REGION OF OTTAWA-CARLETON | REPORT
RÉGION D'OTTAWA-CARLETON | RAPPORT

Our File/N/Réf. **50** 17-98-0005-H
Your File/V/Réf.

DATE 23 June 2000

TO/DEST. Coordinator, Planning and Environment Committee

FROM/EXP. Director, Solid Waste Division
Environment and Transportation Department

SUBJECT/OBJET **TRAIL ROAD LANDFILL SITE -**
LEACHATE PRE-TREATMENT RESEARCH PROGRAM

DEPARTMENTAL RECOMMENDATION

That the Planning and Environment Committee and Council receive this report for information.

BACKGROUND

On 08 September 1999, Council approved the creation of a program to investigate new and emerging technologies for the on-site treatment of leachate from the Trail Road Landfill Site and leachate contaminated groundwater from the Nepean Landfill Site. Council also directed that $500,000 be put in the 2000 Capital Budget to fund this research.

In February 2000, Regional staff developed a Terms of Reference for a technical advisory committee for the Research Program. On 18 February and 25 February 2000, an advertisement was placed in the daily newspapers requesting volunteers to participate on an advisory committee. An Open House was held on 26 February 2000 at the Trail Road Waste Facility. The Research Program was discussed at this Open House and volunteers were again encouraged to participate on an advisory committee. The Technical Advisory Committee (TAC) was formed and all the individuals who requested to participate were accepted on the TAC. There are 12 non-Region members on the TAC. Please refer to Annex A for a list of TAC participants.

DISCUSSION

The TAC has met on three occasions. Listed below are the Committee's accomplishments to date.

1. Allocation of Funds

   The Committee has determined how the money will be allocated (i.e., private sector versus academic sector). The TAC wanted to acknowledge that universities are unique in the research world and should have different requirements and abilities than the private sector. In addition, universities, through their grant programs, have access to matching funding. The TAC, therefore, decided to develop a separate Request for Proposals for University grants on the condition that the work be carried out by graduate students and matching funding be provided. The TAC allotted $125,000 towards the University grant portion of the research program. The remaining $375,000 will be available for general submissions.

2. Parameters

   It was determined which parameters should be targeted and to what treatment level. The TAC decided that the focus of the research program should be on the Trail Road Landfill leachate and not the contaminated groundwater from the Nepean Landfill Site since the contaminated groundwater would be relatively diluted in comparison. The TAC decided to target parameters identified in the leachate that exceed, or closely approach the sewer-use by-law (unless there was a surcharge provision) or discharge agreement. Consequently, the emphasis of this research program is directed at reducing the leachate concentrations of hydrogen sulfide, boron, chloride, m/p xylene, toluene and barium by approximately 50% of the sewer-use by-law or discharge agreement limits. Credit will be given to processes that also bring total Kjeldahl nitrogen, total suspended solids, and carbonaceous biochemical oxygen demand into compliance or closer to compliance.

3. Requests for Proposals

   Two requests for proposals were developed (one for general submissions and the other for universities using a grant format). The two requests for proposals are available upon request.

Originally, it was the intention to have the requests for proposals closed and a preliminary selection of preferred technologies presented in this committee report to coincide with the leachate pipeline report. Due to unforeseen delays resulting from extensive input from the TAC however, the requests for proposals were released on 14 June 2000 and close on 18 July 2000. Proposals will be evaluated by regional staff and several members of the TAC over the summer. It is anticipated that preferred technologies will be selected by the end of August.

Bench scale and pilot scale testing of the various technologies should start in the fall 2000. This testing is expected to last one to two years depending on the technology. Testing of promising technologies could be scaled up after this time and would likely take another one to two years of evaluation. It is anticipated that a full scale implementation is three to five years away.

CONSULTATION

An advertisement advising the public of the research program was issued on 18 February and 25 February 2000. An Open House was held at the Trail Road Landfill Site on 26 February 2000 providing details on the research program. In addition, the TAC is composed of members of the public and reflects their points of view. All members of the public who expressed interest in participating on this project have been included on the TAC.

FINANCIAL IMPLICATIONS

There are no financial implications to date. Funding for the research program is accommodated in Capital Budget item 900455.

CONCLUSION

Work is proceeding on the research project. The partnership with interested members of the public has proved to be very successful in combining public interest and expertise to address environmental issues. Staff will continue to update Committee and Council as required.

Approved by
P. McNally, P.Eng.

MH

Attach. (1)

ANNEX A

LEACHATE PRE-TREATMENT RESEARCH PROGRAM

Members of the Technical Advisory Committee (TAC)

Marilyn Harrold, Region of Ottawa-Carleton
Keith Watson, Region of Ottawa-Carleton
Ted Woytowich, Region of Ottawa-Carleton
Scott Hall, Region of Ottawa-Carleton
Steve Black, CH2M Gore and Storrie*
Wayne Parker
Kevin Kennedy
Bruce Anderson
Wallace Brown
Anita Miettunen
Terry McIntyre
Allan Aizenman
Bill Wong
Guy Felio
Sat Debidin
Chris Kinsley
Paul Laughton

*Provides technical input to the Region as required.