

CONSOLIDATED HEARINGS BOARD

IN THE MATTER OF Sections 2 and 3 and 6 (3) of the Consolidated Hearings Act, 1981, S.O. 1981, c.20;

— and —
IN THE MATTER OF Section 12(2) of the Environmental Assessment Act, R.S.O. 1980, c.140;

— and —
IN THE MATTER OF Sections 30, 35 and 38 of the Environmental Protection Act, R.S.O. 1980, c.141, as amended;

— and —
IN THE MATTER OF Sections 24 and 61 (2) of the Ontario Water Resources Act, R.S.O. 1980, c.361, as amended;

— and —
IN THE MATTER OF Section 28 (3) of, and Regulation 164 under, the Conservation Authorities Act, R.S.O. 1980, c.85, as amended;

— and —
IN THE MATTER OF Section 40(12) of the Planning Act, S.O. 1983, c.1, as amended; in connection with site plan control of the sanitary landfill site;

— and —
IN THE MATTER OF Section 22(1) of the Planning Act, 1983 in connection with a referral to this Board by the Honourable Bernard Grandmaître, Minister of Municipal Affairs, on a request by the Regional Municipality of Halton to amend the Official Plan for the Town of Milton to redesignate a parcel of land comprising Part Lots 3 and 4, Concession 2 N.S. in the Town of Milton from "Agriculture" and "Conservation and Hazard Lands" to permit the construction, operation and maintenance of a landfill site, Minister's File No. 24-OP-0208-A01;

— and —
IN THE MATTER OF Section 34(11) of the Planning Act, 1983 in connection with an appeal to this Board by the Regional Municipality of Halton for an order directing an amendment to By-law 61-85 of the Town of Milton to rezone the lands situated at Lot 3 and part of Lot 4, Concession 2 N.S., in the Town of Milton from "Agriculture" to permit a regional sanitary landfill site and ancillary uses;

— and —
IN THE MATTER OF Section 15(1) of the Planning Act, R.S.O. 1980 ch.379 in connection with a referral by the Honourable Claude F. Bennett, Minister of Housing on a request by Tremaine Britannia Citizen's Group for consideration of part of the Official Plan for the Halton Planning Area with respect to Sections 1 to 5 inclusive, 7, 9 and 10 of Part III D3 Solid Waste Management, Minister's File No. OPC-0026;

— and —
IN THE MATTER OF Section 64 of the Ontario Municipal Board Act, R.S.O. 1980, c.347 as amended in connection with an application by the Regional Municipality of Halton for an order approving:

a) the acquisition of land for the construction, operation and maintenance of a sanitary landfill site to contain 7.96 million cubic metres of waste in the Regional Municipality of Halton and to do so by one of two alternative methods as follows:

- (i) landfilling at the site referred to in Halton's Environmental Assessment as Site F in the City of Burlington;
- (ii) landfilling at the site commonly referred to in Halton's Environmental Assessment as Site D in the Town of Milton

at an estimated cost of \$12,775,000.00, and the borrowing of money by way of temporary advances not exceeding in the aggregate such estimated cost pending the sale of debentures, and

(b) the issuance of necessary debentures to a maximum of \$12,775,000.00 for a term not to exceed fifteen years;

— and —
IN THE MATTER OF Section 193(5) and Paragraph 84 of Section 210 of the Municipal Act, R.S.O. 1980, c.302, as amended;

— and —
IN THE MATTER OF Sections 6, 7 and 8 of the Expropriations Act, R.S.O. 1980, c.148;

— and —
IN THE MATTER OF an undertaking of the Regional Municipality of Halton to provide facilities for the purpose of receiving, dumping and disposing of waste as required by section 137 of the REGIONAL MUNICIPALITY OF HALTON ACT, R.S.O. 1980, c.436, as amended, by acquiring the land for, constructing, operating and maintaining a landfill to contain 7.96 million cubic metres of waste in the Regional Municipality of Halton.

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NETHERCUT & COMPANY LTD.

260 RICHMOND ST. W., SUITE 506

TORONTO, ONT. M5V 1W5

TEL: 593-4802



Nethercut & Co. Ltd.

Toronto, Ontario

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BEFORE: H. H. Lancaster, Q.C. - Chairman

Dr. D.J. Kingham - Member



Nethercut & Co. Ltd.

Toronto, Ontario

Hearing conducted at The Oakville
Granary Commercial Centre, 105 Robinson
Street, Oakville, Ontario, on Friday,
October 21, 1988

VOLUME 183

APPEARANCES:

T.R. Lederer and
H.D. Hodgson

for the Regional
Municipality of Halton
(Proponent)

J.R. Tidball

for the Ministry of the
Environment

T. Vigod
J.F. Castrilli

for the West Burlington
Citizens Group

D. Estrin,
F.E. Leitch and
H. Dahme

for the Corporation of the
Town of Milton

S.R. Garrod and
A. Nurvo

for the Milton Area Citizens
Coalition and several
affected Milton area
landowners

R.B. Tuer, Q.C.
E.A. Cronk and
F. Perrier

for National Sewer Pipe
Limited

L.F. Longo

for Azova Investments
Limited

M.J. McQuaid, Q.C.
and C.J. Tzekas

for the City of Burlington

C. Mansfield

for the Ministry of Natural
Resources

P. Renaud

for Cumis Limited



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Toronto, Ontario

APPEARANCES (Cont'd):

1	C. Stevenson	for Framgard Holdings,
2	P. Hancock	Fosseri Investments
3		Limited, Seriphos
		Investments Limited and
		Topic Investments
4	J.H. Olah	for the Halton Region
5		Conservation Authority

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260 Richmond St. W.

Suite 506

Toronto, Ontario

M5V 1W5

Per: C. F. Nethercut, C.V.R.



1 --- Upon commencing at 9:30 a.m.

2 MR. LANCASTER: Good morning. Please be
3 seated.

4 ARGUMENT BY MR. ESTRIN (continued):

5 I want to just go back for one minute to
6 an issue I raised before and bring your attention to
7 another piece of evidence related to it which I had
8 overlooked, and that is the issue of the lack of any
9 evidence with respect to Mr. Petrie's suggestion that
10 there is anisotropy in the tills at Site D. To the
11 contrary of that opinion, Mr. Chairman, Trow considered
12 at Site D that the horizontal hydraulic conductivity
13 value was equivalent to the vertical conductivity value
14 when they did their calculations for the impact of the
15 hydraulic trap. You will find that in Exhibit H-39A,
16 Appendix 16, the original report, right at the back.
17 It is quite clear when you look at that that they did
18 not -- they were calculating a vertical -- they were
19 trying to calculate hydraulic conductivity in the
20 vertical direction beneath the cell, and they used the
21 hydraulic conductivity values they obtained in their
22 Hvorslev testing for that purpose, the last couple of
23 pages in H-39A, Appendix 16 and you will see under No.
24 1A that k is equal to the hydraulic conductivity in the
25 vertical direction beneath the cell. How do they get



1 that? They go down and take the value of 8.0×10^{-8}
2 for upper till and 2.0×10^{-6} for the lower till and
3 those values come from the Hvorslev tests reported in
4 H-39 at pages 46 and 42 respectively and then they
5 calculate and say "Therefore $k = 1.4 \times 10^{-7}$ cm/s", so
6 the vertical k was based on the horizontal k values
7 they got out of their slug testing and they didn't see
8 any reason to make the assumption or speculation
9 offered by Mr. Petrie in that regard.

10 I want to come to the topic of
11 monitoring, and I touched on that briefly yesterday and
12 I wanted to go into that for another few minutes. You
13 have already heard there is a need at Site D for zero
14 impact on the UGU and you have already heard about the
15 conclusion that you are asked to accept that the
16 leachate collection system will clog off after 20-plus
17 years, and we are now in the situation under the
18 original design at least where some unassessed
19 engineering must be applied to try and keep the trap
20 working. In that situation it will be critical that
21 Site D could be reliably monitored. However, first of
22 all there is no certainty as to where the units of
23 concern are or where they go, the UGU and the LGU.
24 Mr. Petrie doesn't know and neither does anyone else
25 and there is certainly disagreement. Secondly, there



1 is only 100 metres to catch it if it does get down
2 there compared to the situation, say, at Site F and as
3 reported by Trow where you may have an attenuation zone
4 and a zone which you can identify between 650 and 1,400
5 metres.

6 Once leachate hits the UGU, and I'm
7 assuming in this discussion no fracturing in the
8 unweathered upper till, it could be off-site in less
9 than six months because it moves, according to
10 Dr. Rowe's calculations once it hits the UGU, at
11 between 37 and 207 metres per annum, depending upon
12 which variables you plug in. That is found in M-444,
13 page 58. Even assuming a k for the unweathered upper
14 till of 8.0×10^{-8} , which is not a conservative number
15 in my respectful submission, it could be off-site in
16 less than two years. It is interesting and I think
17 relevant to note that Mr. Feenstra in reply admitted
18 Dr. Rowe's calculations about travel time once leachate
19 hits the UGU, to use his term, they are more
20 appropriate than the ones Mr. Feenstra presented in Mr.
21 Feenstra's original modelling as reported in H-39 and
22 he goes into that further at Volume 169 at page 42134
23 and he says at the bottom at line 19:

24 "In the modelling performed by Dr. Rowe
25 for Site D, he presented calculations



1 which actually took into account the
2 effect of increased flow into the upper
3 granular unit because of failure of the
4 hydraulic trap."

5 And turning the page to line 2:

6 "Therefore, I think the linear
7 velocities calculated by Dr. Rowe for
8 the UGU for different failure scenarios
9 are probably more appropriate than the
10 original modelling I performed for the
11 UGU and as reported in H-39. In other
12 words, the velocities will be somewhat
13 higher than I believe ..."

14 and he gives us the 8.4 metres reported in H-39. Then
15 there is also a related issue, Mr. Chairman. There is
16 also the serious potential, once leachate hits the UGU,
17 not only to go off-site via the UGU but to quickly
18 contaminate the lower granular unit. Mr. Chairman, I
19 say that because you can look for yourself at CRA's
20 exhibit, B-618-P85. Here is the upper granular unit in
21 yellow and look how close it is to where they identify
22 the lower granular unit, and the scale on this is in
23 metres, I take it, and by eyeballing it there is at
24 least at this location I am pointing to, maybe a metre
25 or metre and a half between the two and what is in



1 between? We are talking about the lower till as a
2 sandy till and there is no significant attenuation
3 really as has been expressed by other people in that
4 lower till. Once it gets to the upper granular unit,
5 and if it doesn't get out that way it is quite evident
6 that Mr. Feenstra was right in being concerned about it
7 getting into the lower granular unit. I think Mr.
8 Petrie's evidence was that he was more concerned in a
9 way about the lower granular unit, and probably in some
10 ways he was right.

11 The Ministry of the Environment suggests
12 that after Site D is approved that more investigations
13 be done to find out where the upper granular unit and
14 the lower granular unit are and where they go and to
15 determine the hydraulics of these units so that a
16 monitoring program can be designed. That is in their
17 conditions of approval and I directed your attention to
18 them yesterday, conditions 12.1.1 and 12.1.5.

19 Mr. Chairman, this approach is contrary
20 to that recommended by Dr. Charlesworth.

21 Dr. Charlesworth is a very experienced hydrogeologist
22 in this province and he has worked and continues to
23 work for proponents of other major regional landfill
24 sites, for example the Region of Waterloo, the Region
25 of Peel, he has worked with regard to the County of



1 Oxford landfill sites and he does not recommend that
2 approach. Volume 84, page 20017 and he is being
3 questioned on this point indeed by Mr. Tidball at line
4 9:

5 "Q. Is it your concern,
6 Dr. Charlesworth, that when the
7 monitoring program is established,
8 assuming the site is approved and one
9 went on to establish a monitoring
10 program, that when it got to that point
11 that somehow you would miss portions of
12 the upper granular unit with a
13 monitoring network?

14 A. My concern is that if you do not
15 know where the unit is and how extensive
16 the unit is then you may miss flow
17 within that unit."

18 Turning over the page at line 15:

19 "Q. As a hydrogeologist does that seem
20 reasonable to you that one would
21 establish new monitors, specifically
22 looking for particular zones?

23 A. As a hydrogeologist I think it is
24 reasonable that you identify the zones
25 before you approve the site."



1 On another aspect of monitoring, Mr. Chairman, CRA had
2 some difficulty deciding between Messrs. Petrie and
3 Crutcher, how Site D could or should be monitored. In
4 their report, B-618, they set out their concept of how
5 it should be monitored and Mr. Petrie indeed expanded
6 on that in his evidence in chief, but then Mr. Crutcher
7 came up with a new plan while they were in the witness
8 stand and in effect said he would ask you to find that
9 what Petrie was saying was something he had any basis
10 or experience on in the very least and I think he was
11 putting it kindly.

12 Really, that brings us -- I want to draw
13 your attention to that at Volume 144, page 34581, and
14 you may recall, Mr. Chairman, I had some discussions
15 with Mr. Crutcher about his monitoring locations and
16 eventually he marked a number of X's on B-860-D2R which
17 says that those are for leachate level monitoring
18 locations, and that is after he had a chance to think
19 about it and he decided he would initially monitor the
20 site and I put it to him in Volume 144, page 34581 and
21 I point out in Exhibit B-618 at page 100 it says:

22 "Given that the hydraulic trap is a
23 primary means of checking the
24 groundwater environment at the site the
25 monitoring program should be directed to



1 ensure this trap is maintained.'

2 A. Yes.

3 Q. Do you still agree with that?

4 A. Yes."

5 And then we quote from what it says on page 100 which
6 says:

7 "For the purposes of hydraulic
8 monitoring CRA recommends this portion
9 of the monitoring program be designed to
10 demonstrate that the elevation of the
11 leachate mound within the landfill does
12 not exceed the elevation of the
13 piezometric surface of the underlying
14 granular unit and bedrock. It is
15 recommended therefore that at each
16 landfill cell four piezometer (sic) be
17 installed at the base of the excavation
18 midway between a pair of collection
19 pipes. These installations should
20 ideally consist of flexible tubing
21 across the floor of the excavation and
22 up the side slopes to make sure there
23 would not be damage during the
24 landfilling."

25 And it goes on to say:



1 "It is to be emphasized these
2 installations are for the monitoring of
3 leachate levels only and not for the
4 collection of leachate samples."

5 Then, on page -- I ask him:

6 "Q. ...where will the tubing run from
7 the location being monitored to the
8 point where the reading will be taken?"

9 And he says at page 34854:

10 "A. When I was envisioning that I was
11 envisioning these as wells themselves
12 rather than tubing."

13 And then I say at line 13:

14 "Q. Mr. Crutcher, I think first of all
15 that this is a change from the evidence
16 that you and Mr. Petrie gave earlier in
17 this hearing. Your recommendation was
18 at page 100... and your evidence in
19 chief was that you would put in a
20 piezometer on the base of the landfill.
21 It would be on a horizontal plane or a
22 bit of a slant, tubing running from the
23 base up the side to the edge of the
24 landfill. Do you recall that?

25 A. Yes... I recall the discussion



1 about the well. I don't recall the
2 order and such. I am not sure it
3 matters much for the purpose but there
4 are a number of ways of monitoring. You
5 asked me how I would go about the
6 monitoring and I said off the top of my
7 head this is what I was envisioning.
8 You would design a monitoring program.
9 You could do it with the tubing and in
10 fact that may be appropriate so you
11 don't have wells coming through the
12 cover."

13 How much thought have they given to this? First of all
14 they say "Do it with tubing" and then they say in the
15 stand "Well, no, do it with wells" and now he is saying
16 that you could do it with tubing so you don't have the
17 wells coming through the cover.

18 Continuing at 34857:

19 "Q. Now, would you agree with me that
20 up to this point in time today CRA's
21 evidence, your evidence, Mr. Petrie's
22 evidence has been that the preferred way
23 in which you would monitor for a
24 leachate mound would be through a
25 horizontal piezometer placed at the



1 bottom of the landfill with tubing? ...I
2 need to understand, Mr. Crutcher, what
3 is your position and why it is now
4 changing.

5 A. That discussion I primarily believe
6 was with Mr. Petrie. I did not take
7 much issue with what Mr. Petrie thought
8 or said. My thoughts at the time were
9 that wells have less questions
10 associated with them and we could
11 install wells in addition, as an
12 additional means of monitoring. I did
13 not and still do not think it is a major
14 issue and that can be determined at some
15 time in the future as to what the most
16 appropriate means would be.

17 Q. It is of some concern to my
18 client..."

19 Well, stopping there for a moment, again have CRA been
20 careful and conservative in suggesting that there is no
21 problem here and we can monitor this site? The degree
22 of effort that was put into their thoughts about this I
23 think are demonstrated in this back-and-forth tennis
24 game of how to monitor. Then, he does draw these X's
25 on this diagram, B-860-D2R, over the lunch break and I



1 suggest to him at page 34858 that in many of those he
2 will have 20 metres of garbage, there will be potential
3 problems first of all in terms of disposing of the
4 garbage, they may cause problems simply in operation
5 and at page 34859:

6 "A. They may.

7 Q. Secondly, they may be problematic,
8 they may end up being destroyed or put
9 out of operation by equipment unloading
10 garbage?

11 A. They may.

12 Q. Thirdly, they are going to create a
13 problem for the agricultural after-use
14 in the locations that you have
15 indicated?

16 A. They may."

17 He then goes on to say:

18 "What I'm trying to indicate is there
19 are a number of ways of going about
20 doing it. I do not consider it a very
21 big issue.

22 Q. Such a minor issue that your
23 evidence, and by your I mean CRA's,
24 opinion to the Board can change between
25 one month and another, your opinion in



1 the previous month being put piezometers
2 at the bottom of the floor and monitor
3 them through flexible tubing taken to
4 the site. Now you're saying put in
5 wells. It is that minor, is it?"

6 And he had said that I had asked him to mark things and
7 he said he didn't go into any detail as to the actual
8 methodology. I don't think we can take too much
9 comfort from CRA's thoughts about monitoring the site.

10 Indeed, Mr. Chairman, even under
11 Mr. Crutcher's final thoughts there are problems and we
12 demonstrated that I would ask you to find when we
13 brought out Exhibits M-875 and 876 and perhaps you
14 could take those out just for a moment if you don't
15 mind. They would be looseleaf exhibits. These are
16 schematic diagrams and the first shows a partial
17 failure of the hydraulic trap and in case A with the
18 UGU extending under most of the site and the second
19 sample, B, has it only extending under part of the site
20 and M-876 is a schematic showing the failure of several
21 tiles of French drains and M-876 relates directly to
22 Mr. Crutcher's design and monitoring scheme found on
23 B-860-D2R.

24 Now, in Volume 144 of the transcript at
25 page 34874 we deal with in particular Exhibit M-876 and



1 in this case, Mr. Chairman, it is relevant to note and
2 I think you have probably noted at the bottom that in
3 this example the k of the waste is equal to 10^{-4} , so we
4 haven't assumed anything but Mr. Crutcher's assumption
5 about the k of the waste in this scenario. If you
6 look, and I don't want to take you through the whole of
7 the discussion, but it begins on 34874 and goes up to
8 34881 and it relates back to what is shown on this plan
9 over here. We are talking about the failure of -- the
10 failure at two drains I think, and at page 34877 at
11 line 4:

12 "Q. Does this not help us understand,
13 Mr. Crutcher, that monitoring where you,
14 for example, have indicated on the plan,
15 B-860-D2R, you would not pick up a
16 failure in those two French drains
17 towards the western portion of the site?

18 A. That may manifest itself in the
19 monitoring of the manhole... It may be
20 evident these are monitored just outside
21 the manhole. On the other hand, you may
22 not detect it. I do not know. There is
23 that possibility. The actual well
24 itself would not detect that.

25 Q. The monitoring well itself would



1 not detect that?

2 A. The monitoring well would not
3 detect it."

4 the manholes. We have already heard a discussion about
5 manholes and how reliable leachate monitoring is in
6 manholes. Then, at page 34879 at line 2:

7 "Q. Just so we are all clear, if this
8 mound depicted on the schematic
9 extended, let us say, Mr. Crutcher, all
10 the way over to this French drain, the
11 one immediately to the west of the
12 monitoring well, that means four tiles
13 have failed?

14 A. Yes.

15 Q. You still wouldn't have picked that
16 up by monitoring at the red dot location
17 on the schematic; correct?

18 A. That is correct.

19 Q. If the mounding extended even
20 beyond that monitoring location so that
21 we can interpolate this mound... you may
22 not see anything at all... at the red
23 star monitoring location?

24 A. That's speculation. It's hard to
25 tell."



1 Going over to 34880 at line 20:

2 Q. The whole point, Mr. Crutcher, is
3 that unless you have a monitor in a
4 location where mounding occurred you are
5 not essentially going to -- you are not
6 guaranteed that your monitoring is going
7 to pick up the failures. ...the
8 monitoring will only pick up the failure
9 in a zone that has failed?

10 A. That is correct."

11 Mr. Chairman, even under Mr. Crutcher's on-the-stand
12 concepts of monitoring, unacceptable migration may
13 occur undetected, even if CRA's monitors are working
14 effectively. That is the point. Even if the monitors
15 as being proposed by CRA work, it is clear that you can
16 have unacceptable migration and not picked up in such
17 monitoring.

18 As for how Mr. Petrie's monitoring of
19 the leachate mound might have its problems, that is
20 illustrated in Exhibit M-877. This is the one where
21 the tubes would be at the bottom and the piezometers
22 would be at the bottom and you can see how if a break
23 in a tube occurred, it may well not be possible to
24 determine that you had that break. There is more
25 discussion about this in the same volume at pages



1 34885-86. Again monitoring could fail in this instance
2 and that fact could be undetected and the fact your
3 monitors had failed could not be noticed under that
4 scheme.

5 Then Mr. Crutcher indicated you could
6 deal with or you could get a handle on failures by
7 pressure monitoring in the upper granular unit, but he
8 admitted at page 34895 and '96, in that area, and '97,
9 that to detect a local failure by pressure monitoring
10 in the upper granular unit, it would be necessary to
11 have a monitor very close to the point where the
12 failure occurred. In other words, if the monitor
13 wasn't fortuitously located, one would not detect the
14 failure by that kind of monitoring. Again pressure
15 monitoring means, as we understand it, having a
16 piezometer into the waste and again how does that fit
17 in with keeping the cover integral? How is that
18 consistent with agricultural after-use unless you go
19 through the tubing? We just pointed out in M-877 how
20 tubing is subject to failure and undetected kinds of
21 failure.

22 Finally on the topic of pressure
23 monitoring, I wanted to refer to Exhibit 879 which is
24 another looseleaf page, and that was something that was
25 discussed with Mr. Crutcher, and that looked at the



1 changes in head in the upper granular unit for various
2 failure scenarios considered in Dr. Rowe's Exhibit
3 M-442. If you have that out, you will see in the
4 right-hand column what this is trying to set out and
5 does set out is how much change in head there would be
6 under various failure scenarios versus the natural
7 variation in the UGU. In other words, can you see the
8 change you would get from a failure situation by
9 pressure monitoring given the natural variation that
10 would occur in any event in the UGU? If you look at
11 the right-hand column, the question is asked:

12 "Is the change in head from column 4
13 within the range of measured variation
14 in the UGU?"

15 And in column 4, that is the change in head in the UGU
16 50 metres from the landfill. Assuming you weren't
17 monitoring right in the garbage because of the problems
18 we just talked about, but were monitoring let us say 50
19 feet from it, is the change in head there within the
20 range of measured variation in the UGU? If it is
21 within the range of measured variation you can't
22 determine that you have got mounding. It's only when
23 it exceeds that variation that you can tell and,
24 Mr. Chairman, looking at column 5 you will see that in
25 only two cases would the change in head as a result of



1 mounding be in excess of the natural measured variation
2 in the UGU, only in two cases. Mr. Crutcher agrees
3 that that is what this demonstrates at Volume 147, page
4 35507-8.

5 Mr. Tidball gave us some good reasons
6 why, or at least one good reason or rather he gave us
7 one caveat which I think is important to bear in mind
8 on the topic of monitoring and he raised it in the
9 context of discussing Mr. Feenstra's various options
10 dealing with fracturing but it is applicable here as
11 well. In effect he said if you put too much reliance
12 on monitoring there is a greater chance for error and
13 disagreement over what you are seeing. Also you could
14 at that point, if monitoring is your major way of
15 thinking you have a situation in hand, I think I would
16 suggest you could more easily write off the trap, to
17 use his words. I think the whole situation could be
18 accommodated by careful monitoring, but human nature
19 and saving money all tend towards -- 15 years from now
20 or 25 years from now or 50 years from now everyone will
21 have forgotten about our discussions here today and I
22 don't think anyone will be thinking about the potential
23 problems with the care we are looking at them here. We
24 do have to think about that and I ask the Board to
25 think about it.



1 Now, Mr. Chairman, I want to turn to
2 some miscellaneous points but they are all under a
3 general topic, and that is that I think they illustrate
4 how CRA has not been conservative and perhaps their
5 evidence in some cases should not be accepted. This
6 all flows you will recall from the notion in evidence
7 that while in their report they had said that you need
8 to be specific about such things as hydraulic gradient
9 and direction of flow in the major units and how they
10 had taken a conservation approach, to use
11 Mr. Crutcher's language:

12 "...we have taken quite a conservative
13 approach and under the conservative
14 approach we believe the site is both
15 predictable and acceptable."

16 and he probably said it more than once, but that's at
17 Volume 110, page 26531.

18 Now, let's think about that first of all
19 in the context of the partial versus complete failure
20 scenarios. You will recall how Dr. Rowe considered a
21 number of failure scenarios in Exhibit M-442, page 27,
22 and in evidence Mr. Crutcher, and this was in re-
23 examination by Mr. McQuaid, but he indicated:

24 "...we do not believe that we would have
25 a total failure of the system. We



1 cannot conceive of how that would
2 happen. We can conceive of how we could
3 have a partial failure of the system.
4 We have taken a look at the aspects
5 under a partial failure mode and we have
6 estimated again, again conservatively,
7 that we have 120 years before
8 contaminants actually reach the upper
9 granular unit, that being at the 0.1 of
10 their initial concentration."

11 That is page 26532. In fact their analysis is not
12 conservative since they have used what I ask you to
13 find is an unrealistically low hydraulic conductivity
14 which is not representative of field values. In fact
15 if one were to design based on the geometric mean of the
16 field data, there is a 50 per cent probability that
17 contaminants will get through to the upper granular
18 unit faster than calculated. Even to use that
19 geometric mean is not necessarily conservative.

20 Then, referring to Dr. Rowe's complete
21 failure cases, namely cases 6 to 10, Mr. Crutcher
22 indicated again in re-examination (p. 26541):

23 "...we do not believe that a total
24 failure of the collection tiles is a
25 conceivable basis. We can accept in our



1 own mind that some limited failure of
2 the collection tiles is understandable
3 but total failure is, in our mind, not
4 conceivable and it is an unrealistic
5 assumption."

6 I would ask to find that that's not valid and not
7 credible. It is reasonable to consider a complete
8 failure scenario for a number of reasons. First of
9 all, Trow considered it appropriate and they modelled
10 and considered a complete failure and the leachate
11 collection system not working.

12 Secondly, CRA considered it appropriate
13 to consider a complete failure. Mr. Crutcher does say
14 that they did that indeed at Volume 111, page 26698
15 and, thirdly, there has been, as we have already
16 discussed, inadequate monitoring of leachate collection
17 systems generally to allow one to state that a complete
18 failure is unreasonable. In fact the Region's position
19 at this hearing is that in the fullness of time, 20
20 years or so, you must anticipate clogging.

21 Then Mr. Petrie indicated that in their
22 opinion Dr. Rowe's cases 1, 11 and 12 are plausible,
23 and that is page 26543. If case 1 is plausible then
24 what is it? It corresponds to Trow's complete failure
25 scenario. By saying that that is reasonable and cases



1 6 to 10 are unreasonable, CRA is being inconsistent and
2 note that none of these cases 6 to 10 assume a k of the
3 waste of 10^{-5} .

4 At page 26678 Mr. Petrie agrees a
5 partial failure is possible but claims the hydraulic
6 conductivity in case 12 is ten times higher than that
7 used by Trow and states:

8 "In my mind that is an inconceivable
9 hydraulic conductivity for these
10 materials."

11 Now, what is case 12? In case 12 the hydraulic
12 conductivity, it is about 8.0×10^{-7} and is 8.0×10^{-7}
13 inconceivable or is it only Mr. Petrie and CRA who are
14 being inconceivable, especially in light of
15 Mr. Petrie's own master's work where he found a till
16 which had 54 per cent clay compared to Site D which is
17 20 per cent, which had a k value in the range of 10^{-6}
18 to 10^{-7} and where Trow reported a range using slug
19 tests in piezometers which Mr. Petrie agreed could be
20 affected by smearing to have values in the 10^{-7} range
21 as well.

22 Then, going on at pages 26550 and 26551,
23 Mr. Petrie states:

24 "In my mind, of the cases developed by
25 Dr. Rowe, case 1 presents, ... the most



1 reasonable result. To my mind that is
2 still conservative. It is conservative
3 because I would have employed a lower
4 value for the hydraulic conductivity of
5 the till..."

6 Again that statement is inconsistent with CRA's claim
7 that to consider a complete failure is unreasonable
8 since case 1 represents a complete failure.

9 On page 26551 Mr. Petrie states:

10 "Case No. 11 provides a somewhat less
11 reasonable case but not implausible,
12 although it is based on the hydraulic
13 conductivity of the till that is five
14 times greater than that provided by
15 Trow..."

16 I think it is important to note that Mr. Petrie does
17 not rule out the possibility of the k of the upper till
18 being 4.0×10^{-7} , the value used in the analysis of
19 case 11 examined by Dr. Rowe, and that is of importance
20 in that that is the same hydraulic conductivity used in
21 the analysis for example of case 8 where a height of
22 mounding was due to a hydraulic conductivity of the
23 waste of 1.0×10^{-4} . Case 8 is for a complete failure.

24 Then with respect to Dr. Rowe's cases 2
25 to 5, at page 26556 Mr. Petrie states:



1 "...these cases are not plausible with
2 respect to the permeability of the
3 waste..."

4 I would ask you to find this opinion to be considered
5 inconsistent with the use of 10^{-5} by CRA in the design
6 of the Waterloo landfill and on the hydraulic
7 conductivity of the waste determined in Bayview Park.
8 Mr. Crutcher admitted he had never performed any,
9 investigations of in situ waste to determine hydraulic
10 conductivities and Messrs. Petrie and Crutcher at page
11 29743 accept that the value of 2.2×10^{-5} was in fact
12 determined and is a valid value at the location
13 determined and as reported in the paper by Dr. Hughes,
14 et al for waste in that study. They went on to claim
15 that one should do pump tests and then at page 29745
16 Mr. Crutcher agreed they have never performed a pump
17 test to determine hydraulic conductivity of wastes.

18 At page 29749 I refer them specifically
19 to the Bayview Park piezometer 9 in OW-15 and
20 Mr. Crutcher agreed the k determined was 2.5×10^{-5} and
21 corresponded to the hydraulic conductivity of the waste
22 and I asked him at 29751:

23 "Q. Do you not think that it is a
24 number that you should have brought to
25 the attention of the Board in the



1 context of giving the Board an opinion
2 that such a number was improbable or
3 unrealistic?

4 A. No. My evidence is based on
5 looking at the site as a whole and not
6 looking at an individual reading within
7 the site."

8 But they went as far afield as New York to try and drag
9 in some values about the hydraulic conductivity of
10 waste that later on they admitted in cross-examination
11 weren't surprisingly high values because the Fresh
12 Kills landfill was in a marsh and you wouldn't expect
13 the waste to be too highly compacted at that location.
14 So they go that far in that extreme to build a case
15 that 10^{-5} is unreasonable but then they ignored data in
16 Halton Region.

17 Then, Mr. Crutcher around pages 29752 to
18 '57 claims that Dr. Rowe considered a hydraulic
19 conductivity of 10^{-5} applying to the entire mass of
20 waste. That is not correct. If you look as you are at
21 his report, Dr. Rowe's report at page 27, it was only
22 considered for the case of no failure in the landfill
23 and was intended to look at the possibility of the
24 reverse of the hydraulic trap due to low value of k
25 wherever it occurred. In considering the complete



1 failure scenario, looking at page 27, a hydraulic
2 conductivity of 10^{-5} was not considered and I think
3 that that is important to underline; in considering the
4 complete failure scenario, a hydraulic conductivity of
5 10^{-5} was not considered by Dr. Rowe. That is page 27.

6 Even considering a partial failure of
7 the leachate collection system, a hydraulic
8 conductivity of 10^{-5} was not considered.

9 What did CRA do when they brought to the
10 Board their predictions of what would happen at Site F
11 in terms of mounding? In Exhibit B-617 at page 156
12 they show a calculation and Mr. Crutcher admitted at
13 page 29829 that in doing that calculation they assumed
14 or considered a six-metre mound over the entire area of
15 Site F to arrive at that calculation in their report.
16 They, CRA in other words, assumed a six-metre mound for
17 their failure case at Site F and yet claimed the case 6
18 examined by Dr. Rowe at Site D which is only a 4.8
19 metre mound is unreasonable. You may recall we had
20 some discussion about how you calculate a mound on a
21 slope and how it's like pouring water into a bathtub
22 that may be on a hill. Given the greater slope at Site
23 F, it certainly appears based on that calculation that
24 it is CRA who have been unreasonable. In Volume 123,
25 page 29918 Mr. Crutcher agreed that the six-metre mound



1 they considered at Site F represents a widespread
2 failure of the leachate collection system at Site F.
3 He then went on to say that that is what the
4 calculation shows but that is not what he intended. He
5 never in fact performed the calculations to work out
6 what it meant.

7 At page 29926 he claims they should have
8 used a value of three metres as being more
9 representative of failure. He states:

10 "...I apologize to the Board for not
11 doing that calculation and all I can say
12 is that hindsight is a wonderful thing.
13 Next time I am in this position I will
14 do the calculation before I so glibly
15 give the numbers."

16 It is that the context that he, Mr. Crutcher, is asking
17 you to believe his opinion that what is a reasonable
18 failure scenario is a one-in-three tile failure.

19 Mr. Crutcher I respectfully suggest has no experience
20 on which to base that. There is no reason to believe
21 that only two out of every three tiles would fail. If
22 failure results, Mr. Chairman, it's as a result of
23 clogging and why wouldn't all tiles affected be
24 influenced? It is of course possible that Mr. Crutcher
25 could be right, but there is no real reason to believe



1 that it is any more likely to be one in three, one in
2 four or one in five or, in fact, if one wished to be
3 conservative given that one doesn't really know what it
4 would be, then one would assume a complete failure as
5 Trow did.

6 Then, I want to talk for a moment about
7 Mr. Petrie and the UGU on the issue of whether or not
8 he was conservative and how carefully his evidence
9 should be accepted. Mr. Petrie was not careful to
10 analyze all the data before drawing conclusions about
11 the UGU, conclusions that fit his thesis that it is a
12 discontinuous unit. In Volume 111 at pages 26770 to '3
13 Mr. Tidball was asking Mr. Petrie what leads him to
14 believe the UGU is a lens beneath the site and is not
15 connected to the western portion of the UGU through
16 borehole 6-84 and Mr. Petrie replied it was:

17 "A. Principally the borehole record
18 that (sic) HC6-84."

19 Then Mr. Tidball pointed out that the sampling was not
20 continuous at borehole 6-84 and Mr. Petrie agreed that
21 in fact none of the 1984 sampling detected the presence
22 of the upper granular unit. Then at page 26774
23 Mr. Petrie pointed out:

24 "...our interpretation of a lens is also
25 based in part on the response of that



1 system to pumping."

2 Then Mr. Tidball had Mr. Petrie agree that apparently
3 no monitoring of the pump test was performed at that
4 location, MC(OW)4, and then if we look in their report
5 on Site D at B-618, page 40, the first line, and if I
6 could ask you to get out B-618 for a moment, their
7 report on Site D, at page 40 they say at the top under
8 the heading of "Upper Granular Unit", "This Unit is
9 discontinuous..." and if you turn the page, the second
10 paragraph -- sorry, page 42, second paragraph, they go
11 on to say:

12 "The time-recovery graph for PW-2...
13 shows that this well may not have fully
14 recovered following pumping."

15 And if you turn the page to the top of page 43:

16 "The apparent lack of complete recovery
17 is of significance in characterizing the
18 hydraulics of this unit. CRA considers
19 the incomplete recovery to indicate that
20 the Upper Granular Unit does not
21 comprise a continuous permeable layer
22 under the western portion of the site
23 but rather an isolated lense of granular
24 material embedded within the Lower
25 Till."



1 Then if I could ask you to turn to Volume 124 if you
2 have it of the transcript and, if not, I can give you
3 the reference. At page 30058, and it's in the context
4 of what we just read in his report that I am cross-
5 examining Mr. Petrie and I hand him this exhibit which
6 is the Theis recovery for the upper granular unit
7 taking the data from another piece of paper and at line
8 19:

9 "Q. Which in turn was taken from
10 Exhibit 174?

11 MR. PETRIE: A. Correct.

12 Q. The data we have added to Trow's
13 graph was data which was available to be
14 analyzed by you at the time you made
15 your original report and testified here?

16 A. Correct, it was available and as
17 indicated for some reason it had slipped
18 my memory and I could also advise the
19 Board that we had requested this
20 information early on in the process and
21 did not receive it early on..."

22 Skipping down to line 12:

23 "Q. In any event, it was filed as an
24 exhibit several months ago?

25 A. It certainly was and I indicated



1 the date on the copy we have as being
2 September 21st, (1987)."

3 Parenthetically this cross-examination occurred on
4 April 14, 1988:

5 "Q. Looking at these two curves I am
6 suggesting to you that it is obvious
7 that the observation hole recovers?

8 A. Yes...

9 Q. It's also obvious that the pumping
10 well is following a similar trend?

11 A. Correct.

12 Q. Full recovery would be expected?

13 A. Full recovery would be expected..."

14 Mr. Chairman, there was evidence filed since September
15 and Mr. Petrie had not analyzed it and when he analyzed
16 it in the stand because he was being cross-examined
17 about it, he agreed that recovery does in fact occur
18 and he then agreed that his statement in his report is
19 no longer correct, and his admission to that is found
20 at page 30063 at line 13 or rather line 10:

21 Q. Mr. Petrie, it is quite
22 contradictory for you to stand here and
23 say that your report is correct, I
24 suggest, as it is written... You say:

25 'The apparent lack of complete recovery



1 is of significance in characterizing the
2 hydraulics of the unit'

3 And that's no longer correct?

4 A. I agreed that they do not appear to
5 recover."

6 Mr. Chairman, notwithstanding that in B-618 a basic
7 reason for concluding that the UGU was not continuous
8 was based on non-recovery and after agreeing, after
9 Mr. Petrie agreeing he was wrong about this because he
10 didn't analyze the data, he still would not clearly
11 retract his position. All he could now say is that he
12 doesn't understand where the water is coming from. He
13 wouldn't fully retract. Is this really being helpful?
14 In fact what this demonstrates in my respectful
15 submission is that he chose to formulate a hypothesis
16 without reference to the data and then subjectively
17 interpret the data to support his hypothesis. At page
18 30073 I put to him further pump data showing a response
19 of three and a half centimetres at MB(OW)4 during the
20 pump test and this was, according to Mr. Petrie, an
21 isolated portion of the UGU but what was his response
22 when I pointed out the data; it was not to believe it.
23 It was not to believe it and not to believe it was
24 meaningful and he speculated and his first response was
25 that it's probably due to a barometric fluctuation.



1 Then after he had an opportunity to check the
2 barometric data and it didn't confirm his speculation,
3 and this is all found in Volume 125, 30160. Finally,
4 in that volume at 30178 he concedes that it is possible
5 that the UGU extends across the site.

6 However, there is another illustration
7 of Mr. Petrie not being careful to analyze the data and
8 that is with respect to his interpretation of the lower
9 granular unit and that is in the same volume we were
10 looking at a moment ago, Volume 124, page 30077 at line
11 15:

12 "Q. ...I would like to turn to the
13 pumping test in the lower granular unit
14 and turn you to page 44 of your report,
15 B-618. In the last paragraph you talk
16 about how you conclude that that pumping
17 well in the lower granular unit, P-1, is
18 inefficient and you say:

19 'A more efficient well could be
20 pumped at a greater rate and produce a
21 more extensive cone of depression.'

22 A. Yes, I said that.

23 Q. And you also say specifically that
24 'an examination of the recovery plot for
25 PW-1 shows that within approximately 5.5



1 Q. And it is a fundamental problem
2 with regard to your interpretation?

3 A. It does impinge on my conclusions,
4 yes."

5 Going over to page '84, 30084 at line 4:

6 "Q. There was another piece of
7 information that was available to you to
8 reach that conclusion which would lead
9 you to have grave suspicions about the
10 accuracy of the label on this graph in
11 the interrogatories if you look at H-84
12 Addendum B,... which is the drawdown you
13 have given us?

14 A. Which is the drawdown you have
15 evidenced from this table I have
16 described.

17 Q. There is no doubt?

18 A. I believe you are correct."

19 Then turning to 30085 I asked at line 2:

20 "Q. Mr. Petrie, you are telling me you
21 would not want to put any interpretation
22 on the efficiency of the pumping well?"

23 And he goes on to say:

24 "... so it is not possible to make any
25 conclusions regarding the efficiency of



1 the pumping well from that information.
2 Q. Could I ask you to turn to page 44
3 of your report, and I would ask you to
4 agree with me that it would be
5 appropriate to strike out the whole last
6 paragraph?

7 A. I can't make any conclusions based
8 on the data provided by Trow regarding
9 well efficiency and it would be
10 appropriate to strike out that paragraph
11 unless you have some data in the package
12 you have just provided me with for the
13 pumping well."

14 He agreed to have that struck out. Mr. Chairman,
15 Mr. Petrie had ignored data. He had looked at data in
16 only one way that suited his interpretation, but when a
17 careful analysis is taken the data does not support
18 that interpretation.

19 At Volume 111 we got into the topic of
20 gradients with Mr. Petrie and Mr. Tidball indeed was
21 asking him some questions about upward gradients. He
22 asked Mr. Petrie to agree with Dr. Charlesworth that
23 there are upward gradients at certain of the boreholes
24 and at page 26821 Mr. Tidball asked:

25 "Q. Does it matter in your



1 interpretation of the site... that the
2 shale bedrock is the prime receptor of
3 infiltration. Does it matter whether it
4 is not the shale bedrock or is in fact
5 the lower granular unit?"

6 and Mr. Petrie replied:

7 "A. It does not matter."

8 But, Mr. Chairman, it does matter. First of all, it
9 indicates there is uncertainty with respect to the
10 hydrogeology of the site and, secondly, whether the
11 flow is to the LGU or to the shale, it does affect the
12 amount of flow that can enter the system from a failed
13 landfill and Dr. Rowe discussed that in his evidence in
14 his cross-examination.

15 Then in Volume 112 at pages 26914 to '6
16 Mr. Petrie indicates that he considers the bulk of the
17 flow should be to the shale and agreed that Dr. Rowe's
18 flow modelling as reported in M-442 is more appropriate
19 than the modelling conducted, assuming there was a
20 finite transmissivity of the shale. He also emphasized
21 he believed the UGU was a lens and therefore most of
22 the flow will go to the shale. There is inconsistency
23 in those views.

24 Firstly, he claims one should consider
25 the lateral extent of the UGU to be a layer if one is



1 performing an impact assessment and consequently in
2 this scenario the bulk of the flow will be to the UGU.
3 Secondly, his claim is that the bulk of the flow goes
4 to the shale which is inconsistent with the observed
5 gradients at the site which suggests that the LGU
6 rather than the shale acts as a drain to the system.
7 You will recall in B-618-P85 which is over there
8 (indicating) how we do see indeed that there are upward
9 gradients from the bedrock to the lower granular unit
10 in two locations and we don't know at that one because
11 we don't have appropriate instruments and at this one
12 it is a neutral gradient with no vertical gradient.

13 DR. KINGHAM: I understand the data but
14 I don't understand why you say it is an inconsistency.
15 You just said that from the perspective of impact
16 assessment it is conservative to assume that the upper
17 granular unit is continuous, but nevertheless for the
18 calculation we will assume that the gradients go to the
19 shale. In the one case he is qualifying it by saying
20 for the purposes of impact assessment it is
21 conservative to assume, but are you saying that those
22 two statements are inconsistent or perhaps you would
23 like to repeat them and maybe I didn't get them?

24 MR. ESTRIN: I was going rather fast.
25 He seems to be saying on the one hand that one should



1 consider the lateral extent of the UGU as a layer if
2 one is performing an impact assessment and in that
3 scenario the bulk of the flow would be to the UGU.
4 Secondly, he is saying in another phrase that the bulk
5 of the flow in fact goes to the shale, but that is
6 inconsistent with the observed gradients at the site
7 which suggest -- and that suggests that the lower
8 granular unit rather than the shale acts as a drain to
9 the system. It's just a bunch of what are seemingly
10 inconsistent approaches as to assessing how you would
11 assess an impact. Is it really assessing the impact to
12 assume that it goes off through the UGU if it could in
13 fact go through the LGU to the bedrock or whatever?

14 DR. KINGHAM: Are you arguing that the
15 best impact assessment is not the assessment of the UGU
16 as the drain? I want to know what your argument is.

17 MR. ESTRIN: Well, obviously the UGU is
18 important with regard to the wells immediately within
19 100 metres of the site but, as Mr. Feenstra indicated,
20 and I will be reminding you again, there are a lot of
21 other wells in the vicinity and I don't think we can
22 base a risk assessment solely on those wells
23 immediately within 100 metres if in fact what we are
24 talking about is risking contamination of the whole
25 groundwater regime and not just the upper granular



1 unit, but the lower granular unit and the bedrock. I
2 think that that is the problem I am trying to
3 illustrate, and perhaps not very well. Anyway, what do
4 all these references indicate? Variously they indicate
5 what I suggest is an unscientific approach in some
6 instances and in other instances a lack of experience
7 and it provides a basis for you to question Mr.
8 Petrie's opinions, especially where inconsistency or
9 error has been suggested to him but to which he would
10 not admit. It's also contrary to CRA's position that
11 they have been conservative, which I suggest implies
12 being careful in their interpretation, and particularly
13 it is contrary to their fundamental evidence that they
14 have been conservative with respect to the range of the
15 upper unweathered till and that it could not move into
16 the 10^{-7} range. I want to conclude my discussion of
17 this topic by referring you to some evidence about why
18 I believe CRA and Mr. Petrie are being inconsistent and
19 certainly not conservative with respect to the value of
20 till at the site based on their own work.

21 As you know, Mr. Petrie indicated he
22 thinks the hydraulic conductivity of 8.0×10^{-7} is
23 implausibly high. But, in M-697, a CRA report, CRA
24 indicated that the hydraulic conductivity of clay could
25 be 10^{-6} and till in the range of 10^{-4} to 10^{-6} . If you



1 want a specific transcript reference, Volume 121, pages
2 29303 over to 29304.

3 Then, I presented at page 29307 an
4 excerpt from Freeze and Cherry or referenced him to an
5 exhibit which was in, H-487, which indicates hydraulic
6 conductivity of till can vary from 10^{-10} to 10^{-4} and
7 Mr. Petrie would not agree that there could even be one
8 order of magnitude variation at Site D. Then another
9 CRA report was put in, M-698, their report on the
10 Waterloo landfill expansion which Mr. Crutcher signed.
11 In that report they report a range of hydraulic
12 conductivity for their clay silt till in the range of
13 10^{-6} to 10^{-8} , and that is found at transcript page
14 29310. In the same report it is demonstrated that at
15 Waterloo they used a hydraulic conductivity of $1.0 \times$
16 10^{-7} for material that had 24 per cent clay and 77 per
17 cent clay and silt and then in the same area, page
18 29314, Volume 121, I make reference to another CRA
19 study, M-699, and I said to Mr. Petrie at line 9:

20 "Q. What you have done here is you have
21 said let's be conservative in
22 calculating the groundwater flow
23 velocity for the City of Waterloo and we
24 had values of 10^{-7} , 10^{-8} and we have
25 clay content higher than at Site D, 24



1 per cent, and higher clay and silt
2 content than at Site D but let's be
3 conservative and what was the
4 conservative number you picked, Mr.
5 Petrie, it was 1.0×10^{-7} ?

6 A. That is correct."

7 And that was in reference to the "very dense, grey clay
8 till" that they were looking at which was by the way
9 the Maryhill Till Mr. Petrie had investigated by pump
10 test, and I can understand why he wanted to be
11 conservative about that, truly conservative about that.
12 In regard to one of these reports, an old CRA report
13 going back to 1975 which talked about values of clay
14 and conductivity being in the range of 10^{-6} , Mr.
15 Crutcher when I confronted him with this said "Well,
16 these values may no longer be appropriate because it's
17 an old article," or words to that effect, 1975. Mr.
18 Chairman, soil properties don't change hopefully in 15
19 or 20 years, and maybe over geologic time but not in
20 that time. Is that being plausible?

21 I would like to turn now to a brief
22 comment about Site D and Site F and how CRA and
23 Drs. Charlesworth and Rowe approached both of these
24 things. Mr. Crutcher indicated that in CRA's opinion a
25 proposed landfill site must be predictable and the



1 predicted impacts must be acceptable. What CRA are
2 essentially arguing about at Site D is that it is
3 predictable and that the impacts are acceptable whereas
4 at Site F, Site F is unpredictable. Dr. Rowe's and
5 Dr. Charlesworth's position is the reverse. They are
6 arguing that Site D is unpredictable because of the
7 uncertainties regarding the hydraulic conductivity of
8 the key unit, namely the unweathered upper till, and
9 the properties of the granular units. Given the
10 uncertainty with respect to these key hydrogeologic
11 parameters at Site D, Dr. Rowe's and Dr. Charlesworth's
12 evidence is, in essence, we don't know what is going to
13 happen but if we make reasonable but conservative
14 assumptions, unacceptable impact is going to happen, or
15 the predicted impact is unacceptable. In contrast, at
16 Site F we have two existing landfills which serve as a
17 large-scale field experiment and even after up to 30
18 years of migration from these landfills there is no
19 evidence of significant contaminant migration, nor is
20 there any evidence of unacceptable impact. This
21 empirical evidence is supported by theoretical
22 justification provided by Dr. Rowe for the high
23 attenuating capacity of the Queenston Shale and this in
24 addition to the poor quality of the natural groundwater
25 and the lack of groundwater users at Site F and as a



1 result -- the end result is that Drs. Charlesworth and
2 Rowe regard Site F as being both predictable in the
3 broad sense and acceptable. When we talk about
4 predictability it may be important to distinguish
5 between predictability on a very small scale and
6 predictability on a scale which is likely to be of
7 significance with respect to groundwater -- impacts on
8 groundwater quality. At both Site D and Site F it is
9 extremely difficult, if not impossible, to predict
10 exactly what is going to happen on a micro scale. At
11 Site F, however, there is a good basis for making a
12 prediction on a general scale which takes account of
13 migration over distances of tens to hundreds of metres.
14 At Site D we just don't have that luxury.

15 Now, I would like to turn to another
16 topic briefly and that is liner costs. I want to leave
17 all of this evidence for a moment and summarize for a
18 minute Brian Gray's evidence. You will recall that the
19 Town of Milton called Mr. Gray and his witness
20 statement is filed as M-923 and Mr. Gray is an expert
21 and specializes in geotechnical and materials
22 engineering related to soil mechanics, foundation and
23 earthwork construction. His qualifications in that
24 witness statement begin at page 17 of M-923 and I
25 believe you can find he is a gentleman with very



1 considerable experience in such matters and, in general
2 his geotechnical and materials engineering related to
3 soil mechanics, foundation and earthwork construction
4 and, in particular, he has experience with construction
5 on, in and under the Queenston Shale. Both he and Dr.
6 Rowe gave you their opinion that if, if, and it is a
7 big if because the Town of Milton doesn't say a liner
8 is required, but if the Board were to conclude a liner
9 was needed at Site F, they both give you their reasons
10 why a one-metre liner and not a 1.2-metre line would be
11 satisfactory.

12 Mr. Chairman, Milton but not Burlington
13 commissioned scientific and engineering investigations
14 into the property of the on-site till at Site F, and
15 there is a whole raft of that contained in the witness
16 statement on pages 21 to 48 and reporting upon the
17 results of those investigations. Based on these tests
18 and which included three different types of laboratory
19 testing and mineralogical testing, it was concluded,
20 and the Board can firmly conclude, firstly, that the
21 clay till at the locations tested at Site F have
22 similar properties to clay tested by other consultants
23 in the vicinity, for example Trow's testing on the
24 proposed site, Gartner Lee to the west, Peto McCallum
25 to the east, the Ministry of Transportation to the



1 south and Mr. Crutcher's speculation that till in one
2 part of Site F is different from another is just that,
3 speculation.

4 Another firm conclusion you can reach
5 from this evidence is that the native clay till at Site
6 F when compacted will form a suitable liner within the
7 parameters that CRA wanted, if a liner was to be built,
8 at least to the hydraulic conductivity that CRA wanted,
9 and whether or not there aren't other issues to be
10 considered in a liner at that site if that is to be the
11 design is another matter. In any event, that is all
12 that CRA seemed to be concerned about.

13 The third thing you can conclude is that
14 the excavated Queenston Shale at the site will be
15 suitable for use as daily cover and without treatment
16 other than weathering. Another thing you can conclude
17 is that a liner constructed from on-site materials,
18 from the clay till at Site F is cheaper than CRA's
19 imported and gold-plated design. If you read paragraph
20 13 of the witness statement, that sums up some issues
21 with respect to the cost and if you look at Table IIIA
22 as to cost you will see if you take CRA's design and
23 CRA's cost you come in at a \$17 million item and, even
24 accepting CRA's design, but more reasonable cost
25 estimates provided by Peto McCallum, it drops down to



1 \$11,500,000 and if you accept the design proposed by
2 Peto McCallum and supported by Dr. Rowe in terms of
3 eliminating one of the sand layers and some of the
4 contingency monitoring proposed, you can drop the cost
5 down to \$7 million. So there is a \$10 million
6 potential saving between CRA's way of calculating and
7 what another competent firm of geotechnical people can
8 calculate it at and there is no need for a sand blanket
9 under the liner, and that is made clear in Volume 166,
10 page 41385-86.

11 CRA was, in my respectful submission,
12 certainly gold-plating one of the layers of sand. When
13 confronted in cross-examination with the fact that sand
14 meeting an MTC specification was available at much less
15 money than CRA has brought in, Mr. Shepherd's response
16 was to speculate that the Hazen Formula used to rate
17 such sand was not appropriate to determine the
18 coefficient of hydraulic conductivity for sand, but
19 then what did Mr. Gray do? He carried out three
20 different kinds of testing on that very sand and proved
21 beyond a doubt that it met Mr. Shepherd's criteria and
22 he also demonstrated again that, in my respectful
23 submission, and I almost said wild for Mr. Shepherd to
24 suggest that the Hazen Formula was inappropriate for
25 determining the hydraulic conductivity of sand, and in



1 fact that is what it was primarily designed to rate.
2 But, in any event, Mr. Gray showed you the Hazen
3 Formula was very appropriate for determining that
4 hydraulic conductivity value.

5 Although there was cross-examination of
6 Mr. Gray with respect to the details of some of his
7 assumptions about double-handling of materials and how
8 much of that was involved in his cost estimates,
9 Mr. Chairman, it is clear that Mr. Gray's cost
10 estimates were arrived at based upon a similar level of
11 detail or, if you like, generality as CRA and Trow used
12 in coming up with theirs and that one of the basic
13 reasons Mr. Gray was able to arrive at a cheaper price
14 was because he was able to show that you could use on-
15 site materials. Mr. Gray has a great amount of
16 experience in this field. Unlike CRA his firm had no
17 other involvement in this hearing. His firm has not
18 been advising the City of Burlington or the Town of
19 Milton or Halton and unlike CRA has not committed
20 itself to making a case for any liner, let alone an
21 imported liner.

22 Mr. Gray put at least three speculations
23 of CRA to rest. First of all, there is no need to
24 blast at this site. Secondly, there is no need to
25 import clay and, thirdly, there is no reason not to use



1 a cheaper winter sand. I am raising these issues of
2 credibility, if you like, and experience because I
3 anticipate that when my friends get up they will be
4 raising the notion that Mr. Gray didn't put his mind at
5 great detail into how much clay would have to be moved
6 from here to there or wherever and they will be asking
7 you to compare opinions. I am going to ask you that if
8 some issue is raised later in argument about whose
9 opinion, CRA's or Mr. Gray's is more reliable, I would
10 ask the Board to remember how much a gold-plated liner
11 -- first of all, remember how much a gold-plated liner
12 fits into the overall Burlington strategy, which I
13 suggest is make Site F too expensive, and also how CRA
14 came here to speculate that you couldn't use the on-
15 site material and you have to go to gold-plated
16 imported material and without bothering to do any field
17 or lab work on the clay or the shale or the sand and
18 particularly the clay and shale at the site. I think
19 if it comes down to any issues of credibility, the
20 Board has the basis for accepting Mr. Gray's.

21 Would this be an appropriate time to
22 take our morning break?

23 MR. LANCASTER: Yes, I believe it would.
24 Thank you. Fifteen minutes.

25 --- Recess



1 MR. LANCASTER: Please be seated.

2 MR. GARROD: I was wondering while we
3 are waiting, is there a collection of all the exhibits
4 that I might have access to because I am missing a
5 couple I might want reference to and I wondered if
6 there was a set for the public record somewhere.

7 MR. LANCASTER: I don't know if they are
8 all here.

9 DR. KINGHAM: Are you talking about all
10 the exhibits, the book-type exhibits, or just the
11 panels and flip charts?

12 MR. GARROD: I was wondering if there
13 was a complete set of exhibits.

14 DR. KINGHAM: It's comprised of this
15 bookcase and that.

16 MR. GARROD: I understood these were
17 your personal ones.

18 DR. KINGHAM: They are my personal ones
19 but I don't believe there is an additional set unless
20 the Region has been keeping a complete set, but we have
21 been assuming each party had a complete set.

22 MR. GARROD: A lot of them have them and
23 perhaps I could try and get one...

24 DR. KINGHAM: Perhaps your colleagues
25 have between them ...



1 MR. GARROD: I haven't been here every
2 day.

3 MR. LANCASTER: Are there some you
4 particularly want?

5 MR. GARROD: There are, but I'm not in a
6 position to say so but I can sort it out.

7 MR. LANCASTER: Give me a list because
8 we have another set here so we have two sets and they
9 are all mixed up now but we can look and see if we can
10 find them for you.

11 MR. GARROD: I'll see if I can generate
12 a list and I can probably get most of them from my
13 friends. Thank you.

14 MR. ESTRIN: I would now like to turn to
15 Mr. Hodgson's submissions and give you my submissions
16 on behalf of the Town of Milton with respect to some of
17 these. It just occurs to me, if I may just have a
18 moment, but Milton first of all adopts Mr. Hodgson's
19 submissions with respect to the hydrogeological
20 approveability of Site F without a liner. The only
21 comment I would make about Site F in that regard is
22 that the core sampling and laboratory testing that
23 Milton did through Dr. Rowe and the University of
24 Western Ontario, the laboratory testing in terms of
25 demonstrating matrix diffusion does occur in that rock



1 and the various modelling work that Dr. Rowe undertook
2 with regard to Site F certainly gives the Board further
3 insights as to why in the area around Site F where we
4 have operating or had operating landfills, there is no
5 evidence of unacceptable impacts and how the fractured
6 rock has attributes favourable to leachate attenuation.

7 Obviously we don't agree, or maybe it's
8 not obvious, but we don't agree with the Region with
9 respect to the degree of difference between Site F and
10 Site D from a hydrogeological perspective. In our
11 submission there are overwhelming reasons to prefer
12 Site F and it is our position that Site D is a
13 completely unacceptable site hydrogeologically and that
14 it would constitute a dangerous precedent for this
15 Board to approve Site D given the uncertainties that
16 exist with respect to it, dangerous from an
17 environmental perspective and dangerous from a
18 procedural perspective.

19 With respect to Site D, and I'm really
20 commenting on Mr. Hodgson's argument, he said he didn't
21 believe anyone has said it can't be safely landfilled.
22 Yet Mr. Feenstra and Dr. Charlesworth, and indeed
23 Mr. Petrie, have a basic lack of certainty and
24 understanding about key hydrogeologic parameters at
25 that site. I just want to remind you again, because I



1 think it is very important what Mr. Feenstra said about
2 the uncertainty in Volume 172, page 42775:

3 "We are not quite sure at this point
4 where the upper granular unit does go
5 and whether any seepage that enters the
6 upper granular unit may actually, for
7 example, be connected with the
8 groundwater flow system in the bedrock
9 and the flanks of the bedrock valley is
10 a possibility."

11 As I reminded you, that statement by the proponent's
12 hydrogeologist is remarkably similar to
13 Dr. Charlesworth's report about uncertainty at this
14 site. Mr. McQuaid cross-examined Dr. Charlesworth on
15 this issue at Volume 91, page 21689, line 23:

16 "Q. Let me continue with you,
17 Dr. Charlesworth, and when we stand back
18 and look at Site D and your concerns
19 with respect to it, all of the concerns
20 that you have indicated. I wanted to
21 ask, because it is really not expressly
22 stated, but you have recommended, as I
23 understand it, further study, the
24 monitoring, boreholes, et cetera, to
25 fully understand the groundwater flow



1 regime because of your concerns;
2 correct?

3 A. I have said that there are
4 uncertainties relating to it at this
5 time that should be resolved before the
6 site can be approved.

7 Q. Can we understand you have
8 sufficient information to be able to say
9 to somebody who might be studying Site D
10 additional work should be undertaken and
11 we would not reject the site as
12 hydrogeologically unsuitable for
13 landfill?

14 A. I am saying the case has not been
15 proven at Site D.

16 Q. That is different. Are you
17 satisfied on the basis of what you have
18 seen that there is sufficient indication
19 that additional work should go on in
20 order to determine whether the site was
21 hydrogeologically suitable for a
22 landfill? You wouldn't reject it out
23 of hand at this point?

24 A. Any site can be engineered."

25 That seems to be the Region's position, "Any site can



1 be engineered" and Site D will have to be engineered
2 somehow, some way, but why Site D? Let's go back to my
3 process issue. Why is Site D here at all? If any site
4 can be engineered, and that is what the Region is
5 saying, then we don't know we have an appropriate site
6 from the perspective of the Environmental Assessment
7 Act.

8 MS CRONK: What page was that?

9 MR. ESTRIN: Page 21689, Volume 91.

10 Furthermore, contrary to Mr. Hodgson's submission about
11 the groundwater resource, and I want to talk about that
12 if I can find in my notes what he said. He said a
13 couple of things about the groundwater resource. He
14 said it was a local groundwater resource and that more
15 than half the wells were in bedrock and he suggested
16 there was some evidence of hydraulic heads in the
17 bedrock higher than the granular units, but I just read
18 you what Mr. Feenstra had to say. He has a real
19 concern once you contaminate the upper granular unit
20 you will contaminate the lower granular unit and you
21 may contaminate the bedrock. I think you have to take
22 the evidence from the witness and not from the lawyer,
23 and the evidence from the proponent's own witness is
24 that there is a real concern about what could happen to
25 all the wells in the vicinity and not just the ones in



1 the upper granular unit.

2 He also went on to suggest that the
3 water resource -- he pointed out that the quality in
4 the local wells closest to Site D is marginal in
5 quality and that is not disputed, but the point is that
6 they are being used. Dr. Hughes told you that when
7 they are used and they are in such a situation they are
8 still a resource and they are still considered a
9 reasonable use and Mr. Tidball certainly doesn't ask
10 you to write off the resource for that reason.
11 Mr. Hodgson said the resource I think in his words was
12 "only marginal useful." The point is that it is a
13 resource and it is being used and it has been used and
14 the reasonable use policy says you can't impair it. In
15 fact the reasonable use policy makes it that much more
16 important not to impair it when it is close to being at
17 the margin. Mr. Hodgson said the water was limited and
18 it was a local rather than a regional resource. First
19 of all, it is a valuable local resource and it may well
20 be, and I would ask you to find that it is a valuable
21 regional resource in that if it is contaminated, the
22 Region will have to go to some considerable extra
23 expense and effort to put in a water supply or
24 something else, or perhaps buy out a number of people.
25 I don't know how that has been considered.



1 Mr. Chairman, the groundwater resource
2 at this site has been recognized as long ago as 1965 by
3 the then Ontario Water Resources Commission, and you'll
4 find that in M-156, a water resources survey for the
5 County of Halton and in that exhibit you have the map
6 attached to it which hatches the area of proposed Site
7 D and the legend reads:

8 "Area where groundwater conditions are
9 variable, but where supplies of water
10 suitable for domestic and stock purposes
11 are usually obtainable from overburden
12 wells."

13 I would ask you, if you don't mind, to look at Exhibit
14 157, the next one, a single sheet, and it could be in a
15 looseleaf binder because it is one page; Exhibit M-157
16 which has a number of water wells in the vicinity of
17 areas A to E and this data is derived from a Hydrology
18 Consultants' report and it was gone over in evidence
19 with Mr. Sobanski and Mr. Beechinor and I think as
20 corrected the total wells in the righthand column, on-
21 site and within one kilometre reads 17, 22, 10, 35 and
22 20.

23 DR. KINGHAM: We actually have 31.

24 MR. ESTRIN: I think in evidence there
25 was some correction but I'm not sure. If it's



1 necessary I might have to dig that out. You still have
2 31 on our copy. I would have to look at the
3 transcript. Whether it is 35 or 31, the point is that
4 within the radius of Site D of one kilometre there are
5 more wells than within any of the other till site areas
6 that were considered, and indeed within half a
7 kilometre there are more wells closer to Site D than
8 with any of the other areas. Given Mr. Feenstra's
9 comments that I just read you, we're not sure where the
10 upper granular unit does go and whether any seepage
11 that does enter it may be connected with the
12 groundwater flow system in the bedrock, in the flanks
13 of the bedrock valley is a possibility. This whole
14 resource and all of these wells around Site D are
15 potentially at risk. We are not talking about three or
16 four. We are talking 31 perhaps and who knows the
17 exact numbers, but that does give you a range and
18 whether you consider a half a kilometre or a kilometre,
19 we don't know, but you can't say they are not at risk
20 just because they are bedrock wells based on the
21 proponent's expert's own evidence.

22 Notwithstanding that Mr. Hodgson said he
23 didn't want to appear to be denigrating the resource at
24 Site D, he is being cavalier, I suggest in a way, when
25 he says it can be or should be considered for trading



1 off, making trade-offs. I say that bearing in mind and
2 asking you to bear in mind what has always been the
3 Region's No. 1 priority in defining a suitable site and
4 that is public health and safety and hydrogeologic
5 suitability and protecting the water resource. We have
6 a water resource at Site D and we have one in the
7 vicinity of Site D and it has been used and it is being
8 used and it is inconsistent for Mr. Hodgson at this
9 stage of the game to suggest we can make trade-offs
10 about it when that has never been the Region's approach
11 for the last five years in this whole process.

12 I have not had an opportunity
13 unfortunately to address my mind specifically to
14 Mr. Tidball's conditions and I would wonder if in fact
15 there are some specifics of his conditions that I feel
16 it appropriate to comment on that can be done perhaps
17 at the end of Mr. Leitch's argument or, if necessary,
18 first thing Monday morning.

19 MR. LANCASTER: Perhaps you could
20 combine them with Mr. Leitch's if he has any.

21 MR. ESTRIN: We will see if that can be
22 done, but I wanted to advise you that because I am not
23 commenting at the moment doesn't mean I may not have
24 any. I'll try and work them in somehow.

25 MR. LANCASTER: Do you have any at the



1 moment or do you not know?

2 MR. ESTRIN: I really don't know. I
3 haven't had an opportunity to address my mind to those
4 specifics.

5 Now, just coming back to where we were
6 on the groundwater resource issue. Given that the
7 Region has recognized protection of groundwater
8 resources and public health and safety as its No. 1
9 criteria for selecting a site, and given that the Board
10 I am sure will want to ensure protection of the
11 groundwater resource as a number 1 or at least as a
12 very important criterion in site approval, and because
13 CRA has espoused certainty of hydrogeological
14 information and predictability in terms of being
15 fundamental to site approval, I still am left with the
16 question and indeed the argument how can the Region now
17 ask for approval of Site D? We manifestly lack the
18 certainty of geological and hydrogeological information
19 at Site D that all the hydrogeologists at this hearing
20 say is desirable before a site is approved. In my
21 respectful submission it is imperative the Board not
22 allow Site D or indeed any site, because whatever you
23 do decide about Site D will have implications for
24 criteria for approval for all other sites, that you not
25 allow Site D or any similar site that is in a similar



1 degree of uncertainty of understanding but has
2 certainty of impact, adverse impact, to be approved.

3 In summing up on the approveability
4 issue under the Environmental Protection Act, you are
5 already aware in my submission that it fails, first of
6 all, to meet anyone's reasonable criteria for
7 approveability because of the uncertainty and that in
8 the alternative where there is a choice between two
9 sites, it is clearly contrary to the public interest
10 which is inherent in the Environmental Protection Act
11 which commands us to protect and conserve the natural
12 environment. It is contrary to the public interest in
13 that Act to choose Site D which, at most, is a
14 compromise site from a hydrogeological and engineering
15 design point of view and, as I indicated, must be
16 designed, built, operated and maintained like a Swiss
17 watch and that is not how we think of landfill sites
18 generally and probably won't think of them again after
19 this hearing is over. There is just not enough of a
20 safety factor built in in assessing the impacts at Site
21 D. It is agreed that you should accept that the
22 primary engineering, the leachate collection system
23 will fail within the contaminating lifespan and most of
24 it can't be replaced. You have been told it could fail
25 simply through off-site extraction and by people whose



1 activities none of us can control. It could fail
2 simply due to extended drought. It could fail due to
3 shadow effects and it could certainly fail if there are
4 fractures present.

5 Given all of these things, and the
6 admission that the leachate collection system in
7 particular will fail within the contaminating lifespan,
8 it certainly doesn't meet the engineering guidelines.

9 MR. HODGSON: I'm sorry ...

10 MR. ESTRIN: Here we go!

11 MR. HODGSON: There was an admission on
12 the tile collection system.

13 MR. ESTRIN: I said the leachate
14 collection system.

15 MR. HODGSON: That is not the leachate
16 collection system with the greatest of respect. The
17 leachate collection system is the entire system for
18 collecting leachate and one portion is the tile
19 collector system.

20 MR. ESTRIN: I know that Mr. Hodgson
21 would like to give some evidence on this point, but I
22 don't think it's in accord with the statement.

23 MR. HODGSON: I'm sorry, but with the
24 greatest of respect you are mischaracterizing my
25 submissions to this Board. I am not asking for any



1 opportunity to give evidence but I am asking that my
2 submissions not be mischaracterized.

3 MR. ESTRIN: You had your opportunity to
4 clarify it and I'll make my submissions as to what it
5 is that has been said. It has been said that the
6 leachate collection system will clog off, as I
7 understand it, the leachate collection tiles, whatever
8 they are, and whatever they are is the leachate
9 collection system. The solid header pipes won't clog
10 off -- well, they may, who knows, but the fact is the
11 leachate collection system it is agreed, and I heard
12 him say several times it will clog off and even if he
13 didn't say it that is what the evidence is in my
14 submission.

15 DR. KINGHAM: I think we went over that
16 ground yesterday and I think you all know what our
17 understanding is of what Mr. Hodgson said.

18 MR. ESTRIN: He said somehow he could
19 make the hydraulic trap continue to work and I'm not
20 saying hydraulic trap but I'm saying the leachate
21 collection system or the pipes. I am saying the pipes,
22 and that's what I mean by the leachate collection
23 system, and I think of the pipes and I think if I say
24 that maybe we are in agreement.

25 DR. KINGHAM: In fact we understand you



1 to be saying more than that and that was that the
2 primary drain system be it French drains or sand
3 blanket or tile drains under Site D was what you were
4 referring to as clogging.

5 MR. ESTRIN: That's what I was referring
6 to but if you include CRA's design, whatever, and if
7 you include CRA's design, whichever design, all of
8 those will clog off I think we can anticipate well
9 within the contaminating lifespan. It therefore does
10 not meet the engineering guidelines.

11 You have also heard me say more than
12 once that in the absence of a conceptual engineering
13 design and evidence before this Board that can be
14 tested and dealt with here as to how we are going to
15 deal with the site after that happens, it is not
16 acceptable to base an approval on musings of lawyers
17 about what could be an appropriate design and
18 contingencies in the absence of a hearing on the
19 proposed conceptual design and Site D should be
20 rejected.

21 Now, I wanted to conclude by coming back
22 to the process issue in respect of hydrogeology. My
23 first point is that there are fundamental differences
24 between the positions of Site D and Site F in the
25 process as the process evolved. Site D has been the



1 subject of new hydrogeologic opinion, Mr. Feenstra's,
2 formed for the first time very late in the hearing.
3 Site F was not the subject of a change in the opinion
4 by the proponent's hydrogeologist. There is no need
5 for a new conceptual engineering design at Site F,
6 although some minor refinements may be required. There
7 is no public health and safety risk at Site F. On the
8 other hand, on the Region's own evidence, there is need
9 for a new conceptual design at Site D.

10 The position of Site F therefore does
11 not change and therefore it does not require a further
12 iteration in the structure of the process. The further
13 iteration of Site D, which I suggested in relation to
14 the need for further design and engineering
15 considerations, does not mean that the process does not
16 comply with the Environmental Assessment Act or is
17 inconclusive or is unsatisfactory to enable a decision
18 to be made under Section 12 on the acceptance of the
19 Environmental Assessment. But, on the state of the
20 evidence approval of the undertaking at Site D must not
21 be given.

22 Mr. Chairman, there are sound reasons
23 why a proponent brings two sites to a Board and
24 Mr. Leitch will address these. When that happens and
25 they are put before a Board as alternatives, the



1 Environmental Assessment Act hearings become part of
2 the assessment and the evaluation of the advantages and
3 disadvantages under Section 5(3) of the Act. The
4 assessment of advantages and disadvantages continues as
5 an active process including further iteration where
6 necessary. Thus, an alternative can fall out very late
7 in the day and that is what I say has happened to Site
8 D. It has not happened with Site F. The Environmental
9 Assessment is satisfactory and approval to proceed with
10 landfilling at F is appropriate.

11 On the other hand, acceptance and
12 approval to proceed with D is a different matter. My
13 point is that Site D does not have a sufficient, and
14 I'm looking at Section 5(3)(c), it doesn't have a
15 sufficient description of the effects that will be
16 caused or might reasonably be expected to be caused to
17 the environment or the actions necessary or that may
18 reasonably be expected to be necessary to prevent,
19 change, mitigate or remedy the effects upon the
20 environment or might be reasonably expected upon the
21 environment in respect of the landfill undertaking at
22 Site D. So, in my submission there is a fundamental
23 difference under the Environmental Assessment Act
24 between the two sites and Site D drops out and Site F
25 remains and the assessment is acceptable. Thank you.



1 Before Mr. Leitch begins, we will need
2 an opportunity to clear out a bit.

3 MR. LANCASTER: I don't think we should
4 start Mr. Leitch now as it is very close to the lunch
5 hour. We'll adjourn until 1:00. Is that satisfactory?

6 MR. LEITCH: Yes, Mr. Chairman.

7 MR. LANCASTER: Thank you, Mr. Estrin.

8 MR. ESTRIN: Thank you.

9 --- Luncheon recess at 11:45 a.m.

10 --- Upon resuming at 1:00 p.m.

11 MR. LANCASTER: Thank you. Please be
12 seated. Mr. Leitch.

13 ARGUMENT BY MR. LEITCH:

14 Thank you, Mr. Chairman. I would like
15 to preface my closing remarks by saying two things.
16 Firstly, if I am not making myself clear at any point
17 in making my submissions, please stop me and ask me to
18 clarify the particular point I may be on because I
19 think it is helpful that in argument you understand the
20 position of our client as clearly as you can and,
21 secondly, the way I propose to proceed is to tell you
22 what it is that the Town of Milton wants this Board to
23 do with the case before it and, for that purpose, I am
24 going to give you a statement of that position and some
25 attachments that will assist you in your note-taking



1 and make it clearer, or at least as clear as it makes
2 it as to what it is the client is asking for. Then I
3 will go into the body of my submissions and explain why
4 it is that the Town of Milton is asking for those
5 dispositions and after I have done that I will come
6 back to that document and I will discuss for a short
7 while ways and means of accomplishing those
8 dispositions if you are minded to agree with the
9 position that I take on behalf of the client.

10 So, first let me distribute the
11 document. The document consists of a statement of the
12 position of the Town of Milton and attached to that
13 statement of position are a redraft of the Official
14 Plan Amendment for Site D and redrafts of the two by-
15 laws which you will find in the applications which the
16 Region filed. I will deal with the by-laws at the end
17 when we discuss ways and means, but for the beginning
18 of my submissions I will shortly review the things that
19 the Town of Milton requests.

20 The first thing the Town requests is:
21 "Approval for Site 'F' without a liner
22 in accordance with the Trow design and
23 including perimeter drains and purge
24 wells in accordance with the evidence of
25 Mr. Feenstra."



1 Implicit in that approval and in the following
2 paragraphs, 2 and 3, is a request that the Board accept
3 the Environmental Assessment as being sufficient for
4 the purposes of the Environmental Assessment Act. It
5 is the position of the Town of Milton that the
6 Environmental Assessment before you is sufficient for
7 acceptance and the approvals which I refer to in this
8 statement are, in my submission, the second step in
9 your chain of decision-making in this case. The first
10 thing you do is either accept or reject the
11 Environmental Assessment and, once you have done that,
12 if acceptance is your choice, then you go on to
13 consider the approvals, in my submission. If you don't
14 approve Site F in accordance with paragraph 1 which I
15 have just read to you, then the Town asks that you
16 approve Site F on the Trow design with a liner as
17 described in the evidence of Mr. Gray and constructed
18 with native materials including perimeter drains and
19 purge wells in accordance with the evidence of Mr.
20 Feenstra.

21 Again implicit in that is the acceptance
22 of the Environmental Assessment as being sufficient and
23 adequate.

24 DR. KINGHAM: When you say "acceptance
25 of the Environmental Assessment as being sufficient and



1 adequate" you are referring to all of the information,
2 evidence and exhibits which have come before this Board
3 as part of that?

4 MR. LEITCH: All of the evidence before
5 this Board, the evidence on the Environmental
6 Assessment, all of the evidence led by the proponent,
7 in my submission, all of the evidence led by any of the
8 other parties, in my submission, all of the
9 submissions now being made to you; they are all part of
10 the Environmental Assessment. Then, in paragraph 3, if
11 you don't approve in accordance with the first two
12 paragraphs, then I am asking for approval for Site F
13 with the Conestoga-Rovers liner including those drains
14 and purge wells in accordance with Mr. Feenstra's
15 evidence.

16 I deal now with the conditions which I
17 think should attach as part of your approval to proceed
18 in paragraph 4 where the Town requests a condition or
19 conditions requiring an environmental assessment
20 process by the Region of Halton in respect of an Energy
21 from Waste facility and an application by the Region
22 for approval of that assessment and that facility, if
23 that is indicated by the Environmental Assessment. It
24 is my submission that it would be inappropriate to
25 dictate an application if the assessment itself clearly



1 showed that an Energy from Waste facility ought not to
2 be part of the waste management system. I know that
3 the case before you includes an Energy from Waste
4 facility as part of the Region's waste management plans
5 for the future, but that statement of that request
6 really takes into account the next request which is
7 that you affix:

8 " Environmental Assessment Act

9 conditions requiring the Region of
10 Halton to continue and increase efforts
11 to recycle and reuse waste including
12 efforts to implement curbside incentives
13 in the area municipalities in co-
14 operation with the area municipalities
15 and a target of 50% reduction in waste
16 to landfill by recycling and re-use
17 exclusive of energy from waste over a
18 twenty (20) year period."

19 I emphasize the word "target" in that, and I'll come
20 back and deal with that in the ways and means portion.

21 The Town is asking for denial of all
22 approvals in respect of Site D, and when I say "all
23 approvals" I mean starting with the approval to proceed
24 under the Environmental Assessment Act and including
25 all of the specific approvals under the other statutes



1 and, in any case, the Town will be asking for an
2 amendment to the Official Plan and zoning by-laws of
3 the Town of Milton to remove the designation of what
4 has been called old Site F for sanitary landfill. You
5 will recall that old Site F is present Site E
6 approximately, located at the corner of Tremaine and
7 Britannia Roads in the Town of Milton. The Town is
8 asking that you give particular attention in your
9 reasons for decision to describing an unsatisfactory
10 state of evidence in respect to the condition of the
11 unweathered upper till at Site D and the Feenstra
12 hypothesis.

13 The Town is also asking for reasons for
14 decision in this case wherein you recognize the
15 possible need for the use of Site D in a future Halton
16 waste management system, and I will have something to
17 say at the end about that in relation to the conditions
18 which we are asking you to impose in respect of Energy
19 from Waste and recycling and re-use.

20 Then, No. 9. We are asking for:

21 "Reasons for decision outlining a need
22 for further hearing on the
23 recommendation for a liner at Site 'D'
24 with or without purge wells and a piped
25 municipal water supply to residences



1 near Site 'D'."

2 I will try and make clearer my reasons for asking for
3 7, 8 and 9 as I go through the body of my submissions.

4 If it is your choice to grant the
5 approvals for Site D that are sought, we are asking for
6 the following: firstly, and No. 10 in this statement:

7 "Environmental Assessment Act conditions
8 requiring the Region of Halton to design
9 for and implement and maintain
10 agriculture at Site 'D' until a change
11 in after-use is approved by the Ontario
12 Ministry of Agriculture and Food
13 (Director Foodland Preservation Section)
14 and the Ministry of the Environment
15 (Director of Environmental Approvals)
16 and the Corporation of the Town of
17 Milton."

18 I think at the end when we come to deal with the
19 conditions proposed by my friend Mr. Tidball in respect
20 of agricultural after-use at Site D, you will see the
21 difference between the two.

22 Again, paragraph 11, if it is your
23 purpose to approve landfill at Site D, we are asking
24 for:

25 "A re-hearing pursuant to the provisions



1 of the Consolidated Hearings Act with
2 respect to design and engineering of
3 Site 'D'."

4 If you approve, then in paragraph 12 we say there
5 should be different:

6 "Official Plan and zoning amendments..."
7 in accordance with those which I have redrafted, and
8 those, in my submission will:

9 "... revert the Milton Official Plan and
10 Zoning By-law to agriculture (alone)
11 when seven point nine six (7.96) million
12 cubic metres of waste have been
13 deposited at Site 'D' and the closure is
14 finalized."

15 What I can say about that now at the outset is if you
16 look at the by-law as drafted and presented to you,
17 there is no -- there is nothing other than the goodwill
18 and intention of the Region which requires the
19 agriculture after-use. The zoning and Official Plan
20 amendments as submitted to you would have the effect of
21 allowing agriculture as an after-use or open-space
22 recreational use.

23 No. 13. I am asking there be:

24 "Site entrance upgrades including right
25 and left hand turning lanes ..."



1 My friend Mr. Lederer has already spoken of those and
2 concedes that those conditions are appropriate, but I
3 would also ask that you make it a condition of your
4 approval that there be:

5 "... provision for acceleration lanes
6 particularly for southbound traffic
7 exiting the Site entrance."

8 I will say now that that relates to the evidence, which
9 deals with the number of trucks which will enter and
10 exit the site and that 80 per cent of those
11 approximately will go south on Highway 25 and that they
12 are slow vehicles to accelerate because of their size
13 and gear ratios, and I would ask you to take into
14 account the condition of the road there and then,
15 finally, at the end of my submissions I will deal with
16 the Board's jurisdiction to award costs. What I will
17 be asking for is an award of costs in favour of the
18 Town of Milton to restore what I call an equitable
19 balance of the costs of this assessment among all the
20 taxpayers of Halton, and I will be making submissions
21 to you there about the way in which the entire waste
22 management system of Halton is financed, including the
23 costs of this hearing so far as the Region is
24 concerned, and I will be speaking to you about the
25 proportions of those costs which are borne by the



1 users, it being, as I say, on the evidence a user-pay
2 system.

3 DR. KINGHAM: On that last point, we had
4 some discussions at the end of the hearing day two
5 weeks ago, and I'm not sure of the degree of formality
6 of those discussions, but as to whether we would be
7 hearing submissions on costs as part of the final
8 submissions or whether we would defer for a week, or two
9 after hearing final submissions. I thought the desire
10 was and the intent was that submissions on costs would
11 wait for a couple of weeks or some unspecified period
12 of time after we had heard argument as some counsel
13 wanted time to prepare submissions on costs, apart from
14 preparing submissions on the evidence. Is that your
15 recollection?

16 MR. LEITCH: I asked several of my
17 friends about that and perhaps I was not listening as
18 carefully to that as a lawyer usually listens to cases
19 of costs, but I thought that we were to do that now.
20 However, I'm quite content to leave it over.

21 DR. KINGHAM: I am open to have my
22 memory refreshed.

23 MR. GARROD: I think I was the one who
24 raised it with the Board after the record had closed.
25 My understanding was that we were going to deal with it



1 at a later time and I certainly don't intend to deal
2 with the question of costs in my argument and I am
3 simply not prepared to do so at this point in time.

4 MS VIGOD: Mr. Chairman, I don't recall
5 if I was here for that discussion, but I did have some
6 discussions with Mr. Garrod and it would have been my
7 understanding it would have been at a later date and
8 again I do not have such submissions prepared at this
9 date.

10 DR. KINGHAM: I recall there were
11 questions about whether or not we would defer questions
12 of costs until after the Board made a decision as to
13 whether a site would be approved and, if so, which one.
14 We decided we didn't like that option but we were
15 willing to go along with the suggestion which we
16 thought had general support of separating argument on
17 the evidence from argument on costs and if it's not too
18 inconvenient I think we could proceed on that basis.

19 MR. LEITCH: That is fine with me and
20 I'm quite glad to come back and discuss the matter of
21 costs at any time, but it might be fairer to my friends
22 if I made my views in a conceptual way known to them
23 when I talk about an equitable adjustment because I
24 think it is a different kind of approach within the
25 context of what we know now. I'm quite happy not to



1 say anything about it if you wish too.

2 MR. LANCASTER: That is quite
3 acceptable.

4 MR. LEITCH: The first thing I now want
5 to deal with in the body of my remarks is the question
6 of jurisdiction. The powers of this Board are
7 constituted under the Consolidated Hearings Act and are
8 set out under Sections 5(2) and 5(7). I might say at
9 this point that I will be making reference to at least
10 the Regional Municipality of Halton Act, the Planning
11 Act, the Environmental Assessment Act, the
12 Environmental Protection Act as I make my submissions.

13 DR. KINGHAM: Could you run through that
14 list again?

15 MR. LEITCH: If you have before you the
16 Regional Municipality of Halton Act, the Planning Act,
17 the Environmental Assessment Act ...

18 DR. KINGHAM: That Act has been back and
19 forth between and upstairs a number of times and I
20 don't know where my copy of it is. Okay, we now have a
21 copy.

22 MR. LEITCH: ... and the Environmental
23 Protection Act. The greater proportion of the
24 references to the statutes will be to the Planning Act
25 and the Environmental Assessment Act, and you should



1 also have handy your copy of the Consolidated Hearings
2 Act. Section 5(2) of the Consolidated Hearings Act
3 says you:

4 "... may make any decision that might be
5 made by a tribunal that has a power,
6 right or duty to hold a hearing in
7 respect of which a joint board hearing
8 was held or that might be made by any
9 body or person after the holding of the
10 hearing including but not limited to the
11 granting of any authority or directing
12 the granting or issuing of a permit or
13 licence and the imposition of terms and
14 conditions."

15 In my submission, that places you
16 effectively in this hearing in the position of the
17 Minister, subject only to an appeal to Cabinet. The
18 standards and criteria in or under an Act specified in
19 a notice under Section 3 of the Consolidated Hearings
20 Act that relate to the undertaking specified in the
21 notice apply with necessary modifications in respect of
22 a decision you may make under the Act, and the notice
23 in this case specified jurisdiction under the
24 Environmental Assessment Act, Environmental Protection
25 Act, Ontario Water Resources Act, Conservation



1 Authorities Act, Planning Act, Ontario Municipal Board
2 Act, Municipal Act and the Expropriations Act. Those
3 decisions which you will make under the various heads
4 of jurisdiction are final with the exception of the
5 Board's power to re-hear contained in the Consolidated
6 Hearings Act, judicial review, if any party takes
7 judicial review and it is granted, and the statutory
8 appeal to the Cabinet under Section 13. My purpose in
9 making those references is that inasmuch as the
10 decision of this Board stands for all purposes and
11 places in place of any decision or order or action that
12 may be made under the statutes, that decision and the
13 reasons for that decision become government policy
14 documents and represent the government policy subject
15 to the appeal to Cabinet. So, when you give your
16 reasons and make your decision in this case, it's not
17 simply a decision about this case, in my submission,
18 your reasons are statements of government policy.

19 Now, I say that the decision that you
20 will make in this case will form an important part of
21 the decision tree which grows in respect of municipal
22 landfills and waste disposal facilities in the Province
23 of Ontario. This is an important case, not just
24 because of the impact it will have on the people of
25 Halton, but also for its effect in future cases



1 involving future waste disposal matters, similar
2 matters, in the Province of Ontario. Although that
3 decision of yours and your reasons are not binding on a
4 future Board, it will create a precedent with which
5 future Boards will attempt to reconcile their decisions
6 and the effect of that, sir, is that government policy
7 will evolve from this case and the decision in this
8 case and the reasons for decision as they may be
9 modified by the Cabinet if this case is appealed.

10 Now, I'm going to say that in the course
11 of my submissions and I'm not saying anything sinister
12 when I talk about an appeal, but it's for the purpose
13 of saying that I think, given the history of this
14 matter and given the fact that in an earlier case we
15 have heard about an appeal was taken to the Cabinet,
16 given the kinds of issues which this case raises --
17 what can I say but to borrow words from Mr. Feenstra,
18 it is reasonably possible that this case will find its
19 way into the Cabinet and that the government will be
20 viewing it with respect to whether or not what you say
21 is going to become government policy. It's a very
22 important case in my submission.

23 DR. KINGHAM: We don't think there is
24 anything sinister in what you say. In fact the record
25 may show that some time last year it was suggested that



1 no matter what decision was made in this hearing it
2 would be appealed to Cabinet one way or another. So, I
3 think we can take that ...

4 MR. LANCASTER: I think it is reasonably
5 probable.

6 MR. LEITCH: I think reasonably possible
7 means reasonably probable. I don't understand the term
8 "reasonably possible" because a possibility is a
9 possibility and anything is possible, but when you
10 import reasonable to it, you have upgraded it to
11 probable in my submission.

12 If your decision finds its way to
13 Cabinet and is approved, then it really does become
14 government policy and the reasons which you enunciate
15 are important for that purpose. I put it to you that
16 the issues which we have dealt with in this case are
17 very much in the Cabinet room and I think one only has
18 to read the newspapers on a daily basis to understand
19 that all over the province issues are moving to
20 resolution which the government must deal with. So,
21 you can cast your reasons and the decision in a narrow
22 manner or somewhat more broadly, having in mind the
23 evolution and growth of the waste disposal problem in
24 the province.

25 My submission is that the decision



1 should deal with which site is to be approved and
2 should do so with a review of your understanding of
3 Halton's proposed waste management system and the
4 imposition of conditions which you consider appropriate
5 and, in particular, the commitment to Energy from Waste
6 and recycling and re-use should be attached as
7 Environmental Assessment Act conditions to any
8 approval, and they should be done so to ensure
9 continuation of the initiatives which have been
10 described in evidence before you.

11 The Region proposes that efforts be made
12 to increase the annual waste recycled to 12 per cent by
13 the year 1990 and 15.8 per cent by the year 2008. The
14 Region has proposed efforts be made to increase the
15 annual waste recycled to 12 per cent by the year 1990
16 and 15.8 per cent by the year 2008. Those figures have
17 been characterized as being overly ambitious by
18 witnesses presented by the City of Burlington. I say
19 that they are pale in comparison with the European
20 experience where they have as much as 60 per cent
21 reduction. I know there is no evidence of that before
22 you, but I take the position that there is no evidence
23 before you because there has not been, as my friend Mr.
24 Lederer has said, a sufficient experience in the work
25 of the Region to demonstrate waste flow constituents.



1 That work just simply has not been done, but you bring
2 to your position in this case as members of your
3 respective Boards and as Consolidated Hearing Board
4 members, I suggest, the right to draw on your
5 experience and the right to draw on your own research,
6 and I think it is obvious that there is work going on
7 in North America now, and there are no studies I know
8 of where these results are shown to have been achieved
9 in North America, but there are studies showing that
10 they are achievable. I think you can take notice of
11 those things because you are on the Board because of
12 your background.

13 It should be a condition of your
14 approval that the Region commence discussions with the
15 area municipalities on ways and means to develop
16 curbside incentives with respect to waste recycling.
17 It has become clear in the course of Mr. Lederer's
18 submissions and on the basis of questions which the
19 Board has put, that there is a legislative jurisdiction
20 problem in respect of how you get the incentives to the
21 curb. It's the area municipality that picks up and
22 it's the regional municipality that disposes. You do,
23 however, have the right to impose conditions under the
24 Environmental Assessment Act to require parties to make
25 efforts, and it is my submission that you should make a



1 specific condition applicable to your approval to
2 require the regional municipality and the area
3 municipalities to make efforts to achieve those
4 numbers. Now, I say that for a practical reason and
5 the practical reason is this, as I see it; without such
6 a condition which targets that type of recycling and
7 re-use number, you can't effectively in a future
8 environmental assessment monitor the efforts of the
9 parties. Some time in the next ten years it is likely
10 that a waste disposal/Energy from Waste assessment,
11 environmental assessment will come before this Board,
12 and when I say "this Board" I mean a Consolidated
13 Hearing Board. At that time I think that the Board
14 hearing the case should be able to look to the
15 conditions of this approval and make the parties
16 accountable for what they have done in the meantime in
17 respect of recycling and re-use.

18 DR. KINGHAM: You have invited us to
19 seek clarifications any time in your final submissions.
20 First it is apparent to us that there is a great deal
21 of evidence in fact on waste types and quantities that
22 we have heard at this hearing, and I don't think we
23 have to necessarily go beyond the evidence of this
24 record. The second thing I am curious about is that we
25 discussed with Mr. Lederer I think it was, and it might



1 have been with Mr. Tidball, this matter of making
2 efforts and making agreements and would making efforts
3 in your view stop short of making agreements, that is
4 to say we can or cannot in your view go so far as
5 suggesting that the parties make agreements with
6 respect to curbside reduction?

7 MR. LEITCH: I think Mr. Lederer is
8 correct in one sense and incorrect in another. I think
9 it is very difficult for you to order parties to make
10 an agreement because an agreement, after all, is
11 consensual. You have to have both parties reaching
12 consensus on what the agreement will be. What I think
13 you can do is you can say to them that "You are to make
14 bona fide efforts to enter into agreements to put
15 incentives at the curbside and we will be asking for a
16 review of those incentives in two ways; first, you will
17 report to the Director of Approvals on an annual basis,
18 and that is one thing you will report, and, secondly,
19 we are going to suggest in our reasons in this case
20 that any future Board looking at Halton's waste
21 management system and being asked for approvals will
22 review your efforts." That in my submission would be a
23 powerful incentive to make those agreements and, in my
24 submission, the parties will enter into them. I think,
25 as my friend Mr. Lederer has said, there is good



1 intention and there is goodwill, but the difficulty
2 with good intention and goodwill is that it sometimes
3 bends to someone's idea of what is politically
4 expedient and how they might get re-elected. I think
5 that by applying the condition you are formalizing the
6 statement of goodwill and intention and ensuring that
7 someone will make the necessary effort to achieve the
8 object which we all agree is important.

9 It is very important in my view from a
10 particular perspective. I see you as being in a
11 somewhat difficult position in this case because I
12 accept what Mr. Lederer says, this Region needs a
13 landfill. I suppose that if efforts aren't made with
14 respect to recycling and re-use in the manner I have
15 suggested, that ten years from now somebody may be
16 standing before a Board like this and saying to the
17 members that the Region of Halton needs Energy from
18 Waste and there is really not much you can do about it,
19 even though you think there is a greater problem with
20 air emissions than one would suppose, but if you need
21 it, you need it, and I think that only by increasing
22 those recycling efforts will there develop flexibility
23 in your ability to administer the kind of waste
24 disposal system that I think the future is going to
25 require us to have. One thing about the component of



1 re-use and recycling; if you can get it up to the right
2 number it is the least polluting method. On the one
3 hand, you have landfills which sit there as we have
4 heard for many years quietly percolating into the soil
5 or burping gas. On the other hand an Energy from Waste
6 proposal sees air emissions which I suppose we can
7 control, and I don't know much about them, but still
8 you have the destruction of one form of matter and it
9 goes up the flue and the particulate goes somewhere. I
10 don't know what the public health aspects of that
11 really come down to, but both of those methods are
12 potentially dangerous to public health and safety,
13 whereas re-use is not only conservative, it is less
14 dangerous.

15 So, when you look at the three ways we
16 now have on the table to deal with the waste problem,
17 it seems to me that it would be dead wrong not to put
18 some sort of incentive on a higher level for re-use and
19 recycling.

20 DR. KINGHAM: You are restricting your
21 argument to three ways. You will recall the evidence
22 presented by Mr. Clarke, and you may recall as well the
23 questions put to Mr. Clarke about the extent to which
24 lower levels of government, in this case in the case of
25 the Town of Milton at the municipal level with respect



1 to the reduction of the quantities of waste generated
2 in the first place, and you may recall his answer which
3 was to the effect that there was really very little
4 that municipal levels of government or lower levels of
5 government can do and that is my recollection.

6 MR. LEITCH: I don't necessarily agree
7 with that.

8 DR. KINGHAM: I wondered if you had any
9 submissions on one or the other R's that relates to
10 this.

11 MR. LEITCH: Reduction; I have a
12 submission. There are some very innovative reduction,
13 and when I say "reduction" I am speaking of the
14 reduction of the amount going to the curb and I don't
15 mean by someone disposing of it at night but I mean
16 reduction by making a greater effort to recycle or
17 separate. In one area of New Jersey the homeowner has
18 been restricted to a certain number of bags to be
19 picked up under the general levy. All bags in excess
20 of that number require a sticker or tag to be attached.
21 That sticker can only be obtained from the municipality
22 at a cost fixed by the municipality and so the
23 incentive to recycle has a direct financial impact on
24 the waste producer. I have no doubt that from a
25 legislative point of view that the municipalities which



1 are charged with the responsibility of collecting from
2 the ratepayers, --and I'm not saying disposing but I am
3 saying collecting -- can impose restrictions on the
4 amounts and those restrictions would then lead to the
5 people producing, and I'm talking both households and
6 businesses, it will lead to them looking to the
7 alternate methods of dealing with it or recycling or
8 re-use.

9 DR. KINGHAM: Does that fall under your
10 heading of encouraging the parties to make efforts?
11 You are not suggesting, or are you suggesting this
12 Board has the authority to set a condition of that
13 sort?

14 MR. LEITCH: I am suggesting that if you
15 set a condition which gives a target of 50 per cent
16 diverted from landfill exclusive of Energy from Waste,
17 I'm suggesting that those kinds of things are going to
18 happen. If the people with the power know that they
19 are going to be required to give an accounting of the
20 use of their powers to some future Board, then they
21 will co-operate with one another and they will make
22 those efforts.

23 The other thing I say about that kind of
24 condition, although my friends may say that that is
25 unrealistic and not acceptable to them, but I think



1 that there is a climate which exists in the province
2 today which would see that kind of condition approved
3 by the Cabinet if that was a matter raised on an
4 appeal. I am aware of it, but my friend Mr. Garrod
5 asks me to point you to Section 14, subsection (1)(v).

6 DR. KINGHAM: Of ...

7 MR. LEITCH: ... the Environmental
8 Assessment Act, I am sorry. You asked specifically
9 about agreements. I am not sure that such an agreement
10 would be an agreement related to the undertaking. If
11 the undertaking was the waste disposal system of the
12 Region of Halton, then it certainly would but the waste
13 disposal system is not the undertaking here. This
14 undertaking is within the context of the system and the
15 thing that bothers me about it is that when you are
16 doing planning, long-term planning for waste disposal
17 and you take one component of the system and you fix
18 it, then you have lost flexibility in the other areas.
19 You are in a way planning for something and you are
20 tying yourself by fixing the one component because
21 there are things that flow from that. I think that by
22 imposing the condition I am suggesting that what you
23 are really doing is saying "We want to deal with the
24 other component too because it makes good sense to do
25 so at this time and we want to monitor it and we want



1 to see what you have done when you come back asking for
2 an Energy from Waste plant." If those numbers are
3 reached, if it can be done, then when someone asks you
4 for an Energy from Waste plant you can say "Well, we
5 thought we only had 20 years capacity at the landfill
6 but now it appears we have 40 and we would like to see
7 you do more work on that before we approve it." So, it
8 really looks to flexibility and it looks to the
9 position which a future Board will be in and it looks
10 to what I think is sensible in relation to an incentive
11 to make the municipalities and the citizens work harder
12 together.

13 Having said that, I would now like to
14 address myself in a brief way to the process. At the
15 outset of this hearing and in our opening we took the
16 position that the process followed by the Region of
17 Halton satisfied the requirements of the Environmental
18 Assessment Act. That is still our position and that is
19 contained in the statement of position which I have
20 tabled with you. All the evidence called before the
21 Board is part of the Environmental Assessment and it,
22 taken together with the documentation filed by the
23 Region and others, satisfies the requirements of the
24 Act. You can accept the Environmental Assessment in
25 that two-step decision which you take under the Act,



1 but the question then is as to the nature of the
2 approval to proceed and really what we are doing in
3 this case is the nature of the approval to proceed.

4 Now, just to highlight that, I would say
5 that if you review the notice which called this
6 hearing, it is quite clear, and I don't think any party
7 would pick me up on this, but the undertaking before
8 you is:

9 "To provide facilities for the purpose
10 of receiving, dumping and disposing of
11 waste by acquiring the lands for
12 constructing, operating and maintaining
13 a landfill to contain 7.96 million cubic
14 metres of waste in the Regional
15 Municipality of Halton."

16 What I am saying is that the undertaking is not a
17 landfill site at Site F or Site D. The undertaking
18 which is before you is a landfill site in Halton,
19 period and the explanatory note in the notice which
20 follows explains that there are two sites which have
21 been brought to you, but the undertaking is a landfill
22 site of that capacity. So, as I have said, it is your
23 position you can accept the Environmental Assessment
24 and then turn to deal with the nature of the approval
25 to proceed and, in this case the level of review of the



1 alternatives has been elevated beyond the requirements
2 of the Environmental Assessment Act by the presentation
3 of two sites as methods in the alternative. The
4 comparison of Sites F and D at a technical or an
5 Environmental Protection Act level is, in my
6 submission, a logical extension of the Environmental
7 Assessment Act study and flows as a matter of course
8 from the decision in a case named Re Joint Board under
9 the Consolidated Hearings Act and Ontario Hydro, et al,
10 reported in 1985, 51 Ontario Reports (2d) at page 65, a
11 decision of the Court of Appeal for Ontario and it sets
12 out in its reasons the earlier decision of the
13 Divisional Court in the same case. I have copies of
14 that which I will leave with you. I am leaving that
15 with you because I will make some reference to what I
16 say it means in respect of the way the Region has
17 brought this Environmental Assessment and other
18 approvals before you.

19 I would point out that the decision
20 first sets forth the text of the decision of the
21 Divisional Court and then the matters which were
22 considered by the Court of Appeal on appeal, they were
23 dealt with at the end. My view is that the case holds
24 that the Board has jurisdiction to approve an
25 alternative method of carrying out an undertaking and,



1 furthermore, has the jurisdiction to approve an
2 alternative method which has not even been identified
3 by the proponent. In circumstances where the issue of
4 alternatives to the undertaking will be the core of a
5 defence case of a party opposing the proponent, and
6 that is the case here, it would not have mattered which
7 site was named as being the site which the Region was
8 bringing forth. You would have dealt with a case that
9 would have had two sites in it because if the site
10 named was Site F, then Burlington would be here with D
11 and if the site named was Site D, then Milton would be
12 here with F and of that there can be no doubt. That is
13 what happened ten years ago when old Site F was named
14 and this present Site F was the core of the Town of
15 Milton's position before the Municipal Board.

16 Why I say the Region has done what any
17 responsible proponent would do is this; in the kind of
18 circumstances which I have described, the proponent is
19 faced with bringing one level of investigation in
20 relation to the one site, the preferred site or method,
21 and leaving the question of the investigation and level
22 of investigation of a competing location to other
23 parties. In those circumstances, and in particular
24 where the study process makes it apparent which
25 competing site would be put forward, the proponent acts



1 responsibly in bringing the investigation of two sites
2 or methods to the same level and calling evidence of
3 both sites or methods before the Board. Parties who
4 are opposed to a site or method will prepare their case
5 and lead evidence in their own interest.

6 When the proponent deals with that
7 opposition dealing the course of the hearing, the
8 investigation will of necessity be ongoing, it will be
9 reactive as opposed to proactive, and in cases like
10 this where public health and safety is very much in
11 issue, a proponent acts reasonably and responsibly in
12 bringing two sites or methods to the same level of
13 investigation and placing them before the Board. That
14 is what my friends Mr. Lederer and Mr. Hodgson have
15 done in this case. I say that the case, if it had been
16 done with one site only may very well have been longer,
17 it certainly would have been less satisfactory in terms
18 of the level of investigation that you would have had
19 as the case came forward and, furthermore, the higher
20 level of investigation on the second place site, or the
21 site of the defence, would have been done by someone
22 without -- I'm lost for a word at the moment --by a
23 party who didn't have the same balance that the Region
24 brings. After all, my friend Mr. Lederer has said over
25 and over again all the Region wants is a landfill site



1 and they would have no reason for doing less
2 investigation of one site than the other or possibly
3 having some kind of unconscious bias in relation to one
4 site or the other, whereas if you let the defence
5 investigate the defence site, which in their proposal
6 is a better site, not necessarily consciously but
7 inevitably when we try and put our best foot forward we
8 try to put our best foot forward and we accentuate
9 those things that we view as being in our interest and
10 we don't accentuate those things which appear not to be
11 in our interest. So, the bottom line of my submission
12 is the Region in bringing two sites to you the way it
13 did did the right thing.

14 DR. KINGHAM: It sounds to me like
15 you're saying if the Region had only brought forward
16 Site F as we currently understand Site F, then the
17 nearest residents would have opposed that, not on the
18 basis of the unsuitability of that site but rather on
19 the basis of the Environmental Assessment Act
20 requirement for an alternative method to the
21 undertaking by which they would have decided that Site
22 D or Site E were the alternative methods to be
23 undertaken and that's the gist of your argument?

24 MR. LEITCH: They would have done both
25 things. They would have picked an attractive site from



1 their perspective trying to defend the case and they
2 would have put it forward as if they were a proponent
3 and they would have said "Here, look at this site" and
4 ten years ago we did that. We did that, as I said in
5 my opening statement, when the Region of Halton wanted
6 to open a landfill site in the Town of Milton and we
7 came before the Municipal Board and we said "Look at
8 this site in Burlington, it's perfect" and I can tell
9 you that the level of investigation we were able to
10 afford was very unsatisfactory. We didn't have the
11 money to be able to bring that site up to a level of
12 investigation for comparison purposes that was equal to
13 the case which was put forward by the Region of Halton.

14 DR. KINGHAM: And you did it without the
15 benefit of, ten years ago, the Environmental Assessment
16 Act provisions with respect to alternative methods?

17 MR. LEITCH: That is correct. You can't
18 win a case by being negative. You can win a case by
19 being positive. You can't come before someone and say
20 "You shouldn't do that for all these good reasons."
21 You must be able to say "There is a better alternative"
22 and, inevitably the other site would have been here
23 before you.

24 Now, let me deal with what I call the
25 threshold issue and that has to do with the issue of



1 public health and safety. I think there is consensus
2 among all of us that that is the prime issue, and there
3 is a difference in how we say it is met, but in
4 arriving at your decision it will be necessary for you
5 to be satisfied on all the evidence before you that a
6 site satisfies the concern of public health and safety.
7 That will involve a consideration of the existing
8 conditions, proposed engineering design, plan of,
9 operations for the landfill. That is a subject matter
10 which Mr. Estrin has dealt with and for the purposes of
11 my submissions I take it as a starting point the thesis
12 that a site deserves no further consideration if it
13 does not meet a reasonable standard with respect to the
14 issue of public health and safety. If one of these
15 sites at the end of the day is in that position then
16 you simply reject it and go on to the other site.

17 It is my submission that in the matter
18 of public health and safety, taking into account
19 engineering design and operations, both sites might
20 make it over the threshold, but the Board is in the
21 position of not having had a sufficient hearing and
22 airing of an appropriate engineering design and
23 operations investigation with respect to Site D and
24 this of course Mr. Estrin has dealt with but it goes
25 back to Mr. Feenstra's hypothesis that there has not



1 been an appropriate degree of consideration of the
2 design and operations in respect of the fractured
3 unweathered upper till as opposed to an unweathered
4 upper till with integrity is premised in the Trow
5 design. In my submission it is not satisfactory to the
6 need of the public to know and understand the level of
7 safety that the decision on design and operation be
8 left to the proponent in consultation with the Ministry
9 of the Environment.

10 Much I think has been accomplished in
11 this case by cross-examination and the presentation of
12 expert opinion at variance with expert opinion already
13 in. I say that with respect to that aspect of Site D,
14 you shouldn't be satisfied with what you have got and
15 that the adequacy of the case for Site D doesn't bring
16 it over the threshold of the public health and safety
17 standard. Site F is over that threshold and in your
18 consideration of the result of this case you should
19 arrive at that conclusion.

20 Now, I have an additional problem with
21 respect to the suggestion made that a piped water
22 supply may be needed at Site D, both in connection with
23 serving the residents and injection wells. I am not
24 even sure I understand how an injection well would
25 work, but I do know that if you are going to inject



1 water into the ground you must get it from somewhere,
2 and I don't know if it's coming from a piped water
3 supply or not, but I do have this difficulty, and it
4 arises -- Mr. Hodgson made reference to it in his
5 submissions and it arises from the provisions of the
6 regional plan for the Regional Municipality of Halton,
7 Exhibit H-87. I would refer you first to page 68C,
8 D2.23. The Official Plan deals with the subject matter
9 of sanitary sewage disposal and water supply and it
10 starts at page 67 with the statement:

11 "The policy of the Region is to: ...

12 D2.23 prohibit the future extension of
13 urban services beyond the boundaries of
14 the Urban Areas and the Waterfront Area,
15 as designated on Map 1: the Regional
16 concept, as amended from time to time,
17 with the following exceptions:...."

18 And if you go to Map 1 you will find that at page 28,
19 the map following page 28, and if you look at the map
20 you will see the urban area of Milton stops on its
21 southern boundary at Derry Road and the proposed Site D
22 is some two to three kilometres south of that urban
23 boundary. So, what I am saying to you is if you
24 consider the matter of injection wells or piped water
25 supply either with or without significance to injection



1 wells, and you want to make that a condition of some
2 kind, Mr. Hodgson is right, you would have to approve
3 an amendment to the Official Plan, and that is not
4 before you and not part of the notice, and you should
5 not therefore impose a condition which would require a
6 further approval.

7 Now, that raises another conceptual or
8 approvals and conceptual problem in my mind. It is
9 suggested that the design of Site D and its
10 implementation can be finalized by leaving the matter
11 to final design as a process between the Region of
12 Halton and the Director of Approvals in the Ministry of
13 the Environment. I have difficulty with that because
14 if he then decides there is something to this notion of
15 having a piped water supply and a system of injection
16 wells and makes a decision that that is one of the ways
17 to go or the way he wants to go on design, then again
18 that raises the question of approval and I guess my
19 point is that when it comes to making your decision and
20 finalizing this case, please finalize it. I would like
21 to see all the approvals and my client would like to
22 see all the approvals necessary for the Region to have
23 its site and without raising the specter of some other
24 approval which can hold things up. If both sites in
25 your view are on all the evidence over the threshold or



1 standard of public health and safety, and that of
2 course is not my position, I say that that is not the
3 case before you, you would then still have to consider
4 the issue of hydrogeology and public health and safety
5 as a matter of which is safer, which is preferable and,
6 yes, they can both be approved but which is better? I
7 would simply repeat all the things I have just said
8 about getting over the threshold. You would use all
9 those means of analysis to decide which is better, even
10 though both are over the threshold. You must still do
11 that for the purposes of completing the comparison of
12 the advantages and disadvantages of the sites and of
13 course it would be a process of trade-offs as a
14 starting point of dealing with the preference on that
15 factor and the other factors of comparison which is
16 hydrogeology and public health and safety. You will
17 determine which site is to be preferred on the basis of
18 public health and safety and, in our submission, the
19 preference is overwhelmingly in favour of Site F on
20 that factor and you must then go on and consider what,
21 if any, preference may exist in what categories and
22 what the bottom-line preference is. You will do a
23 comparison as between sites and trade off among the
24 categories within the categories.

25 Finally, there is an exercise in



1 determining what the evidence is and weighing the
2 evidence and performing the trade-offs having regard to
3 the findings on the evidence and the weight assigned to
4 the various findings. I will make comments about the
5 evidence in various categories and make suggestions
6 about weight and trade-offs when I come to deal with
7 how I think you should go about your decision-making in
8 attempting to assess all the evidence, but first I want
9 to make some comments with respect to an issue which
10 has excited my curiosity at least in this case and that
11 is social equity.

12 My submission to you is that the
13 beginning point of any consideration of whether social
14 equity is a working concept within this process is the
15 meaning to be attributed to the word "equity" and for
16 equity you can talk fairness, justice, equity. The
17 primary meaning as I understand it is a quality of
18 being equal or fair in any and all relations and
19 circumstances and the secondary meaning is equality of
20 rights, equal justice, impartial distribution of
21 justice. In law it's the application of principles of
22 right and justice to the legal adjustment of
23 differences where the law, by reason of its
24 universality, is deficient. In law it is the system of
25 collateral or supplemental law which was administered



1 by the courts of equity.

2 Mr. Chairman, I know you are fully aware
3 of those concepts as they developed in the common law
4 and I would only say for the benefit of Dr. Kingham
5 that equitable principles were developed by the judges
6 as time went by to alleviate certain perceived
7 injustices which arose as a result of the application
8 of the law. So you had the law and the judges and we
9 still have it today. Our judges continue to feel
10 justice in the pit of their stomach and to make
11 decisions which some say would not necessarily
12 represent the black letter of that law which is before
13 them. That is what equity really was in its
14 development.

15 The question which arises in this
16 context is as to whether the requirements of a remedial
17 public statute and the results flowing from it can be
18 adjusted or varied or changed, modified or enlarged by
19 this Board in the exercise of its statutory
20 jurisdiction. Under the provisions of the Consolidated
21 Hearings Act the statutory jurisdiction of the Board
22 comprises the accumulated jurisdictions of the statutes
23 specified in the notice and in addition to the
24 accumulated jurisdictions specified in the notice is
25 the jurisdiction of this Board to:



1 "... make any decision that might be
2 made by ... any body or person after the
3 holding of the hearing including but not
4 limited to the granting of any authority
5 or directing the granting or issuing of
6 a permit or licence and the imposition
7 of terms and conditions."

8 I have just read Section 5(2) of the Consolidated
9 Hearings Act in part.

10 That, in my submission, means you not
11 only decide the issue under the Environmental
12 Protection Act, but you order the issuance of a
13 certificate with conditions attached and you have the
14 jurisdiction formerly exercised by or under the
15 authority of the Minister of the Environment. The only
16 review, the exercise of the jurisdiction is by way of
17 judicial review in Divisional Court, appeal to Cabinet.

18 Now, fairness and fundamental justice,
19 natural justice are expressions of well understood
20 meaning in relation to administrative law and procedure
21 and they really go to the question of notice and an
22 opportunity to be heard by independent, impartial
23 hearing officers. Parties with status such as all the
24 people in this room are entitled to review in respect
25 of these matters in the courts. Parties with status



1 are entitled to a fair hearing. Remedies in the courts
2 ensure that a fair hearing is held. My submission is
3 that it follows that a fair hearing ensures a fair
4 result. If we've had a fair hearing we get a fair
5 result and that disposes of the question of equity.
6 The suggestion that some equitable principle is
7 operating outside the requirements of a fair hearing in
8 my view can only be accepted if there is some provision
9 in the statute which authorizes the operation of such a
10 principle because administrative tribunals do not
11 exercise a separate, independent, equitable
12 jurisdiction which has built up on a case-by-case basis
13 and become recognized by law as was the progression of
14 principles of equity in the common law. My submission
15 is that there is no court that has recognized an
16 equitable jurisdiction in a Board operating under these
17 statutes.

18 I have another submission about that.
19 When the Legislature wants you to administer equity it
20 says so, and I refer to Section 2, subsection (e) of
21 the Planning Act where the responsibility of the
22 Minister is dealt with under Section 2:

23 "The Minister in carrying out his
24 responsibilities under this Act will
25 have regard to, among other matters,



1 matters of provincial interest such
2 as...

3 (e) the equitable distribution of
4 educational, health and other social
5 facilities."

6 I know one of my friends will rise and say you can just
7 read "educational, health and waste disposal" for
8 "social facilities", but my submission is twofold.

9 Firstly, when the Legislature of Ontario wants you to
10 administer locational equity as I call it, and I say
11 that that is what they are doing in respect of
12 educational and health facilities, they say so and they
13 could very easily say so in relation to the deleterious
14 effects which flow from the location of waste disposal
15 facilities. I have some more Latin for you, Dr.

16 Kingham. When we interpret, and I think we've had this
17 before, when we interpret a public statute and looking
18 specifically at 2(e) and we want to know what the words
19 "social facilities" mean, the general words, we
20 interpret them as it is said ejusdem generis and that
21 means that the general words have to be restricted to
22 the kinds of things that the preceding specific words
23 restrict them to. What I am saying is if you look at
24 that and analyze it, that means that in our communities
25 the Minister is supposed to make sure that as far as it



1 is practicable we can all get to school and a hospital
2 with the same amount of effort and I think that that is
3 what that means. It's delivery of service, and waste
4 disposal service is delivered in a very different
5 fashion. The doctor never comes to the house any more
6 and teachers all teach in the schools, you have to go
7 to them but someone comes to the curb and picks up your
8 garbage. I say that beyond that section and to find
9 authority for an equitable jurisdiction you must look
10 to the provisions of the Environmental Assessment Act.
11 Section 2 provides:

12 "The purpose of the Act is the
13 betterment of the people of the whole or
14 any part of Ontario by providing for the
15 protection, conservation and wise
16 management in Ontario of the
17 environment."

18 Now "environment" is defined in Section 1(c) in the
19 widest possible terms and includes:

20 "... the social, economic and cultural
21 conditions that influence the lives of
22 man or a community, ..."

23 The assessment and scope of assessment are provided in
24 Section 5(3) and include:

25 "... an evaluation of the advantages and



1 disadvantages to the environment of the
2 undertaking, the alternative methods of
3 carrying out the undertaking and the
4 alternatives to the undertaking."

5 And thereafter in Section 14 the Minister is empowered
6 after acceptance of the assessment to:

7 "... give approval to proceed with the
8 undertaking,... subject to such terms
9 and conditions as the Minister considers
10 necessary to carry out the purpose of
11 this Act..."

12 So the Minister in determining whether
13 to give approval, can give approval subject to terms
14 and conditions or refuse to give approval, and when I
15 say "Minister" that means you in this case, you would
16 consider, (a), the purpose of the Act, (b), the
17 Environmental Assessment of the undertaking as accepted
18 and, (c), the submissions made with respect to the
19 Environmental Assessment. Of course the whole thing is
20 enforced because Section 16 provides:

21 "No person shall proceed with an
22 undertaking contrary to any term or
23 condition imposed by the Minister ..."

24 and that is yourselves, and:

25 "... no person shall give ... approval



1 ... contrary to any term or condition
2 imposed by the Minister..."

3 To find a principle of equity or
4 fairness operating independently of the requirements
5 for a fair hearing, it would be necessary to draw one
6 by inference from the statement of the purpose of the
7 Act and the definition of the environment. One must
8 suppose that the betterment of the people of Ontario in
9 their social, economic and cultural relation requires
10 something more than a fair hearing by independent,
11 impartial hearing officers.. You must accept that there
12 is a need to prefer the interests of some of the people
13 in the individual case because of matters of historical
14 treatment or accumulation, or predicted accumulation of
15 future impact and I say that you must stretch the
16 language of the statute to so interpret it. I submit
17 that the better view is that a fair hearing would
18 provide a fair result.

19 The proponent in this case has to
20 canvass the alternatives and the Board has to consider
21 the alternatives in a fair hearing. The result is
22 equitable by reason of the requirements of the statute
23 which represents the legal will of all of the people of
24 Ontario. It is a remedial public statute and it looks
25 to some mischief which the Legislature says is afoot in



1 our province and it is to be given a fair, broad and
2 liberal interpretation and the equity is right in it.
3 Its result is dictated by the study method.

4 Two witnesses made reference to social
5 equity. Myra Schiff dealt with the issue of equity in
6 the Environmental Assessment documentation with the
7 statement that all sites had a claim to equity and for
8 the purposes of her social impact assessment there
9 should be no further consideration to differentiating
10 sites on the basis of equity. Professor Lang gave
11 evidence on issues of equity and addressed fairness as
12 an expression of equality given landfill history and
13 likely future in Halton. Now, if you are minded to say
14 there is equity in this case or in cases like it, if it
15 is to become a principle, then at the very minimum you
16 should delineate the equitable principles which have
17 application and you should recite the factual bases
18 which attract the application of the principle and you
19 should do that in your reasons. The body of principles
20 can then be started under the heading of "equity" which
21 can become a guide in future cases so we know what we
22 are dealing with. In addition, the question of equity
23 may then be before the Cabinet to deal with if an
24 appeal is taken and if they think that there ought to
25 be some kind of locational or spatial equity, then they



1 can take steps to amend the statutes and use direct
2 statements such as has been done in the Planning Act.
3 On analysis I say the equity issue has spatial and
4 temporal characteristics. It has characteristics of
5 quality of impact and that raises the issue of the
6 intensity of impact. There is the matter of a
7 determination of the impacted persons in the past and
8 the future. I guess the analysis is as to what is it,
9 who has had it, who should get it and for how long?
10 The question raises the issue of the quality or
11 intensity of the impact as felt by the affected people
12 or the people to be affected and that will turn on
13 perception, perception will be a question of
14 predisposition, it will be a question of whether you
15 can discern things from other contemporaneous impacts
16 and to what level you can discern things from other
17 contemporaneous impacts, and if the objective is to
18 ensure that each individual has the same amount of
19 impact as other individuals in the community, I think
20 it is an impossible principle to apply.

21 It is clear in my submission that the
22 better course is to follow the requirements of the
23 applicable statutes, hold a fair hearing, let it come
24 to a result based on an objective consideration of
25 impact rather than the notion that the perception is a



1 reality, that the perceived realities can be factored
2 over the community to arrive at some equality of
3 impact. It is just impossible. The mandate under the
4 Environmental Assessment Act, the Environmental
5 Protection Act and the Planning Act is with respect to
6 planning and you as you perform your function I think
7 have an adjudicative function and you have a government
8 function, an administrative function. The result in a
9 case like this should favour the greatest benefit for
10 the largest number of people in Halton and it shouldn't
11 be an attempt to spread the deleterious impacts equally
12 over all of the people of Halton. That is what they
13 mean when they talk about the betterment of the people
14 of Ontario or some part of Ontario. They don't mean
15 you are to reach out and try to adjust differences
16 between individuals. That is an impossible job for the
17 governmental authority, the administrative side of your
18 work, and adjudicatively it can be done between
19 individuals in law cases, but in this kind of function
20 it is my submission that it has no place. In any event
21 it has been designed into the process. That is all
22 that I will say about social equity unless someone
23 invites me to say something more.

24 The planning issue is my next topic and
25 I will start that by saying you have heard evidence



1 from six planners; Mr. Walker on behalf of the Region,
2 Mr. Stagl on behalf of the Town of Milton,
3 Messrs. Kentridge and Kauffman on behalf of the Milton
4 Ratepayers, Mr. Bacon, National Sewer Pipe,
5 Mr. MacNaughton on behalf of the City of Burlington and
6 I think I fairly characterize the evidence when I say
7 the bottom-line preference of five out of the six was
8 for Site F and Mr. MacNaughton called on behalf of
9 Burlington preferred Site D. There was raised in the
10 evidence of Mr. Walker and Mr. Stagl, and again I think
11 Mr. Kentridge and I believe also Mr. MacNaughton the
12 question of what is it that we do here and what are you
13 land use planners doing here, are you constrained?
14 That was the view of Mr. Walker. I say the
15 jurisdictions under the environmental statutes and the
16 Planning Act can be characterized as planning, and when
17 you say planning you mean land use planning and you
18 can't mean much else unless you are talking about
19 social programs, financial programs and even those
20 involve some land use planning, but land use planning
21 with emphasis on planning community facilities which
22 may impact the environment. It is my view that the
23 jurisdictions under the Planning Act and the
24 Environmental Assessment Act are largely overlapping
25 and by necessary implication they require a synthesis



1 of the study under the Environmental Assessment Act and
2 the work under the Environmental Protection Act and
3 with the planning documents that are the framework for
4 the planning of the community. It is a synthesis. We
5 are told when we go to read these statutes that you're
6 not suppose to interpret them in a way that makes the
7 provisions of one repugnant with the provisions of the
8 other. If you look at the order of events under the
9 Environmental Assessment Act, you see that the very
10 first step to these approvals that are all gathered
11 together before you is an acceptance of the study.
12 Once you accept the study, then you look to approving
13 proceeding with the undertaking and part of that
14 approval to proceed involves the other approvals, the
15 approvals under the Planning Act, the approval needed
16 for the operation of the Expropriations Act. You have
17 to take the statutes and make them work together. The
18 legislators are deemed not to have intended to put them
19 in conflict, and of course as my friend Mr. Hodgson, or
20 I think it was Mr. Hodgson -- Mr. Lederer pointed out,
21 or perhaps both of them or one of them, there is a
22 section in the Planning Act which provides that if
23 there is conflict between that Act and any other
24 general or special Act, the provisions of the Planning
25 Act prevail. So, what I submit is that you have to try



1 and make them fit together without conflict so far as
2 that is reasonably possible to do. That is Section 70
3 of the Planning Act. I guess what I am saying is that
4 I view there is no real conflict between them, and in
5 terms of the evidence of the planners who came before
6 you, I think that they have the advantage of the level
7 of study and detail under the environmental statutes to
8 assist them.

9 So, my submission is this; you take what
10 you have as a result of the application of the
11 Environmental Assessment Act study and the
12 Environmental Protection Act study for the protection
13 of the environment. You examine the proposal. When
14 you have it in your sights as to what it means, what
15 your understanding of it is, you run it at the Planning
16 Act and when you run it at the Planning Act you try to
17 fit it into the planning documents so as to make it
18 compatible with those and make it compatible with the
19 community. It's not that one has primacy over the
20 other, it is a question of the order in which you deal
21 with them in my submission.

22 DR. KINGHAM: It sounds as though it's
23 almost a layman's terminology for Section 2 of the
24 Planning Act.

25 MR. LEITCH: Yes.



1 DR. KINGHAM: Two(a), (b), (h) and (i).

2 MR. LEITCH: You are way ahead of me.

3 You start in my view when you have the requirements of
4 the environmental statutes met and you understand what
5 it is you are dealing with and then you go to the
6 Planning Act which defines "Official Plan" in Section
7 1(h) as:

8 "...a document approved by the Minister
9 containing objectives and policies
10 established primarily to provide
11 guidance for the physical development of
12 a municipality having regard to relevant
13 social, economic and environmental
14 matters."

15 There is another way that the circle
16 closes up in this because if you look at the definition
17 of the "environment" in the Environmental Assessment
18 Act, you can conclude that the existing planning
19 documents are part of the environment within the
20 meaning of that definition. They fit together.

21 My submission really comes down to this;
22 you have got six experienced planners who have had the
23 benefit of the opinions of more experts than you can
24 squeeze into this room at one time. In their work they
25 took all of that into account and five of them



1 preferred Site F and their opinions are the evidence
2 which is relevant to what you must do under the
3 Planning Act. Really their work has been taking the
4 other experts' opinions and adding their narrower
5 expertise in land use planning and putting it all
6 together, synthesizing it and reaching their opinion of
7 preference for the site. I must say as I listened to
8 Mr. MacNaughton's evidence, and I have respect for Mr.
9 MacNaughton, but it wasn't really a planning report so
10 much as it was a statement of the defence that
11 Burlington makes to this case and, in the final
12 analysis, you become the last planner and it is your
13 decision as it always is when matters come before the
14 Ontario Municipal Board. My view is that you should
15 locate the facilities with the highest degree of
16 compatibility to existing planning documents, and I
17 mean municipal and provincial, and the highest degree
18 of compatibility to surrounding uses consistent with
19 public health and safety.

20 My friends Mr. Garrod and Ms Vigod and
21 all my friends who follow me are going to give you some
22 submissions about the surroundings and the documents,
23 but I would simply say shortly that Site F is a
24 preference with respect to the provincial planning
25 documents. That use is permitted within the Parkway



1 Belt West. The Minister appears to have been satisfied
2 with respect to the application of the mineral
3 aggregate resource policies. The position of the
4 Ministry of Agriculture and Food as generally set forth
5 in the Food Land Guidelines and the specific position
6 of that Ministry is contained in correspondence which
7 has been entered into evidence, and I refer you to
8 H-382, the grouping of letters from the Ministry. I
9 take those letters to mean that their position is that
10 if Site F is not suitable, then Site D can be used for
11 landfill within the Food Land Guidelines with
12 preferably an agricultural after-use to be established.
13 On the other hand, if Site F is acceptable and usable,
14 then the Food Land Guidelines would preclude the use of
15 Site D.

16 Now, I should say something about
17 Milton's case on agriculture. You heard from
18 Mr. Hoffman and you earlier heard from Dr. Macintosh,
19 and they are both highly respected in their field, but
20 Dr. Macintosh expressed the opinion that agriculture
21 could be restored at the Site D to 90 per cent of the
22 Halton average for common field crops.

23 DR. KINGHAM: I wonder if you could
24 elaborate at this point in your argument on what
25 appears to be an internal inconsistency with what you



1 said earlier about the reason for there being two sites
2 before this Board.

3 MR. LEITCH: Yes.

4 DR. KINGHAM: You have now just told us
5 that it is your submission that if Site F or only if
6 Site F was deemed unacceptable would it be reasonable
7 to move in the face of the Food Land Guidelines to a
8 consideration of Site D.

9 MR. LEITCH: That I say is the result of
10 the application of the provincial policy.

11 DR. KINGHAM: How is that consistent
12 with therefore in any event we have only heard evidence
13 with respect to Site F, other evidence would have been
14 brought with respect to another site that would have
15 been acceptable as well, namely Site D? Do you
16 understand the apparent inconsistency? If Site F is
17 truly acceptable, then why bring in Site D?

18 MR. LEITCH: In the context of my
19 earlier comments you really don't have any control over
20 whether Site D is brought before you by someone
21 defending the case for Site F because they will call
22 the evidence and it is relevant and admissible and you
23 will have to hear it. If we are talking about the
24 conduct of the case, then that is why Site D would be
25 before you even though the agricultural policies would



1 tend to indicate that it shouldn't be.

2 DR. KINGHAM: I guess what I was
3 focusing on was your comment as you advised earlier
4 where you don't win the case on the basis of the
5 negativism, the negative aspect, and I was seeking a
6 clarification in terms of what you are now saying in
7 terms of the relationship between the two sites and the
8 acceptability test in the context of the planning
9 guidelines, where you are right now.

10 MR. LEITCH: What I am attempting to do
11 now is show that the greatest compatibility in respect
12 of the planning issue is Site F with the planning
13 documents. I'm not sure I take your point and please
14 go further.

15 DR. KINGHAM: I'll mull it over over
16 coffee.

17 MR. LANCASTER: Do you think we could
18 take a recess now, Mr. Leitch?

19 MR. LEITCH: Yes.

20 --- Recess

21 MR. LANCASTER: Be seated, please.

22 MR. LEITCH: Sir, earlier in my remarks
23 I read to you the statement of the undertaking and I
24 must say that I read that statement of the undertaking
25 from the notice in this case. My friend Mr. Tidball



1 came forward at the break and pointed out that there
2 seems to be some difference between the undertaking as
3 stated in the Board's notice and the undertaking as set
4 forth in the review under the Environmental Assessment
5 Act prepared by the Ministry, E-110, and I think we
6 should take a few moments to look at it so we know
7 there isn't a problem and in my submission there is no
8 problem about that at all. If you look at E-110, at
9 page 82, or it looks like 82 to me, you will see that
10 at page 82 there appears Schedule A to a regional
11 report, CAO Report 262 of 1986, and it deals with the
12 definition of the undertaking unamended and the
13 definition of the undertaking amended. If you look
14 over to see what that goes with, it goes with a letter
15 from the Regional Municipality of Halton dated November
16 25, 1986 to the Minister wherein the Clerk says:

17 "Dear Mr. Minister: ..."

18 and words following. The difference is that the
19 statement of the undertaking in the Board's notice is
20 clearly referable to:

21 "... receiving, dumping and disposing of
22 waste as required by Section 137 of the
23 Regional Act by acquiring the land for,
24 constructing, operating and maintaining
25 a landfill to contain 7.96 million cubic



1 metres of waste in the Regional

2 Municipality of Halton."

3 If you look over on the next page of the Board's
4 notice, page 4, there is an explanation which speaks of
5 the need for a facility and speaks of the study process
6 and speaks of Sites D and F in the alternative. If you
7 look at the amended definition of the undertaking
8 contained in the government review and attached to
9 Mr. Varley's letter, it comes to the same thing in my
10 view and I would then go back to what I said earlier
11 and that is in dealing with the Environmental
12 Assessment of the undertaking, it is my view that as
13 you exercise your jurisdiction under the Environmental
14 Assessment Act you would accept the Environmental
15 Assessment and give approval to proceed only after you
16 accept the Environmental Assessment, and it's in the
17 process of giving approval that you give approval to
18 the one site which you have chosen. It is the two-case
19 method which puts both sites before you, but the
20 undertaking is for a landfill and not for a landfill at
21 both places in my submission. I just wanted to point
22 that out so that any questions of notice, even though
23 it is late in the day, at least they have been raised
24 in this hearing.

25 DR. KINGHAM: I think you may have also



1 inadvertently provided a clarification to a little
2 problem of your earlier introduction of the section
3 because you said "approval of the study" which might
4 have been construed as being the original Halton study
5 and now you have said "approval of the assessment"
6 which we understand to be the assessment including the
7 evidence.

8 MR. LEITCH: I don't really mean to say
9 approval of the study or -- "acceptance" is the word.
10 It is a distinction important to be understood in
11 understanding the sequence of decisions that you make
12 as you deal with the case.

13 Before the break I was dealing with
14 agriculture and I said that Dr. Macintosh had given in
15 evidence an opinion that agriculture could be restored
16 at Site D to 90 per cent of the Halton average and I
17 really don't take terribly serious issue with his
18 opinion in that regard except that I think you have to
19 understand what it is he means because it came out
20 quite clearly in cross-examination and again in the
21 evidence of Mr. Hoffman. He means 90 per cent of
22 Halton's average for some of the common field crops and
23 he excludes alfalfa and white beans and he means 90 per
24 cent of Halton's average per acre and not 90 per cent
25 of Halton's average on the farm that will remain after



1 this 20-year period and the landfill is closed. His 90
2 per cent is 90 per cent of something less than 100 per
3 cent and that, of course, is the evidence which
4 Mr. Hoffman gave. That of course is without taking
5 into account any problems which may arise by reason of
6 differential settlement, and the evidence is perfectly
7 clear that there will be differential settlement on
8 this landfill after it is closed and the refuse will
9 deteriorate, it will become smaller in bulk as time
10 goes by and water drips down through it, the surface
11 will fall in that kind of soil as the evidence
12 discloses and if there is a depression it will be wet
13 and there will be that kind of problem which inhibits,
14 and again it does not take into account, that is to say
15 his 90 per cent, the problem of methane gas issuing out
16 of the putrefying garbage. That can, as you have
17 heard, lead to anaerobic conditions in the root zone of
18 the topsoil and that can lead to crop deterioration and
19 loss. There is nothing very clear but the best work in
20 the area of rehabilitating landfills comes from England
21 and it's not complete. It's an experimental technology
22 and I think it is an important technology and I think
23 it is important inasmuch as Mr. Lederer has said there
24 is something between 50 and 100 of these cases coming
25 down the pipe at you and there is no doubt that some of



1 those cases are coming at you in good agricultural land
2 and in circumstances where there is no choice between
3 good agricultural land and something like Site F. I
4 think it is important ...

5 MR. LEDERER: I'm not the one who said
6 that and the only reason I rise is because I'm not the
7 least bit certain it's correct. I think it was
8 Mr. Estrin.

9 MR. LEITCH: Was it Mr. Estrin? No, it
10 was Mr. Tidball.

11 DR. KINGHAM: Mr. Lederer has denied
12 ownership.

13 MR. LEDERER: I deny ownership but
14 personally I have no evidence or knowledge that that is
15 the case.

16 MR. LEITCH: I'm sorry ...

17 MR. GARROD: Somebody has said it.

18 MR. LEITCH: ... if I have wrongly
19 accused my friend Mr. Lederer.

20 DR. KINGHAM: I think we can understand
21 and appreciate the gist of what you are saying, that
22 there will be cases involving agriculture.

23 MR. LEITCH: I can be very brief about
24 this, but it is important that somewhere this
25 technology which we have heard about on the gravel pits



1 and pipelines get its chance for moving forward a
2 generation in respect of landfill sites. It is a very
3 attractive way of dealing with the problem of impact in
4 an agricultural community if you have to do it, but why
5 do it in Halton? You have in Halton Site F which is in
6 terms of the policy set forth in the Food Land
7 Guidelines in my view and in my submission, it is the
8 answer. If it is approveable as it is with the
9 proposal before you, then the Food Land Guidelines are
10 the government policy which dictate it should be there
11 and not on Site D. I will have something to say about
12 agriculture in relation to the conditions which you
13 impose, because if you choose to approve landfill at
14 Site D then I want you to consider something more than
15 the good intentions and goodwill of the municipalities
16 with regard to an agricultural after-use. I want to
17 see a by-law which would allow that to be implemented
18 and there should be a condition which requires it to be
19 implemented and it should be given a fair chance. It
20 should not be appropriate for there to be a unilateral
21 decision made by the proponent having had a few bad
22 crops, and coming from the farm I know you do have a
23 few bad crops anyway, but it should be given its chance
24 and there should be some restriction on the proponent
25 and the restriction should not allow the proponent to



1 say "It doesn't look like it's working very well so
2 let's green it over and make it into a closed landfill
3 site or public park or whatever." I don't think that
4 that is appropriate.

5 There did arise in the course of the
6 planning evidence the question of the interpretation of
7 the Milton Official Plan. Mr. Zsadanyi and Mr. Stagl
8 were of the view that an Official Plan Amendment and
9 zoning change were required and there was a very
10 spirited cross-examination of Mr. Zsadanyi by
11 Mr. Lederer and there was a very spirited cross-
12 examination of Mr. Stagl by Mr. Lederer. Mr. Walker's
13 opinion was to the contrary. He thought that you could
14 put an interpretation on those planning documents which
15 would permit agricultural -- or rather a landfill in an
16 agricultural zone, but he tempered that opinion with
17 the advice that with respect to Site D there should be
18 an Official Plan Amendment and appropriate zoning by-
19 law for the purposes of making the documents clear.

20 One thing that is clear from
21 Mr. Zsadanyi's evidence, the Planning Director, is that
22 whether the interpretation Mr. Walker placed on the
23 documents was considered reasonable by the Board or
24 anyone else, it certainly was not intended and he
25 certainly did not intend that to be the result. That



1 was not the intention of the Town nor its staff. The
2 weight of the land use planning evidence I say is in
3 favour of landfill at Site F and the planning evidence
4 takes into account the planning documents and the
5 physical settings and I say, absent some public health
6 and safety reason for preferring Site D, the planning
7 opinion favours Site F.

8 Of course you will review how those
9 opinions were arrived at as you review all of the
10 evidence, and you will work with the question of
11 assigning priorities and weighting factors and doing
12 trade-offs and I want to deal shortly with that.

13 I would suggest that for my purposes the
14 best document for you to have before you is B-901,
15 Mr. MacNaughton's planning report, and I characterized
16 it otherwise earlier, but it is his report, and if you
17 would look at Table 1 at page 3 and Table 4 at page 2
18 it assists me in making this submission.

19 DR. KINGHAM: Could you give me the
20 number again?

21 MR. LEITCH: B-901.

22 DR. KINGHAM: The page reference?

23 MR. LEITCH: Page -- there are two sets
24 of page numbers, Roman Numeral pagination at the front
25 and Arabic numbering after at the end of the Roman



1 Numerals and it's Arabic No. 3 and Arabic No. 4. What
2 you see there is the organization of the categories in
3 Table 1, and those are Mr. Walker's categories, public
4 health and safety, natural environment, social
5 environment, cultural environment and costs and over
6 the page you will see the amendments to that
7 organization which reflect in a graphic way the
8 opinions which Mr. MacNaughton expressed.

9 Now, the first thing I want to say about
10 the organization of the material is that the five
11 categories and their ordering which were developed by
12 Mr. Walker do not themselves constitute factors. They
13 are groupings of material, groupings of factors, and in
14 the grouping weight has then been assessed based on the
15 initial decision to put certain factors in certain
16 categories. So, the headings are descriptive and are
17 not by themselves factors. Factors are the sub-
18 descriptions in the bullets. My submission is that
19 there is some use to placing the actual factor within a
20 category because it gives you a very blunt tool for
21 comparing the categories to each other and to order
22 some priorities, and that is not a bad way of doing
23 things if you have an easy case. However, if you come
24 to the conclusion you have something other than an easy
25 case, you have got a hard case, that in my submission



1 won't work and what you have to do is to break them out
2 and deal with the factors individually as opposed to in
3 those groupings.

4 You see one of the problems I see with a
5 comparison by category is that factors get lost and
6 they have a tendency to disappear into the category and
7 never reappear really for any purpose of making a
8 precise comparison. For instance in the public health
9 and safety category you have the subsuming of the
10 importance of the land use conflict vermin category
11 into the obviously more important category of
12 hydrogeology and so when you come to your consideration
13 you can tend to lose the importance -- not so much the
14 importance of the land use conflict vermin category,
15 but the usefulness of taking it and comparing it to
16 some other factor in the list of things such as
17 heritage, archaeology, visual impact, those kinds of
18 things. It doesn't invite a comparison of the factors
19 among themselves. In a process of assigning priority
20 and giving weight and trading off, you should use all
21 of the factors to trade off against the other factors.
22 For instance, there was a case led in respect of land
23 use conflict vermin and it was a case involving, as you
24 will have heard it, the question of the Burlington Air
25 Park vis-a-vis safety and the gulls which will come to



1 the landfill. Mr. Lederer argued that matter and I
2 accept the difficulty of risk assessment in this regard
3 and I accept that there are mitigative factors, but one
4 thing I did not hear about, and I think Mr. Garrod may
5 well talk to you some more about it than I will, and
6 that is the question of the airstrip right across the
7 street from Site D owned by Mr. Chaput and where his
8 plane will take off right into the landfill and land
9 right over the landfill on days when the wind dictates
10 that. That risk or land use risk vermin is a very real
11 risk which I think you have to take into account.

12 Beyond that I want to say something
13 about the Burlington Air Park. The evidence is that it
14 is the only federal licensed facility in Halton for air
15 traffic. I have for your consideration a case reported
16 in the Ontario Reports as Re Orangeville Airport Ltd.
17 and Town of Caledon, et al, a decision of the Ontario
18 Court of Appeal reported at 11 O.R. (2d) at page 546.
19 That case is authority for the proposition that if an
20 airport has a federal certificate or licence then the
21 municipality's zoning authority disappears from the
22 lands owned by the airport operator. That is the law
23 in Canada, in Ontario, and I draw that to your
24 attention because as we deal with the question of the
25 bird hazard we do so in circumstances where it is not



1 possible, in my submission, for a municipality to
2 restrict the growth of that facility, and we are
3 dealing with a planning period of some length and I
4 think that it is worth some consideration that air
5 traffic will grow, Halton will grow, the landfill if
6 located there will grow, the bird colony will grow, the
7 traffic back and forth between Hamilton Harbour will
8 grow. The airport, one would hope under a reasonable
9 scenario would be there longer than the landfill, but I
10 think Mr. MacNaughton, his point is taken that the
11 expendability of Site D may mean that it is a
12 preferable location as far as a Board is concerned and
13 it would provide for ease of expansion over a longer
14 and longer period of time. I will have a submission to
15 make about that because I think to pick the expandable
16 site as opposed to the constrained site is dead wrong,
17 but it seems to me that those kinds of considerations
18 get lost if you bury that factor in the more important
19 immediate factor of hydrogeology. I think you should
20 disengage that arrangement of the material and when you
21 come to consider, you know, when you get down to your
22 hard case and get down to the very difficult and
23 demanding task of trying to do the trade-offs and
24 trying to do the weighting, and I hope you don't come
25 to the hard case and I hope you accept that Site F is



1 the easy case and just do it, but you should pull it
2 apart and, in my submission, you should try it this
3 way.

4 Firstly decide on the number of factors.
5 If you look at Mr. Walker's analysis there are 15 of
6 them, in other words taking the very factors
7 themselves. By my count, and I would say please do
8 count yourself when the time comes, but then what you
9 do is organize them as to those factors which would
10 have preference for a landfill at Site D in a column
11 and those factors which would have a preference for
12 Site F for a landfill in a column and then count them.
13 By my count when I did that I found 13 favoured
14 landfill at Site F and two favoured landfill at Site D.
15 I then went on and supposed that you would give mineral
16 aggregate matters some status in this comparison,
17 notwithstanding the apparent settlement of that issue,
18 and I increased the number of factors to 16 so I had 13
19 favouring Site F and three favouring Site D. When you
20 have them organized like that on Mr. Walker's material
21 I think what you do is then start to assign weight.

22 The first exercise would be to say they
23 are all of equal weight. If they are all of equal
24 weight then you have a very clear case, but they are
25 not all of equal weight and you should look at the



1 smaller number of factors which favour landfilling at
2 Site D in my submission and double the weight on all of
3 them and see where that takes you. Now, double it
4 again and see where that takes you. If you are not
5 satisfied with that, then my submission is that you
6 should go through the factors one by one and try to
7 assign priority in weight to each. I tried to do it a
8 number of ways and I'm not going to belabour you with
9 it, but I have not been able to find to my satisfaction
10 a way of preferring the site, surprise, and you won't
11 find it surprising, but of preferring Site D to Site F,
12 but I think that that is a proper way of organizing the
13 material and making the trade-offs.

14 Now, I did the same thing with
15 Mr. MacNaughton's analysis and came up with 18 total
16 factors in all of which 12 favoured Site F and six
17 favoured Site D on his analysis and, of course, his
18 analysis recognized that costs favoured Site D and
19 capacity favoured Site D and alternative land use
20 favoured Site D, and I don't take that from the
21 evidence at all, I reject that. When you write your
22 reasons I would ask you to be specific about the
23 priorities and trade-offs that lead you to your
24 conclusion. I say that because as we are concluding
25 this hearing your decision will comprise part of the



1 Environmental Assessment and the theory, as I
2 understand it, is that the logic of the decision-making
3 should be made as clear as possible for those who seek
4 to understand it. I would say to you that I think a
5 decision in favour of Site D would require a finding
6 against F in the hydrogeology factor and that would
7 have to be accompanied by a finding in favour of D as
8 to its approveability on hydrogeology, that F is,
9 preferable in relation to hydrogeology and the public
10 health and safety implications which flow from
11 hydrogeology, and it is my submission that Site D can't
12 be preferable on an analysis of all factors even if you
13 find it to be approveable on the present state of the
14 evidence.

15 Now, I will try and deal with economics
16 which I take to break out into really two issues, and I
17 think my friend Mr. Lederer says the same thing. Those
18 issues are affordability and cost differential as
19 between the two sites. The approval sought is to issue
20 debentures to a maximum of \$12,775,000 for the
21 acquisition of the land and the construction of the
22 site and those are the initial capital costs. That
23 number holds for both sites. Included is an
24 application for approval to borrow money by way of
25 temporary advances. Mr. Watson and Mr. Rinaldo gave



1 evidence for the Region on the issue of affordability
2 and Mr. Watson said each site can be acquired and
3 constructed within that amount of debentures and that
4 the amount was within Ontario Municipal Board
5 guidelines relative to municipal debenturing. I accept
6 his evidence in that regard.

7 Mr. Rinaldo gave evidence that another
8 \$5 million of cost in addition to that \$12,775,000 in
9 terms of front-end capital costs would be acceptable to
10 the Region without a further consideration of the
11 costs, but if the project was going to cost a further
12 \$10 million or more, then the Region would have to look
13 at it again or would want to look at it again. I dealt
14 with the mysteries of municipal finance in cross-
15 examining Mr. Rinaldo and it was an education for me.
16 We dealt with the financial health of the Region in the
17 evidence, and here I am referring to basically my
18 cross-examination which runs from Volume 56, page 12943
19 through Volume 57, page 13198, and it involves a
20 consideration of Exhibit H-300 which is this red-
21 covered document, and it might not be red covered as
22 you have it, but it's the financial statement for the
23 Region of Halton for the period ending December 31,
24 1986.

25 At the end of December, 1986 the Region



1 of Halton had \$55 million in ratepayers' equity and
2 \$44,306,000 in its reserve funds and that you will find
3 in H-300. The regional policy with respect to the use
4 of reserves was that they could be loaned to various
5 programs and if they were loaned to a program they
6 carried an internal rate of interest at prevailing
7 rates, being prime minus one point, and once loaned
8 they were required to be repaid to reserves with
9 interest at some future time. Mr. Estrin talked at
10 some length about conservative assumptions. Those are
11 very, very conservative assumptions in relation to
12 financial matters in my submission and in essence mean
13 that until the policy changes that once those dollars
14 go into reserves then they don't go out of reserves
15 unless they go out for a stipulated purpose, for
16 instance lot levies being used to pay for sewer and
17 water facilities, but the other reserves which are not
18 earmarked for a particular piece of construction are
19 used internally in other programs, but they don't
20 disappear. What happens as I understood the evidence
21 was that the taxpayer would pay interest on his funds
22 loaned internally to another program and eventually the
23 levy would return those monies and they would be placed
24 back in reserves.

25 It was also Mr. Rinaldo's evidence that



1 in 1987 further amounts would be added to the reserve
2 funds. Mr. Rinaldo provided me with financial
3 statements for the Region of Halton as of December
4 31st, 1987 in accordance with his undertaking to do so
5 and I can specifically refer to where you can find it.
6 It is in Volume 56 of the transcript at page 12960,
7 line 1, and it's very short and I can read it to you.
8 My question to him started at 12959, line 14:

9 "Q. Just going back for a moment, the
10 previous exhibit, H-300, was the 1986
11 financial statement and when can we
12 expect the 1987 statement?

13 A. Our target is to have the audited
14 statements prepared by February 28th
15 each year and so therefore the audited
16 statements will be completed February
17 28th, 1988 and with Council approving
18 them usually at the first meeting in
19 March, so in March of 1988 is when we
20 will have the 1987 audited statements.

21 Q. From the look of things we will all
22 be here then, and I wonder if you would
23 undertake to provide me with copies of
24 that at that time?

25 A. We will undertake to do that."



1 Being a man of his word he did and I have the copy
2 which he gave me in my hand, and I can tell you that in
3 accordance with his undertaking he gave me this and the
4 reserve fund and reserves increased by \$15 million in
5 the fiscal year ending December 31, 1987 and ratepayer
6 equity increased by just under \$20 million in the same
7 period. If you want me to leave that with you I can do
8 so. It's a public document and released to the public
9 and it has no exhibit number, but those are the
10 increases that show in it.

11 Mr. Lederer pointed out in his
12 submissions that whether the Region could afford it or
13 not it was obliged to find the money to fund the
14 project. I think the Board would accept that
15 submission and I accept it and my client accepts it and
16 I think you would also accept that the Region would not
17 have much difficulty financing its landfill,
18 particularly in relation to the user-pay system. The
19 evidence which Mr. Watson gave on the issue of overall
20 costs was that the sites were relatively close to one
21 another and both were affordable.

22 You will recall that the evidence
23 Mr. Rinaldo gave with respect to the financial aspect
24 of the landfill operation was that the Region's waste
25 disposal program was in essence a user-pay program



1 financed by the tipping fee at the gate of the
2 landfill. I recall the day Dr. Kingham made his own
3 calculations with respect to cost per month per
4 household, and I'm going from my recollection of that,
5 but what I thought I heard him say was that the cost
6 per month per household in 1987 was in the order of
7 \$1.50 to \$2 per month per household and the cost per
8 month per household assuming the highest cost proposed
9 by Burlington for Site F was \$4 per month per
10 household, or in that order. I would say that the
11 highest cost scenario for Site F included the cost of
12 the liner in accordance with the CRA design, the \$18
13 million liner that Mr. Hodgson spoke of, and included
14 the O'Brien estimate for the cost of the acquisition of
15 Site F based on an income analysis rather than market
16 value, market value on the basis of appraisal and
17 recent sales comparables in the traditional way.

18 The argument for the high cost of Site F
19 assumes the need for a liner and it assumes that some
20 future panel of the Ontario Municipal Board would
21 accept the argument that the highest and best use of
22 Site F is landfill and that notwithstanding the
23 prohibition of taking into account the intended use by
24 the expropriating authority in the Expropriations Act,
25 Section 14(4). It also assumes that consent would be



1 forthcoming from the Region of Halton under the
2 provisions of the Region of Halton Act. You will
3 recall that in the Region of Halton Act the
4 responsibility for landfill is specifically assigned to
5 the Region. Section 137(3) -- I'm sorry, (2) provides:

6 "The Regional Corporation shall continue
7 to provide facilities for the purpose of
8 receiving, dumping and disposing of
9 waste and no area municipality shall
10 provide such facilities."

11 Now to (3):

12 "On and after the day this section comes
13 into force, no facilities for the
14 receiving, dumping and disposing of
15 waste shall be provided in the Regional
16 Area by any person or by any
17 municipality ... or by any other
18 regional municipality or by a
19 metropolitan municipality or by a local
20 board of a regional or metropolitan
21 municipality without the consent of the
22 Regional Council, which consent may be
23 given upon such terms and conditions,
24 including the payment of such
25 compensation, as may be agreed upon."



1 Now, that appraisal of the value of the National Sewer
2 Pipe lands and other lands which comprise Site F on a
3 cash flow basis assumes a lot, and Mr. Lederer has made
4 submissions about it and I would say that some future
5 Board which deals with the question of getting the
6 consent of the Region of Halton for someone to run a
7 landfill at Site F, assuming some other landfill site
8 is chosen for the Region, is going to have some pause
9 about the question of whether it ought to do this, and
10 the Region will be there and they are going to say that
11 their financial program for waste disposal is all bound
12 up in the cost that parties pay to dispose of waste at
13 the gate of their landfill. They are going to make
14 what submissions they think are appropriate to the
15 Board about whether or not someone else can open up a
16 landfill in the Region of Halton and go into business
17 against them, because to go into business against them
18 they certainly would, and the person who charges \$1
19 less at the gate is the person who will get the truck
20 and that is not necessarily in the interests of the
21 public financial health of this Region in terms of its
22 waste disposal system. It is all set up on a user-pay
23 basis.

24 So, I don't think that with respect to
25 Mr. O'Brien's expertise that he properly takes into



1 account all of the things one would have to properly
2 take into account in determining how much it would cost
3 to acquire that site and, as Mr. Lederer said, and I
4 agree with him, the traditional way of arriving at
5 appropriate compensation in a Land Compensation hearing
6 is on the basis of appraisal, recent sales, and you
7 have to make the assumption that someone will concede
8 that the highest and best use of Site F is for
9 landfill, but that is a pretty hard thing to conclude.
10 It's very, very difficult to get a landfill approved.
11 Can you say that that's the highest and best use of
12 that site? You can't solve your problem in that regard
13 by saying "All we have to do is approve Site F or say
14 it is approveable and that's the end of it because then
15 it can be assessed as to its value on that principle."

16 For cost purposes if you are dealing
17 with costs, then your first decision is as to whether
18 there is a liner or no liner at Site F and if you
19 accept the Region's position that no liner is necessary
20 then aspect of the cost differential which Burlington
21 relies on disappears.

22 DR. KINGHAM: I wonder if I can clearly
23 understand the point you have just made. If this Board
24 followed your advice in the earlier part of your
25 submission and said it's an easy case, Site F is



1 clearly the place a landfill should go in Halton,
2 that's it and it should be approved and there are no
3 problems or threats, go ahead, and then Halton in a
4 subsequent hearing was trying to assess a reasonable
5 price or the owners of the property were trying to have
6 a reasonable price assessed and they argued the highest
7 and best use for this land would be a landfill, after
8 all the previous Board has just said that's the best
9 thing to do with the land. Are you telling us that
10 that subsequent Board would discount that opinion and
11 thus discount the value of the land?

12 MR. LEITCH: Yes, and I say so for this
13 reason; first of all Section 14(4) of the
14 Expropriations Act says that when you are assessing
15 that you don't take into account the use to which the
16 expropriating authority is going to put the land.
17 Secondly, if you are sitting in a Land Compensation
18 hearing, it's my view that what you would be doing is
19 assessing the value of the land as if the Region of
20 Halton had its landfill at Site D or some other place
21 in the Region. It's the highest and best use of the
22 land as the owner holds it, as the owner holds it. You
23 see, the big step you can't assume is that it is going
24 to become landfill and just because you say it is
25 appropriate for the Region's plans that it be the site



1 for landfill and that is what another Board can't do.
2 Now, that will all be argued out at some point in the
3 future and, as Mr. Lederer has said, for planning
4 purposes it is a reasonable assumption about costs, but
5 it is simply not that clear in my submission that you
6 can say that if we decide it's the best site we
7 automatically assign a value based on highest and best
8 use as landfill. It's not that clear and some other
9 Board would have to determine what the highest and best
10 use is and the arguments I am making possibly will be
11 used before that future Board and there may be all
12 kinds of other arguments used before that future Board,
13 and I have no doubt there will be if that happens.

14 To return to the question of the liner,
15 that is your first decision and if there is no liner
16 necessary, you can knock \$18 million off the cost of
17 Site F. If you decide there is a liner necessary then
18 you should take into account whose liner that is and
19 Mr. Estrin has made submissions about the liner based
20 on native material and winter sand and I think he took
21 that number down to something in the order of \$7
22 million on the evidence of witnesses called for the
23 Town of Milton. Of course you have to take into
24 account the question of the liner at Site D as well.
25 The cost difficulty you have with a liner at Site D is



1 that you don't know very much about what kind of a
2 liner it's going to be. There are some design
3 considerations that may be difficult to cost and I
4 would say to you that the better approach is to say if
5 there has got to be a liner at Site D, it's somewhere
6 in the reasonable range of the cost of a liner at Site
7 F and they cancel out. There is some other evidence on
8 the record as to liner costs at Site D, I must tell
9 you, and that came from Mr. Horatio -- Hiraishi, not
10 Horatio -- Mr. Hiraishi, and I understand Ms Cronk will
11 deal with that in more detail.

12 So, when you come down to the end, the
13 real cost differential on those capital costs is the
14 price of the land. I say that the net effect of the
15 evidence is that even if the land cost has been
16 underestimated at F, it is still within the
17 affordability of that additional \$5 million which
18 Mr. Rinaldo found acceptable and I come to that because
19 Mr. O'Brien's medium figure was approximately \$7
20 million and Mr. Watson's estimate was something in the
21 order of \$2 million or a little more and that is an
22 additional \$5 million. It's really a non-issue, in my
23 submission, and in particular the way the Board has
24 analyzed it on a cost-per-household basis and
25 considering the costs for waste disposal relative to



1 other municipal services. We could afford to spend a
2 lot more and in fact we should spend a lot more
3 particularly in the area of the effort to recycle.

4 The Burlington case I will now deal with
5 and in a relatively summary way. It is that Site F is
6 too small, I think, not capable of expansion and that
7 it costs too much. Capacity and cost. The issue of
8 the amount of benefit in relation to dollars spent
9 requires some further consideration.

10 The Burlington capacity argument
11 proceeds from the so-called conservative assumption
12 that Energy from Waste should be totally discounted,
13 not worked into the calculation with respect to waste
14 quantities for planning purposes. The argument then
15 proceeds to considerations of limits to expansion at
16 Site F relative to a relatively unlimited capacity for
17 expansion at Site D. The assumption of an Energy from
18 Waste plant in Halton is more than an assumption.
19 Planning is in progress and studies are, I am given to
20 understand, either underway or imminently can be
21 underway. There are reserves set aside for funding
22 that program, something in the order of between \$2
23 million and \$3 million now. There have been
24 resolutions from regional council exhibited before the
25 Board and you have the evidence from Mr. Rinaldo about



1 the creation of the reserves from tipping fees. There
2 is the resolve of the municipal council to proceed with
3 Energy from Waste as things now stand which really
4 can't be disputed.

5 If you accept Energy from Waste in
6 accordance with the regional intention, then for
7 planning purposes it would be extremely conservative in
8 my view to foresee a site life at Site F of at least 15
9 years and with the probability that it will be closer
10 to 20 years than 15 years and, in particular, if you
11 assign a condition with respect to the target I have
12 suggested for recycling and re-use, it will get closer
13 to the 20-year planning period. Mr. Watson's evidence
14 was that 20 years was a reasonable planning period and
15 that the planning period does not become unreasonable
16 in his opinion until it begins to fall below 15 years.
17 In my submission to you there are sound reasons for a
18 planning period on the low end of the reasonable range
19 as opposed to the high end and I say so for this
20 reason; measures must be taken to reduce the amount of
21 waste that goes to landfill. At the present time the
22 responsibility for landfill resides with the
23 municipalities and is reviewed and administered and
24 governed by the things that happen before these Boards.
25 The will of politicians to legislate and enforce



1 alternative means of dealing with waste will depend on
2 pressure, on the pressure they feel from the facts and
3 the pressure they feel from their constituents. That
4 is a fact of life in the political process. The
5 commitment you can expect from a politician who has an
6 infinitely-expandable landfill site will be different
7 from the commitment you can expect from a municipal
8 politician who must soon deal with the question of
9 declining landfill capacity. When I say commitment I
10 am talking about the commitment to alternate means.
11 The existing landfill should be seen and felt to be
12 within reason and the less comfort there is with
13 respect to future capacity within reason the better.

14 This Board should make its views known
15 in respect of recycling and re-use as an additional
16 impetus to regional and area municipality officials and
17 staff. It is suggested that the Burlington thesis is
18 better planning by Mr. MacNaughton and Mr. Stamm.
19 They suggest more capacity for landfill is better for
20 the growth of the community and its waste management
21 than lesser capacity and we reject that notion on the
22 basis that pressure causes change and the Burlington
23 argument is for less pressure and not more pressure.

24 I am very near the end thankfully, but I
25 want to deal briefly with social impact and where you



1 will recall the evidence was by Myra Schiff and
2 Professor Lang. In addition to that evidence you had
3 direct evidence from ratepayers, from the
4 neighbourhoods of both sites, and of course you will
5 consider all of the evidence, but I think that there is
6 a very real difference between the kind of evidence you
7 heard from Mr. Lang and the kind of evidence you heard
8 from Ms Schiff, and I think that this Board should make
9 some comments in its reasons about that kind of
10 evidence in these cases. Ms Schiff's work was done on
11 the basis of an objective appraisal of the impacts from
12 each site as she felt they would be felt by persons
13 living within certain distances. It was criticized by
14 others for its failure to attend to the views of
15 affected persons, particularly for the alteration of
16 the study area lines on the basis of some natural
17 screening which she recognized at Site F. Professor
18 Lang was at the other end of the continuum of opinion
19 as to how you do these studies and he took the approach
20 that relying on information obtained from key
21 informants he could extrapolate community views on the
22 impact of Site F. He made no study of Site D and he
23 was well aware of the natural limitations which were
24 imposed upon his work because, as he said a number of
25 times in his evidence, his thesis was that a perception



1 of impact was real, notwithstanding that an objective
2 observer might find no real impact in relation to the
3 source and the receptor. There was a lack of
4 objectivity in his approach and in his work and, in
5 addition, he seemed to suggest that a sense of
6 injustice prevails relative to the idea of social
7 equity and that that should be a social impact insofar
8 as Burlington was concerned.

9 So, Myra Schiff followed the objective
10 model and Professor Lang followed a model which I would
11 characterize as being subjective and based on a
12 perception reality precept. This area of study is
13 relatively new and it's growing I understand but
14 continues in a formative phase. In my view there must
15 be some objective standard to the discipline. In what
16 I know most about, law, we use the ordinary,
17 reasonable-man standard when we are trying to assess
18 standards and levels of behaviour expected of people.
19 That standard imports objectivity because there is no
20 such person as the ordinary, reasonable man. He is a
21 combination of characteristics. He is an average of
22 characteristics in the mind of the person applying the
23 standard, or in your own minds if you were the triers
24 of a case where the ordinary, reasonable man was your
25 standard, a tort case. For obvious reasons in my



1 the evidence. Those impacts at Site F are tempered or
2 filtered by a profusion of activities in an urban
3 setting. What I mean by that is that qualitatively
4 they are muted in their context but that is not the
5 case at Site D. The surrounding activity at Site D is
6 at a lesser level and there are fewer sensory
7 distractions. I would also ask you to take into
8 account in the social impact the loss of homes, the
9 loss of businesses, the loss of aspirations which the
10 expropriation of land at Site D represents, and you
11 will hear more from Mr. Garrod on that point. It is
12 my submission that the impact of an approval at Site D
13 with respect to size of population affected and degree
14 of affect is much greater than at Site F.

15 Now, this undertaking comes before you
16 with two sites, but it is clear and has been from even
17 before the time of the notice that the two sites are
18 before you in the alternative. I don't know whether
19 you will hear someone suggest that you should approve
20 them both, but I am going to say that it would be
21 inappropriate, it would possibly be inconsistent with
22 the study process and inconsistent with the supervising
23 statutes. You don't have any evidence of cost or
24 affordability capable of sustaining an amendment to
25 approve both sites. The evidence Mr. Rinaldo gave was



1 that it cost in excess of \$10 million more than the
2 amount of debenturing or capital costs and would
3 require some review by regional council and the issue
4 of affordability before you would require a further
5 consideration and further evidence before this Board.
6 This Board, in my submission, should approve one site
7 and one site alone.

8 Now, I have a matter that is addressed
9 in the position statement I placed before you on behalf
10 of my client. It seems obvious to my client and
11 obvious on the evidence that we have before us that
12 there will probably be a need for additional landfill
13 capacity in 20 years or so. I don't think it is
14 possible for us to say what that capacity might
15 represent at that time. It's not possible to know the
16 intention of the provincial government with respect to
17 the whole area of waste management. We read in the
18 newspaper reports of things which may happen and we
19 hear reports of large projects in respect of waste
20 management handling and disposal. Just this past
21 Monday, I believe, there was an emergency debate in the
22 Legislature in relation to the declining capacity of
23 the regional municipalities and Metropolitan Toronto
24 Municipality to deal with waste. I am making these
25 statements because my clients recognize that the



1 process of study which has been involved here has hung
2 a lot of information on Site F which in terms of the
3 future waste management system of Halton may be useful.
4 I think that this Board, understanding best as it does
5 the situation in Halton and understanding better than
6 anyone at this point in its reasons when it, as I
7 submit it should, approves Site F should express some
8 means of reserving for Halton any future use of Site D
9 for landfill.

10 Now, this is a very difficult submission
11 to make, but it is one I think that has to be made. We
12 are planning for a 20-year period and we can't know
13 what we will be facing ten or 15 years from now in
14 terms of what the citizens of Halton need, but what we
15 do know is that we have a lot of information relative
16 to those pieces of land and we also know as you have
17 heard in evidence that at the present time there is an
18 urban area review underway in respect of the Official
19 Plans for this Region. In the long-term interests of
20 the Region of Halton, they deserve in my view some
21 delineation of your views for the assistance of some
22 future Board which may be considering, for instance,
23 whether Site D, proved up as far as it goes, might be
24 useful for some other municipality and there is
25 provision of course for other -- the use of land in one



1 municipality by another municipality for many purposes
2 and landfilling is one of them, and that would not, in
3 my submission be appropriate because there would be
4 considerable resistance to that in this Region by I
5 daresay all the municipalities represented in this room
6 plus two others, plus a whole lot of other people. As
7 our friends to the east of us look westward,
8 considering the nature of their problems, I think that
9 they should understand what the people of Halton did
10 for Halton is for Halton and not for somewhere else,
11 and I think that that is a legitimate thing for the
12 Board to express as it disposes of a case like this.

13 Now, I am finally at the point where I
14 will express not the numbers but the thesis of my
15 future submissions on costs. It all goes back to the
16 issue of the way waste management is financed, waste
17 disposal is financed in Halton. Waste disposal is
18 financed in Halton by the truck that goes through the
19 gate. That being so, if you look at the numbers that
20 are before you you would find that this hearing process
21 for the Region of Halton will be recovered at the gate
22 and so legal costs which have been incurred by the
23 Region of Halton and consultants' costs for this
24 hearing will be paid something in the order of 80 per
25 cent by the urban municipalities of Oakville and



1 Burlington, seven per cent or so by the urban
2 Municipality of Milton and the balance by Halton Hills.
3 It is my submission that since this is a user-pay
4 system that this cost which this hearing represents
5 should be borne in that proportion, and I make this
6 submission now so my friends will understand where I
7 will be coming from in a few weeks time. There are two
8 ways of doing it in my submission and one is for the
9 Board to order the Region of Halton to pay everybody's
10 costs who deserves them and then that would be
11 recovered at the gate of the landfill or, in the
12 alternative, for the Board to have in hand the costs
13 which each of the parties, and here I am referring to
14 the municipal parties, which each of the municipal
15 parties has expended, the money they have expended, and
16 then the Board can see if there is in fact an imbalance
17 as between Milton and Burlington. If there is an
18 imbalance as between Milton and Burlington, then the
19 Board should rectify that and, just as an example, if
20 the costs suffered by Burlington are for instance \$2
21 million and the costs suffered by Milton are \$2
22 million, then that is inequitable and what should
23 happen is that there should be an adjustment between
24 those two municipalities for the taxpayers and the
25 Region should pay that adjustment because they recover



1 it at the gate.

2 Mr. Chairman, I can finish very shortly
3 if it's not out of order.

4 MR. LANCASTER: Go right ahead.

5 MR. LEITCH: I want to go back then to
6 the position statement. I would deal firstly with
7 paragraph 4, the:

8 "Environmental Assessment Act conditions
9 requiring an Environmental Assessment
10 process in respect of an energy from
11 waste facility and application for
12 approval ... if indicated ..."

13 I think that that condition is not a difficult one to
14 draft and I could simply leave that request with you,
15 if you are minded to accept my client's position.

16 The other condition relative to the
17 recycling and re-use efforts, and I'm just going to
18 leave that thought in that form as well because I think
19 it will want some crafting from you inasmuch as it is
20 your order. I think you understand what I think and
21 what my client thinks about it.

22 In paragraph 6 there is a matter that I
23 have to address because if you approve Site F, and
24 regardless of what you do with Site D, there is some
25 zoning and Official Plan language up in Milton that is



1 no longer appropriate, and you heard about that in the
2 evidence of Mr. Walker. I have covered that in my re-
3 draft of the by-laws which I have attached and
4 essentially if you look at the Official Plan Amendment
5 you would find with my statement, and you look at Item
6 (2), and you assume with me that you are not going to
7 put Official Plan language in force for Site D, I still
8 want Item (2) which is:

9 "Part 2, (Policy), Subsection 4.1.4 is
10 deleted in its entirety."

11 That takes the Official Plan language away from old
12 Site F, in this process Site E.

13 Looking again at the two by-laws, and
14 you will recall the reason we have two by-laws to amend
15 here is the historical happenstance that Milton
16 inherited part of Oakville's old zoning by-law, By-law
17 1965-136. So you are being requested to amend both the
18 old Oakville by-law and the present Milton by-law, 61-
19 85, and both of the by-laws as I have drafted them, and
20 indeed as my friends have drafted them, delete those
21 sections of those by-laws which approved old Site F, in
22 this process Site E, and even though these by-laws
23 don't form part of your approvals, I still want you to
24 give us a by-law which removes the zoning at the corner
25 of Tremaine and Britannia. The evidence is clear that



1 that is something that was conceded when I was cross-
2 examining Mr. Walker.

3 Now, the other changes that I have made
4 in the amendments that I have done, and I'm sure my
5 friends will deal with them in reply, but they can be
6 easily seen by comparing the language in my amendments
7 to the language in I think it's H-5, the compilation of
8 approvals sought and where they have draft Official
9 Plans and draft by-laws. When you look at it you will
10 see that the thing I have done is I have removed from
11 my draft or removed from my friend's draft those
12 portions which would permit the Region of Halton to
13 simply decide not to continue farming the farm in the
14 future and run it as open space or recreation, and I
15 would ask you if you are minded to give an approval for
16 landfill at Site D, not to let that happen. I think
17 the commitment for that agriculture after-use should be
18 a clear one and I think that it should not simply be
19 left to the Region of Halton to close up on the farm
20 when they think it appropriate to do so. It may be
21 appropriate to do so at some time, but I think that
22 that should be something which requires an Official
23 Plan change so that others can review their decision,
24 the decision, as I say, to close up the farm.

25 Now, 7, 8 and 9 are related to my last



1 remarks -- 8 is related to my last remarks about Site D
2 for Halton; if at all then only for Halton, if I can
3 put it that way. Nos. 7 and 9 are really companions.
4 In my submission the Board has the power if it wants to
5 to refer or defer the question of the state of the
6 evidence on Site D to a further hearing. It is my
7 submission that if the Board was wont to approve Site D
8 in this process, that it should do that and it is my
9 submission that if you take the entirety of what has
10 happened here as the Environmental Assessment, then
11 there is nothing inconsistent in saying that you can
12 accept the assessment as being a proper assessment
13 under the provisions of the statute and Site D as it is
14 revisited in the assessment relative to this late-
15 breaking evidence falls out as a matter of logic and
16 ought not then to attract any approval to proceed,
17 whereas Site F, as my friend Mr. Estrin has said, is
18 different. I think you should put something in your
19 reasons if you agree with me dealing with that and I
20 would then say to you that that would make it clear to
21 some party who had covetous eyes for Site D that there
22 is a little more there than might appear at first
23 blush, that there is an unsatisfactory state of the
24 evidence.

25 I ask in paragraph 10, if you choose to



1 grant approval for Site D, for an Environmental
2 Assessment Act condition to support agriculture at Site
3 D. In other words I want a condition which enshrines
4 the goodwill and the intention of the Region of Halton
5 in your approval, and I don't say forever, but I say
6 they should:

7 "... design for and implement and
8 maintain agriculture at Site 'D' until a
9 change ... is approved by the Ontario
10 Ministry of Agriculture and Food ... the
11 Ministry of the Environment ... and the
12 Corporation of the Town of Milton."

13 And if you want to approve Site D, it is my submission
14 as I have already said, there should be a re-hearing in
15 accordance with your power to re-hear and to satisfy
16 yourselves on public health and safety in relation to
17 that late-breaking evidence and change of opinion as
18 put forward by the proponent.

19 I have dealt with the Official Plan and
20 zoning amendments and as far as No. 13 is concerned it
21 only makes sense to me because as the evidence will
22 disclose that is a stretch of highway, a provincial
23 highway, and when you are going south from Milton and
24 leave the urban area at Derry Road and Highway 25, that
25 is the boundary of the urban area and you are leaving a



1 traffic light. You might have come through that
2 traffic light on a green or you might have had to wait
3 on a red, but you have got about two to three
4 kilometres before you get to the site entrance and it's
5 a good, flat, high-speed highway. When you get to the
6 site entrance, what you will be faced with is a large
7 packer truck pulling out and heading south because 80
8 per cent of them will head south and it will take a
9 long time for that vehicle to get up to speed and there
10 should be an acceleration lane for that southbound
11 traffic.

12 Subject to any questions you may have,
13 those are my submissions.

14 DR. KINGHAM: I just have a question
15 about item 8. I don't clearly understand where this
16 Board has the authority to say in effect "We didn't
17 decide on Site D now and there is a lot of data about
18 Site D, but this is a warning to the City of Toronto;
19 if you want to use that data to landfill there you had
20 better not try it" and that seemed to be the essence of
21 what you are saying.

22 MR. LEITCH: I didn't say you should say
23 that. I said that and I think what you should say with
24 respect is that the people of Halton have spent a large
25 sum of money on the investigation of Site D, that the



1 state of the evidence as you find it is unsatisfactory,
2 and the state of the evidence with respect to the waste
3 management system in the future for Halton may indeed
4 dictate that there will be future landfills and it
5 would only be just for the people of Halton to have the
6 benefit of the money they have spent in the future.

7 DR. KINGHAM: That may be saying the
8 same thing.

9 MR. LEITCH: It probably is.

10 DR. KINGHAM: But you have used a
11 different form of words at least.

12 MR. LEITCH: Thank you.

13 MR. LANCASTER: Thank you, Mr. Leitch.

14 MR. GARROD: Can I start now,
15 Mr. Chairman?

16 MR. HODGSON: Can you finish by 4:30?

17 MR. LANCASTER: If you can finish by
18 4:30, yes. Would 9:30 be satisfactory on Monday
19 morning?

20 MR. GARROD: Mr. Tidball has asked me to
21 clarify with the Board that we are not sitting on the
22 31st of October as I think a number of us have made
23 arrangements on that assumption.

24 MR. LANCASTER: That's a Monday.

25 DR. KINGHAM: Why are we not sitting on



1 the 31st?

2 MR. GARROD: I understood this was
3 previously discussed.

4 MR. TIDBALL: I raised it a week or so
5 ago in relation to something I'm not going to any more,
6 but the seminar ...

7 MR. LANCASTER: You still don't want to
8 go?

9 MR. TIDBALL: Three or four people in
10 the room I think are speaking at the seminar and I
11 raised it at the time and the discussion was we may be
12 able to finish by then, but it seems clear that we
13 won't be able to.

14 MR. LANCASTER: The Environmental
15 Assessment.

16 MR. TIDBALL: The Chairman of the Board
17 will be on a panel with Mr. Lederer and I'm sorry I'm
18 going to miss it.

19 MR. ESTRIN: I would like to cross-
20 examine.

21 DR. KINGHAM: Perhaps they should
22 postpone the conference until the hearing is over.

23 MR. LEDERER: This was raised before and
24 to the best of my recollection there was no discussion
25 we not sit on the 31st. It's true I'm involved in that



1 but as always Mr. Hodgson is here to replace me. At
2 the moment I see no reason from my point of view or
3 from our point of view why this matter couldn't
4 proceed. In fact I'm rather anxious it does because
5 when I start worrying I get an awful fear we won't be
6 finished the week of the 31st and that possibility is
7 beginning to my mind to hover into view and for the
8 moment at least I can't see why we can't sit and there
9 may be others who may have different kinds of
10 difficulty, but from our point of view I can't see why
11 we can't continue. Besides, it's Halloween.

12 MR. GARROD: I guess that puts me in the
13 position where I might have to ask the Board not to sit
14 that day because I made other arrangements and have a
15 meeting with a large group of other people scheduled
16 for all day that day on the basis that I understood we
17 would not be sitting because of other people's
18 conflicts. It's very difficult when we're here five
19 days a week for me to arrange those kind of things with
20 my other clients and I did make that arrangement but if
21 we are going to sit here I suppose I will have to make
22 other arrangements, but I would like to know that as
23 soon as possible.

24 MR. LANCASTER: May we leave that until
25 Monday?



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MR. GARROD: That would be fine.

2

MR. LANCASTER: So Monday at 9:30 is all

3

right? Thank you.

4

--- Adjournment (4:17 p.m.)

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CERTIFIED CORRECT

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C. F. Nethercut, C.V.R.

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