

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 Grandmaitre, 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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HELD AT: Oakville, Ontario

DATE: August 24, 1988



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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
August 24, 1988

VOLUME 168

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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APPEARANCES (Cont'd):

C. Stevenson
P. Hancock

for Framgard Holdings,
Fosseri Investments
Limited, Seriphos
Investments Limited and
Topic Investments

J.H. Olah

for the Halton Region
Conservation Authority

* * * * *

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Per: C.F. Nethercut, CVR



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

2 MR. LANCASTER: Good morning and thank
3 you. Please be seated.

4 MR. TIDBALL: I don't see Ms. Vigod and
5 she's up next.

6 MR. LANCASTER: She is rather important
7 at this moment.

8 MR. TZEKAS: Mr. Chairman, while we are
9 waiting for Ms. Vigod, I understand yesterday
10 Mr. McQuaid put before the Board a document on the MISA
11 program, and it was not, as I understand it, marked as
12 an exhibit?

13 MR. LANCASTER: It wasn't.

14 MR. TZEKAS: Perhaps it should be.

15 MR. LANCASTER: It wasn't established
16 by the witness and counsel for the environment said it
17 had nothing to do ...

18 DR. KINGHAM: But there are two, this
19 one and the policy.

20 MR. LANCASTER: The white paper was
21 accepted but we didn't mark it.

22 MR. TZEKAS: I was referring to the
23 government policy.

24 MR. LANCASTER: And there was an
25 objection to it and it wasn't established by the



1 witness and that is why it wasn't marked. It is of
2 interest, but it is not an exhibit.

3 MR. HODGSON: Mr. Chairman, could we
4 discuss this. That's not my recollection of what
5 happened. I am sensitive to losing these things and I
6 am almost sure that I objected but I am sure in the end
7 you decided you would accept the policy paper.

8 MR. LANCASTER: I said it could be
9 tabled. I didn't say it would be marked as an exhibit.
10 I wanted it tabled because it was a government document
11 and it may be of some interest.

12 MR. HODGSON: I waive any objection to
13 it being made as an exhibit and you have the matter and
14 it can be marked and referred to in argument.

15 MR. LANCASTER: I had the comment also
16 that it is not relevant to this matter, but if you have
17 no objections to it being marked, and no one else
18 has...

19 MR. TZEKAS: It might be easier if
20 reference is made to it in argument if it had a number.

21 MR. LANCASTER: I left mine upstairs
22 but it will be Exhibit E-930, the white paper.

23 MR. TIDBALL: The proper title would be
24 the MISA white paper.

25 ---EXHIBIT NO. E-930: MISA White Paper



1 DR. KINGHAM: Did Mr. McQuaid finish
2 last night?

3 MR. TZEKAS: He did.

4 MR. HODGSON: I think Ms. Vigod is the
5 cross-examiner and she said she would be an hour.

6 DR. KINGHAM: We can hardly proceed
7 without her.

8 MR. LANCASTER: Dr. Hughes also said he
9 had a correction he would like to make this morning in
10 answer to a question Mr. McQuaid asked him, but I guess
11 we should wait for Ms. Vigod.

12 MR. TIDBALL: We should wait for Ms.
13 Vigod.

14 MR. LANCASTER: We will adjourn for a
15 few moments to give her an opportunity because she may
16 have difficulty in travelling, but we like to welcome
17 back Ms. Cronk.

18 MR. TIDBALL: We will let you know when
19 she arrives.

20 ---Recess

21 MR. LANCASTER: Please be seated.
22 Ms. Vigod, I mentioned before you came in that Dr.
23 Hughes had a correction he would like to make to his
24 evidence of yesterday and if it is convenient at this
25 time?



1 THE WITNESS: I don't know the scope of
2 the engineering at Tricil and I thought about it and
3 said it is foolish for me to start bringing things in
4 that I am not fully aware of.

5 MR. TIDBALL: I am in the odd position
6 of probably knowing more about Tricil than any one in
7 the room because I did that hearing as well.
8 Dr. Hughes is right on point and we could file if you
9 wanted, and I don't think it is relevant, but we could
10 file any number of documents relating to that landfill,
11 but in fact Dr. Hughes is wrong in what he says about
12 it.

13 MR. LANCASTER: I had in mind the
14 future West Lincoln site.

15 MR. TIDBALL: He can comment on that.

16 MR. LANCASTER: Please no. We have our
17 own problems. That is someone else's. Ms. Vigod.

18 CROSS-EXAMINATION BY MS. VIGOD:

19 Q. Good morning, Dr. Hughes.

20 A. Good morning.

21 Q. The one time you have to be on
22 time, the train is late, so I apologize for being late.
23 I would like to ask some general questions about the
24 two policies you have been discussing and, first of
25 all, would you confirm that these are just guidelines



1 and they are not found in statutes or regulations, they
2 are not law?

3 A. I am not sure of the exact status
4 of a policy, it is a policy where the Minister has said
5 or signed a piece of paper saying this is the way the
6 Ministry will think. There is a guideline. I guess it
7 is called a policy guideline associated with it and
8 there is a one-page policy and the policy guideline
9 associated with it.

10 Q. But it is not found in regulations
11 or legislation?

12 A. Not to my knowledge.

13 Q. So we must really look to the
14 governing legislation and the common law for any
15 determination of where off-site degradation may be
16 actionable; is that fair?

17 A. I can't address that.

18 Q. You understand -- well, I guess you
19 have some familiarity with the Environmental Protection
20 Act and the Ontario Water Resources Act?

21 A. Some. I am not -- don't use me as,
22 what you do call it, an expert or a knowledgeable
23 person, because I haven't read it for ten years.

24 Q. But, for example, would you know if
25 the words "reasonable use" appear in any of those



1 pieces of legislation?

2 A. I would be surprised if it did, but
3 I don't know that it doesn't.

4 Q. Again you understand here that we
5 are in the first environmental assessment of a waste
6 disposal site and the Board has a choice between two
7 sites and, in addition, the applicant is also seeking
8 an approval under the Environmental Protection Act.
9 That is by way of background?

10 A. No, I don't.

11 Q. You don't understand that?

12 A. I am not familiar with the
13 background of this hearing at all. I can only testify
14 as to how these policies developed.

15 Q. Let's assume for the moment that
16 the Board is going to be making a decision between two
17 sites, and just leave that by way of background.
18 Again, are you familiar enough with the Environmental
19 Protection Act to know that its purpose is the
20 protection and conservation of the natural environment.
21 Are you familiar enough with that statement?

22 A. It sounds reasonable but, as I say,
23 I haven't read the Act in ten years and I don't
24 remember the wording in the Act.

25 Q. Even in your discussion of the



1 development of these policies you did not have
2 reference back to the legislation?

3 A. On the committee that developed
4 this policy we had a representative of the Legal
5 Services Branch. Anything that came up that had
6 anything to do with appropriateness or whether it
7 fitted the requirements of the Act, he just dictated it
8 into the policy and we adopted it. We didn't argue
9 with him.

10 Q. Again you are not -- are you
11 familiar at all after your many years with the Water
12 Resources Act on the powers the Minister has over
13 groundwater under that Act?

14 A. I am not totally unfamiliar, but I
15 am sure not in a position to answer questions about the
16 Water Resources Act.

17 Q. You would agree in addition to this
18 legislation, we of course have the common law framework
19 as I mentioned before and I am not asking you anything
20 specific about that?

21 A. The only reference to common law,
22 and I did make reference to common law and that again
23 was parroting the words or the position or the
24 explanation that was provided to us by our
25 representative from Legal Services on the committee.



1 Q. Dr. Hughes, if you just look at
2 page 10 of the reasonable use policy?

3 A. You mean the policy guideline, the
4 long one?

5 Q. Yes. Referring under point 1 there
6 is a recognition that the reasonable -- the question of
7 whether an effect is negligible if challenged could be
8 established by the courts and so there is some
9 recognition there that the courts would ultimately have
10 to decide if leachate escape is actionable?

11 A. That appears to be the case. Again
12 this is a paragraph that I suspect was written by our
13 Legal Services Branch representative.

14 Q. Again we don't really want to put
15 ourselves in a situation where we have to go to the
16 courts to sort these things out?

17 A. I hope not.

18 Q. You have already had some
19 discussion with Mr. McQuaid about the MISA policy and
20 other Ministry policies, and I would like to approach
21 this in perhaps a slightly different way. I am going
22 to ask you whether it would be fair to say that the
23 general philosophy and policy of the Ministry in recent
24 years is that contaminants should be controlled at
25 source and that the goal should be the virtual



1 elimination of toxic chemicals from Ontario's
2 environment?

3 A. I don't know. I don't develop
4 policy at that level and this is the policy I have been
5 involved with and it sounds like something that could
6 well have been in a Ministry policy statement or white
7 paper or whatever, but I am not familiar with it.

8 Q. You are looking at these two
9 policies outside the framework of what is developing
10 Ministry policy in a host of areas, is that what has
11 happened?

12 A. I would expect that if when these
13 policies were developed and went through our management
14 approvals process, that if they were -- if they did not
15 conform to our management's thinking at the time, the
16 management committees would have told us to change
17 them. In other words, this is approved by Ministry
18 management at some stage. Perhaps after this was
19 approved other policy statements have been made that
20 may or may not --I can't speak to that, I don't know
21 what happens beyond my little corner of the world.

22 Q. Okay. You know nothing, as I think
23 you have said, of the MISA policy?

24 A. Apart from the fact that it is a
25 policy that deals with surface water and apparently --



1 that's about it.

2 Q. You know nothing of the new capping
3 air pollution policy?

4 A. I haven't been exposed to that
5 either.

6 MR. ESTRIN: I am sorry, but Ms. Vigod
7 is starting to talk about policies and suggesting or
8 inferring that these are policies that have the same
9 status as the document Dr. Hughes is discussing. I
10 think we ought to be clear. If Ms. Vigod is asserting
11 or inferring or wishing the Board to take it that the
12 Ministry and the Minister of the Environment have a
13 policy manual as they have with the reasonable use
14 policy and the engineering guidelines policy, to put
15 these other things she is now suggesting into that same
16 category, the same status, I would like her to show the
17 Board.

18 We now have two documents in evidence
19 that this witness is talking about and they are
20 guidelines, but beyond that they have been endorsed by
21 a Ministerial statement and put into the Ministry's
22 policy guideline and the difference is the small type
23 and the one or two pages you see attached to the
24 reasonable use policy which is double spaced and the
25 same with the engineering guidelines.



1 Now, Ms. Vigod is coming along and
2 talking about things that the Ministry of the
3 Environment may be certainly talking about as emerging
4 thoughts, and certainly they have published papers
5 about them, but I would like her to tell the Board that
6 they don't have the same status as they are not in the
7 Ministry's policy manual and on that basis I would have
8 no objection.

9 MS. VIGOD: First of all this document
10 was brought to the attention of the Board yesterday,
11 the Municipal Industrial Strategy for Abatement and it
12 says "A policy and program statement of the Government
13 of Ontario on controlling municipal and industrial
14 discharges into surface waters" of June '86. If
15 anything, this is a policy of the government of
16 Ontario, and I think it should be given the accord that
17 it is due.

18 I have never heard of a distinction
19 between what appears in a policy manual and other white
20 papers and other policies of the government of Ontario.
21 With respect, this is a statement, as I said, of the
22 government of Ontario and I think whether this witness
23 has knowledge about it is one issue, but to put it to
24 the witness as a policy of the government of Ontario is
25 most appropriate in the circumstances.



1 MR. TIDBALL: Mr. Chairman, I don't
2 disagree with what Ms. Vigod is saying and I am not
3 sure where she is going because the witness doesn't
4 know anything about these policies, but the point of
5 the matter is Ms. Vigod isn't giving evidence and
6 Dr. Hughes is. She may want to correct the record
7 about the CAP program which is Regulation 308, the air
8 pollution thing because it is a white paper, and at
9 this point it is a discussion document.

10 MS. VIGOD: Actually I don't have it.

11 MR. LANCASTER: What is and what isn't
12 government policy has always been a difficult field,
13 particularly before my Board, and that is one reason
14 why I didn't want to accept this initially. This is no
15 doubt a statement of government policy.

16 MS. VIGOD: Yes.

17 MR. ESTRIN: My point was also addressed
18 to the so-called CAP policy, as Mr. Tidball has helped
19 us, and it is simply a discussion paper at this point.

20 MS. VIGOD: Let me call that if you like
21 a proposed program by the Ministry and the MISA policy
22 program.

23 Q. Dr. Hughes, what you are telling us
24 is that -- would it be fair to say that you are
25 familiar with statements made by the Minister over the



1 past few years about the need to control total loadings
2 to the environment?

3 A. Apart from what I read in the
4 newspapers, I have not been involved in that at all.

5 Q. All right. I take it, though, and
6 would I be correct, that you would be familiar with the
7 Great Lakes Water Quality Agreement?

8 A. I know that it exists, and as a
9 matter of fact I was on an advisory board about three
10 or four years ago, but I have never read the water
11 quality agreement and I don't deal with it. My work is
12 almost exclusively related to solid waste disposal and
13 landfilling, It may seem unusual that I am not aware
14 of these other policies, but if in my work I violate
15 one, the system is such that a person further up the
16 ladder will pick up the violation and correct it.

17 So, there is no need for me to know
18 about those things.

19 Q. But you have already testified that
20 you are, if you like, a groundwater specialist rather
21 than a surface water specialist?

22 A. Exactly.

23 Q. You are also aware that the Ontario
24 government has a major role in implementing the Great
25 Lakes Water Quality Agreement, and you are aware of



1 that?

2 A. I am sure that we are deeply
3 involved.

4 Q. I guess my question is have you at
5 all been made aware of the new Annex 16 dealing with
6 pollution from contaminated groundwater?

7 A. Oh, dear. I guess for the purposes
8 of this hearing the answer would have to be no and
9 nobody has sent it to me and said what do you think
10 about that. As I say, I was on a committee and I don't
11 even remember the name of the committee, but associated
12 with the Great Lakes and it started to develop a
13 program for groundwater mapping or mapping sources of
14 contamination, and that was about four years ago and I
15 believe the committee was dissolved.

16 This may be a reactivation of the same
17 thing. The other day a gentleman from the Water
18 Resources Branch phoned me up and began asking me
19 questions about how one would go about mapping or
20 something associated with this, but that is my total
21 exposure to it.

22 Q. Certainly if one of the sites is
23 bordering the Great Lakes, this document might become
24 relevant in that regard?

25 A. You mean if a landfill site was



1 bordering the Great Lakes?

2 Q. Yes.

3 A. I would prefer not to get into
4 that. The answer is not yes. The answer is perhaps,
5 and it gets relatively complicated to say whether it is
6 worthwhile identifying these sites and how much impact
7 they might have on the lake. It is not a simple
8 matter.

9 Q. Can I ask you to look at Annex 16,
10 and as you see, it is a five point annex, and I
11 don't...

12 MR. HODGSON: An annex to what?

13 MS. VIGOD: Last night when I was doing
14 the Xeroxing ...

15 MR. ESTRIN: I wonder before you hand it
16 up to the Board we could have an opportunity of seeing
17 it. Mr. Chairman, I have some concerns. First of all,
18 I am not absolutely up to date on the status of the
19 Great Lakes Water Quality Agreement, but I see
20 something here as amended October 1983 and it seems
21 like there have been further amendments.

22 MS. VIGOD: That is the latest
23 amendment.

24 MR. ESTRIN: Ms. Vigod is giving
25 evidence. The rules of the game as we have been



1 playing it for the last year is if the witness can
2 identify something, if he authored it or it has been
3 part of his activities in his firm, then obviously that
4 can be put to him in cross-examination.

5 If the witness has never seen a document
6 before or I couldn't reasonably have been expected to
7 have seen it before, then it is supposed to be given to
8 the witness in advance. This witness has already said
9 he doesn't believe he has ever seen it, and he could be
10 asked to look at it and to confirm whether or not he
11 has ever seen it, but just because she is handing it to
12 the witness for the purposes of him identifying whether
13 he has seen it doesn't make it worthy of it becoming an
14 exhibit at this time.

15 I would like the witness, and if Ms.
16 Vigod wishes to ask him whether or not he had seen it
17 before, let him look at it and let him answer that
18 question and then we can decide where we are going.

19 The other concern is that there have
20 been more recent water quality agreements since 1983
21 and I don't know whether or not this is of any
22 relevance to Ontario or whether or not -- this is a
23 protocol amending an agreement between Canada and the
24 U.S., amended on October 16, 1983 and there is no
25 signature page, and it is an excerpt from something.



1 If Ms. Vigod is purporting to go any
2 further, I would like to have the whole text and I
3 would like to have the opportunity of satisfying myself
4 that we are looking at the most recent and current
5 document and not take Ms. Vigod's word for anything in
6 that regard if the Board is going to have regard to it
7 because we would need to have a document which has
8 signatures and the whole thing.

9 MR. TIDBALL: I am not as up on this as
10 I should be, but I will accept Ms. Vigod's undertaking
11 that it is a recent amendment to the Great Lakes Water
12 Quality Agreement. I am not sure how far she can go
13 with this witness. He has already said he doesn't know
14 anything about it and I would answer the same way if
15 she asked me because I don't know much about it either.

16 We are at the point where we are simply
17 trying to assist the Board. If it would be of
18 assistance to the Board, I can call someone involved in
19 drafting the agreement and that's not a problem, and I
20 can also call someone in the area of MISA if the Board
21 thinks it is relevant and if Ms. Vigod can convince you
22 it is relevant.

23 The problem is doing it with this
24 witness. We are here to simply get the best
25 information before the Board and if there are other



1 areas of the Ministry you would like to hear from, we
2 would be certainly willing to do it.

3 MS. VIGOD: My concern was, first of
4 all, that this witness was put forward as a witness
5 dealing with various policies and groundwater issues,
6 and these are the recent November 1987 amendments and
7 this is the package I received and I could endeavour in
8 my office to find a signature page, but these are the
9 November 1987 amendments and I think it is appropriate
10 if they deal with the issue of groundwater
11 contamination and the mapping process and a provision
12 for estimating loadings, and the Ministry of the
13 Environment does have a role in implementing this
14 agreement.

15 MR. ESTRIN: How do we know that?

16 MS. VIGOD: I asked him that.

17 MR. ESTRIN: He said he doesn't know
18 anything about it.

19 MS. VIGOD: He agreed the Ministry of
20 the Environment had a role in implementing it.

21 MR. ESTRIN: Ask him what he knows about
22 it.

23 MS. VIGOD: Q. Dr. Hughes, I believe
24 you did state you were aware that the Ontario
25 government has a role in implementing the Great Lakes



1 Water Quality Agreement; is that fair?

2 A. I guess so, yes, I read the
3 newspapers, but that's as far as it goes.

4 Q. You just also said that somebody
5 phoned your office and was asking you about
6 hydrogeological mapping in conjunction with this Annex?

7 A. That is correct. They apparently
8 have to prepare -- I am not even sure it is with this
9 Annex. It had something to do with the Great Lakes but
10 I didn't pursue the matter. They phoned me and said I
11 have to prepare a paper by September 15 dealing with
12 something to do with the International Joint
13 Commission, as I recall, and I don't even recall the
14 questions he asked. I could think about them and try
15 and find out, but I only gave him some technical advice
16 such as if I was involved in this sort of thing how I
17 would go about it.

18 MR. LANCASTER: I don't think that
19 evidence will assist you.

20 MS. VIGOD: I guess I have a problem in
21 trying to bring ...

22 MR. HODGSON: Mr. Chairman, I think
23 Ms. Vigod has a problem and her problem is that she has
24 closed her case and she now discovers there is evidence
25 she would like to have before this Board and she can't



1 figure how to get it through a witness who can't give
2 her that evidence.

3 With great respect, Ms. Vigod has ample
4 power and can use the subpoena powers of this Board,
5 and she can use her powers of invitation of somebody
6 from the Ministry and she could have called this
7 evidence if she wanted the evidence. I think it is her
8 tough luck if she can't get it in and I really do think
9 it is inappropriate to criticize this witness for not
10 being able to speak on global matters. He was called
11 here for specific things and he can speak very
12 competently on those very specific things.

13 MS. VIGOD: My question dealt
14 specifically with the groundwater aspect, but the Great
15 Lakes Water Quality Agreement is legislation and I am
16 prepared to argue it as I would with any other piece of
17 legislation, but certainly the witness had spoken about
18 his involvement in groundwater contamination and I
19 think it was fair to find out to what extent or
20 knowledge he had of this document, but I am prepared to
21 argue it at the end of the day.

22 MR. LANCASTER: It seems that it is not
23 right.

24 MS. VIGOD: Q. Again, Dr. Hughes, and I
25 don't know whether -- can we agree again within the



1 context of groundwater policy generally within the
2 Ministry that the Ministry has moved away from a
3 principle that dilution is the solution to pollution in
4 favour of reducing contaminant loading to the
5 environment?

6 A. I can't comment on that. I haven't
7 heard of this. I don't know.

8 Q. All right. Now, Dr. Hughes, could
9 you turn to first of all -- I take it the goal of the
10 policy is really to control degradation of the
11 environment. Is that fair?

12 A. Sure.

13 Q. Would you agree that in order to
14 control degradation you have to have knowledge and
15 understanding of the hydrogeology of the landfill sites
16 you are dealing with?

17 A. Correct.

18 Q. In other words, we have to know how
19 the leachate is leaving the site, where it is going,
20 the expected quantities, flow paths, et cetera?

21 A. To some level, yes.

22 Q. To enable to effectively control
23 what is leaving the site, we have to know certain
24 features about the hydrogeology?

25 A. You certainly have to know



1 something about it, you are right.

2 Q. I want to explore your concept of
3 contaminant attenuation zone. If we look at page 12 I
4 guess that is where the definition section is and you
5 would agree that the degradation is to take place in
6 exceptional cases and I note exceptional is underlined
7 in the policy?

8 A. That is right.

9 Q. If we look at page 13 we see that
10 where such a zone is going to be designated, the
11 operator of the waste disposal site might obtain the
12 right to the use of the zone by agreement with the
13 property owner and it must be registered on title?

14 A. That's what it says.

15 Q. Those are both conditions precedent
16 to setting up a contaminant zone?

17 A. Yes.

18 Q. I think we have discussed, if you
19 just give me a moment, you talked about yesterday that
20 the definition of the zone must be defined, both its
21 areal extent and its depth?

22 A. Yes.

23 Q. I was just looking, but are you
24 familiar enough to give me the page of that statement?

25 A. No.



1 DR. KINGHAM: I can help perhaps, page
2 12, the second last paragraph, last sentence.

3 MS. VIGOD: Thank you.

4 Q. Again, we have the area of land
5 must be defined and depth. Now, Dr. Hughes, you did
6 mention yesterday that you did have involvement in an
7 earlier policy on advice to applicants and consultants
8 in preparing hydrogeological reports for proposed
9 landfill sites?

10 A. That is correct.

11 Q. I guess if we turn to the back we
12 see the initials GH and have I caught you out here?

13 A. Again I was -- what would you call
14 it -- the Recording Chairman on this committee and I
15 might even have been Chairman on that committee, I
16 don't know. I am Chairman of the working group now,
17 but I don't recall where in the process of developing
18 these things I became Chairman.

19 Q. But you are familiar with this
20 policy and you had involvement in that?

21 A. That is correct.

22 MR. LANCASTER: This will be WB-931.

23 ---EXHIBIT NO. WB-931: Advice to Applicants and to
24 Consultants in Preparing
25 Hydrogeologic Reports for
Proposed Landfill Sites

MS. VIGOD: Q. Before getting into



1 this, you have stated that this policy is a groundwater
2 policy and it doesn't deal with -- the reasonable use
3 policy does not deal with surface water?

4 A. The reasonable use policy does not
5 deal with surface water except -- I don't know if it
6 even mentions surface water and I think I could say it
7 doesn't deal with surface water in there.

8 Q. Let me ask if you would agree that
9 obviously there is a link between groundwater and
10 surface water and that groundwater can often discharge
11 to surface water?

12 A. Certainly.

13 Q. And again if we look -- if we turn
14 to page 3 of Exhibit WB-931, you will see a section on
15 surface water there?

16 A. Yes.

17 Q. And again there is a requirement:
18 "The quality, amount and existing and
19 potential uses of surface waters..."

20 It should be addressed in terms of impact that may
21 occur as a result of impacts on groundwater?

22 A. That is correct.

23 Q. Again, we really can't divorce the
24 two in terms of looking at potential impact?

25 A. I don't suppose you can and if I



1 understand you correctly, you are right.

2 Q. And if we just look at page 4, the
3 first part of E-154, the first part, the policy manual
4 part?

5 A. That's the policy that goes with
6 the blue book.

7 Q. Right. If we look at page 4 of
8 that, we see under the groundwater quality management,
9 under policies, and it is numbered 1, we see "As a
10 general policy, water quality degradation will be
11 controlled in order to protect reasonable uses existing
12 or proposed of both ground and surface waters?"

13 A. I don't see where you are reading,
14 but it sounds familiar.

15 Q. Page 4 under Policies. Do you see
16 that?

17 A. Yes.

18 Q. Regulated sources of contamination?

19 A. Yes.

20 Q. Second sentence starting with "As
21 general policy..."?

22 A. I see it.

23 Q. So again this policy makes that
24 link between ground and surface waters?

25 A. That's right. Yes, it makes that



1 link.

2 Q. You would agree it would be
3 important to have an understanding of the streams and
4 their locations in the vicinity of any proposed
5 landfill?

6 A. Well, in all probability, yes. In
7 practice what we in the groundwater area would do,
8 would be, and that is what the other policy statement
9 says, the advice to consultants is more or less slough
10 off the considerations of surface water onto the Water
11 Resources Branch and the people who are concerned with
12 surface water control.

13 Q. But somebody ...

14 A. Somebody will worry about it
15 certainly.

16 Q. Somebody will worry about it and it
17 is just a division in the Ministry as to who looks
18 after what?

19 A. That's right.

20 Q. Dr. Hughes, you mentioned you had
21 reviewed landfills until about five years ago, and is
22 that your evidence?

23 A. Yes, I guess about five years ago
24 or somewhere around there. I did review reports,
25 submissions on landfills.



1 Q. Do you have any knowledge of the
2 Bayview landfill and the problems that have been
3 associated with it?

4 A. I don't have enough knowledge of
5 the landfill to discuss it. I have heard of it for
6 years and I believe I even attended a meeting probably
7 six or seven years ago about the Bayview landfill,
8 although I am not certain. I can't speak to it with
9 any credibility at all.

10 Q. Let me just ask you a few
11 questions. Were you at all involved in the Ministry's
12 surveys done in late '79 and '80 that found leachate
13 discharging to Indian Creek?

14 A. No.

15 Q. You weren't?

16 A. I don't believe so.

17 Q. Can I ask you what involvement you
18 did have?

19 A. With the Bayview landfill?

20 Q. Yes.

21 A. I am familiar with the name so
22 obviously somebody raised it with me at some time, but
23 as far as any particular assessment or anything, I am
24 not sure that I ever did that. It is possible that
25 something went through our office, but it doesn't ring



1 a bell, and specifically I cannot think of an
2 involvement. I would hate to say that I had never
3 looked at a report on the Bayview landfill because I
4 don't remember.

5 You look at a lot of reports on
6 landfills and they pass across your desk in a day or
7 two days and you write a little memorandum and that's
8 the last of it. I certainly don't remember enough about
9 the Bayview landfill to discuss it at all.

10 Q. So you really can't help us there
11 as to what the problems were identified as in the late
12 seventies or eighties or steps the Ministry took in
13 that regard?

14 A. No, I don't. I vaguely recall
15 something going on about it then, but that's about the
16 limit to my knowledge.

17 Q. Can we turn back to the Exhibit,
18 WB-931, the advice to consultants. Can we look at page
19 4 and you will see there is a section on monitoring
20 program at the bottom?

21 A. That is correct.

22 Q. Would you agree that the purposes
23 of monitoring is to determine if the landfill is
24 operating as designed and whether predicted monitoring
25 results are being obtained. Is that fair?



1 A. Yes, that's what it says.

2 Q. If we turn the page to page 5,
3 again you would agree that the monitoring allows a
4 level of understanding of the hydrogeology of the site
5 to be appraised. In other words, you are comparing
6 predictions and monitoring?

7 A. That is correct.

8 Q. So basically we are saying that an
9 understanding of the hydrogeology is important in order
10 to place monitors correctly?

11 A. Certainly.

12 Q. As you are aware, and if we can
13 assume here that the decision maker or the Board has a
14 choice between sites, and Mr. Estrin put a number of
15 hypotheticals to you, but I would like to ask you first
16 of all if there is a choice between a site that is a
17 containment site by design, for example, a hydraulic
18 trap, whether that is preferable to a site which by
19 design results in off-site migration?

20 A. Well, you would have to apply --
21 you see the position of the working group was that in
22 the long-term there will be off-site migration at some
23 level from all sites. Now this is in the very long-
24 term. If the containment facilities fail or if the
25 containment facilities are not kept up, then you have



1 to go back to relying on the natural environment and
2 that is where the working group was coming from and
3 putting its emphasis, if possible, on natural processes
4 and the natural environment to contain the waste.

5 If your comparison is between a site
6 that will have an unacceptable off-site impact without
7 containment and a site that has containment that will
8 be maintained until the leachate has been reduced in
9 concentration to a level where it can be discharged
10 off-site, then obviously the latter case is the
11 preferable one. It is better to have no contamination
12 -- it is better to have acceptable levels of
13 contamination than unacceptable. I don't know if
14 whether I answered your question or not.

15 Q. I think you have answered certainly
16 a part of the question. First of all,
17 Dr. Hughes, you are familiar with the hydraulic trap
18 concept?

19 A. Yes.

20 Q. You are aware that there are sites
21 operating in Ontario with this concept in place?

22 A. No, I am not. I don't know of
23 these sites and I have no reason to believe they are
24 not, but I am not familiar with any particular site
25 that operates on that principle right off the top of my



1 head, I don't know of one.

2 Q. Were you involved back in the
3 previous period with the County of Northumberland site?

4 A. It is conceivable. I am afraid if
5 you are going -- I can't answer specific questions on
6 landfill sites I was involved with five years ago, I
7 just don't remember them.

8 Q. The Seymour site?

9 A. Seymour we had a lot to do with,
10 but I did not get involved in the actual assessment of
11 Seymour, Morris Goodwin did that.

12 Q. Are you aware that that site was
13 approved with a hydraulic trap?

14 MR. ESTRIN: I have heard that statement
15 of evidence by Ms. Vigod on previous occasions and I
16 would like her to bring some evidence instead of
17 asserting.

18 MS. VIGOD: I believe Mr. Sobanski was
19 asked a question about that and he confirmed he was
20 involved in that site.

21 MR. ESTRIN: He was involved.

22 MS. VIGOD: And Mr. Tidball informs me
23 he asked the question as well.

24 Q. Are you aware of that?

25 A. I am aware that hydraulic traps



1 were discussed at the site, but I don't remember how it
2 was resolved.

3 Q. That is fair. Now, you made a
4 statement that leachate attenuation could be a
5 reasonable use of groundwater and I would like to
6 discuss that briefly with you. First of all in making
7 that statement, are you at all making a distinction
8 between on-site attenuation and off-site migration? In
9 other words, the person's property who is applying for
10 the site may be used for those purposes as opposed to
11 off-site properties?

12 A. If I remember correctly the
13 document, although the Ministry can say to an applicant
14 that he is not allowed to use his property for
15 landfilling, in most cases in practice the actual
16 landfill site, there is attenuation going on there and
17 you can't avoid it, I suppose.

18 Q. I am not sure ...

19 A. Attenuation is attenuation and I am
20 not sure what sort of an answer you are looking for.
21 Try it again, would you please?

22 Q. Okay. I am getting at whether you
23 make a distinction between the person's property where
24 the waste disposal site was on and, if you like, the
25 use of that land, or the use of groundwater underneath



1 that site and the use of adjoining neighbours' property
2 for potential leachate plumes to travel under?

3 A. Indirectly, yes. Accepting the
4 fact that there will be leachate and contaminants moved
5 from the landfill site, our position is that it should
6 not cross the property boundary at a level that will
7 impair the use of that property. That does not mean
8 that the leachate will not continue to attenuate as it
9 moves across the neighbours' property, and in that
10 respect we would use, or there would be attenuation
11 taking place beneath the neighbours' property.

12 Q. First of all, to go back for a
13 moment to the relationship between ground and surface
14 water, you would agree it would be important to know
15 where any discharge gradients would be off-site?

16 A. It would be important to know where
17 the contaminants were discharging to the surface?

18 Q. Yes.

19 A. Yes. Now let me back off a bit.
20 If there was reason to believe these contaminants posed
21 any threat or were of any substantial concentration and
22 if there is no reason -- that is something an applicant
23 would address in his submission.

24 Q. You would agree that in order to
25 determine reasonable use my understanding is that



1 generally reasonable use is domestic use and I think
2 you said that?

3 A. In most cases the reasonable use of
4 groundwater in Ontario will be for drinking water
5 supply.

6 Q. My understanding is that you would
7 go out and look at existing uses and look at the water
8 quality?

9 A. That's right and how much water is
10 there.

11 Q. Would you agree that even where
12 groundwater may be naturally poor, it doesn't contain
13 many of the organics found in leachate?

14 A. You are probably correct.

15 Q. So in fact you would be putting
16 into the environment, if you like, an additional load
17 of additional contaminants?

18 A. There is no question that if you
19 bury wastes in the ground you put contaminants in the
20 ground.

21 Q. All right. Again when we are
22 talking about off-site migration and if we assume, for
23 example, a site that by design, 5 per cent of the
24 leachate cannot be collected and it may be going out
25 into the environment, and can you assume that for a



1 moment?

2 A. Yes.

3 Q. Again if we have a choice of a site
4 that is a containment site where there isn't off-site
5 migration ...

6 A. Because of engineered containment?

7 Q. Perhaps. We don't want to get too
8 detailed, but the fact it's a clay till site as well?

9 A. The clay till, and I don't know how
10 to put it ...

11 Q. Dr. Hughes, maybe this will help.
12 If we have a site that is a containment site with a
13 100-metre buffer and it is not anticipated there will
14 be an impact off-site, and we have another site where 5
15 per cent of the leachate is anticipated to go off-site
16 by design, and there is nothing we can do to stop it,
17 would you agree that it would be prudent to go for the
18 containment site?

19 A. No, not necessarily. I would
20 consider the site and I would consider the impact at
21 the site boundary and, in other words, will it impact
22 the surrounding lands? If you are saying that the
23 containment site will not effect the surrounding lands
24 and impair the use of the lands whereas the other site
25 will impair the use of the surrounding lands, then the



1 policy says -- I guess the first example, the
2 containment site under those circumstances, would be
3 the better site.

4 Incidentally I am assuming -- I am not
5 entirely clear what you mean by a containment site and
6 I am making the assumption that it is a site located in
7 materials with very low hydraulic conductivity, either
8 that or it is a site that contains a synthetic membrane
9 liner or something like that, but containment, not even
10 the synthetic membrane liners affects absolutely
11 containment.

12 Q. Dr. Hughes, I would like to touch
13 briefly on your engineered facility policy and, as you
14 have stated, I believe the leachate collection systems
15 are part of engineered systems, and that is found on
16 your list?

17 A. Sure.

18 Q. Mr. Estrin posed a number of
19 hypotheticals with regard to these facilities and I
20 would like to try one here. Suppose we have a site
21 that is located on quite sloping land and the evidence
22 showed that having a leachate collection system was a
23 necessity to stop mounding and leachate break-outs that
24 could get to creeks that flow into residential areas.
25 You would agree that that system would have to operate



1 for the contaminating life of the site?

2 A. If you consider maintenance and
3 replacement as part of operating, yes. What you have
4 said is if the leachate collection, and again
5 Mr. Estrin's statement if the leachate collection is
6 necessary, must it work, and yes, it must.

7 MS. VIGOD: Thank you, those are my
8 questions.

9 MR. LANCASTER: Thank you, Ms. Vigod.

10 CROSS-EXAMINATION BY MR. HODGSON:

11 Q. Dr. Hughes, I have a number of, I
12 think, fairly brief topics I would like to discuss with
13 you, and the first is with regard to the drinking water
14 objectives. You are aware and in fact have given
15 evidence that the Ministry's drinking water objectives
16 do not establish parameters for a number of substances
17 including, for example, most of the volatile organics?

18 A. That is not my particular field,
19 but I understand that that is the case. I don't know.

20 Q. The suggestion is from the
21 reasonable use policy that where those parameters do
22 not exist, one should look to other jurisdictions and
23 the question I have is if one does look to other
24 jurisdictions and finds that in several other
25 jurisdictions there is a parameter set for a particular



1 substance, but the parameters change from jurisdiction
2 to jurisdiction, is it open to the proponent in Ontario
3 to select the highest level from any other jurisdiction
4 or how does someone chose the appropriate parameter if
5 the parameters are different from jurisdiction to
6 jurisdiction?

7 A. Again this is not my field, but it
8 is my understanding that the proponent would retain
9 competent assistance, prepare a submission and say in
10 the submission, present his arguments for the value he
11 is supporting, submit this to the Ministry, the Water
12 Resources Branch which at least has -- or the Water
13 Resources Branch has people very knowledgeable in this
14 area and they would review the submission and a
15 decision would be reached as to whether we support it
16 or as to whether they supported the proponent's level
17 or not.

18 Q. Thank you. Now, could I take you
19 to the first page of the policy paper on engineered
20 facilities at landfills. I want to re-open a
21 discussion you had with Mr. Estrin and I want to say in
22 advance that I don't want -- I want you to assist this
23 Board if you can and assist us in understanding the
24 meaning of the language being used here, and I
25 recognize that we have a problem and I think it was



1 Humpty Dumpty who said words mean what I say they mean.
2 You are the witness so you get to say what the words
3 mean and that is what I want you to do here.

4 The three words, or the three phrases I
5 would like to focus on are the phrases "engineered
6 facility", the word "replacement" and the word
7 "contingency." And what I want to know, first of all,
8 just with regard to engineered facility and
9 replacement, the concept of replacement could mean,
10 let's suppose an engineered facility has a toe drain
11 and an underdrain system and the toe drain and the
12 underdrain system seal off after, let's say, 25 years,
13 and the contaminating life span of the facility exceeds
14 that by perhaps another 25 years.

15 Does replacement have to mean
16 replacement of the engineered facility as it exists or
17 can replacement mean functional replacement so that one
18 can go to a different kind of engineering and
19 accomplish the same task of intercepting any leachate
20 migrating from the landfill?

21 A. I would hope that the Ministry
22 would be sufficiently flexible to allow an equal -- a
23 new approach to controlling or replacing the toe drain.
24 I can't think -- again I am not in that particular
25 business and I have never thought of that as a



1 question. I can't envision the Ministry saying no you
2 must put a toe drain back in even though you have a
3 better system and the policy says a toe drain has to go
4 back in.

5 Q. So, replacement can mean functional
6 replacement?

7 A. I would expect so.

8 Q. That was certainly the intention of
9 your working group?

10 A. I never thought of it to be honest
11 with you.

12 Q. My colleagues who preceded me have
13 invented or adapted for this proceeding a game which
14 children play called Pin the Tail on the Donkey and you
15 will recall that that is played by tying a blindfold on
16 someone and spinning them around and putting a tail in
17 their hand and letting them see if they can get pointed
18 in the right direction.

19 You are the person who has been
20 blindfolded and instead of a donkey's tail in your hand
21 you have been given one or the other of your two
22 policies and what you have been given to pin it to or
23 really nail it to, you can nail it to either of two
24 sites my friends are particularly obsessed with, one in
25 Burlington and one in Oakville.



1 I apologize, but I am going to play that
2 game, but I will play it very, very briefly. One of
3 the sites before this Board is a site for which there
4 is proposed an underdrain and a toe drain system which
5 are to effect a hydraulic trap and the theory as stated
6 by the hydrogeologists is that for the period of time
7 this hydraulic trap can be made to work all of the
8 contaminants in the landfill can be collected and all
9 of the contaminants that leach out of the landfill can
10 be collected and taken off-site.

11 However, we have had some discussion
12 during the course of the hearing as to how long that
13 collection system can be expected to last and I think
14 there is at least some understanding that it is not
15 expected to last for the contaminating lifespan of the
16 landfill.

17 Now, a secondary measure that is
18 possible, and we have heard evidence on this, is that a
19 system of purge wells can be installed in a granular
20 unit beneath this landfill and that set of purge wells
21 can operate as a contingency in the event that the
22 primary system fails, or it could operate as a
23 secondary system when and if the primary system fails.

24 My question to you really has to do with
25 when is something a contingency and when is it part of



1 an engineered facility and I think I already know the
2 answer and I think you have given it, but I just want
3 to confirm. If the purge well system were in fact to
4 be designed, installed and tested prior to landfilling
5 commencing on the assumption that it would be used as a
6 second system of engineered collection when the primary
7 system failed, would you agree with me that that purge
8 well system would be considered part of the engineered
9 facility and not a contingency system?

10 A. It appears from what you have said
11 there is an expectation... it was installed with the
12 expectation that it would have to used. I thought of a
13 nice little analogy with respect to contingency plans.
14 I carry an umbrella but I don't carry a lightening rod
15 in my briefcase. I expect rain as a normal thing in my
16 life and so I would need an umbrella but I don't expect
17 to be struck by lightening and a contingency would be
18 being struck by lightening because you don't expect it
19 to happen, but you do expect to be caught once in a
20 while by rain, and it is a reasonable possibility.

21 Q. The umbrella is part of your
22 engineered facility and the lightening rod you don't
23 carry as your contingency plan?

24 A. That's right.

25 Q. But it would be possible would you



1 agree that during the period you expect the primary
2 engineering system to function that the purge well
3 system which is operational but not in operation could
4 be considered a contingency measure as well?

5 A. From what you have said, as I say,
6 if they expect failure it is not a contingency and if
7 you expect failure of system one and you have put in
8 system two to back it up, then system two is not a
9 contingency plan.

10 Q. It is part of the engineering
11 facility?

12 A. It would be something that you are
13 going to have to use and it won't be a surprise to you
14 that you are going to have to use system two.

15 Q. Supposing system two is a purge
16 well system and there is an anticipation that perhaps
17 you might run into difficulties with the particular
18 purge wells you have installed and they might have to
19 be replaced at some time. You don't know that that
20 will have to happen, but purge wells have been known to
21 fail, have they not?

22 A. All wells eventually fail. They
23 don't run forever.

24 Q. So the contingency measure in that
25 situation would be to replace the purge wells?



1 A. No, that would be part of the
2 design. You are relying on the purge wells and they
3 are relying on the purge wells and so the purge wells
4 would be something that you would anticipate using and
5 make provision use for their continued maintenance and
6 replacement for as long as they are necessary, whatever
7 time that happens to be. I don't know, and this is
8 what you would have to put into your submission.

9 MR. HODGSON: Those are my questions,
10 thank you.

11 DR. KINGHAM: I just have one question
12 for you, Dr. Hughes, as we get closer to the time of
13 decision where I think I have to avoid analogies,
14 whether it is being struck by lightening or pinning the
15 tail on the donkey. I don't know what the decision is
16 in that analogy or anything else, so I am going to
17 stick strictly to your words and try to understand them
18 with your assistance in the context of words that
19 others have used, and I am going to deal with the same
20 phrase as it has been presented to us four times, three
21 times through your evidence and once in a different
22 form, but frequently by many witnesses who have
23 appeared before us.

24 You said yesterday early in your
25 evidence that your concern about groundwater quality



1 had to do with cases where the groundwater is used for
2 drinking water. I noted particularly you expressed
3 concern in those cases where the groundwater is used
4 for drinking water, and these concerns had to do with
5 the application of the formula, the formula which you
6 described on page 5 of your witness statement and in
7 the case of drinking water the quality must not be
8 degraded by an amount in excess of 50 per cent of the
9 difference and so on, and you went through that
10 equation for us.

11 We have heard many times in the course
12 of this hearing the phrase or a phrase similar to the
13 phrase of the sort "and the local residents do not have
14 to depend on the groundwater for their drinking water
15 supply" and you get the essential differences?

16 THE WITNESS: There are other sources
17 of water.

18 DR. KINGHAM: Yes. We have in the
19 earlier Ministry of the Environment policy paper the
20 statement, and in dealing with off-site contaminant
21 zones, contaminant attenuation zones and I said off-
22 site and I should not have said so, but page 14 of E-
23 154 refers to contaminant attenuation zones and says:

24 "Where good supplies of water are
25 available from municipal systems and the



1 groundwater supplies in a particular
2 unit are marginal with respect to their
3 quality and/or their quantity, the
4 Ministry may support the use of that
5 groundwater as a contaminant attenuation
6 zone."

7 So, we have these uses of phrases and I am not sure if
8 there is any significance that should apply to the
9 distinction, but let's deal with, first of all, whether
10 you sense a distinction between your phrase the
11 groundwater is used for drinking water and the phrase
12 we have heard often where the residents may have to
13 depend upon or are not necessarily dependent on the
14 groundwater for their drinking water.

15 THE WITNESS: They seem compatible to
16 me. There doesn't appear to be any hidden meaning. If
17 the residents are dependent upon the groundwater, then
18 the contaminant attenuation zone would not presumably
19 be supportable and the Ministry would not support a
20 contaminant attenuation zone unless some other
21 provision, and I am postulating, but unless some other
22 provisions or some other things were done to provide
23 the residents with water, but I can't see the Ministry
24 taking away the water supplies of downgradient users in
25 order to develop a contaminant attenuation zone. Am I



1 am I answering you?

2 DR. KINGHAM: I think I understand.

3 Let's focus on the word dependence or dependent upon.
4 We have heard evidence in the course of this hearing
5 that there are water users in the vicinity of one site
6 who do have access to a municipal water supply and I
7 think presumably because that water supply passes down
8 the street in front of their homes. In a sense their
9 dependence on the water supply is a function of how
10 close it is to them. We have heard evidence as well
11 that for one site the nearest water supply is more than
12 1000 yards away, kilometres away.

13 Is dependence then in your distinction
14 between dependence, not necessarily dependent upon the
15 groundwater which is the phrase we have heard before,
16 and your phrase that the groundwater is used for
17 drinking water, is dependence a function of distance
18 and thus economics?

19 THE WITNESS: I suppose it could be. I
20 think -- I don't think I can answer your question yes
21 or no and I am sure that economics and how one might
22 get another source of water supply and whether there is
23 a pipeline and how good is the aquifer they are
24 currently using, are they dealing with marginal water
25 now. On the other hand, if an individual had an



1 excellent water supply, a dandy in a major aquifer,
2 even though there was a source, a pipeline, a domestic
3 water system around, I would not think that this would
4 fit with our -- I don't think we support a contaminant
5 attenuation zone or the policy wouldn't support one
6 under those circumstances. On the other hand, I guess
7 there are several things to consider, if the water
8 supply were poor, very poor, and there are many poor
9 aquifers or poor sources of water in Ontario, and if it
10 was the only source of water, then again we would not
11 take away that very poor water supply.

12 DR. KINGHAM: You say the only source
13 of water and can we add in parenthesis to your words
14 the words used yesterday, economically achievable?

15 THE WITNESS: Or reasonably achievable,
16 yes, I am sure.

17 DR. KINGHAM: Only is a very exclusive
18 term?

19 THE WITNESS: Yes, you could bring it
20 in by truck.

21 DR. KINGHAM: Do we understand from
22 what you said a few minutes ago that personal choice is
23 a factor in the interpretation of this policy you have
24 brought to us and that is the individual's choice to
25 use the available groundwater rather than be connected



1 to a municipal system is a matter which from a policy
2 perspective you would think ought to be considered.

3 THE WITNESS: It would be considered.
4 It is the responsibility of the applicant to obtain an
5 easement. In some way the person who is using the
6 groundwater would have to -- his rights would have to
7 be obtained by the landfill operator, or that's my
8 understanding, and in the same way you have to obtain
9 rights for a power corridor over your property. You
10 would have to obtain some concurrence, I assume some
11 concurrence from the person who is using the water, and
12 you would have to get an agreement from him that that
13 is fine, or take an agreement from him some way.

14 DR. KINGHAM: Thank you very much.

15 MR. LANCASTER: Mr. Tidball?

16 MR. TIDBALL: Two questions in re-
17 examination.

18 RE-EXAMINATION BY MR. TIDBALL:

19 Q. My first question arises out of the
20 questions Dr. Kingham just asked you. Perhaps you
21 could comment on whether the reasonable use policy
22 applies simply to present uses of water?

23 A. Future uses as well or potential
24 uses as well.

25 Q. The second thing has to do with the



1 question Mr. Hodgson asked and I want to be sure we
2 have your answer clear. Mr. Hodgson was putting a
3 scenario to you and in fact he put the scenario
4 describing the conditions at Site D to you and he
5 talked to you about whether the pre-installation of a
6 purge well system at that site would in fact be a
7 contingency or part of the design and we have your
8 answer on that. My question is does your answer depend
9 upon whether that purge well system was pre-installed
10 and does it matter?

11 A. No. Again I am speaking on behalf
12 -- I am speaking -- let me put it this way; it is my
13 understanding that there would be conditions where the
14 Ministry would allow a commitment to be made to install
15 purge wells in the event that they were needed, but as
16 a part of the expected design or install them when they
17 are needed, wait until they are needed and then install
18 them, but they would have to show that they were able
19 to install them and that the system was amenable to
20 purging.

21 MR. TIDBALL: Thank you, Dr. Hughes,
22 those are my questions.

23 MR. LANCASTER: Thank you, and thank
24 you, Dr. Hughes. I think we will take the opportunity
25 to break at this time. It is a little early, but I



1 think it would be appropriate. Fifteen minutes.

2 ---Recess

3 MR. LANCASTER: Please be seated.

4 DR. KINGHAM: Are we finished with E-
5 154?

6 MR. TIDBALL: Yes, we are.

7 MS. CRONK: While Mr. Tidball is getting
8 some papers he needs for the next witness, a number of
9 counsel have had a discussion about scheduling matters
10 and in particular Mr. Hodgson is about to leave given
11 the change in witnesses and I wondered if it would be
12 convenient to the Board if we could take a moment and
13 just talk about the timing that the Board anticipates
14 at its convenience for the commencement of legal
15 argument and where the scheduling appears to be going
16 with respect to the balance of witnesses.

17 It would be of assistance to those
18 counsel who are not here on a daily basis and who are
19 unable for various reasons to be here for the next
20 several weeks?

21 MR. LANCASTER: Well, insofar as
22 argument is concerned, I think we have more or less
23 settled, tentatively at least, commencing argument on
24 the 11th day of October, the day after Thanksgiving,
25 and that would ensure three weeks before.



1 MR. LEDERER: I don't have any
2 particular objection to the Board beginning on the 11th
3 of October, but I think it is wise to point out a
4 couple of things if that is to be the date. The Board
5 will recall that Ms. Vigod informed you about a week
6 ago of a commitment she has in Halifax and the Board I
7 think agreed not to sit on the Thursday and Friday of
8 that week. That would in effect become a two-day week.
9 Sorry, a three day -- a two-day week.

10 MR. LANCASTER: It could be three days.
11 You will be away Friday as well?

12 MS. VIGOD: Thursday and Friday.

13 MR. LEITCH: Mr. Estrin is involved in
14 that as well.

15 MR. LEDERER: I don't know if the Board
16 has been informed and until I heard the date of October
17 11, I assumed the argument would be over by the time
18 this arose, but Mr. Estrin and I are scheduled to
19 appear opposite each other in Divisional Court on the
20 24th of October for a week. This relates to the
21 environmental assessment concerning the Peel landfill
22 and that hearing is presently scheduled to begin on the
23 1st of November and to say we have had to scale great
24 heights to get this date would underestimate the
25 problems we have had. Therefore it won't be possible



1 for me to be present during that week, but I hope that
2 that will make absolutely no difference because Mr.
3 Hodgson will be available and will be able to attend,
4 but I don't know what it does for Mr. Estrin and I
5 don't know what happens if we have more delays in that
6 week, but at the moment it doesn't provide any
7 particular -- I shouldn't say it doesn't provide a
8 problem, but it doesn't present an unsurmountable
9 problem but it is out there cruising in the distance.

10 MR. LEITCH: The difficulty with that
11 particular week is that if Mr. Hodgson is arguing
12 hydrogeology during that week as I understand the
13 argument will come from my friends, that is the aspect
14 of the case Mr. Estrin will be dealing with and so he
15 wants to hear that part of the argument and
16 unfortunately the way we have split our work and Mr.
17 Hodgson and Mr. Lederer have split their work, it is
18 unfortunate that Mr. Lederer and Mr. Estrin are pairing
19 off on this other battle, and it would have been more
20 convenient had I been there.

21 MR. LEDERER: I would be happy to
22 accept Mr. Leitch in the other case.

23 MR. LEITCH: That is a problem and
24 Mr. Estrin did ask me to raise it.

25 DR. KINGHAM: The week of the 24th to



1 the 28th?

2 MR. LEDERER: Yes, sir.

3 MR. TIDBALL: I am trying to follow this
4 as well because it appears to me that Mr. Feenstra will
5 be done either next week or the week following and in
6 that week after Labour Day we are having a day for the
7 remainder of Ms. Vigod's clients and it appeared that
8 that gives us three clear weeks, the week of the 12th,
9 19th and 26th, except for Mr. Gray coming back on the
10 19th and that would leave it open to start argument on
11 the 3rd of October and we could set five days that week
12 and we would still have two days the next week and that
13 might be sufficient to finish it up.

14 MR. LANCASTER: That doesn't quite
15 correspond with my calendar. The Region is still
16 performing the week of the 12th in reply evidence.

17 MR. HODGSON: Mr. Feenstra I hope won't
18 be more than a day in chief and I have no idea what
19 kind of response there will be to his witness statement
20 and his evidence, but I would hope we could do it in no
21 more than six days.

22 MR. LANCASTER: How many witnesses are
23 you calling?

24 MR. HODGSON: Just Mr. Feenstra.

25 DR. KINGHAM: We were told 10 days for



1 the Region's reply and that's where we started from.

2 MR. HODGSON: That was an estimate made
3 long ago and it is long overdue for an update, but Mr.
4 Lederer and I only plan to call Mr. Feenstra and the
5 witness statement has been handed out. I don't see it
6 would take more than about six hearing days.

7 MR. LEDERER: I think in fairness the
8 most recent indication of the length of time was two
9 weeks which is eight hearing days and I am not sure
10 where the ten comes from at this point.

11 MR. LANCASTER: So that then should
12 complete that type of evidence by the 12th.

13 DR. KINGHAM: Now having heard
14 Dr. Hughes whether Mr. Estrin has any intention of
15 coming back.

16 MR. LEITCH: No, there is no plan to do
17 that.

18 DR. KINGHAM: So we are looking at Mr.
19 Clarke today and tomorrow?

20 MR. TIDBALL: I am very confident we
21 will be finished with him today and tomorrow.

22 DR. KINGHAM: That leaves us only with
23 the Region's reply.

24 MR. LEDERER: And those clean-up
25 matters with citizens on the 7th.



1 MR. HODGSON: Perhaps Mr. Tzekas should
2 speak to this, but you will recall that in scheduling
3 the cross-examination of Mr. Gray, Mr. McQuaid pleaded
4 a commitment in the week after Labour Day.
5 Mr. Feenstra, if he completes his evidence in chief
6 on Monday, obviously there is ample time for
7 Mr. McQuaid to do his cross-examination next week
8 rather than put us in a position where we will have to
9 put Mr. Feenstra over an extra week to accommodate
10 Mr. McQuaid's conflict the following week.

11 DR. KINGHAM: You would be anticipating
12 starting Mr. Feenstra on Monday, four days that week
13 and one day in chief and three days in cross-
14 examination if necessary, and if it took six days then
15 that would be to the end of the week of September the
16 5th because we are not sitting on the 6th and 7th which
17 is reserved for the wrap-up of the public, so that
18 leaves Thursday and Friday and that completes the six
19 days. You are then counting three weeks clear, the
20 week of the 12th, the week of the 19th and the week of
21 the 26th and then begin argument on the 3rd?

22 MR. LANCASTER: We would have to start
23 the 4th. If we started argument on the 4th, and I
24 cannot start on the 3rd, would that clear your
25 Divisional Court problem?



1 MR. LEDERER: As I say, that is not a
2 problem and I suspect it would, but the other question
3 is whether we sit the Friday of that week to get a
4 four-day week in?

5 MR. LANCASTER: Oh, yes.

6 MS. CRONK: I was going to raise the
7 question of whether throughout the weeks of argument
8 the Board would sit on Fridays?

9 MR. LANCASTER: The Board would like to
10 so we can get it completed.

11 DR. KINGHAM: We will have to think
12 about it.

13 MR. LANCASTER: There are some other
14 problems involved. Could you go over that concern
15 regarding Divisional Court, I didn't quite understand
16 what would be a problem.

17 MR. LEDERER: Now, I think perhaps I
18 shouldn't have raised it because it may be a bit
19 premature. The problem will only arise in
20 circumstances where Mr. Hodgson is dealing with
21 hydrogeology which would necessitate the attendance of
22 Mr. Estrin or where argument was delayed to the point
23 where I was making the initial submissions in the areas
24 for which I am responsible. Or, pardon me, as Mr.
25 Hodgson points out, Mr. Estrin is arguing.



1 It seems from looking at this that if we
2 were to start, as you propose on October 11, you would
3 have -- October 12, 13 and 14, the days we would start
4 -- I am looking at September, pardon me. You would
5 begin on October 11 and 12 and if you were then
6 prepared to sit for the full five days the following
7 week, the week of the 17th, I suspect that we could
8 arrange this in such a way that the problem simply
9 wouldn't occur.

10 MR. LANCASTER: That is what the Board
11 would prefer to do if possible.

12 MR. LEDERER: Perhaps I can alert you
13 to the difficulty and we'll see how things go and if we
14 stick with the date of the 11th to begin argument, that
15 gives us the greatest amount of flexibility for the
16 evidence that remains.

17 MR. LANCASTER: Is that helpful?

18 MS. CRONK: Thank you. I understand it
19 to have been confirmed that argument will begin on the
20 11th of October and the Board will not sit on the 13th
21 and 14th of that week, but otherwise it will be in
22 accordance with the scheduling you have indicated.

23 DR. KINGHAM: And we may sit the Friday
24 of the following week, the 21st.

25 MS. CRONK: Thank you.



1 MR. LANCASTER: We almost sat a
2 Saturday and there was a suggestion of Sunday.

3 MR. HODGSON: If we sit 14 hour days the
4 argument will be shorter.

5 MR. TIDBALL: Mr. Lederer has the look
6 of anticipatory exhaustion on his face. Are you done?

7 MR. LEDERER: I am done in more ways
8 than one!

9 MR. LANCASTER: Thank you.

10 MR. TIDBALL: I would like to now call
11 Mr. Roger Clarke and perhaps Mr. Clarke could be sworn
12 in.

13 ROGER B. CLARKE (Sworn):

14 MR. TIDBALL: The witness statement of
15 Mr. Clarke was previously distributed and you will also
16 need Exhibits E-109 and 110, the government review and
17 supplementary review.

18 MR. LANCASTER: The witness statement
19 will be marked as E-932.

20 ---EXHIBIT NO. E-932: Witness Statement of R.B. Clarke

21 MR. TIDBALL: Just one note. Mr.
22 Clarke has a problem with his back that may necessitate
23 him at some point sitting down and getting up. I think
24 the problem is more sitting for too long a period of
25 time or standing for too long a period of time, but he



1 promises to make a signal.

2 MR. LANCASTER: Whatever is comfortable
3 for you, Mr. Clarke, go ahead, I know the problem.

4 MR. CLARKE: Thank you.

5 EXAMINATION IN CHIEF BY MR. TIDBALL:

6 Q. Could we go to the last two pages
7 of the exhibit, entitled Appendix A. Is this your
8 curriculum vitae?

9 A. Yes, it is.

10 Q. Could we briefly go over it for the
11 purposes of letting everyone know who you are. As I
12 understand it you have both a Bachelor of Arts and a
13 Master of Arts degree in geography?

14 A. Correct.

15 Q. You have also a Bachelor of
16 Education degree?

17 A. Yes, that's right.

18 Q. Since 1973 you have been employed
19 full-time by the Ministry of the Environment?

20 A. That is correct.

21 Q. For the first ten years you were
22 employed as an environmental officer in the
23 Muskoka/Haliburton District Office?

24 A. That is correct.

25 Q. Since 1982 you have been with the



1 Environmental Assessment Branch?

2 A. Correct.

3 Q. What position do you currently hold
4 with the Environmental Assessment Branch?

5 A. My current position is Supervisor
6 of the Waste Unit, which is one of three units in the
7 Environmental Assessment Branch.

8 Q. How long have you been supervisor?

9 A. Since 1987, April of.

10 Q. What exactly is the Waste Unit and
11 what does it do?

12 A. The Waste Unit is responsible for
13 administering the Environmental Assessment Act, the
14 processes thereunder with respect to waste projects,
15 both municipal and private waste disposal projects.

16 Q. How many projects would you
17 currently be responsible for?

18 A. We have in excess of 120
19 environmental assessment projects onstream at this
20 time.

21 Q. Are there other staff that report
22 to you?

23 A. There are.

24 Q. How many?

25 A. Six.



1 Q. As I understand it you were
2 responsible for the environmental assessment -- or for
3 the environmental assessment review of the Halton EA?

4 A. That is correct.

5 Q. We will come to that in a moment,
6 but I would like to start first of all with some
7 general questions on the EA process. First of all,
8 Mr. Clarke could you start please by telling the Board
9 in general what the EA Act is about in terms of its
10 purpose and what it is meant to accomplish?

11 A. The purpose of the EA Act is
12 actually stated in the Act and I believe it is one of
13 the few Acts that does have a statement of purpose and
14 is quoted in my witness statement.

15 Q. Is it paragraph 3?

16 A. Yes, it is. The branch
17 interpretation of the purpose of the Act is to provide
18 for sound planning and informed decision-making as a
19 part -- as a planning framework in the locating of
20 facilities or the development of plans by various
21 proponents, whether it be provincial, municipal or et
22 cetera.

23 Q. This Board has before it a large
24 number of approvals for which they are responsible.
25 What kind of a statute is the Environmental Assessment



1 Act vis-a-vis perhaps the Environmental Protection Act?

2 A. The Environmental Assessment Act, I
3 guess to put it simplistically, is the planning
4 framework and we often use the phrase it is an
5 explanation of how you got where you are before you go
6 for your technical approvals, which in this case are
7 covered by the Environmental Protection Act which is a
8 detailed analysis of the technical qualities of the
9 site.

10 Q. Now, before we get into an actual
11 discussion of the components of the environmental
12 assessment itself, are there certain key features which
13 permeate the environmental assessment process as it is
14 administered by your branch?

15 A. We like to think there are five key
16 features in the environmental assessment process that
17 should be addressed in any document that is produced
18 within the process. The first one is, and it has many
19 names, but we call it consult with affected parties,
20 and this incorporates the Minister's policy called pre-
21 submission consultation. I guess the basic principles
22 behind consulting with affected parties which would
23 include the public, affected individuals,
24 municipalities in this case, members of the government
25 review team and other federal or local agencies, is to



1 ensure that concerns are identified and addressed, that
2 they promote a co-operative aspect to the planning
3 process and to improve an understanding on both sides
4 of the planning process, both by the proponent and by
5 those parties in the final formulation of what will
6 become an undertaking.

7 Q. Is pre-submission consultation
8 something that happens at one time or in isolation or
9 how does your branch like to see it occur?

10 A. Pre-submission consultation as I
11 stated has been a Ministry policy since 1982 and
12 recently revised in November of 1987. It is for the
13 most part in this particular case the planning that
14 went on between 1982 and 1985 with the dialogue between
15 the Region and other affected parties or among other
16 affected parties. If we had the famous inverted V-
17 chart before us, we could probably define what was pre-
18 submission consultation, but for the most part in that
19 inverted V-chart with which I believe the panel is
20 familiar...

21 Q. Which I believe is H0 and I told
22 Mr. Clarke we would dutifully have it brought down.

23 DR. KINGHAM: We have it engraved in
24 our minds. Did I hear you correctly when you said the
25 pre-submission consultation is the initial planning?



1 THE WITNESS: It includes the initial
2 planning incorporating all the various affected parties
3 concerns, mandates, et cetera, throughout the process
4 until the formal submission to the Minister. We
5 consider for the most part almost all the planning that
6 goes into it should be part of the pre-submission
7 feature, pre-submission consultation feature in the
8 development of a document.

9 MR. TIDBALL: Q. I think you told us
10 there were five key features and that was the first
11 one, and would you move to the second?

12 A. The second is consider reasonable
13 alternatives and this relates directly to the Act.
14 There are two sets of alternatives that are identified
15 in the Act, alternatives to the undertaking, which are
16 considered to be functionally different ways of
17 carrying out some measure, and alternative methods of
18 carrying out the undertaking, which are basically
19 different ways of doing the same thing.

20 Q. In the context of a waste disposal
21 EA such as we are dealing with here, what would an
22 alternative to be?

23 A. An alternative to the undertaking
24 could be considered such as recycling, energy from
25 waste and all its variables, landfilling and composting



1 and some of the more esoteric items that often come up
2 as well.

3 Q. What would an alternative method
4 be?

5 A. Alternative methods could include
6 different sites for those facilities identified in
7 alternatives to, such as different sites for energy
8 from waste, different sites for landfilling, different
9 sites for composting. It could also include different
10 methods or modes of operation of those sites.

11 Q. Could it include different designs?

12 A. Different designs, yes, engineering
13 versus non-engineering, et cetera.

14 Q. That is the second thing and what
15 is the third?

16 A. The third is consider all aspects
17 of the environment, and this relates to clause 1(c) of
18 the Act which defines the environment as we say broadly
19 defined rather than narrowly defined and considering
20 the economic, financial, social, cultural, natural,
21 technical.

22 Q. How does that compare, for example,
23 to the use of the word environment in the Environmental
24 Protection Act?

25 A. The Environmental Protection Act



1 has a more narrow definition of the environment and
2 primarily focuses on the technical aspects with some
3 social concerns, especially with respect to the siting
4 of waste facilities, traffic concerns and impact on the
5 immediate surrounding land use.

6 Q. That is the third feature. What is
7 the fourth?

8 A. The fourth one is systematically
9 evaluate net environmental effects. Basically what we
10 consider we are looking for is distinct points where
11 alternatives are evaluated through a net environmental
12 effects analysis.

13 Q. What do you mean by net
14 environmental effects analysis?

15 A. Net environmental effects is a term
16 which has been bandied around by many and the way
17 subsection 5(3) of the Act has been written, we feel it
18 implies a net environmental effect is an effect that is
19 basically something like a balance sheet. You have the
20 effects of the facility that are produced by its going
21 in in its raw state and there are certain mitigation
22 measures or enhancement measures you can possibly have
23 take place to mitigate or perhaps enhance it, and on a
24 landfill I don't know if there are any enhancement
25 measures, but to make those effects less and the



1 resultant or residual effect left after that balance
2 sheet approach is considered the net environmental
3 effect.

4 Q. Is the environmental effect then to
5 be read then to mean not simply a negative
6 environmental effect?

7 A. It could be positive or negative.

8 Q. That is the fourth, and finally,
9 what is the fifth feature?

10 A. The fifth one we like to consider
11 is provide clear and complete documentation and that
12 includes basically outlining the dynamic nature of the
13 planning framework, the changes that occur over a
14 number of years and the iterations that have taken
15 place, such as feedback loops to use some planning
16 jargon where some event in the temporal sense has
17 changed and you have to go back and re-analyze some
18 aspect of your planning procedure; accurately represent
19 the process, make it clear and understandable, concise
20 and relatively simplistic so that an average person who
21 may be affected by the facility and who is not a
22 trained scientist, planner or engineer would be able to
23 understand the logic of how you went through this
24 planning framework.

25 Q. We have been discussing the



1 planning framework and I understand you have an
2 overhead that sets out basically how the process works?

3 A. Yes, I do. Before I start I would
4 like to point out one correction on the overhead.
5 There is a double typo, I would say, and under
6 Generation and Evaluation of Alternatives which is the
7 fourth major title down, there is a third point at the
8 bottom which says initial screening and that shouldn't
9 be there, it's in the section above it where it says
10 initial screening, so it should be deleted.

11 MR. TIDBALL: We have hard copies of
12 this and perhaps that could be the next exhibit.

13 MR. LANCASTER: E-933.

14 ---EXHIBIT NO. E-933: The Planning Framework

15 MR. LANCASTER: The deletion would be
16 under the fourth arrow down.

17 MR. LEDERER: Could we have the
18 correction again?

19 DR. KINGHAM: Perhaps you could make it
20 on the overhead.

21 THE WITNESS: I will just scratch it
22 off on the overhead.

23 MR. TIDBALL: Q. Could you explain
24 what this exhibit is in terms of the environmental
25 assessment process?



1 A. This is I guess a model of a
2 planning framework that we promote as the framework
3 that a proponent should follow in addressing the
4 problem or opportunity of whatever the proponent is
5 faced with.

6 Q. If I can stop you right there, is
7 it necessary, and I gather from the wording that it's
8 not necessary, but it is not necessarily a problem and
9 in fact there could be something positive?

10 A. It could be an opportunity such as
11 with the private sector which is now coming under the
12 auspices of the Environmental Assessment Act, the
13 private sector is usually faced with opportunities,
14 opportunities often of serving the community or a
15 financial gain.

16 Q. All right. You start with the
17 purpose of the study at the top?

18 A. The purpose of the study basically
19 is the problem or opportunity identification, or what
20 is the problem to be solved or the opportunity to be
21 gained. You will notice down the side as I said
22 previously we have an iterative process where there is
23 input from affected parties all the way through the
24 planning framework and that is part of the ongoing pre-
25 submission consultation process, and those affected



1 parties again could be the public and in the early
2 stages there will be government reviewers, probably the
3 entire review team until the undertaking may be
4 identified later in the planning process.

5 Q. So start right at the beginning,
6 Mr. Clarke, you start with the purpose and do you start
7 with an undertaking?

8 A. It is intent of the Environmental
9 Assessment Act that you start with your problem
10 identification and you look at the various ways and
11 means, i.e., alternatives that you can use to resolve
12 that problem or opportunity.

13 Q. Could you continue?

14 A. The second arrow ...

15 DR. KINGHAM: We had better get these
16 steps clear. In the case of this hearing the problem
17 is...

18 THE WITNESS: ...waste disposal or
19 waste management for the Region.

20 DR. KINGHAM: Is that the way you
21 formulate the problem, waste management.

22 THE WITNESS: Waste management for the
23 Region for a specific number of years.

24 DR. KINGHAM: That is your perception
25 of the problem that exists in Halton, waste management?



1 THE WITNESS: Waste management, yes,
2 and I believe that is how the Region set out the
3 purpose of their undertaking in their environmental
4 assessment as well.

5 DR. KINGHAM: Do you challenge that
6 description of the topic?

7 THE WITNESS: We felt it was
8 appropriate how they described it.

9 MR. TIDBALL: Q. You have some
10 experience with other waste management or waste
11 disposal EA's, Mr. Clarke, and is what the Region did
12 here typical or atypical?

13 A. It is typical. The second major
14 arrow below the purpose of the study is to design a
15 planning process and that is basically, I believe, what
16 Mr. Walker went through in the preparation of the
17 various work plans to come up with a planning process
18 that would address the problem. You are selecting
19 various evaluation methods as appropriate and
20 implementing a public involvement program and probably
21 at this stage also implementing a program to liaise
22 with various government agencies that may have concern
23 with the project as it evolves.

24 The third major arrow is called
25 development of criteria and assumptions for, and this



1 starts to get down to the base line data collection in
2 a waste management problem and that is determining your
3 study area, the Region by virtue of it being a regional
4 authority, determined by their own legislative mandate
5 that the Region of Halton would be the study area, and
6 then the studies go into initial sets of alternatives
7 that may be considered and this is considered the
8 initial screening, and often at this point you are
9 considering a wide range of alternatives that could
10 range from the credible to the incredible, and then you
11 screen out those that are reasonably -- that you have
12 an ability to implement.

13 DR. KINGHAM: You said at this stage
14 "determining your" but who is the "your" in this case?

15 THE WITNESS: I guess with the input of
16 the various affected parties you are looking for some
17 feedback on your alternatives. As the proponent you
18 are putting forward some alternatives and it has often
19 been our experience and I am sure the Region's, that
20 many other individuals come forward with other
21 alternatives you would have to consider in your initial
22 screening process.

23 DR. KINGHAM: To be perfectly clear,
24 when you use the term "your" you mean the region in
25 this case proposes a set of alternatives and you accept



1 feedback from other potentially affected parties as to
2 whether that is the complete range of alternatives?

3 THE WITNESS: That is correct.

4 DR. KINGHAM: Do you and your staff
5 offer any information on alternatives?

6 THE WITNESS: We, through the Ministry
7 and the Waste Management Branch, as well as other
8 branches can provide scientific and other data to
9 various proponents on the state of the art with respect
10 to various alternatives and the success of implementing
11 those alternatives in a North American situation.

12 DR. KINGHAM: That is understood, but
13 do you and your staff at that point say what about A,
14 B, C and D or do you leave it to the parties and the
15 proponent to sort that out?

16 THE WITNESS: Very often we may
17 question the non-inclusion of certain alternatives that
18 may be perceived as viable.

19 MR. TIDBALL: Q. Whose decision is it
20 at this point and who has the responsibility to
21 determine whether they are a reasonable or a non-
22 reasonable alternative?

23 A. The decision is basically the
24 proponent's. We advise they should consider all
25 parties that have made inputs into this stage and



1 consider their concerns and address those concerns.

2 Q. Thank you, could you continue?

3 A. The fourth arrow is generation and
4 evaluation of alternatives. This is after your initial
5 screening and you are down to what is often termed a
6 reasonable set of alternatives, alternatives that you
7 have the ability and the capability and responsibility
8 to implement.

9 Q. Are these alternatives to or
10 alternative methods?

11 A. These could be both at this stage
12 and so I guess it is a wide framework of alternatives
13 and it could include alternatives to and well as
14 alternative methods.

15 Q. All right.

16 A. Basically a basic planning
17 framework is data collection on the environment
18 affected, the environmental effects of each one of the
19 alternatives that are being considered, various
20 mitigation enhancement measures and an evaluation of
21 the advantages and disadvantages of each of the
22 alternatives.

23 Q. All right. I see the phrase "a
24 phased evaluation of reasonable alternatives" and how
25 does that relate to the process Mr. Walker went through



1 and the Board has heard a great deal of evidence on
2 Phase 2A, 2B and 2C?

3 A. We would interpret Mr. Walker's
4 approach, the famous inverted V as being a phased
5 approach to evaluating the various sets of alternatives
6 that were available.

7 Q. All right. Continue please.

8 A. Okay. The next ...

9 DR. KINGHAM: I hate to interrupt, but
10 I want to make this clear as we go along. Mr. Walker's
11 inverted V is your interpretation you said of an
12 example of the phased approach of the alternative
13 methods?

14 THE WITNESS: His is basically a phased
15 approach to considering all the alternatives because he
16 went through the various sets that were available to
17 him.

18 DR. KINGHAM: Mr. Tidball drew your
19 attention to Phase 2A, 2B and 2C and you responded that
20 that was the phased approach, and I just want to know
21 -- when you talk about the total inverted triangle you
22 are talking about alternatives to the undertaking as
23 well as alternative methods and when you are responding
24 to Mr. Tidball's question about stages 2A, 2B and 2C
25 you are referring to ...



1 MR. TIDBALL: I don't want to mislead
2 Mr. Clarke. There is in fact a stage before that which
3 is the waste needs and systems analysis. Let's start
4 with that.

5 Q. What is that, Mr. Clarke?

6 A. I guess what it comes down to as
7 far as we are concerned is that the total approach of
8 the study fit the phased approach considering
9 alternatives to the waste needs, and I forget the
10 proper wording of the inverted V, and then the Phase 2
11 stages as well which considered the next set of
12 alternatives and we were in total agreement with that
13 type of approach.

14 Q. Is that a fairly typical type of
15 approach for a landfill?

16 A. It is pretty standard.

17 Q. Could you continue, please?

18 A. Detailed description of the
19 undertaking which is the fifth arrow down.

20 Q. I take it at some point some
21 alternative has jumped out as the undertaking?

22 A. Yes. Perhaps it would be best at
23 this point to refer to the other overhead.

24 Q. I understand you have another
25 overhead?



1 A. Yes. It interacts with this.

2 MR. LANCASTER: This will be E-934.

3 ---EXHIBIT NO. E-934: Level of detail of examination
4 of alternatives in a particular
5 study

6 MR. TIDBALL: Q. Mr. Clarke, could you
7 explain what E-934 is and how it relates to the other
8 overhead you had up there?

9 A. It is a representation of a level
10 of detail examination as the title states, and it shows
11 and relates back to the generation and evaluation of
12 alternatives section which is the section before the
13 one that we were just talking about, and also back to
14 development of criteria.

15 So, it outlines an alternatives analysis
16 of identifying and initial screening of a set of
17 alternatives which could be anything available in the
18 waste management situation, coming down to a set of
19 alternatives, which is the next set of block diagrams
20 which would be B, D and E.

21 Q. At that point would those be
22 alternatives too?

23 A. They could be both at this point in
24 time.

25 Q. For the purposes of trying to
explain this with an example, could we assume that the



1 blocks marked B, D and E are alternative to, and then
2 we could explain how we go from there to the next?

3 A. To give, I guess, a more realistic
4 example, you could say one is landfilling and one is
5 energy from waste and its derivatives and one is
6 recycling. So, B, D and E are those alternatives that
7 came out of your initial screening, the list A to F,
8 and from B, D and E the proponent through his planning
9 process and input from the various parties has decided
10 that B is the most appropriate alternative with its
11 various derivatives under it such as siting, design and
12 operation, method of operation which is to be
13 considered, and then finally the uninitialled block
14 diagram at the end of the overhead is the preferred
15 undertaking.

16 Q. What do the various boxes mean? I
17 note some are striped and some are checked and some are
18 solid.

19 A. This is a graphical presentation of
20 an interpretation of Clause 1(c) of the Act to give
21 proponents, the public, et cetera an understanding of
22 the types of things that are expected to be considered
23 under the broad definition of the Environmental
24 Assessment Act.

25 You will notice that the histograms, the



1 block diagrams have various links which means that the
2 level of the detail may be different for each one of
3 these components at the various stages in the
4 development of a consideration of the alternatives and
5 the final evaluation of the undertaking.

6 DR. KINGHAM: It looks as though if we
7 turn your page sideways we would get a triangle?

8 THE WITNESS: Pretty close. It is
9 totally unintentional I am sure.

10 DR. KINGHAM: How long has this diagram
11 been in existence?

12 THE WITNESS: In various forms it has
13 been around for three or four years.

14 DR. KINGHAM: So it was available to
15 the Region?

16 THE WITNESS: This is the newest form
17 of it, but it has ...

18 MR. TIDBALL: Q. How new is this form?

19 A. Pardon?

20 Q. How new is this form?

21 A. This form itself I would say is
22 only two months old.

23 Q. So we have an increasing level of
24 detail as you pair down the alternatives and is that
25 your understanding of what Mr. Walker did in the Halton



1 study?

2 A. That is correct.

3 Q. Do you need to go back to the other
4 overhead?

5 A. Yes, I think we need to. I was at
6 the detailed description of the undertaking which was
7 the last block in Exhibit 934 and basically it gets
8 down to the fine tuning of what information is required
9 under the undertaking and meeting the requirements of
10 section 5(3) of the Act, which is defined in that list
11 below that title.

12 So, we go on to implementation which is
13 the next step and that is approval and implementation
14 of the project or construction and operation, and of
15 course the monitoring which could be dictated by
16 legislation or decisions of the Board with respect to a
17 monitoring feedback system to ensure that the
18 requirements are met.

19 Q. One final question on E-933. What
20 do we take from the arrows that go up and down the
21 length of this document?

22 A. I think any planning framework is
23 considered to be iterative in that if there are changes
24 in technology or changes in information that become
25 available to the proponent, that a reconsideration of



1 previous stages to some degree is necessary to ensure
2 that the planning model reflects the most recent
3 information.

4 Q. All right. Mr. Clarke, what is it
5 in the Environmental Assessment Act ...

6 DR. KINGHAM: If I can clarify that;
7 those feedback loops are not fully nested back to the
8 beginning for the purposes of the study but they are
9 sort of discrete to the next previous level. If you
10 come down to monitoring and you find something is
11 different in monitoring, you are not going back to the
12 purpose of the study?

13 THE WITNESS: That is correct.

14 DR. KINGHAM: You are only going back
15 to the previous stage to see if you can do something
16 about implementation?

17 THE WITNESS: Yes.

18 MR. TIDBALL: Q. Mr. Clarke, what is it
19 in the Environmental Assessment Act that prescribes the
20 contents of an environmental assessment?

21 A. The prescribed content is outlined
22 in section 5(3) of the Act.

23 Q. I don't think we need to go through
24 it piece by piece, but can you show us where that is in
25 your witness statement?



1 A. That's the bottom section of page 2
2 of the witness statement and it concludes at the top of
3 page 3.

4 Q. We will get to that as we go
5 through the whole Halton process. Before we start and
6 before we get to the actual Halton environmental
7 assessment, could you explain exactly what it is the
8 government review is meant to be doing?

9 A. The government review is outlined
10 on page 4 of the witness statement. The government
11 review as everyone is familiar is the blue covered
12 document that is prepared when an environmental
13 assessment is submitted to the Minister and the
14 Minister is obligated by statute to have a review of
15 the environmental assessment prepared.

16 The mechanics of how the government
17 review work are basically the review co-ordinator, in
18 this case myself, receives the environmental assessment
19 and it is circulated to a list of government review
20 agencies which may include federal, provincial,
21 conservation authorities ...

22 Q. With respect to Halton, could you
23 show us where that list is?

24 A. It is on page 67 of the government
25 review.



1 Q. E-109?

2 A. And it continues through to page
3 69.

4 Q. I notice on that list that it
5 doesn't seem to be restricted to Ontario government
6 agencies necessarily?

7 A. That is correct.

8 Q. Who else gets distributed with
9 environmental assessments other than government
10 agencies?

11 A. There are Ontario government
12 agencies as well as federal government agencies and
13 usually the local conservation authority and with
14 respect to waste and water and sewage, the Medical
15 Officer of Health because of his jurisdiction over
16 community health.

17 Q. When you receive an environmental
18 assessment that has been submitted to the Minister
19 pursuant to the Act, I assume you as the review co-
20 ordinator then do something with it?

21 A. Correct. We mail along with the
22 letter that is just prior to this listing of
23 individuals, the memo and attachment ...

24 Q. Page 64?

25 A. Pages 64 through to 66. That is



1 circulated to all the agencies on that distribution
2 list with a request for comments by a certain date.

3 Q. What exactly is your role as the
4 co-ordinator of this kind of a process?

5 A. At this point I guess I am the
6 administrator of ensuring that every government agency
7 has received a copy and that we receive comments back
8 from that government agency. Perhaps this is the
9 appropriate time to get into what has been bandied
10 about for the last few years and called the green
11 hat/blue hat separation in the Ministry of the
12 Environment.

13 Q. Please do.

14 A. The green hat is a term that could
15 also be synonymous with a terminology called the
16 technical reviewers. These are the people who review
17 the technical aspects of the submission and later the
18 Environmental Protection Act submission. They are part
19 of the Ministry of the Environment and it represents a
20 team that incorporates many branches and sections
21 within the Ministry.

22 The blue hat is the function that the
23 Environmental Assessment Branch carries out, and that
24 function is to ensure that the reviews, or the review
25 material and comments from all the agencies in the



1 government are submitted to the Environmental
2 Assessment Branch and incorporated into the review. It
3 is more of a government-wide approach rather than a
4 traditional Ministry of the Environment technical
5 approach.

6 Q. Do you as what you have called the
7 blue hat person, do you participate in the green hat
8 review?

9 A. Other than as advisor on the
10 process, we do not usually contribute to the technical
11 aspects of the review.

12 Q. In that respect it is as though
13 they are different Ministries?

14 A. That is correct.

15 Q. One final set of questions before
16 we get to the Halton EA itself, and it is the Halton
17 EA. Could you describe briefly what your role was
18 throughout the process Mr. Walker has described in
19 great detail starting in, I believe, 1983?

20 A. This is outlined at the bottom of
21 page 4 of the witness statement. Basically I became
22 the review co-ordinator for this project in late June
23 of 1985, which was basically after most of the planning
24 documentation had been provided by the Region and you
25 might say I came in kind of cold on the project.



1 Q. Somebody else in the branch had
2 done it before you?

3 A. Yes, who had previously left the
4 Ministry.

5 Q. What was your function having taken
6 over in June of 1985?

7 A. At that point in time I was
8 inheriting the project and I reviewed the formal
9 submission before the Minister and wrote the government
10 review.

11 Q. When you say the formal submission,
12 what exactly are we talking about? I am sure you don't
13 know the exhibit numbers, Mr. Clarke, but which package
14 of documents?

15 A. The formal submission is the
16 environmental assessment overview document plus I
17 believe it has 47 schedules that were submitted to the
18 Minister for review under the Environmental Assessment
19 Act in, I believe, December 1985.

20 Q. In essence that's the stack of
21 orange documents?

22 A. Yes.

23 DR. KINGHAM: Just so we are clear on
24 that, that means by that the time you took over the
25 reins, Phase 1 had been completed?



1 THE WITNESS: All the phases had been
2 basically completed at that time.

3 MR. TIDBALL: Q. In terms of Stage 2A,
4 2B and 2C, where do you come in?

5 A. I attended two public meetings at
6 the very end of Stage 2C.

7 Q. What do you mean by at the very
8 end?

9 A. The documentation I believe had
10 been finalized at that time and it was a presentation
11 to the public at large of the findings of the report.

12 Q. Now, I know you weren't involved
13 before June of 1985. Do you have any knowledge as to
14 what went on between the Ministry or between your
15 branch and the proponent and were there comments made
16 back and forth, for example?

17 A. There were significant comments
18 made back and forth and these are all documented in the
19 environmental assessment in various schedules and in
20 the environmental assessment.

21 Q. Finally, Mr. Clarke, subsequent to
22 the submission of the environmental assessment document
23 and the review, the Region then undertook technical
24 studies on both Sites D and F and submitted those. Did
25 you have any role in the review of those documents?



1 A. I did not.

2 Q. Why did you not?

3 A. It was not part of the
4 environmental assessment submitted to the Minister and
5 was not included in the government review either.

6 Q. What do you view it as being
7 related to?

8 A. I would view it as being related to
9 the Environmental Protection Act level of detail
10 analysis that would be needed for a Certificate of
11 Approval.

12 Q. Finally, subsequent to the
13 technical studies the Region also prepared what is
14 before the Board as H-14, a final comparison of Sites D
15 and F based on the technical studies and did you review
16 that document?

17 A. I have glanced at it lightly, but I
18 have not read it fully and it was not part of the
19 environmental assessment submission and I believe it
20 was submitted almost a year after the environmental
21 assessment was submitted.

22 Q. Do the technical studies in that
23 final comparison have anything to do with the
24 government review you prepared?

25 A. I understand that some of the



1 technical comments that were outstanding and addressed
2 or indicated in the original government review were
3 later addressed by sections of those technical
4 comments.

5 Q. Mr. Clarke, could we turn our
6 attention to E-109. This is a review under the
7 Environmental Assessment Act and is this the document
8 you prepared?

9 A. It is.

10 Q. Briefly how is this document set up
11 in terms of lay-out?

12 A. The format of the document is
13 basically there is a preamble of information in parts 1
14 and 2 to provide the public and other readers with
15 information on what this review is, who contributed to
16 the review, where it may be accessed and public record
17 locations should any individual wish to see the entire
18 file and environmental assessment and some basic
19 information on requirements of the environmental
20 assessment.

21 Part 3 which starts on page 13 of the
22 government review is the comments of the Environmental
23 Assessment Branch with respect to the environmental
24 assessment submission, and part 4, which starts on page
25 40 of the government review is the technical reviewers'



1 comments based on -- it is basically a summary and
2 highlights of their comments from the letters and
3 comments they have made which are included in total in
4 the appendix, and I believe it is Appendix 1, and then
5 part 5 of the government review is the conclusions on
6 the environmental assessment and the undertaking.

7 Q. All right. Now, if you could -- I
8 notice after that there is a significant amount of
9 material starting in and around page 70. Are those the
10 actual comments you received?

11 A. Yes, they are.

12 Q. They are all here verbatim for
13 anyone who wants to read them?

14 A. That is correct. Also included is
15 a summary, the proponent's summary of the environmental
16 assessment so that anyone having just the review
17 document would be able to gain a basic understanding of
18 what is proposed by the proponent.

19 DR. KINGHAM: Would we then in that
20 area, and now you are talking about Appendix A, but is
21 that where we would look for your information under the
22 heading of paragraph 13 of your witness statement, the
23 Ministry provided comments to Halton throughout Phase 1
24 and 2 of the process. Would we find comments about
25 Phase 1 in that appendix?



1 THE WITNESS: You would find those
2 comments in the schedules that were attached to the
3 environmental assessment. These are the comments based
4 on the submission of the total document in November
5 1985.

6 DR. KINGHAM: We would find comments to
7 Phase 1 in the schedules ...

8 THE WITNESS: The 47 schedules.

9 MR. TIDBALL: Let's be clear.

10 Q. As I understood the 47 or however
11 many there were schedules, they included the final
12 report in 2A, the final report in 2B, et cetera?

13 A. Yes, and with each one of those
14 reports there is usually a submission section or
15 submissions document that documented all submissions
16 the proponent received.

17 Q. Having received the environmental
18 assessment document in June of 1985 then, you inherited
19 then I guess a series of comments that had been made by
20 various government reviewers at various points in the
21 past?

22 A. Yes.

23 Q. Did you or any of the government
24 reviewers make further comments on those stages at that
25 point in time or at the point of time of the government



1 review?

2 A. Not individual but only on the
3 environmental assessment as a total document.

4 MR. TIDBALL: Does that address the
5 concern, Dr. Kingham?

6 DR. KINGHAM: I am wondering where we
7 would specifically look to find the Ministry's comments
8 to Halton on Phase 1.

9 MR. TIDBALL: I think you would have to
10 go back into one of the submissions documents that had
11 been bandied about, ostensibly H-70 or 71 or 72 or in
12 that area.

13 DR. KINGHAM: We would have to sift
14 through it?

15 MR. LEDERER: You will find them in
16 various of the submission documents and just, for
17 example, on January 24, 1983 the Environmental
18 Assessment Branch made comments with respect to the
19 Stage 1 evaluation criteria and you will find those in
20 H-9. Now, to the extent the comments are in writing I
21 suspect you will find them at the appropriate place,
22 but you will have to know what you are looking for.

23 DR. KINGHAM: It looks like you have
24 the road map.

25 MR. LEDERER: I have and for a small



1 price I would be prepared to relinquish it. I have
2 only begun to review this myself but I will check it
3 over and if it is of assistance I can provide copies.

4 MR. TIDBALL: I assumed that some of
5 that would be in H-0 and in some of the comments and it
6 might not be as specific ...

7 DR. KINGHAM: It is in H-0 but it is
8 just that H-0 is not specific as to where you would
9 find specific comments. Thanks.

10 MR. TIDBALL: Q. Mr. Clarke, could we
11 perhaps start -- let's start with the mechanics of
12 this. You received this information, the environmental
13 assessment submission in June of 1985?

14 A. Yes.

15 Q. When was E-109 released?

16 A. The notice of completion I believe
17 is February 28, 1986.

18 Q. When you say notice of completion
19 what do you mean?

20 A. That means the notice of completion
21 of the review. In other words, the review had been
22 prepared and notices had gone in the paper indicating
23 that the review was available for public review as well
24 as review by all agencies and it was circulated to all
25 government agencies, the proponent, the 22 landowners



1 on the various sites and any other individuals who had
2 made submissions to the Minister with respect to the
3 undertaking.

4 Q. I may have misstated something and
5 I said it was submitted in June of 1985. When was the
6 environmental assessment submission formally made?

7 A. I believe it was either late
8 October or early November. It was submitted on page 14
9 -- at the bottom of page 14 of the review, it was
10 submitted on October 28, 1985.

11 Q. The government review came out
12 about three months later?

13 A. Yes. There was a request by the
14 Region that a 90-day review period be committed to the
15 review of this document and that request was met.

16 Q. Mr. Walker has commented on this
17 and I may ask you something later, but at this point in
18 time is 90 days fairly typical for a review?

19 A. It is atypical I would say and it
20 was a rather short timeframe given the circumstances of
21 the year, Christmas, et cetera, and my relatively new
22 status as the review co-ordinator.

23 Q. Now, I wanted to go straight to
24 your conclusions and then work backward from there to
25 understand how you reach those conclusions. Could we



1 go to page 61 of E-109. Mr. Clarke, how do you or
2 other members of the Environmental Assessment Branch
3 charged with being review co-ordinators evaluate an
4 environmental assessment?

5 A. As also outlined on page 11 of the
6 witness statement, there are what we call two tests and
7 it is basically a representation of what's at the top
8 of page 61, and the two tests are thus; are the
9 components of the environmental assessment present in
10 the documentation that has been submitted to the
11 Minister...

12 Q. Can I stop you right there. What
13 do you mean are the components present and where do we
14 find the components?

15 A. The components are defined by
16 subsection 5(3) of the Act which we had gone through
17 with respect to alternatives and also by Clause 1(c)
18 which outlines the scope and definition of environment.

19 Q. All right. What is the second
20 test?

21 A. The second test as it is known in
22 jargon is the technical quality and level of detail of
23 these components satisfactory and is there an
24 appropriate range of alternatives.

25 Q. I should have asked you something



1 with respect to the first test. Who makes the
2 evaluation on the first test?

3 A. The Environmental Assessment Branch
4 primarily makes an evaluation on the first test with
5 some input from the technical reviewers.

6 Q. In this case that was your job?

7 A. That is correct.

8 Q. Who is it who makes or provides the
9 evaluation on the second test?

10 A. The second test is made, or the
11 conclusions on the second test are made by the
12 technical reviewers who have submitted comments on the
13 environmental assessment and that would include the
14 Ministry of the Environment technical team, the
15 Ministry of Natural Resources or any other agency on
16 the distribution list.

17 Q. Looking at the distribution list
18 there are a great number of government reviewers who
19 are asked for their opinion and presumably they could
20 have varying opinions. How does this happen and do you
21 get all of them together in a room and they decide, or
22 how does it work?

23 A. In this situation each one
24 addresses their mandate and concerns individually and
25 submits their comments to the Environmental Assessment



1 Branch of which a copy goes to the proponent.

2 Q. In the case of Halton what was the
3 conclusion on the first test, whether the components of
4 the EA were present?

5 A. The conclusion was in the
6 affirmative, that the components of the environmental
7 assessment had been met.

8 Q. I will come back in a minute and
9 you can tell us how it is you came to that conclusion,
10 but, first of all what was the conclusion on the second
11 test?

12 A. On the initial review the
13 conclusion on the second test was there were
14 outstanding concerns, technical concerns by nine
15 agencies, from CN Rail to the Ministry of the
16 Environment.

17 Q. What was the overall conclusion?

18 A. The overall conclusion based on a
19 failure to meet the requirements of the second test was
20 that the environmental assessment did not meet the
21 requirements of the Act.

22 Q. We will come back in a little while
23 to what happened after that, but can we go back to the
24 first test and that is, as I understand it, your job
25 because you evaluate the EA in terms of the components



1 present therein. If we look at -- if we can look back
2 at paragraph 6 of your witness statement, or anyone who
3 has the Act out can look at section 5(3) of the Act,
4 but the first component I see listed is:

5 "(a) a description of the purpose of the
6 undertaking..."

7 and I think you have already gone over this with
8 Dr. Kingham but perhaps you could repeat it to make
9 sure it is clear?

10 A. Well, basically what a reviewer, in
11 this case myself does, is he goes through and reads and
12 reviews the entire document and makes sure that each
13 component of 5(3) is present as well as it is addressed
14 in light of the definition of the environment, and
15 considering all aspects of the environment as defined
16 by the Act.

17 We ensure that based on both policy and
18 practice that the proponent has adequately addressed
19 each section and there is a description of the purpose
20 of the undertaking which we had previously discussed, a
21 description of and statement of the rationale for the
22 undertaking and the alternatives and further on down
23 the list if you want me to go through them...

24 Q. That's what I thought. If we could
25 start with (a) and I think we have covered it but I



1 understood your evidence to be that you concluded that
2 there was an adequate description of the purpose of the
3 undertaking?

4 A. That is correct.

5 Q. The second one is:

6 "(b) a description of and a statement of
7 the rationale for, ...(i) the
8 undertaking, (ii) the alternative
9 methods of carrying out the undertaking,
10 and (iii) the alternatives to the
11 undertaking;"

12 What is the rationale?

13 A. The rationale represents the
14 proponent's summary explanation of the decisions made
15 throughout the process in selecting from various
16 alternatives that have been put forward in the planning
17 process.

18 Q. All right. What was your
19 conclusion on whether there was a description of or a
20 statement of rationale for the alternatives, the
21 undertaking and the alternatives?

22 A. The statement of the rationale was
23 included in the environmental assessment and it was a
24 satisfactory statement.

25 Q. Clause (c) states that it shall



1 consist of:
2 "a description of, (i) the environment
3 that will be affected or that might
4 reasonably be expected to be affected,
5 directly or indirectly, (ii) the effects
6 that will be caused or that might
7 reasonably be expected to be caused to
8 the environment, and (iii) the actions
9 necessary or that may reasonably be
10 expected to be necessary to prevent,
11 change, mitigate, or remedy the effects
12 upon or the effects that might
13 reasonably be expected upon the
14 environment,"

15 And that is by the undertaking and the various
16 alternatives. What was your conclusion as to whether
17 or not that component was present?

18 A. I felt that the proponent had
19 addressed that component and sub-components in the
20 environmental assessment.

21 Q. Is sub-clause (c) where we get into
22 the whole area of the net effects analysis,
23 Mr. Clarke?

24 A. Yes, it is.

25 Q. I wanted to come to page 9 of your



1 witness statement, paragraph 26 -- I am sorry,
2 paragraph 24 and through to paragraph 27 where you have
3 a description of the net effects or net environmental
4 effects. Could you explain your comments contained in
5 those four paragraphs?

6 A. As I stated previously, we felt a
7 net effects or net environmental effects and the
8 analysis thereof was an essential part of the planning
9 framework and it is what we could define as one of the
10 key features of the Environmental Assessment Act.
11 Section 24 of the witness statement is basically an
12 explanation of what I previously explained on how net
13 environmental effects are derived in a three-step
14 process where you describe potential effects, and we
15 can term those the gross effects that may occur with
16 the siting of the facility or the development of a
17 plan. You identify measures that could reduce those
18 effects or increase the positive effects that could
19 possibly come from the siting exercise in this case and
20 subtract mitigation measures, the negative effects, and
21 add any positive effects, enhancement measures, and the
22 result, the residual effects will become the net
23 environmental effects and that is why I used the
24 analogy of somewhat like a balance sheet.

25 DR. KINGHAM: Could I have that



1 clarified? Is your balance sheet region-wide or is
2 your balance sheet site-specific?

3 THE WITNESS: It could be alternative
4 specific or site-specific.

5 DR. KINGHAM: What was it?

6 THE WITNESS: In this situation? We
7 had, I guess, made a comment that we felt, or I felt
8 that net effects analysis had not totally addressed to
9 a level of detail that I would have expected the entire
10 set of alternatives that were considered in this
11 environmental assessment.

12 MR. TIDBALL: Q. All right. I think
13 that gets us to paragraph 25 of your witness statement,
14 Mr. Clarke. I wonder if you could elaborate a bit more
15 on the comments you make there which I understand is
16 summarizing some of the comments of the government
17 review in paragraphs 25 and 26?

18 A. Paragraphs 25 and 26. The
19 information that I had at the time of the review
20 indicated that the approach was more of a gross effects
21 analysis and while the proponent did indicate that
22 mitigation was considered at certain stages and at
23 certain time in the process, I felt that perhaps they
24 could have considered mitigation measures and
25 enhancement measures producing more of a net



1 environmental effect analysis at different stages which
2 would have been more appropriate.

3 Q. You have already told us you
4 concluded all the components were present and this
5 appears to go to one of the components, that being the
6 evaluation of environmental effects and then what you
7 interpret to be a requirement for a net effects
8 analysis. How do your comments on the absence of that
9 kind of an analysis affect -- how do they relate to
10 your conclusion?

11 A. Basically I guess you could say
12 that I felt there were some flaws in the planning
13 process but it was not a fatal flaw. It did not result
14 in myself indicating a negative conclusion in the
15 review with respect to the planning analysis and since
16 people are using analogies and little stories here
17 today, I would like to add one myself.

18 Q. Go ahead.

19 A. One we often use is the great chefs
20 of Europe, and I guess in North America, they make
21 their own soups and they usually make their soups from
22 scratch. If you put the right order of the right
23 ingredients into a soup it takes like the soup you want
24 it to be, but you can put all the components or in this
25 case the ingredients into a soup that will still be a



1 'soup, but it may not taste exactly like what you would
2 like it to taste like. That's the analogy I would use
3 in this case. The soup was there and the soup was
4 edible, but perhaps there were some flaws in the
5 ingredients that made that soup.

6 Q. As I understand the comment,
7 Mr. Clarke, you are suggesting you provide this as a
8 critical comment but it doesn't necessarily force you
9 to draw the conclusion that it is unacceptable?

10 A. That is correct.

11 Q. Is this something, and it is
12 something I may ask again, but we have heard a lot of
13 times here at this hearing that this is the first
14 project of this type to go under the EA Act and go to
15 this level; and is this correct?

16 A. It is the first major landfill site
17 to go before a panel.

18 Q. Was it one of the first
19 environmental assessments of a landfill to come before
20 the EA Branch?

21 A. It would be one of the first five,
22 yes.

23 Q. Is this problem that you highlight
24 here in paragraphs 25 and 26 unique to the Halton EA?

25 A. No, it is not.



1 Q. How would you describe it?

2 A. I would say it is typical of many
3 environmental assessments and not totally unique to
4 waste management and it could be to other types of
5 environmental assessments as well.

6 Q. Finally, if we go back to section
7 5(3) of the Act, the fourth component that needs to be
8 there:

9 "an evaluation of the advantages and
10 disadvantages to the environment of the
11 undertaking, the alternative methods of
12 carrying out the undertaking and the
13 alternatives to the undertaking."

14 What was your conclusion on that component, Mr. Clarke?

15 A. That the information was present
16 and acceptable.

17 Q. What does that include? Where does
18 that fit with what Mr. Walker has described in terms of
19 the process, and what is the evaluation of the
20 advantages and disadvantages. Is it a discrete step,
21 first of all?

22 A. It can be part of the total
23 decision-making process, and I am trying to think back
24 two or three years now, but I believe while being part
25 of the total planning process it also was indicated



1 separately on various charts to ensure the reader
2 understood there was indeed this step within the
3 planning.

4 Q. Before we finish with test one, I
5 wanted to draw your attention to a couple of things in
6 your witness statement and I think they relate to some
7 of the key features you were discussing earlier or at
8 least one of them. Paragraph 19 at page 6, or 19 and
9 in fact 20 where you make comments about the
10 traceability of the decision-making process in this
11 case.

12 First of all, could you explain to the
13 Board what your concern was and, secondly, explain how
14 it is that that fits in with your analysis of the
15 components?

16 A. Traceability and there probably
17 should have been a sub-title above 19, but it is part
18 of the key feature of the net environmental effects and
19 myself and other members of the Environmental
20 Assessment Branch, the reviewers of this and as well as
21 members of the technical team raised this; it was hard
22 to replicate some of the steps that were taken in this
23 environmental assessment and we felt there was probably
24 a need for clarification or improvement of the
25 information so we could easily understand it from



1 reading it ...

2 DR. KINGHAM: Where are you reading
3 that from, this reference?

4 MR. TIDBALL: Paragraph 20 of the
5 witness statement.

6 THE WITNESS: Yes, paragraph 20 on page
7 7.

8 MR. TIDBALL: Q. You will notice
9 throughout the witness statement you will see in the
10 middle of paragraph 20 a reference to pages 27 and 28
11 and throughout the witness statement that is references
12 to pages in the government review.

13 DR. KINGHAM: I had found the
14 traceability section in 109 earlier, but I didn't see
15 the heading traceability in the witness statement.

16 MR. TIDBALL: Mr. Clarke said there
17 should have been a heading above paragraph 19.

18 Q. With respect to traceability, Mr.
19 Clarke, your comment that it was difficult to trace and
20 various reviewers had difficulty in trying to replicate
21 the decision-making process; what effect did that have
22 on your conclusion with respect to test one?

23 A. It did not really affect the final
24 conclusion in that the components were there and there
25 were significant information on which to make that



1 judgment. Many of the reviewers indicated in their
2 comments in part of the government review that
3 additional information would have made it easier to
4 understand some of the steps that had been taken in the
5 environmental assessment.

6 Q. Why is the comment made in the
7 government review? What is the purpose of it?

8 A. Basically I feel that my job as the
9 reviewer and writer of Part 3 of the government review
10 is to provide a critical analysis of what proponents,
11 whether it be the Region of Halton or others have done.
12 It is not a basis for a right or wrong decision, but I
13 think it provides information to the Board on which to
14 make their decision and also information to other
15 proponents in the future when they are preparing
16 environmental assessments to ensure that they address
17 these concerns so that any party that is reading the
18 environmental assessment and review can understand why
19 certain decisions were made and how the final decision
20 was arrived at.

21 DR. KINGHAM: Let me be sure that I
22 have it clearly. The difference you gave us was as
23 noted on pages 27 and 28 and repeated on page 7 of your
24 witness statement, you were concerned about the lack of
25 clarity and consistency in the documented decision-



1 making process and you are telling us now that the
2 presence of the proponent and its consultants helped
3 you to overcome that.

4 THE WITNESS: In some cases there were
5 some what I would characterize as holes that I didn't
6 quite understand, why certain decisions were made and I
7 think other reviewers indicated that as well.

8 DR. KINGHAM: Are you telling us that
9 as a result of consultation those gaps were filled. Is
10 that what you are telling us?

11 THE WITNESS: I haven't really had any
12 consultations since I wrote this document so it stands
13 as I wrote it.

14 DR. KINGHAM: Then I am afraid I didn't
15 understand what you just told us a minute ago. I have
16 got it correctly have I that the concern expressed here
17 is that there are gaps in the document traceability and
18 I thought you said just a minute ago but we had the
19 proponent's consultants with us and so we could talk to
20 them about these.

21 THE WITNESS: I think what I was
22 stating was a kind of generic situation and as my job
23 as government reviewer, it is to prepare a critical
24 analysis of the process and it occurs in many reviews
25 that we do, this critical analysis, but it is not I



1 I guess a dividing line between right or wrong, it is a
2 comment on the process with I guess the main goal being
3 to ensure that other proponents in the future address
4 shortcomings in this environmental assessment or others
5 that have been done, so eventually we may get an
6 environmental assessment, and we have some which are
7 very clear and very understandable to all parties who
8 read them and answer the questions of how you made
9 certain decisions and how you arrived at the
10 undertaking.

11 DR. KINGHAM: Thank you.

12 MR. TIDBALL: Q. You may have answered
13 the question but I will ask it anyway; is this
14 traceability matter unique to Halton?

15 A. No, it is not.

16 Q. Finally, can you go to paragraph 21
17 of your witness statement where you make some comments
18 on the methodology, the decision-making methodology
19 that Mr. Walker employed. Could you summarize what
20 your concern is there and again tell us how that fits
21 in with your decision or your conclusion on test one?

22 A. Again it refers back to my comments
23 in paragraph 20 that it is part of our duty to do this
24 critical analysis. It's like locking two
25 hydrogeologists in a room. I am sure if you locked two



1 planners in a room you will never come up with one
2 answer as to the best method or technique to address an
3 evaluation of in this case a final site in a pair
4 analysis. We indicated that perhaps we thought or I
5 perhaps thought that a more qualitative approach
6 addressing each site individually rather than in a pair
7 analysis may have been more appropriate. A pair
8 analysis may not have been appropriate where one site
9 may be an anomaly with respect to the other.

10 Q. Can we put that concern in the same
11 place as traceability and does it go to the essence of
12 whether it meets the Act or not?

13 A. We put it in the same category as
14 traceability.

15 Q. At the end of the day your overall
16 conclusion was that all the components were there?

17 A. That is correct.

18 Q. So could we move to test No. 2. As
19 I understood your evidence, you sent a letter with the
20 environmental assessment to the various government
21 reviewers and that letter starts at page 64?

22 A. Yes.

23 Q. Could you briefly explain what it
24 is that is found with that letter?

25 A. Appearing on page 64 is a memo to



1 the distribution list which is on pages 67 to 69 and it
2 requests or indicates that the environmental assessment
3 has been submitted to the Minister for approval and the
4 Environmental Assessment Act requires the review as I
5 previously indicated.

6 We request comments from the various
7 agencies with respect to their mandates and concerns
8 and their various constituent agencies within the
9 branches and ministries and that they should be sent to
10 the Ministry. Attachment 1 on pages 65 and 66 provides
11 a guidance form for the various agencies on which to
12 respond based on our experience with environmental
13 assessments since 1976 on the types of questions that
14 need to be answered and the agencies are free to answer
15 these questions or address their own concerns
16 individually.

17 Q. You sent it out and you sent it
18 with that letter with the attachment and you then get a
19 stack of submissions back and those are the ones we
20 find in the last half of the document?

21 A. Correct.

22 Q. In some cases do they answer the
23 questions directly?

24 A. In some cases they go question by
25 question and in most cases they address their



1 particular mandate of that agency and how it affects
2 their operations or policies.

3 Q. As I understand it you have got all
4 these concerns back and how many agencies, and you may
5 have said this already, but how many agencies had
6 concerns?

7 A. Nine agencies indicated substantial
8 concern.

9 Q. Is there a list of those or where
10 do we look in the document?

11 A. The first listing of them I believe
12 is in Halton's response document and also in the
13 supplementary review, but they are listed with their
14 comments on pages 41 through to 55 in the review
15 itself.

16 Q. Could we start at page 40 which is
17 Part 4 of the review. On page 41 I see a subtitle
18 Comments and then Further Action Required. Are those
19 what you considered to be the major comments?

20 A. They are.

21 Q. What follows that?

22 A. Are you talking about the next
23 major subtitle?

24 Q. Is there something after that
25 because you said there were nine agencies with major



1 concerns and where do we find the rest of them?

2 A. On page 55 there is the second
3 section, 4.2, Comments: No Further Action Required, and
4 there some agencies made comments but it did not
5 require further technical studies or information.

6 Q. Is there one further section?

7 A. There is a section that starts on
8 page 57, section 4.3, No Comments.

9 Q. So what we have here is nine
10 government agencies making what you would consider to
11 be substantive comments?

12 A. That is correct.

13 Q. Four agencies making comments, but
14 of more minor concern?

15 A. Yes.

16 Q. And the remainder of the
17 distribution list are those who responded who you put
18 in the No Comment category?

19 A. Yes.

20 Q. As I understand it you take these
21 comments and you come to some conclusion and you have
22 told us what your conclusion was on the second test,
23 but how did you come to that conclusion?

24 A. Basically in some cases I ask for a
25 clarification directly from these agencies because some



1 of their comments were probably not as well written as
2 they could have been, and to ensure that I understood
3 them I had a dialogue with them to ensure I understood
4 their comments succinctly.

5 The technical comments that needed to be
6 addressed or that need additional information to
7 address them are highlighted in this section starting
8 at page 41 of the review and this led me to the
9 conclusion that there was substantial technical
10 information needed by these various agencies to make
11 the environmental assessment document as it stood
12 acceptable and, therefore, the negative conclusion was
13 the result.

14 Q. Mr. Clarke, in the normal event,
15 would there be this many outstanding technical concerns
16 go out with the government review?

17 A. In the normal event I believe this
18 has occurred one other time. Normally the proponent
19 who already has a copy of the entire set of comments
20 would have taken the opportunity to address those
21 comments with those various agencies before publication
22 of this review and perhaps would have sent in
23 additional information to address these directly.

24 Because of the 90-day turnaround time
25 ending in February that was requested and as noted I



1 believe at the conclusion on page -- the middle of page
2 62:

3 "It should be noted that the Regional
4 Municipality of Halton requested a 90-
5 day timetable for the preparation of the
6 Review. This timetable did not provide
7 time to fully clarify the reviewers'
8 comments or to facilitate resolution of
9 issues."

10 So the review was issued with the comments as received.

11 Q. We have heard some evidence about
12 what occurred subsequently, but could you describe
13 briefly what happened after the publication of the
14 government review?

15 A. The proponent in this case, the
16 Region of Halton, indicated that they wished to address
17 the outstanding technical issues and were prepared to
18 put together what they called a response document which
19 was a green covered document and I don't have a copy
20 here and I am not sure what the exhibit number is.

21 Q. I believe that is H-77.

22 A. They also submitted at a later date
23 with that response document which specifically
24 addressed these concerns by the nine agencies, some
25 additional information and an amendment of the site



1 plan areas and the total waste capacity of the site.

2 Q. What did you do when you received
3 that information?

4 A. Since the review had already been
5 prepared and issued to the public and other agencies,
6 we prepared a supplementary review.

7 Q. Exhibit E-110, Mr. Chairman.

8 DR. KINGHAM: Are we going to get into
9 that now?

10 MR. TIDBALL: I wondered about that. I
11 think we can be finished in chief in less than 15
12 minutes. I don't intend to go through E-110 in very
13 much detail and it might be beneficial to finish Mr.
14 Clarke in chief.

15 MR. LANCASTER: I was hoping you would
16 say that.

17 MR. TIDBALL: Q. Mr. Clarke, we have
18 all got out Exhibit E-110. Does this document follow
19 the same sort of pattern as the other document?

20 A. It does and it is somewhat shorter
21 and there is less, I guess you would call it,
22 substantive information on the process in it and it
23 goes directly to the concerns that were indicated and
24 addressed in the document.

25 Q. Was the information submitted by



1 Halton and which is before this Board as H-77, was that
2 sent to the entire government review team?

3 A. Yes, it was circulated to the
4 entire team.

5 Q. Where can we find the letter you
6 sent out plus the distribution list?

7 A. That is Appendix 1 on page 27 of
8 the supplementary review.

9 Q. So you sent this out and asked
10 people for their comments. Can I assume again
11 following that letter and the distribution list is all
12 the comments you received?

13 A. That is correct.

14 Q. Of the nine -- the set of nine
15 major comments you have, what became of those nine?

16 A. The response document as prepared
17 by the Region addressed the outstanding concerns of all
18 the agencies and there were some site-specific
19 undertaking issues still unresolved with respect to the
20 Halton Region Conservation Authority and the Ministry
21 of Natural Resources.

22 MR. TIDBALL: You will recall, Mr.
23 Chairman, you have before you a set of conditions
24 proposed by the Conservation Authority and MNR with
25 respect to their concerns.



1 Q. Were those the only outstanding
2 conditions, Mr. Clarke?

3 A. That is correct.

4 Q. Presumably you subjected this
5 information again to a two-test approach?

6 A. That is correct.

7 Q. Did you make any change in your
8 conclusion on the first test?

9 A. There was only one additional piece
10 of information submitted on the first test.

11 Q. What was that?

12 A. It was on transfer stations and a
13 comment we had made in Part 3 of the review and on the
14 second test, which was the outstanding issues of the
15 technical review team, the information indicated by the
16 reviewers at this point in time was that their concerns
17 had been addressed and therefore there had been no
18 outstanding technical issues to be resolved at that
19 stage.

20 Q. What was your overall conclusion?

21 A. The conclusion then changed from
22 the original conclusion from the review of 1986 to
23 that, on pages 24 and 25 of the supplementary review,
24 that test one, the components are present, and test
25 two, the technical quality and level of detail of the



1 components had been satisfactorily addressed.

2 Q. When was this supplementary review
3 published?

4 A. The notice of completion of the
5 review was published on April 21st, 1987.

6 Q. Subsequent to the publishing of
7 this document have you had any further involvement
8 except for preparing to give evidence today, have you
9 had any further involvement with the Halton
10 environmental assessment?

11 A. No.

12 MR. TIDBALL: That is the evidence in
13 chief, Mr. Chairman.

14 DR. KINGHAM: Before we rise for lunch
15 perhaps I can give you something to chew on aside from
16 your soup. You made a comment about a concern in
17 comparing sites because of the qualitative difference
18 between the sites and I am not sure exactly of the
19 wording you used and I don't want to leave any
20 implication, but are you telling us that if the sites
21 had all been of the same sort then the comparative
22 analysis might have worked, but they were manifestly
23 different and therefore you would not have used the
24 kind of pairing the Region used.

25 THE WITNESS: One of the sites was an



1 anomaly and the other five sites were till plain types
2 of sites and therefore directly comparable, but Site F
3 being a semi-quarry or pit that had been worked or not
4 worked at various times in its past history made it not
5 directly comparable as a site and I guess to throw the
6 jargon away, we were comparing an apple to an orange.

7 MR. LANCASTER: Until two o'clock.

8 ---Luncheon Adjournment at 12:45 p.m.

9 ---Upon resuming at 2:00 p.m.

10 MR. LANCASTER: Please be seated.

11 DR. KINGHAM: I wondered whether
12 Dr. Hughes brought his umbrella or his lightening rod?

13 MS. VIGOD: Maybe a purge well.

14 MR. LEDERER: I have shown a document
15 to my friends and this is the only copy I have but if
16 it is of assistance I can have it copied. It is a
17 compilation which shows the people who made submissions
18 down the vertical axis and across at the various stages
19 of the hearing and the exhibit numbers so you can use
20 this as a way of finding where the various submissions
21 are if that will help you and we can make a copy to
22 file.

23 DR. KINGHAM: It would be easier.

24 MR. LANCASTER: Have you any
25 preferences as to where you go in the order of cross-



1 examination?

2 MR. LEDERER: Stronger than a
3 preference with this witness, I would like to go last.

4 MR. LANCASTER: I assumed you would.

5 MR. TIDBALL: H-0 has made an
6 appearance.

7 MR. LANCASTER: Is there any agreement
8 or understanding as to who would proceed?

9 MR. LEITCH: I am so short I should go
10 first.

11 MR. LANCASTER: I didn't think you were
12 short?

13 MR. LEITCH: I will be so short. Let me
14 put it that way.

15 MR. LANCASTER: You appear rather
16 large.

17 MR. LEDERER: Does that refer to
18 height?

19 MR. LEITCH: Presence.

20 CROSS-EXAMINATION BY MR. LEITCH:

21 Q. I represent the Town of Milton and
22 I only have a few matters I would like to raise with
23 you. The first has to do with your statement, as I
24 understood it, that in your view the environmental
25 assessment in this case concluded at the 2C level as we



1 appreciate the designation of the phasing and
2 thereafter the work which occurred was more related to
3 the Environmental Protection Act approval?

4 A. In a way that is correct and if I
5 can refer to the diagram, the environmental assessment
6 itself, the one that was submitted to the Minister and
7 which we reviewed as the environmental assessment, I
8 guess it is kind of somewhere in the beginning of Phase
9 3 and there were substantial technical documents that
10 were submitted approximately, I think, about a year
11 later for review by various technical people in the
12 Ministry and other ministries, but the environmental
13 assessment submitted to us for review ended with the
14 overview document that encompassed the 40-odd
15 schedules.

16 Q. When you say environmental
17 assessment, you qualified that by the environmental
18 assessment submitted to us for review. I wanted to
19 raise with you my understanding of the administrative
20 jurisprudence in this field which is that this hearing
21 is part of the environmental assessment and one thing
22 the Board may do at the end of this hearing is declare
23 that all of the evidence which has been led here will
24 become part of the environmental assessment. Do you
25 understand that?



1 A. Yes.

2 Q. That leads me then to my next
3 inquiry which has to do with Exhibit E-933, if you
4 would take that in hand. E-933 has the arrows that
5 point up and down and also arrows which point to the
6 centre of the page. You talked about the upward and
7 downward arrows and you used the term looping. As I
8 understood what you meant by that was that at any stage
9 of the planning process that this is a diagram of, you
10 take information and you can go back to earlier or an
11 earlier stage using that new information to review the
12 decisions at the earlier stage. Have I got that right?

13 A. Conceptually, yes, that's right.

14 Q. And then Dr. Kingham asked you a
15 question in regard to that for clarification and
16 suggesting you could only loop back from one stage to
17 the immediately proceeding stage?

18 A. That was the question, yes.

19 Q. Do you recall that? My first
20 question to you is would you understood you could loop
21 back from this hearing to the earlier stages, or in
22 other words take information which we have heard in
23 evidence and which may not have been part of the
24 assessment document the government reviewed and apply
25 it to that work?



1 A. If I understand you right, you are
2 saying that in the final analysis the Board could
3 consider information beyond what was submitted
4 originally to the Minister in their decision.

5 Q. And can further loop back to any
6 point in the planning process?

7 A. The Board has that right.

8 MR. LEITCH: Thank you, those are my
9 questions.

10 MR. LANCASTER: Mr. Tzekas.

11 CROSS-EXAMINATION BY MR. TZEKAS:

12 Q. Mr. Clarke, I represent the City of
13 Burlington and I am also going to try to be fairly
14 brief with this. I would like to pick up on a point
15 that you were just discussing with Mr. Leitch and that
16 is Exhibit 933 and your diagram with the arrows.

17 As I understood your evidence and your
18 response to Dr. Kingham's question, the indication was
19 that you could only go back one level at each stage and
20 that is what the arrow meant, the arrows pointing up
21 meant?

22 A. I guess that was implied by the
23 implementation that if you have already implemented the
24 site and you are at the monitoring stages, it is a
25 little bit difficult to go back to the planning stages



1 if you already have a Certificate of Approval to
2 proceed.

3 Q. That is my point. That example is
4 one really where you are stuck at that stage surely.
5 If we go to the other parts of the chart, sir, is it
6 not possible for information at some subsequent stage
7 to have, if you will, a chain reaction through this
8 process?

9 A. I agree that in the planning
10 component before implementation that if you go back one
11 step you are likely to affect the information that will
12 then effect the previous step.

13 Q. Exactly.

14 A. It should be considered before you
15 finalize the new information.

16 Q. Exactly. As I understand that
17 then, if information becomes available at a later
18 stage, it is not only appropriate, I take it that you
19 would suggest it would be almost necessary to go back
20 and consider how that might affect the entire
21 evaluation process?

22 A. It is appropriate that you consider
23 that information in the total picture.

24 Q. All right, sir. As well, while we
25 are on this particular exhibit, you had indicated your



1 understanding that this, the purpose of this particular
2 assessment was to deal with a waste management project
3 for a specific number of years?

4 A. I forget the precise wording of the
5 purpose of the undertaking, but it was a waste
6 management strategy or plan, I am not sure, to deal
7 with waste.

8 Q. I was interested in your statement
9 though that it was for a specific number of years and I
10 was just wondering what significance that had to you as
11 you were reviewing the assessment that was put before
12 you?

13 A. That basically goes back and I
14 notice it is in the purpose of the undertaking and
15 there is a 20-year planning period, 1988 to 2008 on
16 page S-1 of the summary document.

17 MR. LEDERER: I am having some
18 difficulty hearing you and I would like to hear the
19 answers. I apologize.

20 MR. TZEKAS: Q. Before you begin to
21 answer, Mr. Lederer would like to have the question put
22 again so he hears it clearly. I had reminded you that
23 in describing the purpose of this particular assessment
24 you had suggested that it was a waste management
25 project for a specific number of years. I was



1 interested in your extracting that feature out of he
2 description and wondering what the significance of that
3 number of years was to your review?

4 A. I think I was just discussing it in
5 light of what I knew of the purpose of the undertaking
6 for this particular project. Often waste management
7 plans or waste management EA's have a planning horizon
8 of 20 to 40 years and it could be whatever is
9 appropriate as far as the proponent considers in their
10 overall planning framework, and what they wish to
11 consider based on the various alternatives available to
12 them and perhaps new technologies on the horizon. In
13 this case I believe it is a 20-year planning horizon.

14 Q. Are you, sir, familiar with any
15 projects of this kind which involve a shorter planning
16 period than 20 years?

17 A. I can't think of any offhand. Most
18 of them that I have seen are 20 to 30-year plan
19 horizons.

20 Q. I take it, Mr. Clarke, that that as
21 part of the description of the purpose of the study
22 would give some definition to looking at your chart,
23 933, I take it that would give some definition to all
24 of the other factors that follow. It becomes a
25 foundation of the planning process; does it not?



1 A. As part of the purpose of the
2 undertaking it becomes a factor that has to be
3 considered in the types of alternatives that would be
4 most appropriate to resolve your planning strategy.

5 Q. I also take it that it would be a
6 factor in the consideration of the various alternative
7 methods for carrying out the undertaking?

8 A. Could you repeat that again?

9 Q. Yes. It would also be a factor,
10 the 20-year time horizon would be a factor in your
11 assessment of the alternative methods of carrying out
12 the undertaking?

13 A. It would probably be reviewed by
14 the technical review team. Thinking back two years
15 when I was reviewing our component of the environmental
16 assessment, it really didn't come to my mind but I am
17 sure that technical reviewers would have considered it
18 from a more technical aspect.

19 Q. Staying with Exhibit 933, there is
20 a reference made to input from affected parties and in
21 this case I think you have made it clear, but could you
22 confirm that parties includes the public?

23 A. That is correct.

24 Q. And their involvement, just turning
25 to page 3 of your witness statement at paragraph No. 8,



1 you call it an integral part of the planning process.
2 I wanted to get from you, Mr. Clarke, your comments as
3 to why the public's involvement, why you consider it to
4 be an integral part of the planning process and why it
5 should begin at the earliest possible stage?

6 A. I guess there are two basic reasons
7 for that, the first one being that it is a public
8 involvement, it is a component of Ministry policy of
9 pre-submission consultation, both the 1982 version and
10 1987 version.

11 The second reason is that we as the EA
12 branch and the Ministry encourage public involvement in
13 environmental assessment type projects, whether they be
14 waste or other, to ensure that local community values
15 and concerns are addressed in the development of any
16 plan or facility that affects the community; in other
17 words, people who have to live with this project are
18 aware of the development of and implementation of this
19 project should it be successful and get an approval.

20 Q. I take it you are saying it is
21 important for the people to understand what the reasons
22 are for the project and to understand fully the
23 implications of it becoming a part of their community?

24 A. And going a little beyond that is
25 that they should have the ability to have their



1 concerns addressed and make some input into the
2 process.

3 Q. You indicated there were two tests
4 involved in the government's assessment of the
5 assessment, if you will, and I think those are set out
6 in your witness statement. This is paragraph 30 at
7 page 11 I am thinking of. Am I right in thinking that
8 those were the tests you described to your counsel?

9 A. That is correct.

10 Q. In circulating these documents, my
11 understanding is that the Ministry does give or
12 actually puts to the various parties who receive and
13 are asked to comment on this work a series of specific
14 questions?

15 A. That is correct and it is outlined
16 in Appendix 1 of the review.

17 Q. I have that and that's part of
18 Exhibit E-109 found at page 65. Can you tell me with
19 respect to the first question on that attachment?

20 A. Question 1?

21 Q. Yes. Does that apply to the first
22 or second test set out in paragraph 30 of the witness
23 statement?

24 A. That applies to the second test,
25 the technical reviewer's evaluation.



1 Q. Could you go through the other
2 questions so we have your comments on all of them?

3 A. All the questions in this
4 particularly attachment are mailed to the technical
5 review team and therefore are the questions put forward
6 to them for consideration and their comments on the
7 environmental assessment.

8 Q. Can we then go back and deal with
9 the first question which is part of the second test,
10 the technical quality and level of detail and so on:

11 "Are the data, analyses and conclusions
12 in the EA satisfactory, i.e., are these
13 relevant and substantiated?"

14 Am I right in thinking that based on the response that
15 was received to that particular question, your office
16 came to certain conclusions and those were set out at
17 page 48 of the Exhibit, E-109?

18 A. Page 48 is one section or
19 highlights of one section of information submitted in
20 response to the group of questions as indicated on
21 Attachment 1 by the Ministry of the Environment.

22 Q. These are the MOE's comments, if
23 you will, synopsized based on their response to those
24 seven questions?

25 A. That's correct.



1 Q. One of the responses that the
2 Ministry of the Environment had was that:

3 "Reviewers found some difficulty in
4 following the decision logic..."
5 and that is the first comment?

6 A. That is correct and that is a
7 direct quote from their submission.

8 Q. If I can take you to the third
9 paragraph:

10 "Another problem which has been
11 previously raised is the differing
12 decision logic applied to the selection
13 and analysis of pit and quarry sites
14 versus all other sites?"

15 A. That is correct.

16 Q. Mr. Clarke, were those two
17 concerns, sir, ever addressed by the Region of Halton?

18 A. In the documentation before me as
19 part of the environmental assessment, I am not aware of
20 a direct response to address that particular two
21 paragraphs.

22 Q. Am I right then in thinking and do
23 I have the process correct, and if you can give me a
24 moment to outline it; as part of its circulation, the
25 Ministry put forward a series of questions to help



1 focus, I take it, comments on the environmental
2 assessment documents that were submitted by the Region
3 and those questions, as I understand it, dealt with the
4 second test, that is the technical quality?

5 A. Correct.

6 Q. All right. One of the responses to
7 that circulation is found at page 48 and that is the
8 synopsis of the Ministry of the Environment's comments
9 on that second test?

10 A. The technical wing, I guess you
11 would say, of the Ministry of the Environment, yes.

12 Q. Do I understand it, sir, correctly
13 that those concerns, those technical concerns have
14 never been answered?

15 A. That I am not aware of, have never
16 been answered. I have never seen any specific
17 information.

18 Q. More fairly put, you are not aware
19 of an answer to those particular concerns?

20 A. That is correct.

21 Q. I take it, Mr. Clarke, that if
22 anyone was aware in your office, sir, of answers to
23 these questions, I take it it would be you as the
24 supervisor of this branch?

25 A. It would be in our branch and it



1 may have been answered through other branches, but I am
2 not aware of that.

3 Q. Let me continue the thought that I
4 have, Mr. Clarke, on this particular matter. You say
5 in your witness statement at page 4 in paragraph 10:

6 "The Government review addresses the
7 quality of the environmental
8 assessment."

9 I am looking at page 4, paragraph 10, second sentence.

10 DR. KINGHAM: Sorry, I am not with you
11 yet. Can you give me that reference again?

12 MR. TZEKAS: I am sorry, the witness'
13 witness statement at page 4 in paragraph No. 10 and the
14 statement is:

15 "The Government Review addresses the
16 quality of the environmental
17 assessment."

18 I take it, Mr. Clarke, that that is what the government
19 review is intended to address or one of the things?

20 A. That is correct.

21 Q. Am I right in thinking, sir, that
22 it is your analysis of the quality of the environmental
23 assessment which lets you reach a conclusion as to
24 whether or not section 5(3) of the Act has been
25 satisfied?



1 A. Correct.

2 Q. Just to carry that a little further
3 if I could turn you to page 3 of your witness statement
4 and refer you to a portion of the Act, section 5(3)(d):

5 "An assessment must include ... an
6 evaluation of the advantages and
7 disadvantages to the environment of the
8 undertaking, the alternative methods of
9 carrying out the undertaking and the
10 alternatives to the undertaking."

11 That is part of what an assessment has to have?

12 A. That is correct.

13 Q. If I relate that back, Mr. Clarke,
14 to the problems that were raised on page 48 of Exhibit
15 109, as I understand what the reviewers are saying
16 there, and I am just paraphrasing here, but what I
17 understood these comments to be is really a comment
18 that they didn't understand the logic or the
19 methodology for arriving at particular decisions in
20 this case. Am I reading those fairly, sir, and am I
21 synthesizing that fairly?

22 A. I think that would represent the
23 highlights as presented here.

24 Q. If you don't understand the
25 decision logic which applies to the selection and



1 analysis of these various sites, how can it be said
2 that you can understand the evaluation of the
3 advantages and disadvantages to the environment of the
4 undertaking or the alternative methods of carrying out
5 the undertaking?

6 A. In this case my answer would have
7 to be twofold. I cannot speak for the technical
8 reviewers and you would have to talk to them to
9 conclude on that. As far as I was concerned, in my
10 analysis, and I am looking for some of the same
11 components, i.e., the meeting of the required
12 components of section 5(3), those components and an
13 evaluation of the advantages and disadvantages to the
14 environment were present in the environmental
15 assessment.

16 Q. That takes me to your soup analogy.
17 As I understood that analogy what you were saying to us
18 this morning was that you had satisfied yourself that
19 all of the ingredients you would like to see in the
20 soup were there in some form or another. Is that right?

21 A. That is correct.

22 Q. You weren't there and I take it you
23 didn't see your role or the Ministry doesn't see its
24 role as commenting on the quality of the soup?

25 A. I think it was very clear in Part 3

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1 of the review that we did comment on the quality of the
2 soup and indicated that we did have some concerns on,
3 if you want to extend the analogy, how the constituent
4 ingredients were put together.

5 Q. Let's continue with that. I am not
6 fond of these analogies because I am never quite sure
7 how everyone interprets them. In any event, doesn't
8 the fact that the comments that are found on page 48,
9 the fact that they were not addressed as far as you are
10 aware, doesn't that really go to this question of
11 quality and doesn't that really go to the evaluation
12 and the satisfaction of the Act, if you will, of the
13 Act's requirements?

14 A. I guess I would have to refer to
15 the supplementary review where additional information
16 was circulated to these same team members and those
17 same team members made additional comments and they did
18 not additionally raise this factor again.

19 Now, whether they were satisfied with
20 information I did not see I do not know, but I suspect
21 I guess like I said in my witness statement and
22 previous information, this did not seem to be a fatal
23 flaw, it was a flaw in the fact that people were
24 missing or were perceived to be missing certain pieces
25 of the puzzle and that it was not fatal, to get back to



1 the analogy and despite not wanting to go into an
2 analogy, they didn't want to throw the soup out.

3 Q. I take it from what you say, Mr.
4 Clarke, that the Ministry really has no standard for
5 assessing when a particular assessment is of a quality
6 that they are prepared to accept. There is no specific
7 definition of when you will accept the soup and when
8 you won't, as long as all the ingredients are there?

9 A. I think we are bound by the statute
10 as it now exists and section 5(3) of the Act documents
11 what is expected to be an environmental assessment and
12 then certain things such as what is commonly called its
13 traceability or its decision-making logic is not
14 specifically outlined in the Act itself.

15 We feel that it is important to make all
16 the pieces fit appropriately together, but we are bound
17 by the statute.

18 Q. Being bound by the statute you
19 would approve an environmental assessment if it had
20 these various components regardless of what the soup
21 tasted like, if I can extend the analogy?

22 A. I think it would depend upon the
23 individual situation of how good or how bad the soup
24 tasted.

25 Q. Mr. Clarke, let me put this



1 question to you because I think there may be some
2 interest in having your views on the issue, sir. Isn't
3 the logic of that system, if you will, the fact that
4 proponents will be encouraged to simply put together
5 documents so that they can get their foot in the door,
6 get into a hearing and then at the hearing stage that
7 is when they can worry about how the ingredients fit
8 together and that is when they can put together their
9 decision logic and that is when they can present their
10 theory. Isn't the end result of the process that
11 exists now an encouragement to proponents to do that
12 very thing?

13 A. I wouldn't say it is an
14 encouragement, but it is a possibility.

15 Q. I take it one of the problems of
16 that possibility, if it in fact comes to be, is that
17 the public and the other interested parties or affected
18 parties really don't get to understand the whole
19 process, at least not in this way, until perhaps a very
20 late stage in the analysis?

21 A. That could be a possibility.

22 MR. TZEKAS: If I may just have one
23 moment, Mr. Chairman.

24 Q. One more question on page 7 of your
25 witness statement. You indicate in paragraphs 20 and



1 21 that the problems that the government review found,
2 and I take it, sir, that this is simply a summary, if
3 you will, of the kinds of problems that we have been
4 discussing, for example, the kinds described on page 48
5 of the review?

6 A. Yes, that is correct.

7 Q. I take it from our discussion,
8 Mr. Clarke, that in your view, sir, the fact that it
9 was difficult to trace the proponent's planning process
10 because of, for example, of both a lack of clarity and
11 consistency would not affect its compliance with the
12 Act and the provision of an evaluation of the
13 advantages and disadvantages. That is, so long as
14 there is an evaluation of some kind, your Ministry is
15 satisfied?

16 A. I am trying to remember back two
17 years. There was an evaluation of the advantages and
18 disadvantages to the environment and I think it was
19 more than just an inclusionary statement, that it was
20 part of the overall process that in this case the
21 proponent had put forth as part of the argument for the
22 undertaking, but I can't get specific because I can't
23 remember.

24 Q. My point is having found that the
25 planning process which was put forward was difficult to



1 trace because of both of lack of clarity and
2 consistency, a problem particularly evident in the
3 selection of candidate areas and sites and so on, your
4 Ministry was still prepared to accept that because
5 whatever the problems it was still an evaluation and
6 therefore it still had all the components set out in
7 the EA Act?

8 A. I would say it had the components,
9 correct, as well as there was sufficient information on
10 which to make certain decisions.

11 MR. TZEKAS: All right, thank you.

12 MR. LANCASTER: Ms. Vigod?

13 CROSS-EXAMINATION BY MS. VIGOD:

14 Q. Again, Mr. Clarke, I will probably
15 be brief. First of all in reference to your witness
16 statement, paragraph 5, where you talk about the
17 Environmental Assessment Act providing a process
18 oriented framework. Would it be fair to say that the
19 process is quite an important component of the whole
20 Environmental Assessment Act. It is a planning
21 statute?

22 A. Yes, the Environmental Assessment
23 Act is more of a planning tool or planning statute
24 rather than the traditional environmental approvals
25 mechanism.



1 Q. And that is where the components of
2 traceability and consistency are important in the
3 ultimate decision maker coming to a decision and as
4 well the public in following that process through?

5 A. Correct, yes.

6 Q. I wanted to briefly run through the
7 chronology as I understand it. My understanding is on
8 October 28, 1985 the environmental assessment was
9 submitted and that was basically what we know as the
10 orange documents, the 40 schedules?

11 A. Correct.

12 Q. Then you issued a letter to the
13 reviewers and Mr. Tzekas referred you to that on page
14 61 and 62?

15 A. 64 and 65.

16 Q. That's right. Excuse me. The four
17 looked like a one. In your -- at this point when you
18 sent it out to the reviewers, from what you have just
19 said, they are looking at the technical questions?

20 A. They are looking at it from their
21 technical and policy mandate.

22 Q. So really the component function is
23 left for the Branch. Is that my understanding?

24 A. It is included as part of really
25 question 1.



1 Q. If we refer ...

2 A. And other questions, like question
3 2, range of alternatives and they are free and asked to
4 comment on that from their perspectives.

5 Q. If we look back on pages 65, the
6 second paragraph you say:

7 "...answers to questions 1 through 4
8 address the analysis of the technical
9 quality and completeness of those
10 components."

11 A. Correct.

12 Q. That is the technical part again?

13 A. Right.

14 Q. My understanding then is that in
15 February, 1986 the review was issued and at that point
16 comments from the public were taken to April of that
17 year?

18 A. I think it was April the 11th or
19 something like that.

20 Q. In your supplementary document you
21 make a note that 22 submissions were received from the
22 public?

23 A. Right and public interest groups,
24 yes.

25 Q. To refresh your memory I would



1 refer you to the submission put forward by the West
2 Burlington Citizens Group?

3 A. Yes, I have a copy.

4 Q. You received a copy of that during
5 that?

6 A. I vaguely remember it. It is two
7 years ago but I remember.

8 Q. But you did review those
9 submissions?

10 A. Yes.

11 MS. VIGOD: To the best of my knowledge
12 this has not been made an exhibit.

13 MR. LANCASTER: This will be WB-935.

14 ---EXHIBIT NO. WB-935: Submission by West Burlington
15 Citizens Group

16 MS. VIGOD: Q. Without going through
17 any great detail, the submission sets out obviously
18 concerns with the undertaking and I would like to refer
19 to the last page, if I might, and there is a note on
20 the public participation. Do you see that?

21 A. Yes.

22 Q. Just to confirm there were concerns
23 raised about the public participation process and a
24 concern that it should involve a meaningful dialogue
25 where concerns are dealt with in a substantive and
timely fashion; summarizing the last paragraph. Do you



1 see that?

2 A. Right, yes.

3 Q. Mr. Clarke, if we look back in your
4 Exhibit 109, the review on page 20, we see, I guess,
5 the third paragraph?

6 A. Yes.

7 Q. "The Halton public participation
8 program predominantly involved public
9 presentations on study conclusions. The
10 nature of the public meeting limited
11 public involvement in the decision-
12 making process. In addition, there was
13 no public advisory body involved..."

14 I take it those were your comments?

15 A. Those were my comments from reading
16 the environmental assessment as submitted.

17 Q. Mr. Clarke, you just mentioned
18 briefly at the beginning that when you came into the
19 process in June of 1985, you attended a number of
20 public meetings?

21 A. Yes, one in Burlington and one in
22 Milton.

23 Q. Was this the Aldershot High School
24 meeting or the Botanical Gardens?

25 A. I think it was the Botanical



1 Gardens and I remember a lot of flowers around.

2 Q. Do you remember also there were,
3 let's say, quite a few hundred people at that meeting?

4 A. There was a substantial crowd.

5 Q. Would you agree there were a lot of
6 concerns raised, and if I can put it the frustration
7 level was very high at that meeting?

8 A. I would perceive it to be intense.

9 Q. Do you remember specifically
10 discussions of the issue of the social impact study?

11 A. I don't really remember any details
12 of what went on at the meetings at all.

13 Q. Were those meetings in part part of
14 the basis for your statement on page 20?

15 A. Not really. To me it was an
16 unrepresentative sample so I went on what was in the EA
17 itself.

18 Q. You reviewed the submissions and
19 the process set out by the consultant in reaching that?

20 A. Correct.

21 Q. Just to follow on, then when the
22 review came out in February that was the point at which
23 you said it didn't meet the technical requirements and
24 my understanding is that on November 25, 1986 a
25 response document was filed by the Region?



1 A. Yes, and it is indicated on page 6
2 of the supplementary review, 110.

3 Q. For the purposes of this hearing
4 that has become H-77 and that is actually the response
5 document. At that point in time you indicated that the
6 Environmental Assessment Branch had just reviewed or
7 just had this response document at the time you did
8 your review; is that correct?

9 A. For the secondary ...

10 Q. For the supplementary.

11 A. For the supplementary review there
12 were two green documents, one was an amendment and one
13 was the response document if I remember rightly.

14 Q. So we had H-77 and then I believe
15 there was a series of letters and an amendment to an
16 undertaking but a very slim green document?

17 A. It says on page 6 the response
18 document, including Schedule N, letters, reports and
19 resolutions adopted by the Regional Municipality of
20 Halton.

21 Q. That is before this Board H-77A. I
22 take it that you did not have, if you like, the
23 Environmental Protection Act technical studies?

24 A. No, I did not.

25 Q. Then my understanding is that this



1 response -- your letter to the reviewers then went out
2 on December 19, 1986, and that again is referred to in
3 Exhibit E-110?

4 A. That is correct, yes.

5 Q. I believe at that point you were
6 asking, it was a very short turnaround time and you
7 wanted comments back by January 19?

8 A. January 21st.

9 Q. January 21st?

10 A. Page 28 of the supplementary.

11 Q. You would agree that that was a
12 very short time given the Christmas holidays?

13 A. There was a short time relatively
14 speaking; yes.

15 Q. My understanding is that the
16 reviewers were actually sent the technical documents
17 and is that your understanding?

18 A. Which technical

19 Q. The Environmental Protection Act
20 package if you like?

21 A. That I don't know. It came from
22 Halton and it went to whoever they felt was
23 appropriate.

24 Q. Mr. Clarke, if we just look in
25 Exhibit H-77, the Halton response document, we see



1 that, and I am just looking for it, but references
2 throughout in the response document to various
3 schedules, the design and operations report, the whole
4 ambit of schedules?

5 A. Are you talking about on page 6 of
6 the report, the response document, the listing?

7 Q. Yes, that is correct.

8 A. If I can elaborate on what happened
9 between the two reviews, staff from the Region of
10 Halton had a succession of meetings with the various
11 technical reviewers that had comments to resolve where
12 possible any outstanding technical issues and I was
13 present at about 60 or 70 per cent of those meetings as
14 an observer/advisor on the process, to see what was
15 happening. I really can't comment if those reviewers
16 were given specific documents or packages of documents
17 because I never saw any documents change hands. They
18 may have been under separate cover, I don't know.

19 Q. In fairness, on page 6 we see the
20 response consists of the following documents and one is
21 response and two is schedules?

22 A. All I received was the two
23 documents.

24 Q. Are we in the situation that
25 between early December and January that respondents



1 had, if you like, this package of material to review
2 and get back to you on?

3 A. My understanding was that they had
4 various schedules as they were prepared and I believe
5 there was a period of a year at which time various
6 reports were being prepared and discussed and I was
7 really on the periphery of that discussion.

8 Q. Mr. Clarke, would you agree that at
9 that point those technical EPA documents were dealing
10 with two sites, Site D and Site F?

11 A. Without seeing them I can't agree,
12 but I would make an assumption that they probably
13 would, but I have never seen them to this date.

14 Q. I would like to just go back to Mr.
15 Tzekas' -- briefly on the concerns raised about the
16 process that first of all you have raised, concerns in
17 the review and we have seen the Ministry of the
18 Environment at least since 1985 have been raising
19 concerns about the process. Is that fair?

20 A. The process was basically from a
21 public point of view and an agency point of view was
22 just about wrapped up by mid-1985.

23 Q. I am talking about, for example, a
24 reference in the Ministry's review, if we look at page
25 100 of Exhibit 109 and the reviewers found difficulty



1 in following the decision logic and there is a
2 reference to a memo of April 19, 1985?

3 A. That is correct. That is a memo
4 that pre-dates my use or involvement in the project.

5 Q. For the purposes of the Board we
6 will find this memo in H-73 and it is in a submission
7 document before this Board?

8 A. All Ministry comments were included
9 in the various submission documents.

10 Q. Again if we look at the response
11 document, H-77, Halton's response to the Ministry we
12 see on page -- if you look at page 27 there is, I
13 guess, a re-statement of the Ministry's concern about
14 the logic?

15 A. Yes.

16 Q. As we see, I believe you stated,
17 there is a response:

18 "As this is a general concern, no
19 response appears necessary."

20 A. That is the proponent's response in
21 this situation.

22 Q. If we look through Exhibit E-109,
23 we see the comments of the Ministry of the Environment,
24 the green hat and starting at page 98 and continuing
25 through to page 115, and we see that?



1 A. Correct.

2 Q. If I look through the response
3 document, I believe I see reference to, one, two or
4 three -- a number of these paragraphs but not to the
5 concerns raised with regard to the decision logic and
6 site selection?

7 A. That is correct.

8 Q. Mr. Clarke, you indicated in coming
9 to your supplementary review that you -- I don't know
10 whether you were sure whether there were -- what the
11 technical response had been?

12 A. I don't think I remember offhand.

13 Q. I would like to refer you to page
14 20 of Exhibit 110 and again we see there a summary of
15 the Ministry's response and if I could read briefly:

16 "Halton makes no response to our general
17 comments that reviewers have difficulty
18 following the logic used to arrive at
19 some of the conclusions..."

20 et cetera. You would agree that the Ministry continued
21 to have concerns throughout this response period?

22 A. This is the technical review team,
23 yes.

24 Q. Mr. Clarke I would finally like to
25 confirm that H-14 which we know as the comparative



1 analysis was not part of your review and only the 2C
2 summary report was available for you to examine
3 Halton's decision-making logic?

4 A. That is correct.

5 MS. VIGOD: Thank you, those are my
6 questions.

7 MR. LANCASTER: Thank you, Ms. Vigod.

8 Mr. Lederer.

9 CROSS-EXAMINATION BY MR. LEDERER:

10 Q. Before I start I want to understand
11 something. This traceability, as you said in answer to
12 Mr. Tidball, is the same as decision logic insofar as
13 the questions asked by Ms. Vigod are concerned. Is it
14 the same concept?

15 A. Yes, basically it is.

16 Q. We will come back to it, but I
17 wanted to make sure we were talking about the same
18 thing.

19 Now, sir, as I understood your answers
20 to questions asked by my friends, when you originally
21 became involved in this project in June, I believe you
22 said of 1985, and I think I can quote you directly; you
23 said you came in cold?

24 A. Relatively speaking, yes. I had my
25 own portfolio of projects and this was in with another



1 planner who subsequently left the Ministry.

2 Q. What we can deduce from that is you
3 had very little understanding at the time of what had
4 gone on or what the nature of the involvement of the
5 various players had been up to that point in time?

6 A. Other than names, I had no
7 understanding.

8 Q. And I was also interested in answer
9 to a question asked of you by Ms. Vigod with respect to
10 the submission of the West Burlington Citizens Group.
11 She asked you if you were familiar with their document
12 and you said you were vaguely familiar with it, it was
13 two years ago?

14 A. Yes.

15 Q. Can I assume from that that you
16 have not reviewed all the documentation prior to coming
17 and giving evidence here?

18 A. You mean all the documentation on
19 this site?

20 Q. That's exactly what I mean.

21 A. It would be what I would call an
22 impossible task on short notice.

23 Q. Can I presume what you looked at
24 was the government review?

25 A. I reviewed the two government



1 reviews.

2 Q. Yes?

3 A. The summary documents.

4 Q. Yes?

5 A. And some of the transcripts of
6 testimony.

7 Q. To the extent there are answers or
8 information with respect to some of the questions which
9 my friends have asked and you have said there is no
10 response, is it fair to say there may be answers, but
11 you just don't recollect them from the material. That
12 is possible?

13 A. That is possible.

14 Q. When you come here and in response
15 to questions asked by my friend, Mr. Tidball, give us
16 an overview of the environmental assessment process and
17 provide us with the two overheads, it is fair to say,
18 isn't it, that what you are providing us with is your
19 understanding and perhaps the Ministry's understanding
20 of the environmental assessment process as that
21 understanding exists today. Is that fair?

22 A. It represents current practice,
23 yes.

24 Q. It is fair to say, sir, isn't it,
25 that our understanding and the Ministry's understanding



1 of the environmental assessment process has been
2 evolving over time?

3 A. As all matters do, yes.

4 Q. Over the last few years, for
5 example?

6 A. Yes.

7 Q. It is therefore fair to say that
8 our understanding of that process as it exists today is
9 different than it was at the time at which Mr. Walker
10 was carrying out his work and would you agree with
11 that, sir?

12 A. It depends on what you mean by
13 different and the degree of difference.

14 Q. The degree. I am suggesting we
15 have a more comprehensive understanding of what it is
16 we mean by this term today?

17 A. There are some differences.

18 Q. In fact it is fair to say, sir,
19 that the process has evolved over that course of time
20 and over the years?

21 A. Yes.

22 Q. The Ministry's own understanding
23 has increased?

24 A. Yes.

25 Q. And its interpretation has been



1 amended and changed over that period time?

2 A. It has evolved.

3 Q. It is fair to say that as one of
4 the first environmental assessments this one has
5 provided the Ministry with some of what it has learned,
6 isn't that true?

7 A. Some of what it has learned.

8 Q. For example it is very common ...

9 DR. KINGHAM: Did you understand the
10 question because -- or Mr. Lederer perhaps you could
11 rephrase the question. Did you some, s-o-m-e or the
12 sum?

13 MR. LEDERER: Q. Some, s-o-m-e, some
14 of what has been learned and not the sum, but some, a
15 portion of what has been learned.

16 A. I delayed a bit in my response.

17 Q. I am willing to credit this process
18 with a lot, but not that much.

19 For example, there is now prevalent in
20 waste management planning the notion of the waste
21 management master plan?

22 A. Correct.

23 Q. Those plans go through a phased
24 series of studies?

25 A. That is correct.



1 Q. Isn't it correct that the
2 understanding of that phased approach to studies finds
3 itself in the Halton landfill environmental assessment?

4 A. Some of the information in the
5 development of the present terms of reference, which is
6 a generic term of reference prepared by the Ministry,
7 that information was developed in light of the Halton
8 experience.

9 Q. It stands to reason from all of
10 this that when Mr. Walker did his work he didn't have
11 the same understanding of the environmental assessment
12 process you are now putting forward here?

13 A. That's a reasonable assumption.

14 Q. When we come to judge that effort
15 you would agree that it would be a little unfair to
16 judge that process by today's standards as opposed to
17 the standards available at the time, and isn't that
18 right?

19 A. I guess I am reticent to make
20 judgments on fairness.

21 Q. You are the first one here, sir.
22 All right. You don't want to answer the question. It
23 is a legal term? Natural justice? You don't want to
24 answer the question?

25 A. Perhaps you could rephrase it.



1 Q. What I am suggesting is that when
2 we evaluate this process what we ought to be doing is
3 looking at the problem as it confronted Mr. Walker and
4 not the problem as we understand it today?

5 A. I think ...

6 Q. Would that be appropriate?

7 A. It would be appropriate, yes.

8 Q. Thank you, sir. The simple fact is
9 that Mr. Walker didn't have, for example, the first of
10 two diagrams you showed to us in any form, did he?

11 A. Not as they exist today and I don't
12 know if he had previous editions.

13 Q. I am going to suggest he wasn't
14 given anything like that and are you in any position to
15 disagree?

16 A. I don't know.

17 Q. Sir, Mr. Tzekas asked you about the
18 temptation, and this isn't a term or the way he used
19 it, but the temptation to withhold information until
20 the hearing because it would take care of it anyway and
21 that would withhold it from the public until the last
22 moment. Do you recall the suggestion?

23 A. I do.

24 Q. It is fairer to say that what may
25 have happened here, since you don't know, but all of



1 the problems that existed are simply part of the
2 learning process and that's fair; isn't it?

3 A. Again I am reticent to judge
4 unfairness.

5 Q. It would be a reasonable
6 interpretation to say that to the extent difficulties
7 occurred here, they are part of that learning process
8 and evolution?

9 A. Yes.

10 Q. I believe you responded to this
11 question already and I would like to lay the groundwork
12 with you to confirm it. My understanding is, and I
13 believe the Environmental Assessment Board has ruled,
14 to put it differently, that the environmental
15 assessment process begins at the beginning of the study
16 phase, but in fact does not end until this Board in the
17 context of this environmental assessment renders its
18 decision and is that consistent with your
19 understanding?

20 A. That is consistent, yes.

21 Q. The fact of the matter is that
22 questions or concerns that have been raised may be
23 answered over the course of the hearing process?

24 A. The possibility exists.

25 Q. People have a chance to come here



1 and make their concerns known?

2 A. Yes.

3 Q. And raise questions about the
4 process and the issues raised along the way?

5 A. Yes, they do.

6 Q. The question becomes whether or not
7 the matter has been properly responded to in the
8 context of the entire process?

9 A. Yes.

10 Q. You weren't involved prior to the
11 end of the Stage 2C stage, that's fair; isn't it?

12 A. Could you repeat that?

13 Q. You were not involved prior to the
14 end of the 2C stage?

15 A. That is correct.

16 Q. So you don't know what happened
17 before that?

18 A. That is correct.

19 Q. So far as questions have been
20 raised both the entry of pits and quarry sites into the
21 process, were you here for Mr. Sobanski's evidence?

22 A. I was not.

23 Q. Have you reviewed the very early
24 reports, the very first reports that were prepared by
25 the Walker team?



1 A. The draft reports of 1980?

2 Q. I am thinking about here, and I am
3 going from memory myself here, but the Phase 1 reports?

4 A. I only reviewed what was submitted
5 as part of the formal submission to the Minister.

6 Q. If Mr. Sobanski in his evidence,
7 and if those reports demonstrate and I can refer to the
8 reports, but the pits and quarry sites, or the
9 availability of such sites for landfill was already
10 something under consideration and discussion at that
11 time, you are not in a position to say whether that is
12 so or not?

13 A. I can't respond.

14 Q. Assuming it is so for the moment, I
15 am putting an assumption so you can understand my
16 question is based on what I have just said is right,
17 that would suggest, wouldn't it, that pits and quarries
18 as a potential location for landfill in this area were
19 involved from the very outset of the study; wouldn't
20 it?

21 A. If you put it in that scenario they
22 were considered from the very beginning, yes.

23 Q. Thank you, sir. You also said you
24 weren't aware of responses and I would like to refer to
25 a couple of submission documents if I can find them. I



1 am going to refer you to Exhibit H-69, the submissions
2 report, review and supplement to Stage B, selection of
3 candidate sites and most particularly to page 33. You
4 will see this is broken down -- first of all, is this
5 one of the documents you would have reviewed prior to
6 coming to give evidence here today?

7 A. I believe so.

8 Q. Let me be fair in the question so
9 we understand it. Did you review it at the time you
10 undertook your review of the environmental assessment?

11 A. In 1985, yes.

12 Q. Would you have re-read it and is
13 this one of the things you would have re-read prior to
14 giving evidence?

15 A. I did not re-read it.

16 Q. You would be familiar with, but
17 this is something you would vaguely be familiar with
18 two years ago?

19 A. Yes.

20 Q. Fair enough. This is broken down
21 at least on the pages I am referring to into -- what we
22 are looking at is the Ministry of the Environment
23 comments on page 25?

24 A. The Ministry of the Environment
25 Environmental Approvals and Project Engineering Branch



1 which is the technical wing of the team.

2 Q. We have comments and study team
3 response?

4 A. Correct.

5 Q. If we look at 19 we have this
6 comment:

7 "The Ministry continues to have a
8 concern that the system of analysis
9 chosen by the consultant provides one
10 type of analysis for pits and quarries
11 and a different type of analysis for
12 other potential landfill areas. We
13 would like to know how the consultant
14 plans to tie the two methods of analysis
15 together."

16 A. Yes.

17 Q. There follows from that a response?

18 A. Yes.

19 Q. There follows from that a response,
20 does there not?

21 A. Yes.

22 Q. So it is fair to say then, isn't
23 it, that to the extent that this concern was raised at
24 the time, how will they be joined together and what is
25 the form of analysis, an answer was provided?



1 A. A response was provided.

2 Q. "A response was provided." In
3 other words, it wasn't ignored, if I can put it as
4 simply as I can?

5 A. There is a response.

6 Q. I would also like to show you by
7 way of another example, if I can, Exhibit H-65, and
8 this is going back in time and I am going backward, but
9 this is the submissions report for the Phase 2, Stage
10 2A general overview analysis?

11 A. Yes.

12 Q. Can I assume this is one of the
13 reports you would have reviewed two years ago when you
14 conducted your environmental assessment review?

15 A. If it was part of the submission to
16 the Ministry, yes.

17 Q. You don't recall?

18 A. I can't remember the schedules.

19 Q. I could assume that it is not one
20 of the documents you reviewed prior to giving evidence
21 today?

22 A. Correct.

23 Q. In this case we have here on page 7
24 a reference to a submission from the Ministry of the
25 Environment?



1 A. Correct.

2 Q. Here there is no breakdown into
3 technical side or environmental approvals side?

4 A. Not on that page.

5 Q. Among the concerns or within the
6 summary of comments at the top of page 7 we see:

7 "...inadequate documentation provided on
8 the rejection of alternative quarry
9 sites;"

10 And do you see that?

11 A. Yes.

12 Q. If we go over to page 9, No. 12, we
13 see this response:

14 "Documentation of the quarry sites that
15 were considered and their reasons for
16 rejection are given in the attached
17 appendix. The quarries have received
18 the same level of assessment as other
19 areas given that extensive engineering
20 will likely be required."

21 And do you see that?

22 A. Yes.

23 Q. Again, without going to the
24 appendix, although it is found, and for the record it
25 is found as Appendix 4 to H-10, but again there was a



1 response provided?

2 A. There was a response, yes.

3 Q. Now, sir, there was some discussion
4 here of the public meetings and do you recall that and
5 Ms. Vigod asked you some questions and you referred to
6 the fact you attended two of them at the end of the
7 Stage 2C phase?

8 A. That is correct.

9 Q. I take it, first of all, that at
10 the meetings which you attended, all of the consultants
11 were present?

12 A. I only recall seeing Mr. Walker
13 present.

14 Q. I think we have heard evidence that
15 Ms. Schiff for one was there and are you saying she
16 wasn't or you don't recall?

17 A. I don't recall, I just remember Mr.
18 Walker and several political figures of the Region at
19 the time.

20 Q. Mr. Walker and political figures
21 are strong personalities and the rest ...

22 A. I can't remember.

23 Q. Is it fair to say that on those
24 occasions questions were asked of the consultants and
25 the politicians who were present representing the view



1 of the Region?

2 A. I believe they were, but I am not
3 sure of the structure of the deputations or questions.

4 Q. To the extent questions were asked
5 and you recall this, but is it fair to say that either
6 answers were provided or promised?

7 A. I believe that that's the case.

8 Q. I take it from what you have said
9 in answer to Ms. Vigod, that your attendance at these
10 meetings was not part of the input into your review of
11 the public consultation process?

12 A. Not really because I felt it was
13 unrepresentative...

14 Q. I beg your pardon?

15 A. Not really in that I felt it was an
16 unrepresentative sample, two meetings over the course
17 of three years of meetings.

18 Q. In making your comment about that
19 or raising any questions with respect to that phase of
20 the study, you were relying on the comments of others?

21 A. I was relying on the information in
22 the environmental assessment.

23 Q. Were you relying, for example, on
24 the brief presented to you here this afternoon, or
25 presented to you or referred to you by Ms. Vigod?



1 A. That brief was presented as part of
2 the Minister's review time, 30 days after the review
3 had been published.

4 Q. I take it you are saying that was
5 not part of the input to your comments?

6 A. That was not part of the input.

7 Q. Did you have submissions from
8 citizens group before you got out the government
9 review?

10 A. Not that I am aware of.

11 Q. Did you have the submission reports
12 provided here and put into evidence by the Region?

13 A. I can't recall really and if they
14 were part of the original submission of the
15 environmental assessment, yes, I did have that.

16 Q. Assuming they were, and this is my
17 recollection and I confirmed that they were, but
18 assuming they were, can I assume that you read them?

19 A. I probably didn't read them in
20 depth in that there was a 90-day review time and it
21 took about three weeks just to read the thing as it
22 was, so some of the stuff was lightly skimmed, but I
23 did touch every page.

24 Q. It is fair to say from that that in
25 completing your view you didn't have a complete



1 understanding of the material before you. Is that
2 fair?

3 A. I think I had enough of an
4 understanding...

5 Q. That wasn't the question,
6 Mr. Clarke.

7 A. ...to make the comments I did.

8 Q. That wasn't the question. The
9 question was you didn't have a complete understanding
10 and that's fair?

11 A. It depends upon what you define as
12 "complete".

13 Q. If you only skim something and
14 didn't look at it in depth, there may well be something
15 missing in your understanding; isn't that fair?

16 A. It is possible that I might have
17 missed some item.

18 Q. That being the case, and we don't
19 know and I am not trying to be insulting, but I just
20 want to understand. That being the case, we don't know
21 what you might have missed and what you might not have
22 missed and that's fair?

23 A. I think that's true for anyone who
24 reads a massive document.

25 Q. To the extent that some question



1 was raised like the inclusion of pits and quarries
2 there may have been an answer there that you simply
3 weren't aware of -- I don't know how to put this, it
4 doesn't trigger anything as you skimmed these pages?

5 A. I didn't skim the more substantive
6 issues.

7 Q. I understand, but insofar as this
8 response to the submissions is concerned?

9 A. In the realm of possibility there
10 is always a chance of one missing something.

11 Q. I appreciate your candor, thank
12 you. Sir, can we agree from your experience, and if
13 you don't have enough experience to answer this I would
14 be happy for you to tell me that, but from your
15 experience with landfills and environmental
16 assessments, is it fair to say that people living in
17 close proximity to them generally speaking don't like
18 the idea?

19 A. I guess I would have to answer that
20 in generalities and I think it is an accepted
21 perception, both in the literature and in the media
22 that people around any waste disposal facility beyond
23 landfill don't particularly like them.

24 Q. That means then, doesn't it, that
25 they come to oppose the proposition, don't they?



1 That's the natural logical step; isn't it?

2 A. It is the natural, logical step but
3 not always the case.

4 Q. It is fair to say, isn't it, and
5 again if this question is unfair to you because of your
6 areas of expertise, please tell me and I will stop. It
7 is fair to say isn't it that people don't want to
8 believe that a proposal to have a landfill or other
9 waste disposal facility near them is appropriate or
10 proper?

11 A. I think you are stepping beyond my
12 expertise.

13 Q. Thank you, fair enough, I
14 appreciate it. Now, one of the comments which you made
15 to my friend Mr. Tidball concerned the matter of
16 looking at net environmental effects. Do you recall
17 saying that?

18 A. Correct, yes.

19 Q. As I understand it, what you do in
20 that situation is you carry out a kind of mathematical
21 calculation as it were and you take the gross effects,
22 you look at the mitigation and subtract the mitigation
23 from the gross effects and you get the net effects?

24 A. The residual effects left after.

25 Q. Okay. Now, in order to do that and



1 look at mitigation, would you agree that you can't look
2 at the Region as a whole and you can't determine
3 mitigation like berms around the whole Region or
4 anything like that?

5 A. Regionally, no.

6 Q. All right. It is also fair to say,
7 isn't it, that you can't look at it for a large segment
8 -- if you are looking for a 100-acre site and you have
9 a 1000-acre possible location, that doesn't help you
10 very much in considering mitigation at that level
11 either, it is simply too large?

12 A. On a large site I think there are
13 certain generic elements that you can consider for any
14 site once you get down to that site.

15 Q. Would you agree that when you come
16 to deal with mitigation in any kind of refined way you
17 are talking about something which is at least
18 alternative if not proposal specific?

19 A. Like I said in my previous
20 statement, there are certain generic features that can
21 be considered for any type or classification of site
22 and they could be incorporated into the equation.

23 Q. Can you give me an example of what
24 you are talking about?

25 A. Offhand is the one you used



1 previously, berming. Berming is an acceptable practice
2 around a landfill site regardless of where it is
3 located.

4 Q. Isn't it fair to say that in some
5 circumstances you may have natural ridges arising out
6 of the natural topography so you don't need a berm?

7 A. Then you would interpret it as a
8 natural berm and part of a natural mitigation factor.

9 Q. The fact it is already there would
10 have some impact on your analysis in a comparison of
11 the site?

12 A. It would cause you to re-evaluate
13 for that site specifically.

14 Q. Let's deal with it this way; if you
15 are dealing with generic mitigation or something you
16 are assuming you can apply anywhere or within the range
17 of alternatives then available to the degree of detail
18 you have it available, would you agree that that
19 mitigation doesn't really assist you in any kind of
20 comparison of the sites because you are applying it
21 equally across the board?

22 A. At the general site -- not the site
23 -- I should say the area, plan area. It is possible
24 and I think it depends on the type of environment you
25 are dealing with, a flat plain versus rolling hills, et



1 cetera.

2 Q. We are only talking about
3 generically and we are not talking site-specific or
4 proposal specific so you may have all of those ranges
5 within an area; mightn't you?

6 A. Yes, it is possible.

7 Q. The point is that the whole notion
8 of net effects or residual analysis would you agree
9 only becomes effective when you get to a fair degree of
10 detail or a fair degree of understanding of what the
11 proposal is likely to be and at an early level it
12 doesn't help much?

13 A. I think there are degrees or levels
14 you are talking about and I think there is some value
15 in having mitigation considered at the earlier level
16 and more intensely considered at the site-specific
17 level.

18 Q. At Stage 2A there were no specific
19 sites but just large areas of the Region, and would you
20 agree that looking at mitigation at that stage would
21 not have been very meaningful because it was too early
22 in the process?

23 A. I can't totally agree. I know the
24 consultant for the Region at that time suggested it was
25 not able to do that and therefore we accepted that



1 statement.

2 Q. For the purposes of this assessment
3 you were prepared to accept that position with respect
4 to the 2A level of study?

5 A. At that stage, yes.

6 Q. Can we also agree there is a
7 certain cost attached to carrying out these studies and
8 running these programs?

9 A. Are you talking about the
10 proponent's studies?

11 Q. I certainly am.

12 A. I would have to agree to that.

13 Q. Can we agree that one of the things
14 we want to do is look at questions or issues that are
15 raised when it becomes appropriate and one of the
16 considerations would be economics?

17 A. Economics is part of the definition
18 of environment.

19 Q. Would you agree, for example, that
20 when it comes to looking at mitigation, that would
21 require in effect some kind of independent study of
22 each of the areas you are looking at?

23 A. I really can't say. I am not an
24 economist so I don't ...

25 Q. I am not asking about money, I am



1 saying if you are considering mitigation and carrying
2 out a net effects analysis, you will have to look at
3 each of the areas then still present in your study
4 program?

5 A. I think you are talking about a
6 level of detail item again and there should be some
7 kind of general economic evaluation.

8 Q. I am not talking about economics
9 and let me ask the question again and we will get to
10 economics in a minute. I am saying -- would you agree
11 on the simple proposition, that if you are carrying out
12 a net effects analysis and if you have available still
13 within your study 55 large areas, for example, you
14 would have to look at each of those areas individually
15 to carry out the net effects study; wouldn't you?

16 A. Yes.

17 Q. At Stage 2B, there were 55
18 different areas and I am suggesting it would be
19 inappropriate to expect someone to carry out an
20 independent mitigation study on 55 separate proposals?

21 A. I think the advice of the Ministry
22 and the staff at the time was that certain, I guess,
23 level of detail should be considered and I think the
24 word desktop is constantly used, but I think it is
25 appropriate that mitigation be considered and if the



1 'proponent feels that it is unable to do that, they
2 should state that they are unable to do that and why
3 they are not able.

4 Q. Would it be carried out at the
5 generic level at that stage?

6 A. I believe it should be.

7 Q. That's what you mean by desktop,
8 applying the same thing everywhere?

9 A. Yes.

10 Q. I am interested in this issue of
11 traceability or decision logic. First of all I want to
12 be quite clear. My understanding is that this is not
13 an uncommon complaint from the Ministry in
14 environmental reviews it has carried out to this point?

15 A. I have already stated affirmative,
16 yes.

17 Q. I think you also indicated that it
18 is your view of your role to assist by criticizing and
19 therefore you may put in criticisms which are not in
20 any sense fatal to the process as a whole?

21 A. It is my role to make a critical
22 evaluation of the process.

23 Q. So you don't take this comment as
24 being fatal to the process as a whole?

25 A. That is correct.



1 Q. With all of that in mind, I am
2 curious on a couple of things. Can you agree that
3 ultimately when you carry out a study like this,
4 somebody has to apply judgment?

5 A. I think that is perfectly clear in
6 a planning process that there is judgment on the part
7 of individuals in that process.

8 Q. In a conceptual sense you sort of
9 take all the different pieces of a puzzle and weigh
10 them and play with them or do whatever you do with
11 them, and then you make a judgment on what you think
12 are the appropriate weights or the appropriate emphasis
13 or the appropriate ordering and priorities, would you
14 agree?

15 A. I wouldn't say it is an
16 individual's judgment but certain things like criteria
17 should be set with input from government agencies and
18 the public.

19 Q. You set the parameters of the
20 weighing of all of that by setting criteria, don't you?

21 A. You set the criteria and then
22 weight those criteria and how important they are.

23 Q. Would you agree at the bottom line,
24 the bottom line of all of this is someone taking the
25 criteria or skeleton, if that is the right phrase, of



1 the analysis and applies the particular facts and he
2 comes to a decision and a single person or it may be a
3 group?

4 A. It could be either, yes.

5 Q. Would you agree that in order to
6 fully understand that, ultimately you would have to be
7 able to open up the mind of the person or people
8 involved and look inside and see what was going on.
9 Isn't that right?

10 A. I think what we are asking for is
11 documentation of the intuitive process that often goes
12 on with experienced people.

13 Q. I understand what you are looking
14 for but I want you to answer my question. My question
15 is that at the bottom line it is something that went on
16 in someone's head and you would have to open their mind
17 to look inside to see what it was that took them
18 ultimately to the decision they made. That's fair;
19 isn't it?

20 A. I can't agree with that.

21 Q. You think that somehow you ought to
22 be able to write down the way in which your mind works
23 and the values and the basis upon which the judgment
24 was ultimately made?

25 A. I think if you are making decisions



1 I think you should be able to document the rationale
2 for those decisions.

3 Q. Just a second, I am not talking
4 about documenting the rationale, but the decision
5 logic, the process the mind goes through in coming to
6 the decision, and I am regarding that as the same
7 thing?

8 A. I guess it is a difference of term,
9 but I am saying, yes, they should be able to write down
10 those decisions.

11 Q. In fact, sir, there was an analysis
12 carried out, the pairings analysis as it has been
13 called, at the end of Stage 2C?

14 A. Yes and I believe the terminology
15 in the environmental assessment was "paired comparison
16 analysis".

17 Q. There we have in fact an
18 explanation of how each of the sites compared to each
19 of the other sites of the six remaining at that time?

20 A. That's correct.

21 Q. There is the rationale behind why
22 each site was compared ultimately in a particular way
23 to another site and is contained within the reports
24 which support the 2C study; isn't that correct?

25 A. Correct.



1 Q. Would you agree with me that to the
2 extent that you have now described it as a writing down
3 of the rationale behind a particular decision, that
4 exists in the Stage 2C study; doesn't it?

5 A. Could you say that again?

6 Q. You just said to me that you
7 thought you ought to be able to write down the
8 rationale of any kind of analysis or decision and I am
9 saying to you that on that description that kind of
10 rationale is found within the Stage 2C study and that
11 description of the reasons for and against each site as
12 compared to each other site?

13 A. I think the method is described and
14 the results of that method are described.

15 Q. Would you agree that it shows you
16 the logic behind or the rationale behind that decision?

17 A. I am not sure what decision.

18 Q. The ordering of the sites as
19 contained within the report?

20 A. The paired comparison test, if you
21 want to put it as such, comes to a conclusion and that
22 conclusion is documented in the EA.

23 Q. You can see that by looking at
24 those documents?

25 A. Yes.



1 Q. In fact, sir, you were aware of the
2 Region's position before this Board with respect to the
3 two reminding sites?

4 A. You may have to update me in that
5 respect.

6 Q. You know there are two sites before
7 the Board, one in Burlington and one in Milton?

8 A. Yes.

9 Q. You know that based on Exhibit H-
10 14, the green document, the Region takes the position
11 that Site F is preferred although perhaps just
12 marginally and that is the position as it entered this
13 hearing?

14 A. I have heard that.

15 Q. Would you agree that as you go
16 through that document you will see all the reasons
17 behind the Region's position within that document?

18 A. I am not sure what document the
19 exhibit number refers to.

20 Q. If Mr. Tzekas doesn't mind me
21 stealing his copy for a moment?

22 A. The comparative study?

23 Q. Yes.

24 A. I have not fully read that.

25 Q. So you don't know what's really in



1 it?

2 A. Other than just a few pages, no.

3 Q. We do agree, however, that if you
4 want to see the basis for the Region's position at the
5 end of 2C you can find it by looking at the 2C in the
6 study and looking at the comparative analysis?

7 A. The pairing analysis is one of the
8 tools that was used in 2C.

9 Q. Now, I want to deal with that
10 because you said to Mr. Tidball, as I recall, that
11 another one of your criticisms not fatal to the process
12 but arising out of your critical role was the use of
13 the pairing analysis when one of the sites was, as you
14 called it, an anomaly, and that's your word?

15 A. I think I remember saying anomaly,
16 yes.

17 Q. Will you agree with me, and I think
18 this is a pretty straightforward question, but the
19 environmental assessment process at its root is the
20 discussion of alternatives and alternative methods and
21 a winnowing or sieving down of the various options
22 available to solve the problem or take advantage of the
23 opportunities?

24 A. It goes beyond a discussion. It is
25 an evaluation of the advantages and disadvantages of



1 each of those and a selection of a preferred
2 undertaking.

3 Q. As you select, or as you sieve
4 these different alternatives and alternative methods,
5 it stands to reason doesn't it, that you have to
6 compare them; doesn't it?

7 A. I don't know if you necessarily
8 have to compare them to each other. They could stand
9 on their own and by inference I would say you have to
10 compare them.

11 Q. If you have six and each of them
12 stands on its own, you don't stop there; do you?

13 A. No.

14 Q. You go on to find which one would
15 be the most preferred hopefully of those six; isn't
16 that right?

17 A. That is why I said by inference...

18 Q. The essence of it is that
19 ultimately you have to begin comparing these sites,
20 don't you?

21 A. Yes.

22 Q. Will you agree with me that
23 generally speaking, and I don't suggest this will
24 always be the case, but generally speaking you will
25 ultimately come down to two where you have two



1 alternatives left; won't you?

2 A. You may come to that decision.

3 Q. When you do you are going to
4 compare them; aren't you?

5 A. Or you will weigh the advantages
6 and disadvantages of each and basically see which is
7 the most appropriate.

8 Q. Isn't that a comparison?

9 A. In the broad sense.

10 Q. Weighing one against the other?

11 A. In the broadest sense of the word.

12

13 Q. So in some fashion can we agree
14 that a pairing analysis is a form of comparison?

15 A. I think by the nature of the word
16 in the title, I think it is a form of comparison.

17 Q. So what I am suggesting is that at
18 some point a pairing analysis or a comparison is
19 intrinsic in any environmental assessment process, do
20 you agree?

21 A. It can be part and would be part of
22 an environmental assessment process, planning process.

23 MR. LANCASTER: Mr. Lederer, could we
24 consider a break?

25 MR. LEDERER: We can, sir. I will get



1 into trouble. Let's take a break.

2 DR. KINGHAM: You are going to say you
3 are only going to be another ten minutes?

4 MR. LEDERER: That's what I was going
5 to say. Let's take a break and I don't want to get
6 into trouble, but I will say I won't really be very
7 long.

8 MR. LANCASTER: We will take our break
9 and then we will see.

10 ---Recess

11 MR. LANCASTER: Please be seated.

12 MR. LEDERER: Q. Mr. Clarke, I may not
13 have understood this correctly and if I didn't please
14 correct me. Did I understand you to say in response to
15 questions asked by Mr. Tzekas that no response was
16 delivered to the technical concerns raised through this
17 project?

18 A. I think I stated that I wasn't
19 aware of any response to the specific items he brought
20 to my attention.

21 Q. What were those specific concerns.
22 Let me deal with it this way: I am now showing you H-70
23 and this is the submissions report for Phase 2, Stage
24 2C, the one which I had referred you to earlier. Can I
25 ask you or can I presume first of all that this is one



1 of the documents you would have reviewed in the course
2 of conducting your environmental assessment review?

3 A. Yes.

4 Q. I take it from what you said
5 earlier that this is one of the documents you reviewed
6 not in a deep way?

7 A. That is correct, yes.

8 Q. What I would like to do is show you
9 just by way of example, and let's go to page A7-1. Do
10 you see that?

11 A. Yes.

12 Q. You see this is dealing with the
13 Ministry of the Environment?

14 A. Yes.

15 Q. In response to a submission dated
16 April 19, 1985?

17 A. Correct.

18 Q. Received on April 22nd, 1985?

19 A. Correct.

20 Q. Would you agree looking at the
21 headings that these tend to deal with technical
22 matters, land use planning, air quality assessment,
23 noise assessment, visual assessment, biophysical
24 assessment, economic assessment, social impact
25 assessment and transportation assessment, hydrogeologic



1 assessment; and so on?

2 A. Correct.

3 Q. Will you agree with me that here we
4 have an example of where the technical concerns of the
5 Ministry of the Environment have been assessed by these
6 submission documents?

7 A. At that point in time.

8 Q. Thank you. It is not a matter of
9 them being ignored or no response being given.

10 A. At that point in time, yes.

11 Q. Now, will you agree with me at
12 Stage 2C, it marks the end, subject to the work that
13 was done and which became the subject matter, of -- I
14 can't remember the term I used -- the supplementary
15 review -- subject to that, 2C was the end of the
16 environmental assessment process or subject to the
17 preparation of a summary document, subject 2C was the
18 end of the environmental assessment process?

19 A. It was the end of the pre-
20 submission consultation component of the EA process.

21 Q. After that there was the submission
22 of the formal environmental assessment?

23 A. To the Minister, correct.

24 Q. Your review was prepared?

25 A. Correct.



1 Q. Some additional work was done?

2 A. By the proponent.

3 Q. And the supplementary review was
4 prepared?

5 A. Correct.

6 Q. When you tell us that it was to
7 this point in time, that point in time is virtually the
8 end of the environmental assessment process; isn't that
9 right?

10 A. Like I said before, the pre-
11 submission consultation.

12 Q. In the context then of this process
13 as occurred here, I understand that you told us it was
14 normal for the Ministry to contact the proponent in
15 some informal way prior to the delivery of the review
16 and say these are the problems and give the proponent
17 an opportunity to address those problems?

18 A. I didn't say that.

19 Q. I thought you did. Didn't you say
20 there was an opportunity to address the concerns prior
21 to the release of the review?

22 A. I said there was no opportunity to
23 address those concerns.

24 Q. And I thought you said ...

25 A. And it was stated in the



1 conclusions of the review.

2 Q. I thought you said that because of
3 the 90-day period imposed here, there were certain
4 constrictions and one of the constrictions was that
5 there was no ability in the proponent to respond to the
6 concerns in the course of the review process?

7 A. No, I quoted the fourth paragraph
8 on page 62:

9 "It should be noted that the Regional
10 Municipality of Halton requested a 90-
11 day timetable for the preparation of the
12 Review. This timetable did not provide
13 time to fully clarify reviewers'
14 comments or to facilitate resolution of
15 issues."

16 Q. It is the words "facilitate
17 resolution of issues" which interests me. If you have
18 an issue in which you have called the normal case,
19 there is an opportunity for the proponent to resolve
20 those issues before the review is finalized, and isn't
21 that the proposition within those words?

22 A. Because the proponent was copied on
23 all the reviewers' comments as they arrived, either
24 directly from the various reviewers or we supplied them
25 with comments as we supplied comments to other parties,



1 then the proponent had that opportunity to examine
2 those comments and address the issues as they became
3 aware of them.

4 Q. Before the completion of the
5 review?

6 A. That is correct.

7 Q. In this case that didn't take place
8 because of this 90-day period?

9 A. There was no time for that to take
10 place.

11 Q. You say that is what normally
12 happens, and that's the word you used when this was
13 discussed. Do you recall saying this?

14 A. I don't recall saying that.

15 Q. I want you to assume you did
16 because that is something I am certain of. Will you
17 agree with me, sir, that going back to the way things
18 were then as opposed to the way they are now that this
19 being one of the first five landfill environmental
20 assessments, at the time all this was taking place,
21 there was no normal way of doing anything because in
22 fact there wasn't enough practice in place yet to tell
23 us what was "normal".

24 A. I can't agree with that because a
25 waste environmental assessment is the same as any other



1 environmental assessment and there have been at least
2 six years of dealing with various proponents in the
3 environmental assessment process.

4 Q. Since 1982 do you know how many
5 environmental assessments there would have been?

6 A. I think there would have been about
7 seven at that time.

8 Q. I guess the public record can
9 confirm or deny that. Tell me, in any event would you
10 agree with me that what has happened here is that we
11 have had the government review finished and -- excuse
12 me. Typically what happens is the environmental
13 assessment gets submitted, would you agree?

14 A. Correct.

15 Q. That's what happened here?

16 A. Yes.

17 Q. The assessment is sent out to all
18 the various reviewers, do we agree?

19 A. Correct.

20 Q. That's what happened here?

21 A. Yes.

22 Q. The reviewers express concerns, do
23 you agree?

24 A. Some reviewers expressed concerns,
25 yes.



1 Q. They express concerns if they have
2 any?

3 A. Yes.

4 Q. That's what happened here?

5 A. Yes.

6 Q. And the proponent then has an
7 opportunity to comment or to try and clarify those
8 concerns?

9 A. Correct.

10 Q. In effect that is what happened
11 here; isn't it? The difference is only that there was
12 a review published before that secondary opportunity to
13 address concerns was taken advantage of?

14 A. It eventually happened, yes.

15 Q. Typically a review is then
16 published but here we have a supplementary review?

17 A. Correct.

18 Q. Except for the fact that there was
19 a public indication or a more public indication of the
20 concerns for want of a formal review being printed,
21 this is a fairly typical example of what happens, isn't
22 it?

23 A. This is the only example of the
24 process as it occurred in Halton that has happened to
25 date.



1 Q. In the sense there is a
2 supplementary review. If you ignore that and look at
3 the steps, the filing of the assessment, comments of
4 the reviewers, opportunity to address and finalization
5 of the review, those steps are frankly present here,
6 aren't they?

7 A. Yes.

8 Q. In that sense then this is a fairly
9 typical process; isn't it?

10 A. In a sort of round about way, yes.

11 MR. LEDERER: Could I just have a
12 moment, sir. I apologize.

13 Q. Someone referred you to the fact
14 that there was a comment written by you that the public
15 consultation process should begin as soon as possible,
16 or words to that effect. It may not be as soon as
17 possible, but early in the process?

18 A. I think that's a standard Ministry
19 statement.

20 Q. This is a copy of an exhibit filed
21 here and the original form was in the back of, I
22 believe, Exhibit 8, the witness statements, and I don't
23 recall the number or whether it was separately
24 numbered, but there was a pouch in the back. This is
25 just a history of this study process and down the side



1 you will see the various kinds of reports prepared, and
2 that would be the vertical axis, and on the horizontal
3 are the different stages, Phase 1 and Phase 2, Stage 1
4 and then Phase 2, Stage 2A and Phase 2, Stage 2B and so
5 on.

6 What I wanted to show you, and just to
7 confirm you weren't involved prior to June of 1985?

8 A. That is correct.

9 Q. Here we have at Phase 1, the work
10 program and Phase 2, Stage 1, the waste and needs
11 systems analysis, but on October 14, 1982, a public
12 information centre. Do you see that?

13 A. I do.

14 Q. Would you agree that that
15 represents the beginning of or part of a public
16 consultation program?

17 A. I would have to take your word for
18 it.

19 Q. Would you agree that beginning with
20 a look at the work program for that earliest stage of
21 study is about as early as you can get involved in a
22 public consultation program?

23 A. I really can't comment on that.

24 Q. I was a bit concerned about
25 something you said because I am not sure it is quite



1 accurate. When the response to the environmental
2 assessment review was filed, is it your evidence that
3 you did not see the attendant schedules and documents
4 which make up the Environmental Protection Act phase of
5 the study but include the responses to the concerns
6 raised in the environmental assessment?

7 A. I was, I guess I recollect that I
8 was promised a box of documents but I never personally
9 received them.

10 Q. Are you in a position to say they
11 weren't filed with the Ministry?

12 A. I wouldn't say they weren't filed
13 with the Ministry, but they weren't filed with myself
14 or our branch.

15 Q. You are not sure then whether they
16 were with the Ministry?

17 A. I would assume they were filed with
18 the Ministry technical team.

19 Q. Did you inquire of the technical
20 team whether they had them?

21 A. I know they had some of them for
22 sure because I saw them on desks.

23 Q. Wouldn't it have been wise for you
24 to obtain copies that way and review them?

25 A. I requested them several times and



1 they were not circulated.

2 Q. The technical people chose not to
3 send them to you?

4 A. I requested them of the proponent.

5 Q. Wouldn't it have been wise to go to
6 the technical side of the Ministry and ask for them?

7 A. Since they addressed technical
8 aspects and technical concerns and was beyond the
9 review time for both the original and supplementary
10 review, I had no purpose in reviewing them.

11 Q. Finally -- there is one question I
12 want to ask. You were asked by Mr. Tzekas about the 20-
13 year planning horizon?

14 A. Yes.

15 Q. Is it fair to say there is no
16 reference to 20 years within the definition or
17 statement of the undertaking; is there?

18 A. There are actually two dates, if I
19 can quote.

20 Q. Under the undertaking?

21 A. The undertaking is described as the
22 two sites or one or the other.

23 Q. Can we agree that is no reference
24 to date but what there is a reference to -- this is not
25 as defined?



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19 can quote.

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22 two sites or one or the other.

23 Q. Can we agree that is no reference
24 to date but what there is a reference to -- this is not
25 as defined?



1 A. This is the original.

2 Q. In its present form would you agree
3 that the statement, the life of the site is defined by
4 terms of the amount of waste it will receive and not
5 the length of time it would last?

6 A. That is correct in that it is not
7 mentioned in the undertaking, but it is mentioned in
8 the purpose of the undertaking.

9 Q. There is no question that that is
10 the base of the design and I am not denying that, but I
11 am asking if you would agree that within the
12 description of the undertaking it is described in terms
13 of the amount of waste?

14 A. It is a volume figure.

15 Q. Would you agree that when you look
16 for a volume figure, one of the things you might do is
17 begin by considering how long you might optimally like
18 a site to last?

19 A. That is one of the considerations.

20 Q. Would you agree in order to do that
21 you would have to look at population projections?

22 A. That would be one consideration.

23 Q. Would you agree you would have to
24 look at waste generation?

25 A. An additional consideration.



1 Q. Which means you would have to look
2 at such factors such as what would be recycled and what
3 wasn't?

4 A. That is another consideration.

5 Q. My point being that what you are
6 dealing in, can we agree, is prediction?

7 A. To a degree.

8 Q. A prediction which is sensitive to
9 a number of differing variables?

10 A. Yes.

11 Q. Would you agree that predictions of
12 that kind change generally speaking from year to year
13 depending upon the economic climate and more
14 understanding or less understanding of the various
15 inputs to such a calculation?

16 A. They can do so.

17 Q. Would you agree then that when we
18 come to look at the size of a landfill to determine
19 these figures, what we are looking at is reasonable
20 planning and what is a reasonable number in the
21 circumstances?

22 A. I am not sure of what you are
23 asking.

24 Q. We know we can't have complete
25 accuracy because we can't predict that accuracy, can



1 you agree?

2 A. You can do some predictive
3 analysis.

4 Q. Sure, but I once cross-examined a
5 man from Hydro, an economist, and there was one
6 statement I remember clearly about his prediction, and
7 that is the one thing he could say is that it would be
8 wrong. His predictions never worked out to be exactly
9 right, and neither do you, and it would be pretty
10 unusual?

11 A. I think that that's a fair
12 statement.

13 Q. So would you agree with me then,
14 sir, that what we are looking for is a figure which is
15 reasonable in the circumstances?

16 A. I really can't comment.

17 Q. Would you agree, because you have
18 agreed the prediction is likely to be wrong, but would
19 you agree that that being the case, when you look
20 forward in time and you retain different people to do
21 these kind of projections, that if you put different
22 people in a different room and ask them for the same
23 projection, one thing you can be reasonably certain of
24 is that the number they will come up with would be
25 different?



1 A. I didn't agree the prediction would
2 be wrong, I said there could be some uncertainty to the
3 prediction.

4 Q. Would you agree that two different
5 demographers doing this kind of work might come up,
6 doing the population work and all the subsequent
7 analysis done by requisite experts, if you had two
8 different sets of experts or two different experts you
9 could count on and pretty well coming up with a
10 different answer?

11 A. I think that that could be the case
12 in any field of expertise.

13 Q. Absolutely. Therefore, doesn't it
14 stand to reason that when we are planning -- what we
15 are asking for is not to plan perfectly since there is
16 some degree of uncertainty but to plan reasonably?

17 A. I really can't ...

18 Q. You can't answer that?

19 A. No.

20 Q. Fair enough. Will you agree with
21 me that these numbers will change or can change from
22 year to year?

23 A. Which numbers?

24 Q. Population numbers, waste
25 generation numbers and therefore the waste likely to be



1 developed over a 20-year period?

2 A. The numbers are variable, yes.

3 Q. Would you agree with me that these
4 studies do take many years and for whatever reason that
5 has become a fact of life. You can't do it in 12-
6 months generally, can you?

7 A. I think any planning exercise takes
8 a number of years to gather all the information.

9 Q. It would appear that as we start
10 this process, the one thing we know is that the
11 population numbers and the waste generation numbers and
12 all of that which leads to the prediction of size and
13 begins with the life of the site will change each year,
14 possibly; and that's fair?

15 A. Again on the question of fairness,
16 I think, is a possibility.

17 Q. You don't like that's fair?
18 Generally speaking, that's correct; isn't it?

19 A. It is a possibility.

20 Q. Would you agree it is not really
21 appropriate to suggest you would have to go back every
22 time there is a change and in effect start over again
23 and re-adjust the size of your site, is it?

24 A. I think there are certain points in
25 any planning study where there can be a re-



1 consideration of planning horizons, whether they be
2 size or number of years that will be served to a
3 certain point in the study and there are usually
4 threshold points where you cannot start to reverse the
5 whole process.

6 Q. Would you agree at some point you
7 have to make up your mind what you are going to plan on
8 and get on with the process?

9 A. Depending upon those decisions and
10 I can't usually say all decisions have to at one point
11 in time be made and continue, but some, yes.

12 MR. LEDERER: Thank you and those are
13 all my questions.

14 MR. LANCASTER: Thank you.

15 DR. KINGHAM: It is not going to
16 surprise you to learn that the Board will have a few
17 questions and I don't think it will surprise
18 Mr. Tidball either.

19 You have already observed this is a
20 relatively new field and in some senses we are breaking
21 new ground in this field. I want you to know that what
22 we want to do is simply understand as completely and
23 clearly as we possibly can on this Board what it is you
24 have done and what the Branch has done and I hope you
25 understand that this clarification is in no one way a



1 criticism of the Ministry or your work, we just want to
2 understand how you approached this Halton undertaking.

3 I would like to start with the stated
4 purpose of the Environmental Assessment Act which you
5 included on page 1 of your witness statement, where you
6 make the observation the purpose of the Act, or you
7 quote the purpose of the Act as being:

8 "...the betterment of the people of the
9 whole ... of Ontario ..."

10 I am wondering in your work and particularly in this
11 application, what you did or what your colleagues did
12 on behalf of the people of the whole of Ontario with
13 respect to Halton's waste management problem. Did you
14 take that part of the Act into consideration?

15 THE WITNESS: I took it into my
16 consideration in my review of the documentation before
17 me and basically, to use a jargon phrase, the bottom
18 line in my mind was will the development of this
19 facility be worse than what exists now, and that was
20 affecting negatively the population of Halton Region
21 and thereby being part of the population of Ontario.

22 DR. KINGHAM: How do you consider if
23 this undertaking has any implications that extend
24 beyond the boundaries of the Regional Municipality of
25 Halton?



1 THE WITNESS: I think it was made clear
2 in the environmental assessment that they did not
3 intend that this application, whether it be Site D or F
4 or any of the facilities they are proposing as part of
5 their waste management plan extend beyond the
6 boundaries, except the situation as it now exists which
7 does extend internationally.

8 DR. KINGHAM: As a result of your
9 review of their assessment, you don't feel there are
10 any impacts of the undertaking as stated that are
11 beyond the Regional Municipality of Halton?

12 THE WITNESS: I really can't answer
13 that clearly from my review. I think a lot of that
14 would come from the technical reviewers as well.

15 DR. KINGHAM: We are going to get into
16 the technical reviewers in a minute. Let me ask you
17 this question; as I turn to E-933, the planning
18 framework, the very first step in the planning process
19 you describe under the heading "Purpose of the Study"
20 as "Problem or Opportunity."

21 How did you view the Halton undertaking,
22 as a problem or an opportunity, or both or neither?

23 THE WITNESS: I am trying to think back
24 a number of years now, but my immediate reaction would
25 be problem, but I think there is also an opportunity



1 there as well and that is the coming of age of waste
2 management as a utility on the municipal side of
3 things.

4 I guess it has been a poor cousin
5 utility with respect to a lot of other municipality
6 facilities, water, sewage, roads, transit have all been
7 seen to be a very enhancing thing for municipalities to
8 develop and waste management has always been something
9 that the poor works engineer got stuck with and he did
10 it part-time on the side, and maybe not in the case of
11 a municipality of the size of Halton's scope, but there
12 is a problem to be resolved, waste management for the
13 Region, and if they care to go in with other Regions,
14 perhaps a consortium.

15 There is an opportunity to approach the
16 environment from a wider perspective of looking at
17 recycling and recycling materials that do not
18 necessarily have to be disposed of and changing a
19 little bit of our lifestyle tendencies.

20 DR. KINGHAM: That is precisely the
21 point I wanted to focus on. You viewed it as a problem
22 of waste management. Did you in your discussions with
23 the Region, the public or your technical advisors,
24 consider the opportunity of reduction or the reduction
25 of waste in the first as an alternative to the



1 undertaking.

2 THE WITNESS: The proponent indicated
3 that that was a component of the waste management
4 scheme for the Region.

5 DR. KINGHAM: I don't know what you are
6 referring to specifically. What was their way of
7 reducing the generation of waste and I am not focusing
8 on waste recycling or energy from waste, we understand
9 those parts of the Region's program. Did you consider
10 in any way the basic problem or the basic opportunity
11 when you looked at alternatives to a landfill?

12 THE WITNESS: I can't remember if it
13 was discussed in that fine a detail and that is
14 something that has traditionally been a provincial
15 mandate issue. The various branches of the Ministry
16 are taking initiatives to solve the problem before it
17 becomes a problem, such a change of lifestyle, less
18 throw-away products generated in the first place.

19 I don't think it is really within the
20 responsibility or capability of the Region other than
21 on the production of their own waste.

22 DR. KINGHAM: So it is your own
23 evidence that communities, municipalities and regional
24 governments cannot take steps to reduce the volume of
25 waste generated in the first place. We understand your



1 position that provinces and national governments and
2 international bodies can, but you say you can't do it
3 below that level?

4 THE WITNESS: I think I am stepping out
5 of my expertise a bit here and I think some things can
6 be done and some area municipalities have done some
7 things.

8 DR. KINGHAM: I don't want you to step
9 out of your expertise and I think your answer is that
10 basically that did not weigh heavily in your assessment
11 of alternatives to the undertaking.

12 THE WITNESS: It doesn't really come to
13 focus in my mind.

14 DR. KINGHAM: I raise that of course
15 because of your witness statement on page 2, paragraph
16 5, "to respond to a problem or opportunity" and, in
17 particular your quote of that section of the Act
18 referring to the alternatives to the undertaking.

19 I would like to turn then to page 3 of
20 your witness statement and in particular paragraph 8
21 where you make the observation:

22 "The input of affected parties is an
23 integral part of the planning process
24 and begins at the earliest stages."

25 Who did you consider to be the "affected parties" in



1 regard to this undertaking?

2 THE WITNESS: The affected parties in
3 my mind are the community at large, the public, public
4 interest groups, those who are directly affected by any
5 of the then six potential sites, and later two sites,
6 as well as the government review team.

7 DR. KINGHAM: Could you be more
8 specific as to who you understand the parties to be
9 with regard to the final undertaking.

10 THE WITNESS: I don't think there is
11 any change in that list as far as the final
12 undertaking.

13 DR. KINGHAM: The public is a very
14 broad category and it is all of us.

15 THE WITNESS: Right.

16 DR. KINGHAM: Can you be more specific?

17 THE WITNESS: I think you have to
18 consider the public as a whole because there may be
19 individuals in that public as a whole that may have
20 direct concerns with a site facility or whatever it may
21 be, a process or plan, that you may not be able to
22 truly identify if they were living beside the site and
23 you are very cognizant that they have concerns because
24 they are there, but we could take an example of, let's
25 say, the anglers and hunters. If there is someone



1 proposing to landfill a prime wetland identified as a
2 provincially significant wetland, and while they don't
3 live near or on the site, they have a concern because
4 of various programs they run that this wetland would
5 basically be destroyed.

6 DR. KINGHAM: Can I infer from what you
7 are saying that people who live on the site are
8 affected parties?

9 THE WITNESS: Yes.

10 DR. KINGHAM: People living near the
11 site are affected?

12 THE WITNESS: Yes.

13 DR. KINGHAM: People who live in
14 communities close to the site are affected parties?

15 THE WITNESS: Yes.

16 DR. KINGHAM: I raise the question in
17 the context of the heading consultation and it is
18 simply to know the extent to which you or your
19 colleagues consulted with the affected parties and what
20 was the consultation?

21 THE WITNESS: In the consultation
22 program it is basically run by the proponent with
23 advice from us on what we felt was appropriate.

24 DR. KINGHAM: Did you or your
25 colleagues, did the Ministry of the Environment consult



1 with people affected by the undertaking.

2 THE WITNESS: There is again the
3 difficulty of answering because I came in at the end of
4 the process and there may have been meetings with
5 groups or individuals I don't know.

6 DR. KINGHAM: I was going to deal with
7 that later actually but let's deal with it now. You
8 came in late in the process and you said you came in
9 cold and in response to questions from Mr. Lederer you
10 had come comment about not really being briefed on it.
11 Was there no transfer of the issue to you in any way
12 that conveyed the history of the issue and that gave
13 you a sense of what had happened before on the basis of
14 which you would continue the work?

15 THE WITNESS: I guess you then get into
16 a situation of a personality who was then the review
17 co-ordinator and ...

18 DR. KINGHAM: I don't really want to
19 get into personalities but I want to know if you came
20 into this cold or if you had some history.

21 THE WITNESS: I had basically about a
22 half hour briefing and I attended those two public
23 meetings, and that was it.

24 DR. KINGHAM: On page 4 of your witness
25 statement in the second half of the 11th paragraph, you



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2 provincially significant wetland, and while they don't
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24 DR. KINGHAM: On page 4 of your witness
25 statement in the second half of the 11th paragraph, you



1 observe:

2 "Upon receipt of comments, the Review is
3 prepared by the EA Branch and with the
4 Notice of Completion is sent to the
5 Minister ..."

6 Can you explain to us what is actually done in the
7 preparation of the review?

8 THE WITNESS: Okay. In preparing the
9 blue document called the review, and we have to wait
10 until we get all the comments in and we basically as
11 myself, the review co-ordinator, our comments are part
12 three of the review and that is our planning comments.

13 We try to highlight and summarize the
14 salient points the other technical reviewers have given
15 to us in Part 4 and then decide on what the conclusion
16 of the various, of the two key tests are, once the
17 review has been put together in a draft based on our
18 comments and the technical reviewers' comments. This
19 is usually myself and my supervisor who go over all the
20 information that we have before us and basically the
21 conclusion is left to me with some feedback from my
22 supervisor on the appropriateness of that conclusion.

23 DR. KINGHAM: So you draw a conclusion
24 based on the technical review of the parts?

25 THE WITNESS: The conclusion would be



1 based on both the planning aspects which is the EA
2 branch or the Environmental Assessment Branch
3 component, Part 3, which is the first test on whether
4 all the components of subsection 5(3) of the Act are in
5 the document, and then the second test is the technical
6 reviewers' comments as they were submitted to us and
7 that is the second test as to whether technical quality
8 and level of detail is sufficient.

9 DR. KINGHAM: I am going to take a
10 little bit of liberty with your analogy and I hope you
11 will forgive me.

12 THE WITNESS: The soup analogy?

13 DR. KINGHAM: You raised it so I am
14 going to take some liberties with it and call you Chef
15 Clarke and you are making the soup. Let's take the
16 real world example: you are making the soup and you
17 will put in some mushrooms and somebody supplies you
18 with good mushrooms; you will put in some oranges and
19 you will decide whether you are going to fry the
20 oranges before you put them in or not; you put in some
21 apples and it is a weird soup and someone provides you
22 with an apple that is rotten and you can see that it's
23 rotten. The person who provides you with the apple is
24 the supplier of apples, the grower of apples, and he
25 says this is the fine apple. Do you put it in the



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22 with an apple that is rotten and you can see that it's
23 rotten. The person who provides you with the apple is
24 the supplier of apples, the grower of apples, and he
25 says this is the fine apple. Do you put it in the



1 soup?

2 Do you understand why I am using the
3 analogy?

4 THE WITNESS: Yes. I would say if it
5 was me, personally, I would question the
6 appropriateness of this particular apple and be
7 reluctant to put it in any soup that was going to be
8 served to my customers.

9 DR. KINGHAM: What concerns me about
10 this, and it is not a concern with the EA Branch any
11 more than it is with the person putting together an
12 environmental assessment, but it is the broad question
13 of the guiding intelligence at all levels of the
14 preparation of an environmental assessment, whether it
15 be the proponent or the reviewer.

16 You said at some stage that you could
17 not speak for the technical reviewers, they did their
18 own technical review. When you described to us the
19 difference between the original review, Exhibit E-109,
20 and the supplementary review, Exhibit E-110, with
21 respect to the matter of how the decisions were made,
22 the traceability, I think you said, you said maybe they
23 were satisfied in the supplementary review, I don't
24 know.

25 My question really is, how do you use



1 the information provided by technical people providing
2 it to you and other Ministries in formulating your
3 judgment as to the adequacy or completeness of the
4 review that you are then going to sign off to the
5 Minister.

6 THE WITNESS: In the case of the
7 original review...

8 DR. KINGHAM: Or in the case of the
9 supplementary review.

10 THE WITNESS: There were definite
11 outstanding technical concerns and they were indicated
12 in the review, both highlighted as well as included in
13 full as part of the appendix to the review.

14 In the case of the supplementary review,
15 the indication from the technical reviewers' to me on
16 such items as hydrogeological concerns, land use
17 concerns which were totally beyond my realm as someone
18 with a geography planning background, they indicated to
19 us that their concerns had been addressed and therefore
20 in a supplementary review I had to indicate that I have
21 been advised by those who commented previously that
22 their concerns are now addressed.

23 DR. KINGHAM: The dilemma I am facing,
24 Mr. Clarke, is that the earlier criticisms of your
25 branch had to do with the logic of the decision-making



1 comparison of different sites and the technical
2 reviewers, if I have understood you, were reviewing
3 certain technical aspects such as hydrogeology, biota
4 and what have you, and when you received their comments
5 in the supplementary review they said nothing about the
6 earlier difficulties but were satisfied on the
7 technical difficulties.

8 Am I to understand you to say that that
9 led you to conclude they must have been satisfied with
10 the logic of the process?

11 THE WITNESS: I wouldn't make that
12 assumption and I think it probably still holds today,
13 that some of those parties are still not totally
14 assured of what was needed to address those concerns
15 unless they were in those technical review reports I
16 did not see. It was not brought up again and it was
17 also not what I would call a flaw that would really
18 make the review stand or the environmental assessment
19 stand or fall. It was a general concern and not a
20 highly technical concern.

21 DR. KINGHAM: Let me ask you then as I
22 turn to E-109, I think you are telling me that we don't
23 have much to indicate whether your opinion was
24 positively and decisively changed between 109 and 110,
25 the review and the supplementary review with regard to



1 the point made on page 27 and to which you referred in
2 your witness statement:

3 "It is difficult to trace the
4 proponent's planning process in this
5 environmental assessment because of a
6 lack of both clarity and consistency in
7 the documented decision-making process."

8 I think you were saying your technical reviewers came
9 back and didn't have much comment on that point?

10 THE WITNESS: In the second review?

11 DR. KINGHAM: Yes.

12 THE WITNESS: Yes.

13 DR. KINGHAM: Let's turn to page 28,
14 the fourth paragraph on that page under Stage 2A as a
15 heading:

16 "Hydrogeologic suitability was the
17 primary evaluation criterion used at
18 this stage to narrow the region-wide
19 search for 'candidate areas'. The seven
20 pits and quarry sites were not subject
21 to the same hydrogeologic evaluation,
22 instead they were grouped together and
23 treated as a separate type of area."

24 and you give reference to pages and the final sentence
25 says:



1 "The decision to include these sites at
2 this stage was not clearly explained."
3 And my question is simply was it by the time of your
4 supplementary review clearly explained and, if so, how?

5 THE WITNESS: I am not aware of any
6 additional information to explain that from the
7 documents forwarded to me.

8 DR. KINGHAM: On page 29 of the same
9 document, E-109, a reference is made to the same kind
10 of problem, the last paragraph says:

11 "The consultant did not provide a clear
12 explanation to describe the separate
13 evaluation methodology used for pits and
14 quarries, but seemingly allowed
15 inconsistent treatment of these sites in
16 comparison to the clay till plain
17 candidate areas."

18 Was that uncertainty or inconsistency as you described
19 it removed in moving to E-110?

20 THE WITNESS: Not that I am aware of.

21 DR. KINGHAM: Thank you very much.

22 MR. LANCASTER: Mr. Tidball?

23 MR. TIDBALL: Just a couple of questions
24 in re-examination.

25 MR. LEDERER: I have a question arising



1 out of Dr. Kingham's questions, if that is appropriate.

2 MR. LANCASTER: All right.

3 FURTHER CROSS-EXAMINATION BY MR. LEDERER:

4 Q. Would you agree with me
5 that an environmental assessment is a dynamic process
6 and I am not talking in general concepts of
7 environmental assessments, but an environmental
8 assessment, a specific assessment is a dynamic planning
9 process?

10 A. Yes.

11 Q. As you proceed down your study path
12 it evolves and changes may occur to adjust to increased
13 knowledge?

14 A. Yes.

15 Q. Would you agree that that
16 demonstrates, for example, there may be some need to
17 evolve or amend the criteria used to evaluate different
18 sites?

19 A. I would agree provided that there
20 are sufficient reasons stated why such a change is
21 made.

22 Q. For example, if you determined, or
23 it becomes apparent to you that your set of criteria as
24 developed simply don't apply to a particular class of
25 sites, would you agree it would be consistent with the



1 process for the criteria to evolve and take into
2 account that factor, or rather that fact?

3 A. That fact as well as how it affects
4 other aspects of a dynamic nature.

5 Q. For example, if you had as a
6 criterion that you wanted to have 20 metres of till
7 below your landfill, and I want you to know 20 metres
8 of till is not a criterion here anywhere that I can
9 recall, and then partway in the process you became
10 aware of the fact that there were some quarry sites,
11 would you agree that the layer of till beneath a quarry
12 site really isn't applicable to that kind of site, it
13 is simply generically different. It is not a real
14 criterion and it has no meaning?

15 A. I would agree with that.

16 Q. In that context would you agree
17 that within the evolving changing nature of an
18 environmental assessment, reasonable criteria which
19 applied to that kind of site would have to evolve and
20 come into play. They would have to be evaluated in a
21 different way and perhaps that's a better way of
22 putting it?

23 A. In a more appropriate way.

24 Q. I can accept that. Therefore,
25 isn't it intrinsic within the environmental assessment



1 process that as these things evolve in this fashion a
2 criterion may be applied differently or may change as
3 increased knowledge of the various alternatives
4 actually available becomes apparent?

5 A. Considering -- I agree with the
6 caveat that you must consider the effects of any change
7 on other aspects of the process.

8 Q. With that qualifier, which I don't
9 think is a qualifier, the answer is yes, and it is
10 intrinsic in the process?

11 A. Yes.

12 DR. KINGHAM: Mr. Tidball might take
13 advantage of this opportunity to move the lectern.

14 MR. LEDERER: I just wanted to hang on
15 for one last shot.

16 Q. As the process evolves as we have
17 discussed, it is fair to say, isn't it, that you don't
18 just look at the potential impacts of this other kind
19 of site we have conceptually brought on or decided to
20 look at in more detail, I think is a fair way of
21 putting it, you would also look at the benefits from
22 such a site; wouldn't you?

23 A. As part of the evaluation of
24 advantages and disadvantages, yes.

25 Q. For example, the fact that you



1 would save agricultural land by going there would be a
2 benefit you would consider in analyzing this other type
3 of site?

4 A. I believe that that was stated in
5 the environmental assessment.

6 MR. LEDERER: Thank you, and thank you,
7 Mr. Chairman.

8 MR. LANCASTER: Thank you.
9 Mr. Tidball.

10 RE-EXAMINATION BY MR. TIDBALL:

11 Q. Mr. Clarke, I want to start at sort
12 of the end and work backwards. Starting from
13 Dr. Kingham's questions about the pit and quarry sites
14 and the comments you make in the government review
15 about the analysis of pits and quarry sites versus the
16 till sites, I want it clear. Exactly what were you
17 saying? Was the comment directed to the fact that that
18 was wrong?

19 A. I guess this gets an all-
20 encompassing consideration of what the role of the
21 review is and the role of the review is not a basis for
22 a wrong or right decision. It is a critical evaluation
23 and it is really up to the decision-maker, whoever that
24 decision-maker may be, and in this case the Board, to
25 identify and decide if there is the logic that is



1 available to them to make a proper decision on if the
2 undertaking should be undertaken and approved and
3 proceed.

4 Q. I take it arising out of what
5 Mr. Lederer asked you, you are not here before this
6 Board commenting that for the specific example of the
7 pits and quarries that the Region has done something
8 wrong that cannot be -- has done something wrong that
9 continues throughout this process and right through
10 this hearing?

11 A. I am saying that it is not
12 necessarily wrong, it is something that several readers
13 of the documentation couldn't quite understand
14 correctly.

15 Q. A question from Dr. Kingham was to
16 pre-submission consultation and I was a bit curious.
17 Is pre-submission consultation something normally done
18 by the proponent or by the government?

19 A. I guess in its broadest sense many
20 parties are involved, but a program is usually part of
21 the EA process and it is usually developed by a
22 proponent with input from various government agencies
23 and hopefully the public and the public interest
24 groups.

25 Q. Is it typical for the EA Branch or



1 any of the other government industries to actively seek
2 the input of the public for the purposes of the
3 government review?

4 A. In very odd circumstances that has
5 been done and I think I can think of one instance where
6 that was done.

7 Q. Mr. Lederer raised a concern, and I
8 am not quite sure what the question was but it had
9 something to do with the start date of the public
10 participation program. Did you have some concern that
11 the public participation in this case didn't start
12 early enough?

13 A. I don't think I expressed that
14 concern and I don't think I was talking about quantity,
15 I think I was talking about the quality of the public
16 participation program.

17 Q. I was curious about a comment you
18 made that goes to the question of reviewing all of the
19 documents and I have a couple of questions arising from
20 that. First of all, is this environmental assessment
21 as it came in with its 47 schedules fairly typical of
22 the way environmental assessments are done in this
23 province at that time, or now?

24 A. It seems that we used to measure
25 them by volumes and now we measure them in inches and



1 so they are growing rapidly in size, although we do get
2 the odd small sized one which is just as readable...

3 Q. Is it typical for proponents to
4 submit with their environmental assessment copies of
5 all submissions they have received throughout the
6 process?

7 A. Generally the current practice is,
8 yes.

9 Q. Was it the practice at the time?

10 A. I think it was evolving at that
11 time.

12 Q. In one of the answers to
13 Mr. Lederer, I think you said that because of the time
14 period involved you didn't have time to go through all
15 the documents and I took that to mean the submissions
16 documents, and I thought that's what you said, and is
17 that right?

18 A. In my original review of the
19 environmental assessment?

20 Q. Yes.

21 A. I read or traversed every page of
22 that EA document and some of the information was less
23 scrutinized than others, but I did read the entire
24 documentation.

25 Q. Mr. Lederer asked you those



1 questions in the context of your comments on the public
2 participation program and could you go to page 20 of
3 the review, E-109?

4 A. Twenty?

5 Q. Yes, the second full paragraph
6 beginning with "The Halton public participation
7 program..."?

8 A. Yes.

9 Q. You make some comments about the
10 public participation program and I take it Mr. Lederer
11 took it as being in some way critical. I gathered his
12 question to you related to that concern. Do you
13 believe there is anything in the material there that
14 would effect -- the material included in the 47
15 schedules which would affect that conclusion?

16 MR. LEDERER: With great respect, I
17 don't think that is an appropriate question.
18 Mr. Clarke has indicated that now as he traversed every
19 page two years ago and he has indicated he remembers
20 vaguely some of it and now we will have an answer which
21 assumes he must remember everything on every page.

22 With the greatest of respect, the
23 question is not fair or proper given the groundwork
24 that has been laid, or to put it differently, has not
25 been laid with respect to the question in the area of



1 examination.

2 MR. TIDBALL: Let me try it a different
3 way.

4 Q. You made the comment on page 20
5 with respect to the documents you had before you at the
6 time?

7 A. Yes.

8 Q. I am not going to take that any
9 farther. Thank you.

10 Mr. Clarke, does the Environmental
11 Assessment Act dictate a form of methodology that must
12 be used in a selection process such as Halton
13 undertook?

14 A. It does not dictate a precise form
15 of method or technique.

16 Q. Finally, I think it was Mr. Tzekas
17 put a proposition to you that Mr. Lederer has already
18 asked you about that there would be some advantage to a
19 proponent to, I took it to mean putting in essentially
20 a skeleton environmental assessment and only putting in
21 the bulk of the information before the Board and I
22 wanted to ask you a further question on that.

23 Is there an advantage to a proponent to
24 do it in a way that you or your colleagues would be
25 happy with?



1 A. I think the advantages that are the
2 case with many of the medium or smaller sized
3 environmental assessments with respect to waste
4 management is that there have been no hearings, even
5 excluding the normal mandatory hearing under EPA, but
6 because of the EA precedents over EPA and a good
7 submission, and I use the word "good" in quotes,
8 enables the review to come to a positive conclusion
9 with respect to the proposed undertaking and the
10 planning process and, as a result, there are no
11 requests for a hearing and the Minister himself sees
12 fit to waive the hearing requirement and approve the
13 undertaking, and that has taken place I would say we
14 have had five or six medium to small landfill -- other
15 types of facilities that have not had hearings.

16 Q. That does raise an interesting
17 concern and it arises out of something Mr. Lederer was
18 asking about in cross-examination. Since the beginning
19 of this hearing the proponent has, I think, on a fair
20 number of occasions talked about how this was the first
21 environmental assessment for a landfill site that went
22 through the process. Did any of those five or six
23 precede Halton?

24 A. Yes.

25 Q. Have there in fact been sites



1 approved under the Environmental Assessment Act before
2 this hearing?

3 A. Yes.

4 MR. LEDERER: With the greatest of
5 respect, I don't know how this is proper reply and what
6 concerns me, quite frankly, is you have to get into a
7 comparison of those five and were any of them before
8 Halton and were any municipal proposals and I don't
9 have any great objection to all of this, but it is a
10 bit misleading to put it in in this fashion. I guess
11 the only way I can object is to say it is not proper
12 reply, because it doesn't respond to anything directly
13 asked.

14 MR. TIDBALL: I think it responds
15 directly to a whole line of questions Mr. Lederer was
16 asking.

17 MR. LEDERER: Which line of questioning
18 was this? I want to know where I made my mistakes.

19 MR. TIDBALL: It had to do with, I think
20 on more than one occasion Mr. Lederer talked about this
21 happening so early and being the first one through the
22 process, and I remember him saying it in cross and he
23 has said it on numerous occasions throughout the
24 hearing.

25 MR. LEDERER: I think that's fair



1 actually and I agree with my friend.

2 MR. TIDBALL: If Mr. Lederer wants more
3 information.

4 Q. Were the five or six sites
5 relatively small?

6 A. They were small to medium-sized.

7 MR. TIDBALL: Those are my questions.

8 MR. LANCASTER: Thank you very much.

9 Thank you, Mr. Clarke.

10 DR. KINGHAM: I wonder if we could
11 recall Mr. Walker to answer one very brief question for
12 us.

13 MR. LEDERER: It is pretty irregular,
14 Mr. Chairman, and I think I want to know a little bit
15 more about the basis upon which you were doing this.
16 Obviously if the Board wants it the Board should have
17 it, but what kind of free-wheeling cross-examination
18 will then be open to my friends, for example, because I
19 certainly did not intend to call him in reply, but if
20 this is only to respond to a question of the Board.

21 DR. KINGHAM: It is a question of the
22 Board as a result of something you raised in your
23 cross-examination of Mr. Clarke.

24 MR. LEDERER: That's fine, but that
25 doesn't mean my friends can giggle and chuckle because



1 they know I know I am at the deep end of not knowing
2 what is going on here.

3 MR. LEITCH: Another concern I have is
4 that there are parties who are not here who would be
5 vitally interested I am sure in that.

6 MR. LEDERER: I don't agree with that.
7 If they were interested in this they would be
8 interested in what Mr. Clarke had to say.

9 MR. LEITCH: They have no notice of what
10 you are proposing.

11 MR. LEDERER: I am wondering whether it
12 is appropriate for me to say so, but I think I would
13 like to know what the question is.

14 MR. LANCASTER: I was suggesting that.

15 MR. LEDERER: I don't think it is
16 unfair in these usual circumstances and the first
17 question is whether Mr. Walker is in a position to
18 answer that now and then we can proceed from there. I
19 don't agree with Mr. Leitch.

20 DR. KINGHAM: As I understand it you
21 want to know what the question is before we put the
22 question?

23 MR. LEDERER: Absolutely.

24 MR. LANCASTER: I think we will adjourn
25 for about five minutes.



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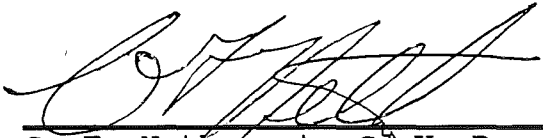
Clarke, re ex
(Tidball)

1 ---Recess

2 MR. LANCASTER: I guess that concludes
3 today and we will adjourn until Monday at 9:30.

4
5 ---Adjournment at 5:00 p.m.

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7 CERTIFIED CORRECT:

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

12 (Page 42050 Follows)

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