

REGIONAL MUNICIPALITY OF HALTON

Report to The Chairman and Members of the
Solid Waste Management Committee

From John E. Fleming, Chief Administrative Officer,

Date 1987 01 26

Report No. CAO 33/87

Re: Receiving Comments from Halton Agricultural
Advisory Committee - Halton Landfill Technical
Study

RECOMMENDATION

THAT the report of the HAAC Subcommittee on the After Use Report - Site D, Halton Region Landfill Technical Study and the minutes of HAAC accepting the subcommittee report be received for information, and that the Landfill Approvals Coordinator forward the comments to the appropriate technical consultants.

Report:

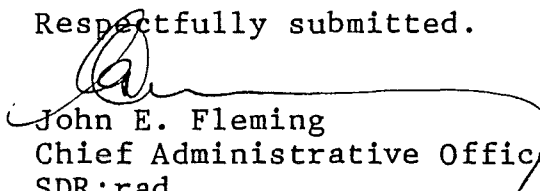
- On January 6, 1987, the Halton Agricultural Advisory Committee passed the following motion regarding the Halton Landfill After-Use Report on Site D:

"That HAAC accept the subcommittee report, as amended, regarding the Halton Landfill After-Use Report on Site D, and that the report be forwarded to Planning and Development staff for transmittal to the Landfill Coordinator."

As directed by Planning and Public Works Committee on October 15, 1986, the Director of Planning and Development attended the HAAC meeting to explain the process and the basis for the Planning and Public Works Committee's recommendation.

A copy of the amended subcommittee report and the minutes of the meeting related to this item is included for the information of Council and will be forwarded for review by the appropriate technical consultants .

Respectfully submitted.


John E. Fleming
Chief Administrative Officer
SDR:rad

4. Subcommittee Comments - Landfill After-Use Report - Site D

✓ J. Kitching read a subcommittee report distributed at the meeting regarding the Landfill After-Use Report for Site D. He advised that the subcommittee felt an agricultural after-use would be most appropriate for the site, but recreation would not be appropriate. He went on to say that the subcommittee had concerns regarding the ability to rehabilitate land to agriculture. In particular, he identified concerns with the proper separation and storage of topsoil and subsoil, erosion prevention, and contamination of water supply. He indicated that the subcommittee recommended endorsement of the recommendations in the Halton Landfill Technical Study, but stressed the importance of following the report's recommendations.

P. Langdon questioned the subcommittee's point regarding sufficient topsoil and subsoil to cover the final dome of the landfill site, as the site will be excavated down to a certain level. E. Segsworth stated that there would be sufficient underburden but not sufficient topsoil. It was clarified that the subcommittee report should refer to Horizons A and B in referring to topsoil and subsoil.

MOTION: Moved by J. Kitching, seconded by F. Anthony

"That HAAC accept the subcommittee report, as amended, regarding the Halton Landfill After-Use Report on Site D, and that the report be forwarded to Planning and Development staff for transmittal to the Landfill Co-ordinator."

CARRIED

7084
RECEIVED APR 22 1987

April 20, 1987

Ms. T. Vigod
Canadian Environmental Law
Association
4th Floor
243 Queen Street West
TORONTO, Ontario
M5V 1Z4

Dear Ms. Vigod:

RE: Regional Municipality of Halton Environmental Assessment for
the Landfill component of solid Waste Management - Errata
Our File No. 11000/62,181

We have identified the following errata in the witness statements, that have been forwarded to you. Please note the following corrections:

1. Witness Statements of the Applicant, the Regional Municipality of Halton, Vol. I, tab 8, pg. 11, section 8. Population impacts should be rated "low", not "low moderate".
2. Witness Statements of the Applicant, the Regional Municipality of Halton, Vol. II, tab 10, pg. 2, section B, line 6. The number of ha in parentheses should read "2,500 not "25,000".
3. Witness Statements of the Applicant, the Regional Municipality of Halton, Vol. II, tab 9, pg. 2, item b. The final report, Phase 2, Stage 2B (Feb., 1984) is included in: Consolidation Report, Phase 2, Stage 2B, Selection of Candidate Sites, April, 1984.

We have also included a copy of Mr. John MacKay's (P. Eng.) Curriculum Vitae. Mr. MacKay will be preparing a witness statement and will present expert technical evidence in the subject area of the Regional Municipality of Halton's waste recycling, and waste reduction program.

We will provide Mr. MacKay's witness statement, and notify you of any other errata as soon as they come to our attention.

Yours very truly,



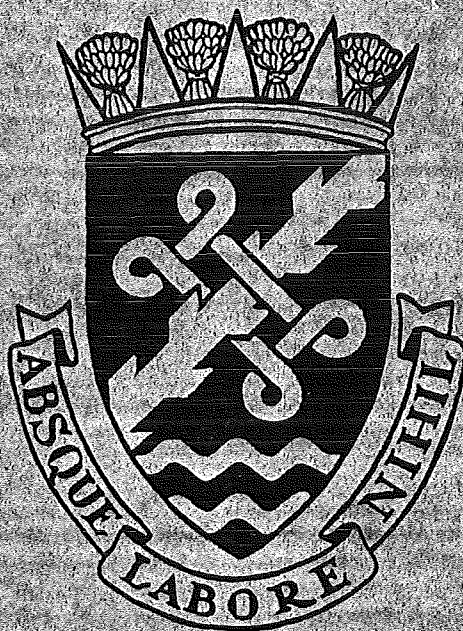
for Thomas R. Lederer
TRL;la

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from AR
May 87

THE REGIONAL MUNICIPALITY OF HALTON



SPECIAL REGIONAL COUNCIL

AGENDA

MARCH 4, 1987

THE REGIONAL MUNICIPALITY OF HALTON
SPECIAL MEETING OF REGIONAL COUNCIL NO. 6 - 87

DATE OF MEETING: Wednesday, March 4, 1987.
TIME: 7:00 p.m.
LOCATION: Council Chambers
 Regional Administration Bldg.
 Oakville, Ontario

A G E N D A

<u>ITEM NO.</u>		<u>PAGE NOS.</u>
	Roll Call	
1.	<u>DISCLOSURES OF CONFLICT OF INTEREST</u>	
2.	<u>DELEGATIONS</u>	
	- Mr. Michael McQuaid, Legal Counsel, City of Burlington	
	- Mr. Ed McBean, Professor, University of Waterloo	
	- Mr. Piero Boldrini, President Hamilton & District Multicultural Council	
3.	<u>CONSIDERATION OF COMMITTEE REPORTS (In Committee of the Whole)</u>	
	- Joint Solid Waste Management and Planning and Public Works Committee Meeting Nos. 6-87 and 8-87, Wednesday, February 25, 1987	1 - 2
	(Item No. 6 only)	
4.	<u>CONFIRMATION OF PROCEEDINGS</u>	
	<u>ADJOURNMENT</u>	

* * * * *

INFORMATION SECTION

SPECIAL MEETING OF REGIONAL COUNCIL NO. 6-87
WEDNESDAY, MARCH 4, 1987

INFO
PAGE NOS.

- JOINT SOLID WASTE MANAGEMENT AND
PLANNING AND PUBLIC WORKS REPORT NOS.
6-87 and 8-87 RESPECTIVELY

- Item No. 6 - Supplementary information
presented by Mr. McQuaid, Legal Counsel
for the City of Burlington

1 - 17

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THE REGIONAL MUNICIPALITY OF HALTON

MEETING NO. 6-87
8-87

NAME OF COMMITTEE: JOINT SOLID WASTE MANAGEMENT
AND PLANNING AND PUBLIC WORKS
COMMITTEES

DATE OF MEETING: WEDNESDAY, FEBRUARY 25, 1987
9:30 a.m.

PLACE OF MEETING: Council Chambers
Regional Administration Bldg.
Oakville, Ontario

Members of Council:

The Joint Solid Waste Management and Planning and Public Works
Committees met on the above date and recommends the following:

6. Report No. CAO 44/87 (App. Item #15 Pgs. P84 - P85)

Re: Approval and Adoption of the Comparative Analysis
Study: Proposed Site F in Burlington and Proposed
Site D in Milton

RECOMMENDATION

6.1 THAT the Report prepared by Walker,
Wright, Young Associates Limited:
"Comparative Analysis of Alternative
Sites for Sanitary Landfilling in
the Regional Municipality of Halton
Site D and Site F , January 1987,"
("Comparative Analysis") be approved
and adopted.

6.2 That the Regional Municipality of
Halton recommends that both Site D
and Site F are viable and safe as
future sanitary landfill sites, but
that Site F is marginally preferred
as a future landfill site for the
reasons set out in the Comparative A
January, 1987.

JOINT SOLID WASTE MANAGEMENT AND PLANNING AND PUBLIC WORKS
COMMITTEE MEETING NOS. 6-87 and 8-87
WEDNESDAY, FEBRUARY 25, 1987

- 2 -

- 6.3 That the Regional Clerk submit the Comparative Analysis to the Minister of Environment for information.

* * * * *

COMMITTEE NOTES

- Item No. 6 - Messrs. Michael McQuaid, Legal Counsel for the City of Burlington and Ed McBean, Professor at the University of Waterloo were present and made a presentation on behalf of the City of Burlington along with submitting a "Suggested Recommendation". (A copy of the "Suggested Recommendation" and overhead presentation are included in this Special Council Agenda - Information Section for March 4, 1987.)

As a result of the costs, Mr. McQuaid advised the Committee that there will be an impact on the tipping fees and that he would address this issue at the Special Meeting of Council on March 4, 1987.

Mr. McQuaid will also be addressing the background of the \$4.9 million additional financial adjustments in favour of Site "D".

Mr. F. Leitch, Legal Counsel for the Town of Milton was present to briefly address the Committee.

* * * * *

OVERALL COSTS

PRESENT WORTH (MILLION \$) AS OF JANUARY 1987

	<u>D</u>	<u>F</u>
OVERALL COSTS (WATSON 1986)	\$62.9	\$61.1
<u>DIFFERENCES IDENTIFIED BY BURLINGTON'S CONSULTANTS</u>		
. Add clay liner at Site F	-	7.4
. Design Changes		
- Forcemain instead of trucking leachate at Site D	-3.0	-
- Other design changes	-0.5	-1.0
. Additional after-use cost at Site F	-	2.0
. Contingency at Site D	-1.0	
Adusted Overall Costs	\$58.4	\$69.5
Calculated Difference in Favour of Site D	\$11.1	
Additional Adjustments in Favour of Site D (under review)	4.9	
	16.0	

Therefore, Site F is \$11.1 Million to \$16.0 Million more expensive than Site D.

REVISED CHART C6

	<u>Comparative Analysis</u>	
	<u>Site D</u>	<u>Site F</u>
First Priority - Public Health and Safety		
- Hydrology/Hydrogeology: Existing Constraints to Site Development	tied	tied
- Hydrology/Hydrogeology: Potential Impacts of Engineered Site Development	-	-
- Hydrology/Hydrogeology: Potential Impacts of Landfill Contingency Implementation	-	-
- Traffic Safety/Traffic Service & Operations	"low"	"low"
- Land Use Conflicts: Vermin	"low" (1)	"nil"
Second Priority - Natural Environment		
- Biophysical	"low" (+)	"high" (+)
- Agriculture	"high-mod" (2)	"low"
Third Priority - Social Environment		
- Population Impacts	"mod-high"	"low-mod"
- Community Facilities	"low"	"high-mod"
- Dust/Odour	"low"	"low"
- Litter	"low"	"low"
- Noise	"low"	"low"
- Visual Impact	"high" (3)	"mod-low" (3)
- Land Use Compatability	"low-mode"	"low"

REVISED CHART C6 (cont'd)

	<u>Comparative Analysis</u>	
	<u>Site D</u>	<u>Site F</u>
Fourth Priority - Cultural Environment		
- Heritage Features	"mod"	"mod"
- Archaeology	"low"	"low"
Fifth Priority - Costs		
- Cost (\$ million)	\$58.4	\$69.5

Notes:

- (") Quotation marks indicate direct statements from the Walker et al (1987) report
- (1) "good housekeeping practices will help ensure that gull populations do not become a problem"
- (2) loss for operational period - can be equated to dollars
- (3) view is of a berm versus a working face of a landfill
- + qualitative statements selected as highest of sub-factors, where no overall summary qualitative statement provided

CONCERNS

1. WITH TECHNICAL ISSUES - TO BE DEALT WITH AT HEARING
2. COMPARATIVE ANALYSIS
3. COSTS
4. MISSING EVALUATION FACTORS

CHART C6 - SUMMARY OF RANKINGS FROM WALKER ET AL (1987)

<u>Priority</u>	<u>Site D</u>	<u>Site F</u>
First Priority -Public Health and safety		
Factors		
- Hydrology/Hydrogeology:Existing Constraints to Site Development	N/A	N/A
- Hydrology/Hydrogeology: Potential Impacts of Engineered Site Development	2	1
- Hydrology/Hydrogeology: Potential Impacts of Landfill Contingency Implementation	2	1
- Traffic Safety/Traffic Service & Operations	1	1
- Land Use Conflicts: Vermin	2	1
Second Priority - Natural Environment		
Factors		
- Biophysical	1	2
- Agriculture	2	1
Third Priority - Social Environment		
Factors		
- Population Impacts	2	1
- Community Facilities	1	2
- Dust/Odour	2	1
- Litter	1	1
- Noise	2	1
- Visual Impact	2	1
- Land Use Compatbility	2	1
Fourth Priority - Cultural Environment		
Factors		
- Heritage Features	2	1
- Archaeology	2	1
Fifth Priority - Costs		
Factors		
- Costs	1	1

Note: The most preferred site for landfilling is ranked No. 1, the second most preferred is ranked No. 2, and so on.

from Walker Wright Young and Associates Ltd (1987)

CONCERNS WITH COMPARATIVE ANALYSIS

1. AWARENESS OF RELATIVE IMPACTS TENDS TO BE LOST
2. DIFFICULT TO REFLECT IMPORTANCE OF THE DIFFERENT PRIORITIES AND FACTORS
3. WHETHER ALL THE FACTORS HAVE BEEN CONSIDERED

AWARENESS OF RELATIVE FACTORS.
TEND TO BE LOST

EXAMPLE:

	<u>ALTERNATIVE 1</u>	<u>ALTERNATIVE 2</u>
FACTOR 1	30	513
FACTOR 2	30	41

THIS INFORMATION IS TRANSLATED IN PAIRWISE COMPARISONS AS:

	<u>ALTERNATIVE 1</u>	<u>ALTERNATIVE 2</u>
FACTOR 1	1	2
FACTOR 2	1	2

EXAMPLE OF A CONCERN - HYDROGEOLOGY.

- REGIONAL CONSULTANTS HAVE DESIGNED THE SITES TO THE SAME CRITERIA AND ESTIMATED THE COSTS
- REGIONAL CONSULTANTS HAVE PROVIDED BOTH SITES WITH CONTINGENCY PLANS
- TWO OF THE FACTORS IN THE WALKER ET AL (1987) COMPARATIVE ANALYSIS REPRESENT DOUBLE ACCOUNTING - THE IMPACTS HAVE BEEN ENGINEERED AND ARE REFLECTED IN THE COSTS
- ACCORDING TO THE REGIONAL CONSULTANTS, THE SITES ARE "TIED" IN TERMS OF HYDROGEOLOGY

EXAMPLE OF CONCERN - IMPACTS OF ODOUR

SITE D - "SOME ADVERSE DUST IMPACTS FROM APPROXIMATELY
20 DAYS DURING CONSTRUCTION OF THE BERMS"

"DURING OPERATION OF THE LANDFILL NO OFFSITE
DUST AND ODOUR IMPACTS ARE PREDICTED"

- RANKED AS LOW IMPACT

SITE F - "EXCEPT FOR INFREQUENT ELEVATED LEVELS OF DUST
AND DETECTABLE ODOURS IN BAYVIEW PARK, NO
OTHER OFFSITE IMPACTS ARE PREDICTED"

- RANKED AS LOW IMPACT

AND YET, IN THE COMPARATIVE ANALYSIS SUMMARY,
SITE F IS RANKED AS SUPERIOR TO SITE D

Source: Walker et al Report

EXAMPLE OF CONCERN - NOISE IMPACT

- "BOTH SITES, ASSUMING MITIGATION AT SITE D, COULD MEET MINISTRY OF THE ENVIRONMENT NOISE CRITERIA"
- "FOR BOTH SITES, THE ADDITIONAL TRAFFIC NOISE GENERATED IS MINIMAL"
- BOTH SITES RANKED AS LOW IMPACT
- YET IN THE COMPARATIVE ANALYSIS SUMMARY, SITE F IS RANKED AS SUPERIOR TO SITE D

Source: Walker et al Report

REVISED CHART C6

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Fourth Priority - Cultural Environment		
- Heritage Features	"mod"	"mod"
- Archaeology	"low"	"low"
Fifth Priority - Costs		
- Cost (\$ million)	(*)	(*)

Notes:

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- (2) loss for operational period - can be equated to dollars
- (3) view is of a berm versus a working face of a landfill
- + qualitative statements selected as highest of sub-factors, where no overall summary qualitative statement provided

SUMMARY

1. FROM WALKER ET AL (1987), BOTH SITES D AND F ARE ACCEPTABLE SITES FOR LANDFILLING
2. CONCERNS WITH TECHNICAL ISSUES WITHIN THE REPORTS, BUT THESE ARE BEST DELT WITH AT HEARING
3. MAJOR CONCERNS REGARDING COST ESTIMATES
4. HAVE ALL THE FACTORS BEEN CONSIDERED?

SITE LIFE EXPECTANCY (YRS)

ADDITIONAL WASTE GROWTH RATE (%)	EFW 1996	NO EFW
0	20*	18 16
1	18	16 15
2	16	15 14
5	14	13 12

* SOURCE: WALKER ET AL (1987)

ASSUMPTIONS USED FOR 20 YEAR ESTIMATE:

- EFW TO ACCEPT APPROXIMATELY 50 PERCENT OF THE WASTE STREAM
- REGION'S POPULATION PROJECTION - REVISED DEC/1985
- NO GROWTH IN PER CAPITA WASTE RATE
- SOURCE SEPERATION INCREASING FROM 5 PERCENT IN 1985 TO 16 PERCENT IN 2008
- 11 PERCENT CONTINGENCY VOLUME ASSUMED

EXPANDABILITY

SITE D - CAN POTENTIALLY EXPAND 50 PERCENT

SITE F - CAN POTENTIALLY EXPAND 15 PERCENT

OVERALL COSTS

PRESENT WORTH (MILLION \$) AS OF JANUARY 1987

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Therefore, Site F is \$11.1 Million to \$16.0 Million more expensive than Site D.

SUGGESTED RECOMMENDATION:

1. THAT the Report prepared by Walker, Wright, Young Associates Limited: "Comparative Analysis of Alternative Sites for Sanitary Landfilling in the Regional Municipality of Halton Site D and Site F, January 1987," ("Comparative Analysis"), be received.
2. THAT Site D in the Town of Milton be recommended as the preferred location for the future Sanitary Landfill site based upon consideration of the added factor of capacity for site expansion and further consideration respecting costs.
3. THAT the Regional Clerk submit the Comparative Analysis and this resolution to the Minister of Environment for information.