The Metropolitan Toronto and Region Conservation Authority

IMPROVED LAKEFILL QUALITY CONTROL PROGRAM

MONTHLY REPORT

OCTOBER 1991

CONTENTS

I	Introduction.....	Page 1
II	Discussion.....	Page 1-2
III	Fill Received Statistics.....	Page 2
IV	Rejected Material.....	Page 3
V	Chemical Test Audit Results.....	Page 3-4
VI	Appendix A - Lakefill Location Soil Acceptability Checklists	
VII	Appendix B - Violation Reports	

DISTRIBUTION LIST FOR ILQCP MONTHLY REPORTS

1. City of Toronto
   Environmental Protection Office
   6th Floor, East Tower
   City Hall
   Toronto, Ontario

   Contact: Ric Nishi

2. The Toronto Harbour Commissioners
   60 Villiers St.
   Toronto, Ontario

   Contact: A. (Sandy) Wallace

3. The Ontario Ministry of the Environment
   7 Overlea Blvd.
   East York, Ontario

   Contact: Bob Shaw

4. The Royal Commission on the Future of the Toronto Waterfront
   207 Queens Quay West
   P.O. BOX 4111, Station A
   Toronto, Ontario

   Contact: Ms. Hollingsworth

5. Canadian Environmental Law Association
   517 College St.
   Suite 401
   Toronto, Ontario

   Contact: Sarah Miller

I Introduction

The following report contains the fill received statistics for all lakefill sites in the month of October 1991.

II Discussion

In the interest of further improving the Improved Lakefill Quality Control Program, the MTRCA has purchased an instrument which is capable of detecting low levels of volatile organic material in soils. This instrument, the Photovac MicroTip (TIP), is currently being calibrated by ILQCP staff members for use as an expeditious on site screening tool for lakefill quality.

This MicroTip is capable of detecting the presence of over 400 volatile organic compounds, none of which are included in the current guidelines for lakefilling. Some of these compounds are hazardous and many are excellent indicators of potential environmental problems which may have gone undetected during the original approvals process. Small Sites, for instance, may have additional environmental concerns which a simple site inspection cannot detect. The MicroTip provides us with a useful screening tool which gives us even greater assurance of lakefill quality above and beyond the current guidelines.

Phase One of this calibration procedure will attempt to achieve the following;

1. Comparison of TIP results with results of full bulk analysis for the parameters on the Open Water Guidelines and the Restricted Land Use Guidelines. We will attempt to see if there is any correlation between the two sets of results.
2. Training of personnel on the correct handling, calibration and usage of the instrument.
3. Determination of any variables, other than soil quality, effecting TIP results (eg. soil types, differences in daily calibration procedures, wet samples vs. dry samples etc.).
4. Comparison of TIP results obtained from different soil types and other lakefilled materials such as asphalt.

Phase two of the calibration will concentrate on comparisons of TIP readings with actual laboratory results for volatile organics. It is our intention to arrive at a part per million number (or numbers) which would disqualify trucks from lakefill sites. A full report on Phase One of the calibration will be appended to the 1991 Year End Report.

III Fill Received Statistics

Table 1. Destination Area Breakdown for October 1991.

	Volume (m^3)		
	Open Water	Protected	Confined
Large Projects	26,700	0	50
Small Projects	0	0	690
Total	26,700	0	740

Table 2. Fill Volume Totals for October 1991.

	Volume (m^3)	% of Total
Large Projects	26,750	97.5
Small Projects	690	2.5
Total	27,440	100.0

Table 3. Site by Site Breakdown of Fill Volumes Received in October 1991.

Site	Volume (cubic metres)		
	Open Water	Protected	Confined
Leslie St.	26,200	0	0
Sam Smith	410	0	740
Totals	26,700	0	740

IV Rejected Material

A. Material rejected at the application stage by chemical analysis results.

- EV02329- 323 Richmond St. - office buildings - 20,000 cu. m rejected representing 20% of the total excavation volume.
- EV02330- 159 Frederick - Frederick House (10 Storey) - 1,600 cu. m rejected representing 31.3% of the total excavation volume.
- EV02356- 1706 Bloor St. West - Senior Citizen Centre - 8,000 cu. m rejected representing 40% of the total excavation volume.
- EV02384- 393 King St. West - 3,500 cu. m rejected representing 17% of the total excavation volume.

B. Material rejected after visual inspection of excavation sites.
(These projects were all rejected in their entirety.)

- EV02357- 7 Progress Ave.- 50 cu. m rejected representing 100% of the total excavation volume. Project rejected because of the heavy commercial nature of the address.
- EV02332- 16 Upton Rd. - 20 cu. m rejected representing 100% of the excavation volume. Rejected because of the industrial nature of the address.
- EV02375- 1535 Kingston Rd. - 50 cu. m rejected representing 100% of the total excavation volume. This site would require chemical analysis due to the questionable site history of the area.

V Chemical Testing Audit Results

Table 3. Summary of test results obtained as part of the ILQCP internal auditing program in October 1991.

Sample Taken From	#of Results Received	#Failing OWG	#Failing RLUG
Small Site trucks	1	0	0
Large Site trucks	10	1	0

OWG = Ontario Ministry of the Environment "Open Water Disposal Guidelines"
RLUG= Ontario Ministry of the Environment "Restricted Land Use Guidelines"

Results Discussion :

The one sample failing the Open Water Guidelines was obtained from 300 King St. West in Toronto, project number EV02165. Lead was the only parameter found to exceed the Open Water Guidelines. The four soil samples of native materials in the original environmental report showed no exceedances for lead. In addition, three previous MTRCA audit samples from this project showed no lead failures. No action was taken as this was judged to be an isolated case.

VI Appendix A

Lakefill Location Soil Acceptability Checklists

Note : no reports were issued in October 1991.

VII Appendix B

Violation Reports

1.Violator :

- V.M. Excavating and Grading was in violation of the Improved Lakefill Quality Control Program requirements. Dumping privileges at Authority operated lakefill sites were suspended indefinitely.

Nature of Violation :

- A driver for V.M. Excavating and Grading presented bills of lading for 333 King St. and 45 Pineridge Dr. despite the fact that he was originating from 171 Hallmark Ave.

2. Violator :

- York Excavating and Eastern Construction were in violation of the ILQCP requirements. The project on which they were working was banned indefinitely and certified as "complete" by the ILQCP staff.

Nature of Violation :

- York Excavating drivers were given bills of lading from Eastern Construction staff in order to haul material to lakefill that originated outside of the boundaries investigated in the original environmental report.

3. Violation :

- York Excavating was in violation of the ILQCP requirements. York Excavating was banned for a period of one week from all MTRCA lakefill sites and with the concurrence of the Toronto Harbour Commissioners was banned from the Leslie St. Spit as well. The ban was lifted after four working days when York Excavating complied with MTRCA requests for assurances that they and their staff understand the importance and procedures of the ILQCP.

Nature of Violation :

- York excavating were hauling earth from 323 Richmond St. without a soils consultant being on site. A minor amount of the rejected fill material was taken to lakefill.