City of Kelowna

MEMORANDUM

DATE: FILE:	July 3, 2003 8500-07 & 5280-02
TO:	City Manager
FROM:	Transportation Manager
RE:	Award of Waste-Derived Transportation Bio-Fuels Study

RECOMMENDATION:

THAT Council award a feasibility study to research the production and use of waste-derived transportation bio-fuels to CH2M Hill for the amount of one hundred and twenty thousand dollars (\$120,000) plus taxes.

BACKGROUND:

The City and the Regional District have been successful in receiving approval of a Federation of Canadian Municipalities grant to look at creating clean fuel from the treatment of organic waste materials. The grant is for 50% of a total project budget of \$131,300. This report is to address the appointment of consulting services for the project.

The Project and Funding Sources

Like most Cities, municipal wastes are disposed of in many different methods. Wastes include wastewater and solid waste from domestic, commercial, industrial and agricultural sources. Some of these wastes require treatment prior to disposal and may end up in our landfill or are disposed of in other ways (i.e. burning).

An opportunity may exist to use these organic waste materials to produce useable forms of clean fuel. Examples of clean fuel include methane, electricity, ethanol and hydrogen. This potentially self-sufficient and sustainable supply of clean fuel could be used in the City's municipal fleet or for co-generation of electricity using innovative new technologies.

The idea for this feasibility study originated with City staff in 2002 in conjunction with a Federal program known as the Urban Transportation Showcase. Innovative new ideas were being encouraged to address the international problem of greenhouse gases and Climate Change. We were unsuccessful with the federal Showcase initiative but the idea for developing a sustainable clean fuel source seemed a good one and worth pursuing. We therefore pursued funding through another source the Federation of Canadian Municipalities.

The FCM's Green Municipal Enabling Fund provides up to 50% of approved feasibility studies to a limit of \$100,000. As would be expected, a considerable effort was required to complete their application and respond to their questions in order to get approval for their share. We were successful in getting approval for \$65,650. A copy of their letter dated June 3, 2003 is attached.

The local funding sources for this project are made up of the following:

- Alternate Transportation \$10,000
 Landfill Reserve \$10,000
- Electrical Reserve \$10,000
- Wastewater Reserve \$10,000
- Central Okanagan Reg, District \$15,650
- BC Transit In-kind \$10,000

Consultant Selection

The City did not have the expertise or the resources to support the application to the FCM. We therefore considered consultant support services. Our Landfill consultant on retainer was CH2M Hill. This firm was also very knowledgeable about other City waste management facilities such as the Brandts Creek Tradewaste Plant.

CH2M Hill were approached about our proposed research project in early 2002. As we had no funding at that time for this project without the FCM grant we were not able to offer them payment for supporting our application. They provided this service expecting to get the assignment if FCM funding could be secured. We could not commit to this at that time.

Some of the reasons in support of awarding this assignment to CH2M Hill include:

- CM2H Hill has the most direct background on this work as they have been the City's consultant for the landfill, have the considerable experience with the Brandts Creek Treatment Plant, have done a cataloguing of organic waste for the Glenmore Landfill bio-reactor study and did a review of management options for handling municipal sludges.
- CH2M Hill has not charged for their services in support of the FCM application (valued at aprox \$11,000).
- An RFP process to select a consultant would be time consuming, complicated and likely cost a considerable amount of staff and consultant time (which would deplete the budget for the project).

Ron Westlake, P.Eng. Transportation Manager

John Vos Director of Works & Utilities

Attach.