The Regional Municipality of Waterloo

Commissioner of Engineering

To: Fred Kent and Members of Engineering Committee

Date: July 4, 1990

Subject: Environment Assessment Status Report

Recommendation:

That the Regional Municipality of Waterloo:

1. a) That Regional staff work with the Ministry of the Environment to conclude a review of the Region’s Environmental Assessment Addendum and initiate the 30 day public review period by September 4th, 1990.

   b) Should the Ministry’s review not be completed by September 4th, 1990, request that the Ministry of the Environment proceed with the processing of the Environmental Assessment application.

2. a) Approve the implementation of a material ban on old corrugated cardboard at the Regional landfill sites as of April 1, 1991.

3. Approve the hiring of:
   a. Two Environmental Inspectors – Starting September 1st
   b. Two Spotters – Starting September 1st
   c. One Field Clerk – Starting September 1st

   To establish a program to ensure the quality of incoming materials is acceptable for landfill and to implement an old corrugated cardboard ban and other bans, to be funded from funds identified in this report, that the 1990 current budget be revised accordingly, and approve the Waste Management Division Organization Chart and refer to Human Resources Committee for further action.

4. Approve the hiring of a Heavy Equipment Operator to operate a second compactor at the Waterloo Landfill site, starting October 1st, 1990 to be funded from funds identified in this report, that the 1990 current budget be revised accordingly, and approve the Waste Management Division Organization Chart and refer to Human Resources Committee for further action.

5. Approve the hiring of a Compost Coordinator to administer an expanded composting program, starting September 1st, 1990, to be funded from funds identified in this report, that the 1990 current budget be revised accordingly, approve the Waste Management Division Organization Chart and refer to Human Resources Committee for further action.
6. That the Regional Municipality of Waterloo approve the following capital projects:
   a. Purchase of a landfill compactor $450,000
   b. Construction of a Compost are in Cambridge $600,000
   c. Purchase of 3 pick-up trucks for new staff $60,000
   d. Design of leachate pumping station and forcemain $50,000
   To be funded from funds identified in the mid year capital review and that the 1990 capital budget and 10 year forecast be revised accordingly.

Summary:

The Region of Waterloo has been in the Environmental Assessment process since 1983 seeking an expansion to the Waterloo Landfill site. This report also updates the Committee of the status of the Environmental Assessment.

There is a significant chance that approval for the Waterloo Landfill expansion will not be obtained prior to exhaustion of capacity at the existing Waterloo Site.

The Ministry of the Environment has formally responded to our Environmental Assessment application. The response contains a number of concerns. The Region can prepare additional submissions and submit them for review, a lengthy process, or ask for the process to continue and submit additional information as it is available.

This report outlines a response to the ministry and proposes a number of programs to extend the life of the landfill.

Given the amount of remaining capacity, the Region must move prior to the next budget cycle to extend capacity.

Although the catalyst for this report is the Environmental Assessment for the Waterloo Landfill site expansion, recommendations are made to implement Region wide programs. A Region wide approach will allow the promotion of a consistent message is a significant step toward the Region’s goal of 36% diversion by 1994 and helps extend the short life of the Cambridge Landfill as well.

Report:

Waste Management Staff are endeavoring to make planning a priority. In the fall of 1989 a review of the Environmental Assessment was initiated. This review indicates that the existing Waterloo Landfill site could be exhausted prior to the approval of the expansion.

In the fall of 1989 a study (Winters Report) was conducted relative to water supply capacity within the Region of Waterloo. One of the findings of that study was that the
Regional population forecasts were understated and did not include impacts from Metro Toronto.

These same population forecasts have also been used in capacity planning for landfill. The understatement in population has an impact on Waste Management projections.

The Winters Report indicated population figures used within the Region are understated. A revised growth model is expected to be available from the planning department shortly.

A revised short term forecast has been developed by extrapolating actual tonnages received. This revised forecast has been used for short term planning in this report. The entire forecast and methodology will be reviewed and updated with the new figures from the Planning Department.

Waste Capacity:

The Waterloo Landfill site is currently operating under an emergency Certificate of Approval. This certificate expires on December 31st, 1990. This is the 3rd emergency certificate that the Ministry has issued at the Waterloo Landfill site. There is no guarantee the Ministry will issue a 4th emergency Certificate or Approval. It is expected however, that a 4th certificate will be issued because the Region has an Environmental Assessment in progress.

These emergency Certificates of Approval have been granted for limited amounts of time to allow for regular review. The site is of fixed size and will eventually be filled.

The forecast used in this report now projects exhaustion by early 1993. Physical capacity will be exhausted between January 1993 and July 1993, depending on the assumptions used. March 1993 has been used for planning purposes. Exhibit one shows the schedule for this project.

The Cambridge Site has approximately 10 years capacity at current rates of disposal.

Required Approvals:

In order to start landfilling in the Waterloo Expansion area in 1993, approval of the Environmental Assessment (EA) and issuance of a Certificate of Approval is required prior to construction of any works on the expanded site.

The required works include a leachate collection system, clay liner, pump station, forcemain and service road. This construction work could be completed in one season. Given experience with similar sized projects, allowing only one season for construction introduces some risk that the facilities not be ready in time.
It is unlikely that EA approval will be received by early 1991 allowing two years of construction time.

Some of these works will be required even if the EA was not approved in order to close the Waterloo Site. In order to reduce the magnitude of work in 1992, construction of the pumping station and forcemain are recommended for 1991.

The pumping station and forcemain would be sized to handle the landfill expansion. Costs relating to solely to the expansion involve installing larger pumps than would otherwise be installed with an additional cost expected to not exceed $5,000.