REGIONAL DISTRICT of CENTRAL OKANAGAN

From: Carol Suhan, MBA
Regional Waste Reduction Coordinator

Date: September 12, 2006

Re: Support for Adoption of Zero Waste Policy

REQUEST

THAT the City of Kelowna Council support the adoption of a Zero Waste policy by the Regional District.

BACKGROUND

Zero Waste is a philosophy that maximizes recycling, minimizes waste, reduces consumption and ensures that products are made to be reused, repaired or recycled back into nature or the marketplace. The Zero Waste International Alliance 2004 adopted the following definition of Zero Waste:

> Zero Waste is a goal that is both pragmatic and visionary, to guide people to emulate sustainable natural cycles, where all discarded materials are resources for others to use. Zero Waste means designing and managing products and processes to reduce the volume and toxicity, conserve and recover all resources, and not burn and bury them. Implementing Zero Waste will eliminate all discharges to land, air or water that may be a threat to planetary, human, animal or plant health.

More and more communities in Canada and abroad are adopting a Zero Waste policy. Although it may not be achievable, its value as an aspiration, like Zero Accidents, has been adopted by:

- The Regional Districts of Greater Vancouver, Central Kootenay, Kootenay Boundary, Cowichan Valley, Sunshine Coast and Nanaimo.
- Toronto, Halifax and Annapolis Royal
- Seattle, San Francisco, New York City, Boulder, Oakland
- Australia
- New Zealand
- Companies like Telus, Toyota, Hewlitt Packard

The Solid Waste Management Plan recommends that a Zero Waste policy be adopted by the Regional District. The Recycling Council of British Columbia and Zero Waste Canada are actively advocating the adoption of a Zero Waste policy by the Province.

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From: Carol Suhan, MBA
Regional Waste Reduction Coordinator

Date: September 12, 2006

Re: Draft Solid Waste Management Plan

BACKGROUND AND OVERVIEW OF PLAN

The provincially mandated Regional Solid Waste Management Plan (SWMP) governs all waste reduction activities in the region and is relied upon by Waste Reduction Office (WRO) for direction. In late 2004, Earth Tech was hired to write a new SWMP to update the existing plan and address the waste reduction and management needs of the area for the next five to 15 years.

After extensive public consultation, and in accordance with the provincial "Guide to the Preparation of Regional Solid Waste Management Plans", the draft Solid Waste Management Plan has been completed. The Plan is broken into 3 phases: Phase 1 – 0 to 5 years, Phase 2 – 6-15 years and Phase 3 – 15+ years.

The guiding principles of the Plan are: 1) adopt Zero Waste policy; 2) uphold operational best practices; and 3) continue to improve waste reduction and awareness programs. The Plan also recommends that over-arching principles be adopted:

- Reassess and pilot new programs prior to full-scale implementation
- Continuous evaluation of programs (waste audits, etc.)
- Conduct a financial distribution study
- Pursue additional landfill disposal bans as diversion programs are implemented
- Reduce bag limits when additional diversion programs are implemented
- License privately owned waste management facilities
- Lobby senior governments for expansion of product stewardship programs

The recommendations of Phase 1 of the Plan, in order of priority, are:

1. Introduce variable tipping fees for DLC (demolition, landclearing and construction waste)
2. Enforce paper and cardboard bans at landfills
3. Improve blue bag collection system – add more plastics to blue bag collection program
4. Provide year round collection facility for household hazardous waste (and E-waste if applicable)

5. Ban ICI (Industrial, Commercial, Institutional) yard waste from disposal
6. Increase frequency of yard waste collection service to monthly service during growing season – may be implemented on a “pay-as-you throw” basis.
7. Subsidize the purchase of yard waste composters
8. Provide garbage and recycling collection services for multi-family residents

If all the above initiatives were adopted within the next five years, the Region would realize an increased diversion rate of 30% from 2004 levels (.82 tpa (tonnes/person/annum) to .54 tpa) The cost to implement all these programs would be approximately $1,447,420 per annum, for an increase of 11% in cost of solid waste management functions. 63,400 tonnes per annum more would be diverted from landfill, saving 190,200 cubic meters of saved space (value of $7.4 million/yr).

The second phase of the Plan recommends improvement of existing waste reduction programs and further research for waste management processes. Decisions will be required on either siting another landfill in the RD or partnering with neighbouring RDs to locate a regional landfill. Additionally, a decision will need required to either collect and compost remaining organics (kitchen and yard waste) or leave organics in the waste stream to be used as fuel for a bioreactor landfill at Glenmore. (Glenmore Landfill will pilot test the bioreactor model over the next several years to determine if the site is suitable.) The diversion rate at the end of Phase 2, if organics were composted, would be 66% from 2004 at an approximate increased cost of $683,678/year. If the RD and the City pursue the bioreactor landfill model, there would be no additional diversion from landfill and the increased cost would be approximately $527,246 per annum.

Phase 3 of the Plan recommends continuous improvements to existing Phase 1 and 2 programs and researches the suitability of thermal treatment of residual waste and energy recovery.

With approval of the Plan by the RD and its member municipalities, Earth Tech will proceed with the Ministry of Environment approval process. The Plan would then be adopted by the RD and begin phased implementation in early 2007.