Plant.

Executive Summary:

The Westside Regional Wastewater Treatment Plant (WRWWTP) produces Class B biosolids as defined by parameters set out in the Provincial Organic Matter Recycling Regulation (OMMR). Further these organics are managed through land application requirements also identified in OMRR.

Currently, the biosolids are being hauled and land applied to OK Ranch, near Clinton B.C. where they are managed under an approved Land Application Permit. In the fall of 2014 the RDCO entered into a five year agreement with Biocentral Green Depot to manage WRWWTP biosolids at a composting facility near Merritt B.C. where the biosolids would be conditioned to a Class A compost. Due to ongoing local resident concerns, peaceful protests including requests to divert biosolids away from the Merritt area, and a self-imposed moratorium by Biocentral Green Depot, the RDCO has not delivered biosolids to the facility since March 8, 2015

Recommendation: Receive for Information

Respectfully Submitted:

Chris Radford
Director of Community Services

Approved for Committee Consideration

Brian Reardon, CAO

A local site that was identified as requiring ongoing fertilization that would align with a land application plan was the Brenda Mine site. The site requires ongoing chemical fertilization to establish vegetation on the tailings pond area. Presentations were made to local governments and Interior Health on the proposed project. Unfortunately this project did not proceed under the order of Interior Health.

With local options exhausted, staff issued a Request for Expression of Interest (RFEOI) for Biosolids Management in June, 2014. The primary purpose of the RFEOI was to identify all potential biosolids management solutions for the 4,200 metric tonnes of biosolids produced at the Westside Regional Wastewater Treatment Plant and up to an additional 15,000 metric tonnes of biosolids from neighbouring municipalities. This additional 15,000 metric tonnes is reflective of the City of Kelowna and City of Penticton's interest in participating in the Regional District of Central Okanagan's biosolids management program. The RFEOI was also intended to narrow the scope of the forthcoming Request for Proposals. The current contract for biosolids management with Sylvis Environmental was scheduled to end on September 30, 2014.

Thirteen responses to the Biosolids Management RFEOI were received. Responses came from companies located throughout North America including several from American-based companies and several from companies based in Ontario.

The responses can be separated into three distinct groups including:

- Options (10) that are capital-intensive and require new land and generally require between 12 and 36 months to implement.
- Options (4) that require no capital and can be implemented immediately or within a few months.
- Options (2) offering support to the Regional District to determine the best option. These options do not offer biosolids management solutions.

Responses offering technical support and no biosolids management solution were not given any further consideration as they did not address the requirements of the RFEOI.

The table below compares response information from the capital-intensive options and options that require no capital.

- Cost competitiveness;
- Environmental (impacts to water, air, land), social (odour, health) and financial sustainability; and
- Beneficial reuse of the biosolids.

Four proposals were received. Based on a detailed evaluation of the proposals, including input from Interior Health, the Westside Regional Wastewater Treatment Plant Stakeholder Select Committee voted unanimously in favour of the following resolution on September 8, 2014:

THAT the Westside Regional Wastewater Treatment Plant Stakeholder Select Committee support awarding a biosolids management contract to BioCentral for a term of five years at an approximate total value of \$1,157,000.

Summary of Land Applications

The Regional District of Central Okanagan (RDCO) has successfully land applied biosolids generated at the Westside Regional Wastewater Treatment Plant for the last three years. During this three year period the RDCO biosolids land application program has been managed by SYLVIS Environmental.

Land application sites over the last three years have been located within the Thompson-Nicola Regional District. Specifically, at the Pennask and Bob's Lake's gravel pits along the Coquihalla Connector and OK Ranch near Clinton, B.C. (current site). Prior to land application, biosolids were landfilled at the Westside and Glenmore Landfills.

Based on the results for the RFP, BioCentral was best able to meet the overall goals that were stated in the proposal call. All proponents provided solutions that beneficially reuse RDCO's biosolids; however, BioCentral was best able to ensure environmental, social and financial sustainability. BioCentral separated itself from the other proponents in two important ways:

- Composting prior to land application, which results in higher quality more stable material that is less odorous and can be land applied without any regulatory restrictions due to minimizing the pathogen concentrations and vector attraction; and
- Use of a private location for composting and land application while maintaining relatively low transport-related costs.

In October 2014, the Regional District of Central Okanagan (RDCO) entered a five-year contract with BioCentral Green Depot Ltd. to receive, compost and land apply Class 'A' biosolids at a site near Merritt, B.C. The Regional District also has a contract with Waste Management to haul biosolids from the plant in West Kelowna to BioCentral's composting facility near Merritt.

Despite information meetings involving the community, industry experts and officials from various Provincial Ministries recent protests and road blocks along Highway 8 near Merritt have necessitated the diversion of our biosolids to an alternate site near Clinton, B.C. Staff expect this diversion to continue for the foreseeable future while this issue is resolved.

This dispute is between the Province and the demonstration group and that's where it needs to be resolved. It should be noted that the RDCO is in full compliance with all Provincial Laws & Regulations in this matter.