MTRCA via WDW Feb 28/91

I Introduction

The following report contains the fill received statistics for all lakefill sites in the month of October 1990.

II Discussion

In October, 1990 The Metropolitan Toronto and Region Conservation Authority implemented its' new lakefill policy with regards to "protected" and "confined " quality material at Authority operated lakefill sites.

Since the inception of the ILQCP in January, 1989, the Authority has accepted soil failing the Ministry of the Environments "Open Water Disposal Guidelines" into "protected" areas at its' lakefill sites providing that the material satisfied the MOE's "Restricted Land Use" and "Drinking Water Quality " guidelines. As of this month, all soils shown by testing to exceed the "Open Water Guidelines" are to be deposited on land and not in direct contact with the water. Since "protected " lakefill allows for disposal directly into the water providing that the location of deposition is surrounded by three sides of land etc., this decision effectively means that "protected " disposal locations are no longer offered at the Authorities lakefill sites, however; protected bills of lading will continue to be accepted and the loads placed in confined areas.

The elimination of protected disposal locations at MTRCA sites is a site operations policy implemented by the MTRCA and not a change to "Improved Lakefill Quality Control Program ". For this reason "protected " bills of lading will continue to be issued to applicants if appropriate; however; the ILQCP staff have begun to inform environmental consultants that distilled water leachate analysis is now an unnecessary procedure since there are currently no sites available for protected material and hence there is no necessity to distinguish between confined and protected soil.

Another important policy change implemented in October involves changes to the ILQCP itself. The definition for "confined disposal areas" has been revised to ensure that it does not involve disposal of fill directly into the open water. The new definition is as follows;

Confined lakefill disposal may be permitted in areas where there is no direct contact with water, if the concentration of chemical constituents in the material exceed the Open Water Disposal Guidelines but meet the Restricted Land Use Guidelines, and the results of a Distilled Water Leach Analysis exceed the Drinking Water Guidelines. Confined disposal areas must be above the 100 year flood level(75.5 meters geodetic) and not less than 15 meters from the shoreline.

III Fill Received Statistics

Table 1. Destination Area Breakdown for October 1990.

	Volume (m^3)		
	Open Water	Protected	Confined
Large Projects	30,630	380	4,550
Small Projects	0	20	2,690

note : all loads submitting "protected " Bills of lading were placed in confined areas at MTRCA lakefill sites.

Table 2. Fill Volume Totals for October 1990.

	Volume(m^3)	% of Total
Large Projects	35,560	92.9
Small Projects	2,710	7.1
Total	38,270	100.0

IV Rejected Material

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

- No soils were rejected in this manner in October 1990.

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

- Job#EV01624 - Kingston Rd. at Valhalla - 30 cubic metres rejected representing 100% of the total excavation volume.

C. Truck loads rejected by visual inspection at the lakefill site .

- No truck loads were rejected in this manner in October 1990.

V Chemical Testing Audit Results

Table 4. Summary of Test Results Obtained as part of the I.L.Q.C.P. internal auditing program in October 1990.

Type of Sample	# of Results Received	# Failing Open Water Guidelines	# Failing Restricted Guidelines
Taken from trucks originating from "small projects"	5	1	0
Taken from trucks originating from "large projects"	1	1	0

Results Discussion

The six samples were taken from a total of six different excavation projects. Five of the samples were obtained from "small sites" as defined in the "Manual for an Improved Lakefill Quality Control Program". The remaining sample was obtained from A previously tested "large site".

Two samples were found to exceed the "Open Water Guidelines" for bulk chemistry. One was obtained from the Canvarco Rd. excavation and showed excedences in PCBs and lead. The original environmental report for this project showed one borehole with PCB levels greater than the Open Water Guidelines. The results of another audit sample taken by the ILQCP staff in September satisfied the Open Water Guidelines. The other sample taken in October which failed the Open Water Guidelines was taken from the "Jones Ave. (Malton to Hazelton)" project, a "small" linear excavation. It displayed a marginally high phosphorus concentration. This sample did however satisfy the Restricted Land Use Guidelines which are the relevant criteria for untested "small sites ".

VI Fill Volumes Received by Site

Table 5. Site by Site Breakdown of Fill Volumes Received in October 1990.

Site	Volume (cubic metres)		
	Open Water	Protected	Confined
Leslie St.	30,360	0	30
Sam Smith	0	0	0
Bellamy	0	0	0
Fishleigh	110	400	5,230
Guildwood	160	0	1,980
Totals	30,630	400	7,210

I Introduction

The following report contains the fill received statistics for all lakefill sites as well as information on all rejected or partially rejected excavation projects and results of the ILQCP Chemical Test Audit for November 1990.

II Discussion

The low volume of soil rejected by the ILQCP in November, 1990 (see section iv) was reflective of the small number of loads entering lakefill sites at this time and the sparse numbers of soils reports received by the ILQCP office. During November 1990, the ILQCP office received only 29 applications for bills of lading from which only 50 cubic meters of fill was rejected compared with 121 total applications in November, 1989 from which 43,180 cubic meters of fill was rejected.

III Fill Received Statistics

Table 1. Destination Area Breakdown for November, 1990

	Volume (m^3)		
	Open Water	Protected	Confined
Large Projects	19,200	0	540
Small Projects	0	0	930

Table 2. Fill Volume Totals for November, 1990

	Volume (m^3)	% of Total
Large Projects	19,740	95.5
Small Projects	930	4.5
Total	20,670	100.0

IV Rejected Material

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

- Job # EV01697 - 47 Baldwin Ave. - 50 cubic meters rejected representing 7% of the total fill volume.

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

- 0 cubic meters of fill material was rejected in this manner in November, 1990.

C. Truck loads rejected by visual inspection at the lakefill sites.

- 0 cubic meters of fill material was rejected in this manner in November, 1990.

V Chemical Testing Audit Results

Table 3. Summary of test results obtained as part of the ILQCP internal auditing program in November, 1990.

Sample Taken From	#of Results Received	#Failing OWG	#Failing RLUG
Small Site trucks	5	1	0
Large Site trucks	16	7	0

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

Results Discussion

From Table 3. above, 7 of 16 audit samples taken from large projects failed the OWG's. It must be pointed out that 3 of these samples were obtained from projects which originally tested for "confined " disposal and hence this was the expected audit result. The remaining four samples, however, were obtained from trucks presenting "open water " bills of lading. Two of these samples were taken from the "901 King St. " project. Upon further investigation by ILQCP staff it was determined that there was a breakdown in communication between the office and site staff of the environmental consulting firm. Trow Geotechnical staff on site were unaware of a last minute change to the soils removal proposal which was asked for by the ILQCP staff. The Trow office staff made the appropriate changes, which involved classifying a certain section of the site as unacceptable for lakefilling, but didn't pass this information down to the on site staff. Trow was contacted and informed of their error. It seems that the person who drafted the report left the company shortly there after and this may have led to the confusion. The ILQCP staff continued to monitor the excavation closely and additional audit samples from this project were taken and will be reported in the December report.

VI Fill Volumes Received by Site

Table 5. Site by Site Breakdown of Fill Volumes Received in November,1990.

Site	Volume (cubic metres)		
	Open Water	Protected	Confined
Leslie St.	18,920	0	10
Sam Smith	0	0	70
Bellamy	0	0	0
Fishleigh	0	0	0
Guildwood	280	0	1,390
Totals	20,200	0	1,470

I Introduction

The following report contains the fill received statistics for all lakefill sites in the month of December 1990.

II Discussion

The volume of fill disposed of as lakefill in December, 1990 represented the lowest monthly totals since the ILQCP was instituted in January, 1989.

III Fill Received Statistics

Table 1. Destination Area Breakdown for December, 1990.

	Volume (m^3)		
	Open Water	Protected	Confined
Large Projects	11,830	0	0
Small Projects	0	0	0

Table 2. Fill Volume Totals for December 1990.

	Volume(m^3)	% of Total
Large Projects	11,830	100
Small Projects	0	0
Total	11,830	100.0

IV Rejected Material

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

- Job#EV01728 - 200 cubic metres rejected representing 34.4 % of the total excavation volume.

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

- Job#EV01722 - 190 cubic metres rejected representing 100% of the total excavation volume.
- Job#EV01724 - 50 cubic metres rejected representing 100% of the total excavation volume.

C. Truck loads rejected by visual inspection at the lakefill site .

- No truck loads were rejected in this manner in December, 1990.

V Chemical Testing Audit Results

Table 4. Summary of Test Results Obtained as part of the I.L.Q.C.P. internal auditing program in December, 1990.

Type of Sample	# of Results Received	# Failing Open Water Guidelines	# Failing Restricted Guidelines
Taken from trucks originating from "small projects"	0	-	-
Taken from trucks originating from "large projects"	6	3	0

Results Discussion

The six samples were taken from a total of three different excavation projects. All of the samples were obtained from tested "large sites" as defined in the "Manual for an Improved Lakefill Quality Control Program".

Three samples were found to exceed the "Open Water Guidelines" for bulk chemistry :

1. One of these samples was obtained from project number EV01069 which was discussed in the November report. In November two soil samples obtained from trucks originating from this site were found to exceed the Open Water Guidelines. It was found during the ILQCP investigation that there had been a breakdown in communication between the office staff and the on site staff of the environmental consulting firm. They were sending material to the lake from a sector of the site that was classified for landfill. The MTRCA staff were satisfied that the areas to be excavated in December were areas that originally tested for open water disposal and hence the excavation was allowed to continue. In December, two samples of this project were taken and of these, one failed the Open Water Guidelines. The sample failing did so for the parameter arsenic which was not one of the parameters which failed the November audit results. Because the arsenic result was marginal, the excavation was occurring in native soils and high levels of arsenic had not been found previously on this site, the ILQCP staff allowed the excavation to continue to bring soil to open water lakefill. The ILQCP staff will be continuing their close monitoring of this site into the new year.

2. The two other samples found to fail the Open Water Guidelines in the December audit were both obtained from project number EV01701. This site was issued 120 Bills of Lading for open water disposal on the basis of an environmental report which contained the test results from 6 soil samples. The results of these original six samples indicated that the material was suitable for open water disposal. The audit results however, showed excedances of the Open Water Guidelines for oil and grease, copper, lead, zinc and PCB's. The environmental consulting firm was informed of our test results and they have not yet responded with an explanation. This project had ceased hauling soil by the time these audit results were obtained.

VI Fill Volumes Received by Site

Table 5. Site by Site Breakdown of Fill Volumes Received in December 1990.

Site	Volume (cubic metres)		
	Open Water	Protected	Confined
Leslie St.	11,830	0	0
Sam Smith	0	0	0
Fishleigh	0	0	0
Guildwood	0	0	0
Bellamy	0	0	0
Totals	11,830	0	0