

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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DATE: June 3, 1987

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Toronto, Ontario

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BEFORE: H. H. Lancaster, Q.C. - Chairman
Dr. D.J. Kingham - Member
S. Tanner - Member



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Toronto, Ontario

Hearing conducted at The Oakville
Granary Commercial Centre, 105 Robinson
Street, Oakville, Ontario, on
June 3, 1987

VOLUME 16

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



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APPEARANCES (Cont'd):

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

for the Halton Region
Conservation Authority

* * * * *

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Per: Sarah Nicholson, CVR.



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---(UPON COMMENCING AT 9:30 A.M.)

MYRA SCHIFF, RESUMED

DIRECT EXAMINATION BY MR. HODGSON (cont'd):

Q. Now, Dr. Schiff, I believe when we finished yesterday we had completed Exhibit H-37 through to the end of your discussion of population impacts and your ranking of same and I think we now go to page 3-1 which is Social Equity.

What do you mean by Social Equity?

A. Social Equity relates to the question of how fair it is to locate a landfill at each of the six sites.

Q. What issues did you look at to assess this?

A. I looked at four issues. The first being the history of the area near the site with respect to regional landfilling.

Second of all, whether or not the area near the site is serviced by municipal garbage collection.

The third being the portion of the region's waste stream which is generated by the municipality in which the site is located.

Fourthly, whether the area accepts regional waste other than landfill and in my



1 investigations that specifically turned out to be
2 an issue relating to the sewer sludge.

3 Q. Now, what did you find when
4 you investigated these six sites for these issues?

5 A. The history - or the social
6 equity issue near Sites A, B and C is similar
7 and I would like to combine those three sites.

8 First of all, by pointing out that
9 all three of them have been associated with the former
10 landfill, that is, the former landfill for the Town of
11 Oakville located on the Fourth Line, between
12 Highway 5 and Burnhamthorpe Road. This site was an
13 Oakville landfill; it became a regional landfill
14 in 1974 whereupon it began to take waste from
15 Oakville, Milton and near Halton Hills for
16 eight years until the site closed in 1982.

17 I would also point out the sludge
18 storage area for the region is located in Oakville, though
19 just, I must point out, just inside the boundaries
20 of the Town. That the farmers in the area take
21 treated sewage sludge and use it on their fields
22 for fertilizer. That the area of Sites A, B and C is
23 a rural area and therefore receives no garbage
24 collection and that Oakville generates 42 percent
25 of the region's waste.



1 With respect to Site D; Site D is
2 located in close proximity to Site E which had been
3 previously designated as a regional landfill.

4 As well, although the storage facility
5 for treated sludge is located in Oakville and I
6 indicated before that it was just inside Oakville
7 and in fact Site D is the site that is closest to
8 this facility.

9 Again Site D is in a rural area which
10 does not receive garbage collection. The farmers
11 in that area accept sludge for fertilizer on their
12 fields and Milton as a whole produces 7 percent of
13 the region's waste.

14 Site E is the site that had been
15 previously designated as the preferred site for the
16 regional landfill. It too is located in a rural
17 area which does not benefit from garbage collection.
18 The area does accept sludge - the farmers in this
19 area use sludge on their fields - again, because
20 the site is in Milton it generates about 7 percent
21 of the region's waste.

22 Site F is adjacent to Bayview Park
23 which served as a municipal landfill from 1960 to
24 1972. It is as well, of course, adjacent to the
25 current regional landfill which was a municipal



1 landfill for Burlington from the time of its
2 opening in 1972 until 1974.

3 In 1974 when regional government was
4 introduced, Site F became a regional landfill although --

5 Q. You said Site F, you meant ...

6 A. Yes, sorry. I meant the
7 current landfill. When regional government was
8 introduced in 1974 the current landfill became a
9 regional landfill and took waste only from
10 Burlington until 1980.

11 In 1980 it also began to accept
12 waste from Milton.

13 When the Oakville landfill closed
14 in 1982, current landfill became the only regional
15 landfill and the life of that landfill has been
16 extended on two occasions: in May 1980 and in
17 October 1984. Burlington, as a municipality,
18 generates about 41 percent of the region's waste
19 and the homes in this area do benefit from the
20 collection of garbage.

21 Q. Having collected that data
22 on the issue of Social Equity, what did you conclude
23 in terms of ranking the sites on this particular
24 factor?

25 A. I concluded that all three



1 sites - or six sites - had strong claims with
2 respect to the Social Equity factor and that, although
3 I hate to use the trite phrase of comparing apples
4 and oranges, I felt that that would be the task that
5 was facing me and that I really could not differentiate
6 between the sites on that factor.

7 Q. Now, we went through your
8 qualifications yesterday in some detail. Do you
9 regard yourself as particularly qualified to make
10 judgments about matters of Social Equity?

11 A. Not as qualified as I would
12 like to have been for this situation. I certainly
13 don't feel any more qualified than bodies which are
14 constituted to deal with those issues, such as
15 judicial and quasi-judicial bodies and perhaps
16 even various levels of government.

17 Q. Thank you. Now, the next
18 subject in Exhibit H-37 is Community Facilities.

19 A. Yes.

20 Q. And this was another major
21 aspect of the social impact analysis?

22 A. That's correct.

23 Q. What measures did you use
24 on this factor?

25 A. I used two measures. One was



1 the use of public facilities, the impact or the
2 possible impact of a landfill on community facilities
3 in the vicinity of the site.

4 Secondly, the extent to which the
5 area around each of the six sites serves the larger
6 community.

7 The latter information has been given
8 descriptively because it was not possible to use
9 the questionnaire data about how people used their
10 properties because of insufficient returns.

11 Q. All right. First of all, just what
12 public institutions are you talking about here?

13 A. In the case of this stage of the
14 process, we are talking about non-profit facilities,
15 that is buildings, spaces or institutions which
16 provide services in the field of recreation, health,
17 religion, education or research and cemeteries which
18 may be there.

19 Q. And how did you collect data
20 about such facilities?

21 A. Perhaps, before I answer that,
22 I should point out that with the exception of two
23 facilities, all the facilities that I evaluated
24 on this factor were within the half-mile study area.
25



1 of the site and the two exceptions are the Ontario
2 Agricultural Museum and the Milton District Hospital.

3 I collected data on the impacts of
4 these facilities by meeting with representatives
5 of these facilities. That is in each case meeting
6 with one or more people who were responsible for
7 the facilities to initially determine what their
8 perceptions of the impact of a landfill might be
9 on their facility.

10 Q. First, could you go through the six
11 candidate sites in Stage 2-C and describe the
12 community facilities that are within the study area?

13 A. Yes. At Site A there were
14 three facilities, the Trafalgar Memorial Hall, and
15 in my meetings with Oakville Parks and Recreation Depart-
16 ment, they indicated that they did not feel that
17 a landfill at Site A, B or C would have adverse
18 impacts on this facility or on the extent to which it
19 could be used.

20 I also met with Reverend Schooley
21 who was the Minister for Munn's United Church. He
22 also indicated that he did not believe that a landfill
23 would have a significant, direct impact on the
24 church. He did indicate, however, that he felt
25 that the ongoing health of the congregation



1 depended on future growth, new families who would be
2 moving into subdivisions south of Highway 5 and that
3 if the landfill at Site A, B or C were to jeopardize
4 the development of these subdivisions, this in turn
5 would jeopardize the future of the church.

6 Also at Site A, as we indicated
7 yesterday, is the Welding Institute of Canada which
8 sits directly on the site. It is a research and
9 educational facility for the welding industry in
10 Canada and the Director identified potential impacts
11 to include a visual impact and the impact of
12 airborne contaminates.

13 He also raised the issue of the
14 potential impact of noise, particularly because the
15 main building of the Institute is used primarily
16 for offices, for a library and for classroom space.

17 Q. I wanted to ask you, I never
18 asked you this before, but did they do any welding
19 at the Welding Institute of Canada. Whenever I have
20 been around welders I was concerned about the air
21 impact they generated.

22 A. There is actually a large
23 shed in the back where they do research on welding
24 and obviously they do weld back there.

25 DR. KINGHAM: It's maybe



1 jumping ahead a bit, but I note that your --
2 in this matter of the Welding Institute -- your
3 Sites A, B and C, with regard to B and C, your document
4 shows "see comments under Site A", which sort
5 of implies that the impact is the same on A as it is
6 on B as it is on C, the social impact, the community
7 impact.

8 Maybe you could expound on that as
9 you go through A, B and C and the Welding Institute,
10 which in one case is some distance away and on the
11 other side of the road and, in the other case, it's
12 facing it.

13 THE WITNESS: Well, first of all, you're
14 correct, but the close proximity of the three sites
15 means that the Director -- remember these are his
16 beliefs and perceptions at this time without any
17 qualification as to the accuracy of these perceptions --
18 and he expressed these concerns with respect to all
19 three sites.

20 This was often the case at Sites A,
21 B and C.

22 For example, as we move to Site B, you
23 will see that in respect to the church, Munn's United
24 Church, the same comments apply for the church at
25 Sites A, B and C.



1 At Site B, the issue with respect to the
2 cemetery, the Minister for the church, who was also
3 responsible for the cemetery, indicated that he
4 didn't feel that a landfill at any of those Sites A,
5 B and C would have any impact because the cemetery
6 is for all intents and purposes closed. There are
7 still a few burials there but certainly not a significant
8 number.

9 MR. HODGSON: I think, Dr. Kingham, that
10 it breaks down this way: Section 4.1 of this report is
11 where Dr. Schiff reports the information she obtained.
12 And Section 4.2 gives her --

13 DR. KINGHAM: Her assessment.

14 MR. HODGSON: -- her assessment and
15 ratings, yes. What she's doing now is reporting the
16 information in 4.1 and going back to discuss impacts.

17 Q. Are you finished with Site A,
18 Dr. Schiff?

19 A. Yes, those were the main
20 community facilities at Site A, and I would just point
21 out the brief paragraph at the bottom of the page
22 which describes how residents around Site A used the
23 land in this area for jogging and bicycling. It is
24 used for Bike-a-thons, Walk-a-thons and many of the
25 homes in the area area are the site of various club
activities and pignics.



1 I believe, in essence, I have now
2 covered Site B because, as I have indicated, the
3 perceptions with respect to the Trafalgar Hall and
4 the Welding Institute are the same and, again, I
5 think I have already described the indirect but not
6 direct impact on the church and the fact that the
7 cemetery is not going to experience an impact.

8 Again Site B, the area around it is
9 used for jogging, bicycling and walk-a-thons and
10 the homes on it have been used for various public
11 events.

12 C, I think, has already been covered.
13 Again because of its proximity to A and B, and again
14 the homes are in use for various community events.

15 Q. So what did you find at
16 Site D?

17 A. At Site D there were three
18 facilities that I considered, the Milton District
19 Hospital, Boyne Community Hall and the St. Clair
20 Masonic Temple and Cemetery.

21 With respect to the Milton District
22 Hospital, the Hospital Board has gone on record
23 by its submission to the Region as opposing a
24 landfill site in Milton based on concerns with
25 traffic, with airborne contaminants and with
aesthetics. And when I tried to get them to ... to



1 get them to clarify the nature of these concerns,
2 they admitted that they found them difficult to
3 define but the Board at the Hospital felt that
4 the closer the landfill was to the hospital the
5 greater the impact of these concerns would be.

6 Therefore, since Site D is further
7 from the hospital than Site E, which I will be
8 talking about in a minute, from the point of view
9 of the hospital it would be perceived by the Board
10 to have less impact.

11 At Boyne Community Hall - or with
12 respect to Boyne Community Hall - I met with the
13 Director of Planning and the Director of Parks and
14 Recreation in Milton and they raised a number of
15 issues with respect to the impact of the landfill
16 at Site D on Boyne. These included the impact of
17 traffic from haul routes, of noise, seagulls and
18 aesthetics, that is, the visual impact, and felt that
19 as a result of these it would be hard to keep the
20 Hall respectable and it would make it less
21 attractive as a place for meetings and social
22 events for which they rent out the hall.

23 They also expressed concern with
24 respect to the use of the grounds of the hall and
25 as well for the quality and safety of the water



1 supply, since the water is on a well. They obtain
2 their water from a well.

3 Thirdly the St. Clair Masonic Temple
4 and Cemetery is a meeting hall for Masons and
5 the cemetery serves pioneer families but it is not
6 a very active cemetery. There were no specific
7 concerns expressed.

8 At Site E there were three facilities,
9 the Milton District Hospital and, I believe I have
10 already covered their concerns with respect to my
11 discussions of that of Site D.

12 With respect to the Boyne Community
13 Hall, because of the distance between Site D and
14 E, the reactions of the Director of Planning and
15 the Director of Parks and Recreation in Milton
16 were different for the Boyne Community Hall if the
17 landfill were at E than if it were at D and
18 basically they felt that the distance between the
19 Boyne Hall and Site E was great enough that there
20 would be no impact.

21 The Program Director and the
22 General Manager at the Ontario Agricultural Museum
23 indicated that their only concern, with respect to
24 the location of the landfill at Site E was with
25 respect to truck traffic due to the potential



1 conflicts between haulage trucks and the large number
2 of school buses which enter and leave the museum
3 property.

4 At Site F, there were five facilities that
5 were considered, the first being the Burlington
6 Rifle and Revolver Club, and here I met with several
7 members of the executive of the club. They expressed
8 no concerns at all with respect to the facility and
9 in fact said that they would welcome it if it would
10 guarantee their future in the area, that there
11 would not be other land uses moving in which would
12 force them to move.

13 Bayview Park we have heard a great
14 deal about already. I met with the representatives
15 of the Park and Recreation Department and with
16 representatives from the City Administrator's Office
17 and they expressed concern about the effects of
18 dust, odour and litter from the landfill on the
19 present and future use of the park.

20 They also discussed at that time
21 the equestrian facility which is located in the
22 north end of the park.

23 We received a submission from the
24 Park Avenue Church which has purchased property
25 at the northwest corner of Kerns Road and the North



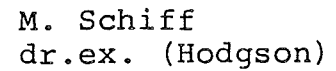
1 Service Road. They intend to build a new church
2 and large educational facilities for 240 students
3 from junior kindergarten through Grade 8 and as
4 well are considering expansion to a day care or
5 nursery school, a large one at that, and as well
6 a residence for senior citizens.

7 The church was concerned that a
8 landfill at Site F would result in dust and odour
9 and that airborne particles would cause allergy
10 problems for children.

11 They also expressed concern about
12 noise from the landfill and as well about unforeseen
13 but possible environmental problems.

14 The Burlington Model Airplane Club
15 has recently - or at the time of this work - had
16 recently signed a five year lease with the City of
17 Burlington. They expressed no concerns about the
18 landfill as long as they would be able to retain
19 an area large enough for their activities. And,
20 indeed that is not jeopardized.

21 The next facility that I considered
22 was the after-use of the existing landfill. That
23 is, what would happen to that landfill after it's
24 closed and what impact might the landfill at Site
25 F have on that.



M. Schiff
dr.ex. (Hodgson)

25 THE WITNESS: So that the school -- or



1 the has purchased property on the northwest corner
2 in this location. (indicating)

3 DR. KINGHAM: And while you're at it ...
4 You made a comment, quite apart from anything else,
5 possible impacts of a landfill on a future park would
6 include noise, dust, odour, litter and a visual impact.

7 THE WITNESS: Yes.

8 DR. KINGHAM: Do you mean in a context of
9 after-use, if this is converted to a park, it would be --

10 THE WITNESS: No ... Well, I was talking
11 about the after-use of the existing landfill and
12 what the impact of the landfill at Site F would be on
13 the after-use of the existing landfill.

14 DR. KINGHAM: Oh, I see. If the existing
15 landfill is turned into a park while Site F were to be
16 approved as being landfilled, then the impact on the
17 new park on the existing site would be --

18 THE WITNESS: That is correct.

19 MR. HODGSON: You will recall from Mr.
20 Stevens' evidence that the proposed after-use for the
21 existing landfill is passive recreation. So it's to
22 be re-forested and made available over the next few
23 years for that use.

24 Q. Now, Dr. Schiff, can I take you to
25



1 Section 4.2 of Exhibit H-37 and would you, going
2 site by site describe for the Board how you
3 assessed the information you obtained in respect
4 of the impacts on these various community facilities?

5 A. Yes. After I had had these
6 discussions and had assimilated this information
7 on people's perceptions of an impact, I reviewed
8 the reports at the end of this stage 2C, I reviewed
9 the stage 2C reports of other technical consultants
10 who had assessed the actual physical impacts that
11 these various informants were raising. And, on
12 the basis of not the perceived impacts which I have
13 just been talking about, but rather on the basis of
14 the actual impacts as predicted by the technical
15 consultants, I rated these sites.

16 With respect to Site A, the Welding
17 Institute had raised issues with respect to noise,
18 airborne contaminants and visual impacts, but, a
19 review of the technical reports on those three
20 topics indicated that none of those impacts would
21 actually occur at the Welding Institute when the
22 appropriate mitigation measures, as recommended in
23 those reports, were in place.

24 With respect to Munn's Church it has
25 already been noted that the Reverend did not receive



1 any direct impacts and a review of the land use
2 and planning assessment report indicated that any
3 impact on the subdivisions south of Highway 5 was
4 unlikely and that therefore the viability of the
5 church should not be indirectly affected.

6 As a result of these two factors
7 I rated Site A as low with respect to impacts on
8 community facilities.

9 At Site B, I determined again from
10 the noise consultant's report that there would
11 not be a noise impact with the appropriate
12 mitigation in place and again that there was
13 neither a direct nor indirect impact on the
14 Munn's Church. And, we had already established
15 there would be no impact on the cemetery.
16 Consequently, this site, Site B was also rated
17 low with respect to its impact on community
18 facilities.

19 At Site C, the consultant's report on
20 noise indicated that indeed the Welding Institute
21 did lie within the 55 decibel noise contour but
22 that these problems - or potential problems of
23 noise at Site C on the Welding Institute could
24 be mitigated by installing new windows which did not
25 open and, in compensation for that, installing



1 air conditioning and that with those mitigation
2 measures in place there would be no noise impact
3 on the Welding Institute.

4 Again with respect to Munn's
5 Church and Cemetery, there was no direct or indirect
6 impact rated and as a result the site was rated
7 low on this factor, on the assumption that if the
8 landfill went in at Site C, the adjustments to
9 the Welding Institute of Canada would be installed
10 in order to mitigate the effects of noise.

11 At Site D, the Milton District
12 Hospital, the review of the consultant's report on
13 traffic indicated that the hospital was not on
14 a haulage route and therefore there should not be
15 problems with traffic.

16 The report on air quality indicated
17 that there would not be airborne contaminants
18 reaching the hospital but the assessment of the
19 visual impact indicated that there was some support
20 for the hospital's concerns about the aesthetics.

21 The consultant's report indicated
22 that a landfill at Site D would be visible from
23 the hospital, that it could be screened but that
24 it would take some time before the screening became
25 effective.



1 In view of the concerns that I
2 as a social impact assessment consultant had about
3 looking at the landfill from the hospital window,
4 this would likely not be good for the patient morale
5 and therefore might indirectly effect recovery and
6 I felt that that was a legitimate concern.

7 With respect to the Boyne Community
8 Hall, it is already located within - it is located
9 within a half mile of Highway 25 but this has already
10 been designated as a truck route and the traffic
11 consultants expected only about a one percent
12 increase in truck traffic.

13 The visual analysis indicated that
14 the landfill at Site D would not be visible from
15 the Boyne Community Hall because the hall is located
16 below the crest of the hill between Highway 25 and
17 the hall and the Air Quality Report indicated
18 that contaminants would not extend as far as the
19 hall from Site D.

20 In respect to the St. Clair
21 Masonic Lodge, activities in the Lodge occur
22 indoors on evenings and on weekends when the
23 landfill would not be operating and the cemetery
24 would not be affected by airborne contaminants, and
25 I have already indicated the negligible additional



1 impact of truck traffic on Highway 25.

2 Because of the impact of a landfill
3 at Site D on the Milton District Hospital, that is,
4 because of the visual impact and the possible
5 indirect effect on patients, I rated this site low
6 to moderate with respect to impact on community
7 facilities.

8 With respect to Site E, the Milton
9 District Hospital's concerns about traffic are not
10 supported, as I have already indicated, nor is their
11 concern about airborne contaminants supported.

12 The visual impact, however, is legitimate,
13 as it was at Site D, and in fact a landfill at Site
14 E would be harder to screen than a landfill at
15 Site D would be.

16 With respect to the Ontario
17 Agricultural Museum, which is the other facility
18 of concern at this site, it was determined that
19 there would be no problems with respect to traffic
20 because the museum is not located on a haul route
21 to Site E. Because of the impact, the visual
22 impact of a landfill at Site E on the hospital,
23 this site was rated moderate to high. Again
24 in comparison to Site D, let me remind you that
25 this site would be more difficult to screen from



1 the hospital than Site E.

2 At Site F it was determined that
3 the concerns raised were partially supported even
4 with mitigation in place. Dust and litter may be part
5 but would not be a major problem, but high winds
6 could result in dust and litter occasionally
7 blowing into the park.

8 The concern with respect to visual
9 impact was warranted both for the equestrian facility
10 as well as for the other portions of the park. The
11 noise impact of the landfill at Site F, although
12 an issue not raised in the interviews, was one that
13 was identified by the noise consultant and he
14 identified the fact that for three to four years
15 while the northern portion of this site was being
16 filled that noise levels in Bayview Park would
17 fall within the 55 dB noise contour.

18 As a result, the park could not
19 function as it does at present as an equestrian
20 facility and as a general park for Burlington
21 and the impacts cannot be fully mitigated.

22 With respect to that issue,
23 therefore, we recommended the relocation of the
24 park and the riding ring as a mitigating measure.

25 In respect to the after-use of the



1 park, we assumed that the after -- I'm sorry, the
2 after-use of the existing landfill, we assumed that the
3 after-use of the existing landfill would be a passive
4 park and the east side of the after-use park would
5 be affected by noise when filling was taking place at
6 the north end of Site F. Nevertheless, it was felt
7 that this impact could be mitigated by a hill on the
8 east side of the existing landfill which would serve
9 as a buffer. We would expect that this park would be
10 used mostly on weekends when Site F is not fully
11 operating.

12 In sum, because of the impact of a
13 landfill at Site F on the after-use of the existing
14 landfill and with the mitigation of moving the Bayview
15 Park and the equestrian facility in place, this site
16 was rated low to moderate.

17 Q. All right, can you summarize
18 then your ranking of the six sites on this one factor,
19 community facilities?

20 A. Yes, the summary of that
21 ranking is contained on page 4-15 in the middle where
22 I ranked Sites A, B and C collectively as having the
23 lowest impact, Sites D and F, both having low to
24 moderate impact, and Site E having a moderate to high
25 impact.



1 Q. Now, just before we leave
2 Stage 2C, do you have a copy of Exhibit H-13 with you,
3 which is the Evaluation Summary Report?

4 A. Yes.

5 Q. I just wanted to have you turn
6 to page ... After page 13, there are a series of charts
7 which we've numbered in these hearings 13A, B, C, D., etc.
8 If you turn the pages to 13-I, 13-J.

9 A. That would be the two charts --

10 Q. Social Environment.

11 A. Yes.

12 Q. I just want to have you confirm
13 is the data presented on 13-I, data from your report?

14 A. Yes, that's correct.

15 Q. And on 13-J, what data from
16 your report is presented?

17 A. The data from my report
18 presented there is in the first line, "Community
19 Facilities".

20 Q. Now, when we started your
21 evidence, you said you were responsible for three of
22 the factors of the Social Environment: Population
23 Impacts, Community Facilities and Social Equity.
24 Social Equity was not presented in this chart. Is
25 there a reason for that?



1 A. I would assume that it's not
2 been presented because the sites were not ranked on
3 it.

4 Q. I just want to have you
5 confirm that you ranked Population Impacts and
6 Community Facilities separately, so that you presented
7 to Mr. Walker two sets of rankings?

8 A. Yes, that's correct.

9 Q. And you at no time combined
10 those rankings into a single Social Impact?

11 A. Not during Stage 2C.

12 Q. Thank you.

13 Now, if I could have just a moment,
14 Mr. Chairman ...

15 Mr. Chairman, before we continue,
16 I wanted to correct for the record and have the witness
17 confirm ...

18 If I could ask you to turn to
19 Exhibit H-8A under Tab 8, page 11, Section 8. the
20 second paragraph under Section 8 says:

21 *Site F continues to be rated*
22 *low-moderate.*

23 We sent out a letter from our office
24 on the 20th April correcting an error in that line.
25 That line should read:



Site F continues to be rated
low ...
rather than low-moderate, and that was a correction
that came from Dr. Schiff.

5 Can you simply confirm that, Dr.
6 Schiff?

7 A. I don't believe that is the
8 proper correction.

Q. All right.

10 A. I'm sorry, I ...

11 MR. HODGSON: Mr. Chairman, could
12 we take a five-minute recess. This is important.
13 I think we'd better get our ...

14 THE CHAIRMAN: Yes, I didn't follow
15 you either. Try it again.

MR. HODGSON: That may be to our
advantage, Mr. Chairman! If we could have a break,
we'll give you the correct correction ...

THE CHAIRMAN: All right.

---RECESS AT 10.10 A.M.

---UPON RESUMING AT 10.25 A.M.

THE CHAIRMAN: Thank you. Please
be seated.

Now, Mr. Hodgson?

25



1 MR. HODGSON: Mr. Chairman, we've
2 discovered the error, and the error was actually located
3 in our office rather than the witness, so she maintains
4 her credibility and we lose ours!

5 THE CHAIRMAN: Not much doubt about
6 her credibility.

7 MR. HODGSON: We're about to go to
8 a letter that she wrote. It appears as Exhibit E-2
9 in Exhibit H-14, and in that document -- you don't have
10 to turn it up at the moment -- but in that document,
11 it says:

12 *The impact of a landfill at*
13 *Site D on community facilities.*
14 *is rated low.*

15 When that information was transposed
16 into Dr. Schiff's witness statement at page 11, in the
17 first paragraph under Section A, it says:

18 *Site D continues to be rated*
19 *moderate high with respect to*
20 *population impacts and it is now*
21 *rated low moderate ...*

22 that should read:

23 *... rated low with respect to the*
24 *impact on community serving facilities ...*

25 Q. Is that correct, Dr. Schiff?



1 A. Yes, that's correct.

2 MR. HODGSON: And then when our
3 office sent out a letter to correct that error, we
4 didn't! So, I think everybody now knows exactly
5 what the witness's evidence is and always was.

6 MRS. TANNER: Site F is supposed
7 to say:

8 *Site F continues to be rated low*
9 *moderate ...*

10 MR. HODGSON: No, I'm sorry, Site D.
11 In the next paragraph,

12 *Site F continues to be rated low*
13 *moderate ...*

14 THE CHAIRMAN: What's the change?

15 MR. HODGSON: The change is three lines
16 above that where it says:

17 *Site D continues to be rated*
18 *moderate high with respect to*
19 *population impacts and it is*
20 *now rated low ...*

21 take out the word *moderate*

22 *... with respect to impact on*
23 *community serving facilities ...*

24 So that parallels the information
25 presented in Exhibit H-14.



1 Q. Now, Dr. Schiff, subsequent
2 to your involvement in Stage 2C, which we have now
3 discussed in some detail, were you asked to make a
4 contribution in the technical phase of this environmental
5 assessment?

6 A. I was asked whether I thought
7 there was work that I ought to be doing during the
8 technical phase of the study.

9 Q. And what was your response to
10 that?

11 A. My response was that the work
12 being undertaken at that stage did not require my
13 input.

14 Q. Now, when the technical
15 phase was completed and all the reports made public,
16 were you asked to review the work you had done in
17 Stage 2C in conjunction with the work that had been
18 done by other consultants in the technical phase?

19 A. Yes, I was asked to review
20 the work that I completed to see whether it required
21 updating.

22 Q. And what did you conclude?

23 A. Well, I did discover that it
24 required updating. There had been changes in some
25 of the conclusions in the technical study phase and,



1 as well, there had been some changes in the populations
2 at Site D and I felt it necessary to update my report
3 on the basis of those changes.

4 Q. Now, before we get into the
5 substance of that, where do we find in your report,
6 the additional work that you did?

7 A. It's in the Comparative
8 Analysis Report, Exhibit H-34.

9 Q. No, actually, it's H-14.

10 THE CHAIRMAN: H-14?

11 MR. HODGSON: Mr. Chairman, it's
12 Appendix E to that document, H-14.

13 Q. Now, first, with respect to
14 population impact, did you do some additional work?

15 A. Yes, I did. I discovered that
16 there had been, as I just mentioned, some changes at
17 Site D and I called all the households on Site D
18 to update my information on the population figures
19 and then recalculated at Site D the values for the
20 measure of dislocation and the values for other measures
21 which included the population living on site; and
22 that would be the measures for emotional impact and
23 for the disruption of an established community.

24 Q. And did you also ... And what
25



1 results, what conclusions did you reach on population?

2 A. At the time I completed this
3 work, the number of people on site had increased from
4 ten at the conclusion of Stage 2C to 14; the number
5 of households had increased from three to four; the
6 number of people 65 and over had decreased from two to
7 none; the index of income had increased; the
8 income, index of income for people 36 and over had
9 decreased slightly; the number of households with
10 children 16 and under increased from none to three;
11 and the number of households with four or more people
12 remained at zero.

13 As a result of these changes, in
14 fact, Site D changed from a low rating on dislocation
15 to a low moderate rating on that factor.

16 With respect to emotional impact,
17 stress from the selection process and stress from
18 uncertainty, living near the site, increased.

19 The measures of disruption of
20 established community, which were functions of the
21 length of residence, decreased.

22 The overall change in Site D was
23 that the site would continue, despite all these changes,
24 to rank as moderate to high, as it had before.
25



1 At Site F-- you will recall that I
2 only addressed those changes which involved on-site
3 populations. It did not seem feasible nor appropriate
4 to review all the households in the study area. At
5 Site F there were no changes because there was no
6 population living on site.

7 Q. All right. Did you also do
8 some additional work with respect to community
9 facilities?

10 A. Yes, I reviewed the work of
11 the other consultants which they had undertaken during
12 the technical study phase to determine whether the
13 assessments with mitigation in place that had been
14 made at the end of Stage 2C were still appropriate.

15 At Site D, I found that it had
16 been rated low to moderate because of the visual
17 impact of a landfill on the Milton District Hospital
18 but that further work by the Visual Impact consultant
19 had indicated that it would now be doubtful if a
20 landfill would be visible from the hospital after
21 all and, consequently, the rating on that was change
22 from low moderate to low.

23 At Site F, it had been rated low to
24 moderate with mitigation in place, namely with the
25 closing of Bayview Park and the equestrian facility



1 and its relocation to another place in Burlington.

2 Changes which were made in the
3 Designs and Operations Report indicated that it would
4 not be the same kind of noise impact on the landfill
5 that had previously been estimated but that the
6 visual impact on the horse ring was now rated high
7 by the Visual consultant and that there would be on
8 some occasions minor effects, possibly dust and litter
9 in the after-use of the existing landfill, though those
10 would not be enough to produce a health problem.

11 The park will not be fully developed
12 until about 20 years after the current landfill closes,
13 by which time Site F will have ceased operation.

14 In view of the effects of Site F
15 on the after-use of the current landfill and the
16 visual impact, the impact of the landfill at Site F
17 is now rated moderate to high on community serving
18 facilities.

19 There was again no change with
20 respect to social activities.

21 Q. Did you develop an overall
22 ranking with respect to --

23 A. Well, yes, at this time, I
24 indicated that I felt that Site F was a preferred
25 location for a landfill over Site D when the two



1 factors of population impact and community serving
2 facilities were taken jointly, on the grounds that
3 population ... that the affects on the population are,
4 in my opinion, more significant and of greater duration
5 because they are there all the time and that those
6 impacts, therefore, should bear more emphasis than
7 the impacts on community serving facilities.

8 Q. And did you consider the
9 magnitude of the changes?

10 A. I considered the magnitude
11 of the change in the sense of indicating that the
12 distance between Sites F and D had increased from
13 the distance between them at the conclusion of Stage 2C
14 and the distance between them at this point.

15 Q. Thank you.

16 Mr. Chairman, that concludes the
17 questions to this witness.

18 THE CHAIRMAN: Thank you.

19 It would seem that Burlington would
20 go first. Mr. Leitch?

21 MR. LEITCH: The Burlington Group --

22 THE CHAIRMAN: I'm sorry, Milton --

23 MR. LEITCH: My friend has graciously
24 consented to let me go first, Mr. Chairman, so I'll
25 undertake to be finished by twelve o'clock at least.



1 CROSS-EXAMINATION BY MR. LEITCH:

2 Q. Dr. Schiff, as I understand
3 your curriculum vitae and your formal training, you
4 bring a background in mathematics to social psychology
5 and combined those for your present work?

6 A. Yes, that's correct.

7 Q. And, as I understand, your
8 statement in your witness statement -- which is in
9 Exhibit H-8A, Tab 8, page 2 -- it's your view that
10 social impact assessment in this study should produce
11 a quantifiable result?

12 A. Wherever possible, yes.

13 Q. And that you will measure the
14 impacts in such a way as to be able to relate and
15 compare the range of options which are put before you;
16 is that fair?

17 A. Yes, that's correct.

18 Q. And that's a sort of over-
19 riding principle which guided you as you went through
20 the process?

21 A. Yes.

22 Q. And, as I understand your
23 initial involvement, it was at the stage or, rather, the
24 Phase 2B stage?

25 A. That's right.



1 Q. And you there went through an
2 exercise of ranking the impacts with respect to 55
3 sites --

4 A. Right.

5 Q. -- or "candidate areas" I
6 guess is more accurate? And my recollection is that
7 at the end of that, you gave your rankings to Mr.
8 Walker and had some meetings with him and other
9 consultants and you delivered some input from the
10 social impact side; and with respect to the six
11 sites which then were reviewed in your Stage 2C
12 process, they were all, as I understand it, ranked
13 moderate in your first cut, that is, at the Stage 2B?

14 A. That's correct.

15 Q. Now, you didn't choose the
16 six sites. They were chosen in a process which Mr.
17 Walker conducted and he simply gave them to you for
18 the purpose of the Stage 2C?

19 A. Yes.

20 Q. You did have input which he
21 would have used, as I understand it --

22 A. Yes.

23 Q. -- but the decision was his?

24 A. Yes.

25 Q. And then when 2C started, you



1 took the six sites which he had chosen and you went
2 through the analysis which we see in Exhibit H-37?

3 A. Yes.

4 Q. And correct me if I'm wrong,
5 but I took from H-37 that what you were attempting to
6 do was devise a ranking system which would rank the
7 six sites relative to one another?

8 A. Yes, that's correct.

9 Q. And would, from the social
10 impact perspective, attempt to compare them and show
11 which was most preferred for landfilling and which was
12 least preferred for landfilling and where they ranked
13 in between; is that a fair statement?

14 A. Yes.

15 Q. And when that was finished,
16 you had arrived at a certain ranking. And the next
17 phase of study was what we've been calling the
18 technical phase; am I correct about that?

19 A. Yes.

20 Q. And in the technical phase,
21 the number of the disciplines dealt with the two sites
22 which had then been chosen. For instance, from the
23 perspective of the visual impact, there was an attempt
24 to compare Site D and Site F on that category and see
25 if a preference could be resolved?



1 A. Correct.

2 Q. But, as I understand from the
3 latter portion of your evidence, you did not do such
4 a study, rather you waited until it was done in all
5 the other areas and used those conclusions to finalize
6 your opinion?

7 A. Yes.

8 Q. And that we find in your letter
9 of 26th January, 1987, the last document which you
10 reviewed in your evidence, which is in H-14, Appendix E?

11 A. That's correct.

12 Q. So do I have an overview which
13 is accurate as to what you did?

14 A. I think so, yes.

15 Q. Then what I'd like to do is
16 go to H-37 and work our way through it, if we can.
17 And I might say that I accept your methodology all the
18 way up to the end of Stage 2C. My concern is to deal
19 with comparative analysis of Sites D and F. So that's
20 what I'm going to attempt to do, and I'd like to
21 start by dealing firstly with the question of the
22 site area and the study area. The site area is the
23 area of the site or the boundary of the site given
24 to you by the lead consultant; am I correct about
25 that?



1 A. I'm sorry?

2 Q. The site area --

3 A. Yes.

4 Q. -- you deal with the quantifying
5 impacts on the basis of the site area and on the study
6 area?

7 A. That's correct.

8 Q. And if I understand what
9 you've done, you've taken the site area and you've
10 done a population count within it?

11 A. Yes.

12 Q. And you have actually drawn
13 a line around the site areas and called that the study
14 area?

15 A. Yes, that's right.

16 Q. Now, my first question is:
17 is the study area exclusive of the site area or does
18 it include the site area?

19 A. No, the study area is
20 exclusive of the site area because the people on site
21 would have to move off site and, therefore, those
22 impacts which were determined in the study area would not be
23 affecting people who were on the site area.

24 Q. So, when we look at your
25 numbers as they are developed in the tables, we have



1 to recognize that the number for the study area is
2 exclusive of the people who live in the site area?

3 A. Yes.

4 Q. And with respect to that
5 process, I think what you did in the first instance
6 was to draw your lines approximately half-a-mile
7 around the site area and then subsequently went into
8 the field and made such adjustments as you thought were
9 appropriate?

10 A. That's correct.

11 Q. Now, my question then is:
12 is the half-a-mile or .8 kilometre exercise from
13 the centre of the site or from the boundaries?

14 A. From the boundaries of the
15 site.

16 Q. From the boundaries of the
17 site. And then I think you gave some evidence concerning
18 certain adjustments, and I'll come to that later.

19 Now, once you'd done that, you began
20 to determine what population existed on the sites and
21 in the study areas?

22 A. Yes.

23 Q. And you went further, using
24 questionnaires and telephone interrogatories. You
25 wanted to know not only how many people there were but



1 how many households they lived in and what their stage
2 in life was relative to age, occupation and other
3 factors?

4 A. Yes.

5 Q. Am I right that the reason
6 you do that is because social impact isn't simply a
7 matter of counting heads --

8 A. I'm sorry, it's not ...?

9 Q. It's not a matter of simply
10 counting heads in determining a certain number of
11 people are receptors of this impact, because different
12 people receive it in different ways?

13 A. That's right.

14 Q. And the impact on different
15 people is different because of the fact that they
16 may be occupied in different functions. They may be
17 receptive in the way that young children are as opposed
18 to older people; and that's quite clear in your
19 report.

20 A. Yes.

21 Q. So what you have to do when
22 you're determining social impact is you can't stop at
23 the level of simply counting heads; you have to go
24 into more detail to determine what kinds of people
25 you're impacting on?



1 A. Yes, that's correct.

2 Q. Now, the first measure that
3 you address in your work is at ... the table I'm going
4 to deal with is Table 2, which is following 2-10, page
5 37. And you've chosen the number of categories to
6 measure dislocation, and what you're doing in this
7 exercise is you're assuming that each site is chosen
8 for landfill and that the people on each site will
9 have to move?

10 A. Yes, that's correct.

11 Q. And that's the impact you're
12 looking at; am I right about that?

13 A. In Table 2, yes.

14 Q. And in Table 3, you're
15 producing a rating system for the dislocation that
16 comes out in Table 2?

17 A. Yes.

18 Q. And as Dr. Kingham was
19 inquiring yesterday, and you showed by doing some
20 calculations for him, essentially you're assuming
21 that there will be a low impact, a moderate impact
22 and a high impact in each category?

23 A. Yes, that's correct.

24 Q. And to do that what you've
25 done is simply broken the category into thirds?



1 Q. And the low third is low,
2 the middle third is moderate, the top third is high?

3 A. Yes, I would just point out that
4 the exception to that rule is with respect to the
5 indexes.

6 Q. And I'll come to that, yes.
7 I appreciate that.

8 All right, then, let's just, if
9 you will indulge me, and since I don't question the
10 ranking of the six sites and the methodology for
11 six sites, let's go through an exercise of trying to
12 compare Site D and Site F specifically from the data
13 that you have provided.

14 Looking at Table 3 and drawing on
15 the information in Table 2, the Measure, Number of
16 People at Site D there were 10 people and at Site F
17 there were no people?

18 A. Yes.

19 Q. There were three households
20 at the time of the 2C at Site D and no households
21 on Site F?

22 A. Correct.

23 Q. There were two people 66 years
24 and over at Site D and no people in that category at
25 Site F?



1

A. Yes.

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Q. And going down to Households with More than Four Members: at Site D there were none of those and at Site F there were none of those.

Children 16 Years and Under: At Site D there were none of those and at Site F there were none of those; correct?

A. Correct.

Q. And you have two index categories which relate to Income from Activities on Site, and what you've done there is you've just ranked them in as to least affected, number one, and most affected, number six, between the six sites or among the site sites?

A. That's right.

Q. And just dealing with that indexing, I'd like to look at Table 2, the Measures of Dislocation. And if you can do it illustratively for me, will you tell me how you arrived at those indexes, what basic data you had and what calculations you made? I don't want the calculations spelled out for me but the principle of it.

A. The principle was that we asked people in each interview or in each questionnaire



1 and in each telephone interview, we gave them six
2 categories and asked them to estimate the percentage
3 of household income which they earned as a result of
4 activities either on site or in the study area,
5 depending on their location. The categories were these:
6 0 to 10 per cent, 11 to 24 per cent, 25 to 49 per
7 cent, 50 to 74 per cent, 75 to 89 per cent, and then
8 90 to 100 per cent. We asked each person to indicate
9 which category their income fell into. And for each
10 individual, we took the midpoint of that category into
11 which their estimate fell and the income -- I'm sorry,
12 the index is the sum of those midpoints of the category.
13 So that if, let's say, there were two people living on a site
14 and one said that their income fell between -- that the
15 proportion of income which they earned on site was
16 between 0 and 10 per cent, that would be 5; and if
17 there was someone else who fell into this category of
18 50 to 74 per cent, the midpoint would be 62 per cent;
19 and we would add up the 5 per cent and the 62 per
20 cent and come up with an index of 67 per cent.

21 Q. And so as I look at Income from
22 Activities on the Site in Table 2 and I see 569 under
23 Site B and then you've taken various persons'
24 reports of the percentage of their income they earned
25 on the site and you've just made a gross total of



1 those?

2 A. Yes.

3 Q. So that's 569 per cent of
4 something or is that just a number?

5 A. It's really ... I would be
6 uncomfortable thinking of it as 569 per cent of
7 anything. I really think that it is just an index
8 which has allowed me to put some relative, or gain
9 some understanding of the relative extent to which
10 people relied on the site for income.

11 Q. But what it does, if I under-
12 stand you correctly, is ... take the number of people
13 earning income and somehow or other put together the
14 percentages of that relative to their total income?

15 A. That's correct.

16 Q. But simply how is that of any
17 use to us?

18 A. Well, it is an index and,
19 as I indicated yesterday, it is a constructive
20 index like a number of other indexes. It doesn't
21 in fact, as an index, relate to a specific number;
22 and that's why I'm reluctant, as I just indicated to
23 you, to say ... well, I don't like to think of it
24 as 569 per cent of anything.

25 Q. It would be more helpful to



1 us if we had the data which showed how many people
2 were actually earning income and what percent of their
3 income they were earning on the property. It would
4 be a deeper level of information which one could use
5 constructively.

6 A. Yes, I suppose that's true.
7 On the other hand, one of the things that I was trying
8 to do, particularly in this case as, in fact, one
9 has to do in any case where you're working with large
10 amounts of data, is to try to summarize it. And if
11 you put down all your raw data then it's impossible
12 to deal with. And this is the way that I chose to
13 summarize.

14 Q. I guess my point is -- and I make
15 reference to Site D in particular -- that it may not
16 be particularly helpful when you get to the point where
17 you compare two sites because my understanding is
18 that of 127 per cent of Income from Activities on
19 Site that you found at Site D, of that number 127,
20 85 of those 127 would be attributable to Mr. Walt
21 Martin; am I right about that?

22 A. First of all, you used a phrase
23 I would not use; you said "127 per cent of income".
24 I have not used that phrase, as I have indicated, nor
25 am I comfortable doing so.



1 The midpoint, whatever the midpoint
2 of 75 and 89 is would, yes, be attributable. That would
3 be 82 per cent not 85.

4 Q. Just looking at the number 127,
5 127 units, we won't call them per cent, 85 of those
6 units are attributable to Mr. Martin?

7 A. That's correct. But what that
8 means is that he is highly reliant on this site for his
9 income.

10 Q. Precisely. And I'm not going to
11 belabour that because I know my friend, Mr. Garrod,
12 is going to go into that in some detail.

13 And when I look at Site B again
14 where there are 569 units, I really don't know how
15 many people are involved in the accumulation of those
16 units. There could be some full-time persons in terms
17 of income there and some part-time?

18 A. You are correct, that's not
19 clear from this table.

20 Q. And the same applies to Income
21 from Activities on Site for People 46 years and Older.

22 And, again, dealing with Site D
23 the number is 92. Of those, Mr. Martin would comprise,
24 I think we said, 82?

25 A. Yes, 82.



1 Q. Well, then, I'll return to
2 Table No. 3, Ratings for Dislocation. We've gone
3 through the raw data in respect of that and my problem
4 is that, in respect of comparing Site D and Site F,
5 it really seems to me more appropriate to have another
6 category than the ones that you have used, if we
7 were simply doing two site comparisons because, as
8 I look at Site F, really the impact is nil; it's not
9 low, it's nil; am I right about that?

10 A. With respect to these numbers,
11 yes, you're correct.

12 Q. And so the impacts on Site D
13 which you've rated as low on the bottom of the chart
14 certainly are low relative to the six sites but,
15 in relation to Site F, you would be more correct to
16 say high?

17 A. That's correct but this report
18 was prepared to assist me in differentiating between
19 six sites and not two.

20 Q. I accept that and all I'm
21 trying to do is see how we may make more use of it
22 in trying to decide between these two sites. And
23 stop me when I go too far because I don't want to
24 take you too far, if I can avoid it.

25 And I go over to the ratings for



1 Measures of Disruption ... just hold that for a minute
2 because I have some other factors with respect to
3 dislocation because, as I understand your final work,
4 it was to look at the site again, look at the two
5 sites F and D, which you did and reported, found in
6 H-14 at Appendix E?

7 A. Yes.

8 Q. And what you found when
9 you went back and counted I'd like to review with you
10 because you found that the number of people on the
11 site had gone up to a total of 14?

12 A. Yes.

13 Q. That's an increase over 10?

14 A. Yes.

15 Q. You found that the number of
16 households at Site D had increased by one, now being
17 four as opposed to three?

18 A. At the time of this work, yes.

19 Q. And you found that the two
20 people 66 years and over had reduced in number to
21 zero?

22 A. Yes.

23 Q. And you found that the category
24 Children 16 Years and Under had increased from zero
25 at the time of the 2C study to three?



1 A. Yes.

2 Q. Just drawing some conclusions
3 from the numbers, it appears that our two senior
4 citizens either moved away or something else happened
5 and that a new family moved in, comprising six people;
6 am I right about that?

7 A. Not exactly. Well, no. There
8 were numerous changes on that site between the time
9 that this work was done and the time the update was
10 carried on. At the time of the three families who
11 were living on the site at the time that the 2C work
12 was completed, only one of those families remains.
13 Two households moved out who were replaced by two
14 new households and that would make three; and then
15 a fourth property which had been vacant is now
16 occupied.

17 Q. And the net result of all of
18 that is the impact in respect of dislocation has
19 increased?

20 A. Yes.

21 Q. And that's the status at the
22 present time as we go through your evidence, as far
23 as you know?

24 A. I understand -- but it's only
25 "understand" -- that one of the properties that's



1 included here has burnt down and that family has
2 apparently moved out. But I have not brought that
3 material up to date -- that information up to date in
4 this material.

5 Q. Then I would ask you to go with
6 me to the Measures of Disruption, which are to be
7 found at the charts following 2-13, and here again
8 you have taken raw numbers of data and you have given
9 a category of low, medium and high?

10 A. Yes.

11 Q. And that's at Table 5?

12 A. That's correct.

13 Q. And if we try to relate the
14 designation low, medium and high to the raw data,
15 we'd have to go over to the next page where the ratings
16 are established?

17 A. Some of them have begun to
18 be established at the bottom of 2-14 and the rest of
19 them are at the top of 2-15.

20 Q. Yes. What I wanted to do here
21 was to find where in the range the raw data fit,
22 because it seemed to me that later on in the report
23 when you referred to low, you started using terms like
24 "low to moderate", "moderate to high" to show where
25 it fit within the range of the low, medium, high



1 categories that you designated for the sites; am I
2 correct about that?

3 A. Yes, later on I did do that.

4 Q. So at this point, if we are
5 comparing Site D and Site F, Site F is designated
6 low in all categories?

7 A. Yes.

8 Q. And the number of people, being
9 39, the range within which that 39 appears is 0 to 88.7?

10 A. Yes.

11 Q. So that's medium low or mid-low?

12 A. Well, I would say that it is
13 in the middle of the low range but I would not
14 characterize it as medium low in the same sense that
15 I have used those phrases later on in the report, that
16 is, those phrases later on in the report were used
17 to indicate that where I ... where things ... where
18 ratings or rankings did not fit neatly into a
19 category. At this point I have those categories. So
20 I would say it is in the middle end of the low range
21 but that's not the same as saying that it's low
22 moderate or moderate low.

23 Q. So, you don't find that useful
24 to go through this exercise?

25 A. I think it may be useful to go



1 through the exercise of indicating where in the range
2 it falls, where within the range it falls, but I
3 don't find ... I'm not comfortable with putting labels
4 such as you're suggesting on it.

5 Q. I suppose what I'm trying to
6 say is that if you want to begin to use a sharp pencil
7 analysis of the differences between Site D and Site F
8 in respect of Measures of Disruption, I'd want to know
9 where in the range of low or high the raw numbers
10 fit; and you can do that by simply going to the ratings
11 which you've developed and showing that?

12 A. I agree, fair enough, but again
13 I'm not comfortable with your putting phrases like
14 "medium low" on my numbers.

15 Q. All right. So you're happier
16 if I just find on the bottom line that the impact of
17 disruption for Site F is low and the impact of
18 disruption for Site D is high, which I think you do
19 in Table 5?

20 A. Yes, well, certainly I do find
21 that, yes.

22 Q. Well, then, let's go over to
23 Emotional Impact, and when you got to Emotional Impact
24 you made a change in the study area for Site F?

25 A. Yes.



1 Q. And I'm interested to know
2 when you decided to do that, make that change in your
3 study area and why it was that you made that change
4 in the study area?

5 A. The change in the study area
6 was made during the completion of the 2C work and
7 it was made to reflect the very strong concerns that
8 were expressed by people at Site F with respect to
9 the emotional impact issue.

10 Q. And the people that we're
11 talking about who expressed those concerns, who
12 are they?

13 A. Those would be residents of
14 this area south of the CN tracks, in letters and
15 submissions and in meetings, who indicated that they
16 did not feel I had given sufficient weight to their
17 concerns about stress.

18 Q. Have you got Mr. Hodgson's
19 pointer so you can just outline for us what area
20 you think these additional 200 people are contained
21 in?

22 A. Yes, we're looking at basically ...
23 If you recall, for other measures, we determined that
24 this would be -- that is, the tracks here, would be
25 the southern boundary.



1 Q. The CNR tracks, that was the
2 southern boundary of the study area until you reached
3 the point where you were determining the impact
4 emotionally?

5 A. That's correct.

6 Q. And can you just show us,
7 perhaps by delineating the street, how far south of
8 the former southern border these additional people came
9 in?

10 A. Yes, we went down to here
11 and the City of Burlington estimated that in the
12 additional area needed to round out to the full half-
13 mile there would be ... there would be an additional
14 200 people. We did not -- I should point out, as is
15 indicated in here -- we did not survey those people.
16 And we used an estimate provided to us by the City
17 of Burlington as to the number of additional people in
18 that area.

19 Q. Now, am I correct then that
20 you went to the first street parallelling the CN
21 tracks, south of the CN tracks, or do you know which
22 street marks your boundary for that additional 200
23 people?

24 A. We did not specify -- I did
25 not specify a specific street. We contacted the City



1 of Burlington and --

2 Q. I take it you asked the City
3 of Burlington how many people would be impacted, in
4 their opinion, south of the CN tracks?

5 A. Yes ... Well, if we were to
6 extend the study area or when we extended it south --

7 Q. I guess my problem, Dr. Schiff,
8 is in determining how far south you told them you
9 were going to extend it.

10 A. To complete the half-mile
11 study area.

12 Q. Oh, I see, so to go one-half mile
13 exactly south of the site boundary?

14 A. Yes.

15 Q. You had to go somewhere within
16 that subdivision?

17 A. That's correct which, at the
18 time, was still along here.

19 Q. Well, then, as I look at it,
20 it would appear to me that you would be taking in a
21 pie-shaped piece of the subdivision; am I right about
22 that?

23 A. Somewhat, yes.

24 Q. In any event, you said you
25 wanted to go a half-mile south, as I understand it.



1 You called somebody at the City of Burlington and asked
2 them if you did go half-a-mile south how many people
3 that would pick up in your count?

4 A. Yes, that's correct.

5 Q. And they told you 200?

6 A. Right.

7 Q. And, in terms of that 200
8 people, did you extrapolate from information you already
9 had to find out how many households with children under
10 16 and ... households with children and those kinds of
11 things?

12 A. Yes, we did.

13 Q. So, you just took the previous
14 information and you assumed that the mix would be
15 the same?

16 A. If you look on Table 6, you'll
17 notice there is a footnote and that footnote says:

18 *Because the Residential area south*
19 *of Highway 403 was not surveyed, it*
20 *was necessary to estimate the*
21 *number of households with children.*
22 *This was done by determining the*
23 *average ratio of households with*
24 *children to the number of people*
25 *in the study area at sites A through E*



1 and applying the ratio at Site F.

2 Q. You said in your evidence
3 yesterday that you weren't doing sampling as the polling
4 companies do and then forecasting results from that
5 but, rather you were doing a more complete count in order
6 to conduct your study?

7 || A. Yes.

8 Q. And in this particular instance,
9 you've gone one step further and you've had to make some
10 assumptions?

11 A. That's right.

12 Q. Now, I want to deal with some
13 of the components of this Measure of Impact.

14 A. I'm sorry, which one?

15 Q. We're talking about emotional
16 impact.

17 A. Okay.

18 Q. You said in your evidence that
19 it was the perception rather than the reality of the
20 impact which accounted in this sub-factor.

21 A. Yes.

22 Q. Because what you had happening
23 is that people imagine there may be a problem, have a
24 kind of layman's unease about having a landfill nearby?

25 A. Yes, that's correct.



1 Q. And I was interested in that
2 because in relation to the population we're dealing with
3 at Site F, would you agree with me that it is most
4 likely that most of the people who have moved into
5 the area would have been aware of the existence of the
6 landfill?

7 A. I'm not certain about that.
8 If you are referring to this community south of the
9 CN tracks --

10 Q. Yes.

11 A. -- I'm not certain.

12 Q. At page 2-23 in Exhibit H-37,
13 you calculated some established community statistics
14 that took place.

15 A. Yes, but those statistics are
16 based on this ... the houses along King Road, Old
17 Waterdown and Rennick. I do not include the community
18 down here, and I'm not prepared to extrapolate from
19 this area up here to this area down here.

20 Q. They're not similar?

21 A. I don't believe ... I don't
22 believe that they are. I'm not certain that they are
23 and I'm certainly not sure enough to extrapolate.

24 Q. Just looking at the areas that
25 you have described, would you agree with me that the



1 residences north of Site F and those along Old Waterdown
2 Road and Rennick are more like country residences than
3 urban subdivision residences?

4 A. Yes.

5 Q. And would you conclude, as I do,
6 that the rate of change of those kinds of areas is
7 less than the rates of change in urban municipality
8 subdivisions, people coming and going?

9 A. I'm not certain. I would point
10 out that there has been an inordinate, to my view,
11 amount of change in Site D.

12 Q. Yes. And you can't say
13 whether or not you believe the people living south of
14 the CN tracks would be aware of the landfill when
15 they moved in? Is that because there is quite a
16 bit of natural buffer; firstly, there's the CN track --

17 A. There is quite a bit of natural
18 buffer, yes. There is the CN track, the Hydro
19 corridor. There is ... and also now, of course,
20 Highway 403 and the North Service Road. And I consider
21 those to form a large psychological barrier between
22 the subdivision south of the tracks and the proposed
23 Site F.

24 Q. You deal with the question of
25 stress from living near the site. This is a perception



1 of stress as well but -- correct me if I'm wrong --
2 the fact of that boundary would tend to diminish the
3 likelihood of that stress?

4 A. To diminish it, yes, but
5 not necessarily to remove it altogether, that is,
6 I'm not prepared to totally discount the issue of
7 stress at Site F, but I am prepared to agree that
8 I would expect it to diminish, yes.

9 Q. Now, dealing with stress
10 resulting from the selection process, I think we
11 can all understand what you're talking about there.
12 People become aware of the fact that a project is
13 planned in the neighbourhood and this is a stressful
14 experience.

15 A. That's correct.

16 Q. And you add that stress to the
17 stress of their ordinary activities in life and
18 that's what you're really trying to get here; am I
19 right about that?

20 A. The additional stresses
21 associated with this, yes.

22 Q. And there are two things about
23 that that I'd like to put to you: one is that that
24 stress is likely to be less for people who have lived
25 in an area where they were aware of an existing



1 facility like that than for people to whom it is new?

2 A. I don't think I would agree
3 with you. My experience, looking at all six sites,
4 was that each of them had their own particular stresses
5 relating to the selection process, that is, at Sites
6 A, B and C which had not previously had any landfill
7 or not recently and had not recently experienced any
8 issues around landfill selection, those stresses
9 resulted from the fact that it was new, that they
10 had to organize a group, learn the ropes, as it were,
11 about how to begin to act as a an advocacy group.

12 At the other three sites, Sites D,
13 E and F, people had been ... were organized and, in that
14 sense, they had the advantage.

15 On the other hand, stress can be
16 cumulative and these groups had been fighting landfill
17 battles, as they would put it, for quite a period of
18 time.

19 So the stresses may be different
20 but I believe they approximately equal each other
21 out.

22 Q. That is with relation to this
23 proposal to site this particular facility both at
24 Site D and Site F?

25 A. Yes.



1 Q. Now, let me put another question
2 to you about that: are you aware of the fact that the
3 Ontario Waste Management Corporation in about 1982
4 designated three sites near Site D as being sites
5 which had been chosen by them in their rather final cut
6 selection?

7 A. Yes.

8 Q. And those sites, one of them
9 sits right on top of existing Site D?

10 A. Yes.

11 Q. One of them is what we called
12 old Site F, which is about a kilometre down the road
13 to the west --

14 A. Yes.

15 Q. -- right on Britannia. And
16 another one is about two kilometres east on Britannia
17 at a little village called Omagh?

18 A. Yes.

19 Q. So at the same time as this
20 stress was occurring in relation to this landfill
21 project, there was a super added stress in relation to
22 that particular process?

23 A. I would agree but I would also
24 point out that at the same time the residents of
25 Burlington were opposing the extension of the existing



1 landfill.

2 Q. The next category you have
3 is Stress Resulting from Uncertainty about the Future.
4 Would you say that there would have been more uncertain-
5 ty about the future in the Milton area with two
6 proposals extant than there would have been in
7 Burlington with what amounts to an extension?

8 A. Well, you'll notice, if you look
9 at Site F, that this is not one of the stress factors
10 for which I extended the boundary. The concerns about
11 stress from uncertainty about the future seemed to
12 me to have to do primarily with issues relating to
13 money and, particularly, for people who were using
14 part of the site for income-generating activities
15 and whether they should continue to invest in that
16 business, whether the risk was high that they would
17 lose their business, whether they should, therefore,
18 go and look for another job now instead of three years
19 from now or whatever.

20 And so in fact with respect to
21 stress from uncertainty from the future, I did not
22 extend the study area for that stress south of the
23 CN tracks.

24 Q. So that applies only then to
25 stress from living near the site, stress from the



1 selection process?

2 A. That's correct.

3 Q. And we see that reflected in
4 Table 7 which is immediately following 2-20. There
5 you're summarizing your results and you take the
6 200 extra people out and the impact at Site D is high,
7 the impact at Site F is low, the number of people on
8 site. The indexes remain relatively the same as they
9 did earlier on?

10 A. Yes.

11 Q. And the difference then in
12 emotional impact is that you have high emotional
13 impact for Site F in the category of stress from
14 living near the site and stress from the selection
15 process?

16 A. That's right.

17 Q. And assume with me for the
18 purpose of my question, that those 200 people that
19 were added in were taken out --

20 A. Yes.

21 Q. -- of the Site F process,
22 would I be right then that you would assign ratings
23 of low to all of those categories? In other words,
24 stress from living near the site would be low --

25 A. That's right.



1 Q. The number of people in the
2 study area would be low, households with children
3 would low and the stress from the selection process
4 would be low?

5 A. Yes.

6 Q. And I think you've agreed with
7 me that in respect to those 200 people, that you
8 believe that the stress that they will experience
9 is less than the stress of the 39 people that we deal
10 with when we deal in the category of uncertainty
11 about the future?

12 A. I'm sorry, would you repeat
13 the question?

14 Q. Would you agree with me that
15 the 200 people that were added in, wherever they might
16 be south of the CN tracks, would experience less
17 stress than the 39 people who were originally identified
18 when the area was bounded on the south side by the
19 CNR tracks because of the barrier?

20 A. It's difficult for me to answer
21 that question because stress is a personal thing.
22 Whether they ought to experience stress, I have no
23 difficulty saying yes. If stress were totally
24 rational, indeed they should experience less stress,
25 the people living south of the tracks, than those 39



1 people living north of the tracks. Whether they will
2 actually experience less stress, I'm not prepared to
3 say. Stress is not rational and often is a very
4 personal reaction.

5 Q. To go back to your principle
6 of trying to quantify these things and compare them,
7 would you accept my proposition that to quantify that
8 factor you could reduce the number of people by 200
9 to 100?

10 A. On what basis?

11 Q. On the basis that they have
12 a very significant boundary between them and the
13 site?

14 A. Again, you are assuming that
15 the reaction to stress is rational and, as a
16 psychologist, I don't believe that it is. I will
17 say again that if it were rational then this boundary
18 would be quite significant and, in my opinion, we would
19 not include those additional 200.

20 Q. Well, Dr. Schiff, for the
21 purposes of the exercise the members of the Board
22 are obliged to go through, don't we have to assume that
23 the people are rational until someone demonstrates
24 that they aren't?

25 A. I suppose what you've done, in



1 effect, is laid out one of the difficulties with
2 social impact assessment in general and that is that,
3 unlike perhaps particles of dust or noise, waves of
4 noise, we are not as effective at predicting how
5 people will respond in various situations as we are
6 about other physical elements and, therefore, it is
7 a less precise science or it's a less precise exercise,
8 and the question of whether it's a science, I think
9 is one that is being addressed in the field. We would
10 like it to be a science.

11 Q. But surely you have to assume
12 that the general population is rational to stress,
13 otherwise the study means nothing?

14 A. What we are assuming is that
15 people will ... that we may expect that some of these
16 people will experience stress and that perhaps the
17 levels of stress will vary among those individuals;
18 and perhaps not all of them will experience stress,
19 and some will experience more than others. What I
20 am assuming is that in general there will be some
21 stress but I am not assuming that the reality of that
22 is necessarily the case, that is, this is really a
23 perceptual issue.

24 Q. And dealing with perceptual
25 issues, if I put a wall between me and what I'm about



1 to receive that will help?

2 A. Well, I wasn't using perceptual
3 only in the visual sense.

4 Q. Well, in every sense... I
5 think that's as far as we can go. I'm not ...

6 Dealing with Table 9 at 2-24,
7 I have only one question about that. Here you're
8 trying to determine how the extended family has been
9 in the community?

10 A. Correct.

11 Q. Because the longer it's been
12 in the community the greater the impact?

13 A. The greater the sense of loss,
14 yes.

15 Q. Yes. And I look at how you
16 have bottom-lined those ratings. If I look at Site F,
17 you've got L/M, which I take to be low/moderate?

18 A. That's correct.

19 Q. And on the other side of the
20 rating, you have H?

21 A. High, yes.

22 Q. And to be consistent, shouldn't
23 it be H/H?

24 A. No. I did not place extra
25 emphasis on either one of these. They were given



1 equal rating and, therefore, if one is L and one is M,
2 then it has to be L/M, low/moderate, just as if you
3 have a (1) and a (2), you would average them to
4 1.5.

5 Q. Well, I looked at that and
6 then I went over to the table which rates the population
7 impact sub-factors at 2-29, and as I compared D and
8 F on emotional impact or disruption of an established
9 community, I see that you have an H under D --

10 A. Yes.

11 Q. -- which is consistent, and
12 then L/M under F?

13 A. Mm-hm.

14 Q. I also note that in summary
15 you put all of those sub-factors together and came
16 up with an overall ranking, and I could not determine
17 how it was that you factored an L/M in against an H.
18 It seemed to me if you were quantifying, you had to
19 quantify H-H.

20 A. I'm sorry, I don't understand
21 your point.

22 Q. Well, when you arrive at L/M
23 as the overall rating for Site F.

24 A. I see.

25 Q. And you've done that by somehow



1 or other totalling the ranking in the sub-factors?

2 A. Correct.

3 Q. My question really is: how
4 do you rationalize the L/M for disruption of an
5 established community against a single H? What exercise
6 did you go through to do that?

7 A. Well, I looked at each of the
8 factors individually, in other words, Site F was
9 low on three factors, was moderate to high on one,
10 and low to moderate on one. If you wanted to consider
11 the ... If you wanted to consider the moderate high
12 and the low moderate as a kind of evening out at
13 moderate, then you would have three lows and two
14 moderates, and it was basically in that manner that
15 I did this.

16 Q. So, three lows and two moderates
17 give you a low moderate?

18 A. Yes.

19 Q. And three highs and two lows
20 give you a moderate high?

21 A. Yes.

22 Q. Dealing with Special Population
23 which is the last factor we haven't dealt with.
24 That's found at page 2-26. And in rationalizing
25 the six sites, you've counted the number of artists



1 and writers, artisans and craftspeople and quantified
2 them.

3 A. That's correct.

4 Q. Site D at the time had two;
5 Site F had one.

6 A. Mm-hm.

7 Q. Both, therefore, in the low
8 range of zero to four?

9 A. Yes.

10 Q. And you gave the low impact
11 rating then to Site D and to Site F in relation to
12 the six-site exercise?

13 A. Right.

14 Q. And if I go over to Table 10,
15 I see that you again give a low rating of the Special
16 Population Groups to each site and yet, by my
17 calculation, if you're comparing Site D and Site F,
18 it's two to one. So would you make an adjustment
19 there?

20 A. Well, it is precisely for this
21 reason that I then went on ... You will recall, I
22 testified yesterday that simply stopping at Table 2-10
23 was not sufficient and that one then had to go on
24 and look at the stress. Now, you can look at it as
25 a spread of two to one or you can look at it as a



1 spread of one more. Nevertheless, what's necessary
2 is to go ahead and actually look at the actual ...
3 to look at the actual numbers and the pattern of
4 those numbers because, as you yourself have indicated,
5 in some cases, such as that one, the numbers are
6 different -- I'm sorry, the numbers are different and
7 the rating is the same, that will happen. As well,
8 the difference, because the difference between a
9 low and a moderate rating might be very small, depending
10 on where the range splits, and in addition the ...
11 Well, I'd certainly make those two points.

12 Q. That's why I went through the
13 exercise of looking at the data so that we could reach
14 Table 10, because I wanted to put some questions to
15 you and some propositions about the rankings that
16 you call Overall Ratings at that point.

17 In the sub-factor of dislocation
18 you had D ranked low and F ranked low and, therefore,
19 for the purpose of that table they would be dealt with
20 equally?

21 A. Right.

22 Q. You and I agreed that in fact
23 there was no impact at Site F on that category?

24 A. Yes.

25 Q. And so I'm going to put a zero



1 beside that as opposed to low. In the category of
2 Disruption, we had no difficulty: the rating for D
3 was high and the rating for F was low. And the
4 question of emotional impact, we agreed that the
5 emotional impact for Site D was high but we had a
6 question about the 200 extra people that went into the
7 rating of Site F of medium high. I had a question
8 about that; I'm not sure that you agreed with me.

9 A. Right.

10 Q. But I look at that designation,
11 medium high, and I have some difficulty in accepting it
12 because of the way the 200 people got in; so you
13 understand my concern.

14 A. Yes, I do.

15 Q. In terms of disruption of
16 an established community, I have no difficulty.
17 And then when we get to Special Population Groups,
18 I have a problem because if you try to compare the
19 two sites, there are twice as many of those persons
20 on Site D as there are in Site F. So you would have
21 to say that those two lows are not equivalent?

22 A. Well, they are not equivalent.
23 Another way of looking at saying there are
24 twice as many people is to say that there is one
25 more.



1 Q. Another way of looking at it
2 would be to say if that one person at Site F was
3 someone like Robert Bateman, he might be worth a lot
4 more than two people at Site D; is that fair?

5 A. It might. That's a hypo-
6 thetical question.

7 Q. So what I'm getting at, Dr.
8 Schiff, is you concluded that the gap is widening
9 between those two sites?

10 A. Yes.

11 Q. And I've tried to work through
12 the quantities themselves to show the same thing.

13 A. Yes.

14 Q. And you would agree with me
15 that the quantities themselves show that the gap
16 is widening?

17 A. Yes.

18 Q. And, indeed, when you got to
19 the point where you did your update, you found
20 that the quantities of people were such that the gap
21 widened again?

22 A. Correct.

23 Q. The issue of social equity is one
24 that I want to address, and your starting point
25 dealing with social equity is that social equity means



1 fair, "How fair is it?"; can you tell me about that?

2 A. Yes, that's the way I defined
3 it, correct.

4 Q. And Mr. Hodgson put a question
5 to you as to how comfortable you felt about determining
6 fairness in relation to this project, and you concluded
7 that that might be more appropriately left to judicial
8 bodies or quasi-judicial bodies?

9 A. Yes, that's what I said.

10 Q. Would you agree with me that
11 we're in one of those two bodies here?

12 A. Yes.

13 Q. Now, you understand how the
14 Environmental Assessment Act requires a proponent
15 to deal with these kinds of projects?

16 A. Yes.

17 Q. And just to try to put it in
18 context, that statute requires that a proponent of
19 an undertaking, such as this, look to alternatives;
20 is that correct?

21 A. Yes.

22 Q. And it must look to functional
23 alternatives and it must look to locational alternatives?

24 A. Yes.

25 Q. We are here looking at locational



1 alternatives?

2 A. Yes, that is correct.

3 Q. And because the Regional
4 Municipality of Halton Act requires that the Regional
5 Municipality provide waste disposal facilities,
6 you start with the Region of Halton because there's
7 no jurisdiction outside?

8 A. Right.

9 Q. And this process requires that
10 there be a rational and reasonable study to determine
11 which alternatives, locationally, are the best?

12 A. Yes.

13 Q. And when the proponent has
14 determined what the undertaking is and puts forward
15 the best alternatives, it's on the basis of a rational
16 study process?

17 A. Yes.

18 Q. And then this Board, under the
19 Consolidated Hearings Act, another power of
20 legislation, makes a determination as to which of the
21 alternatives is the best alternative?

22 A. Yes.

23 Q. And would you agree with me
24 that, after going through that process, dealing with
25 natural environment, social environment, that the



1 decision of this Board represents fairness?

2 A. That would be my position,
3 yes.

4 MR. LEITCH: Thank you. Those are
5 all my questions.

6 THE CHAIRMAN: Thank you, Mr.
7 Leitch.

8 Mr. Garrod.

9 MR. GARROD: Mr. Chairman, I don't
10 expect that I will finish before you wish to break for
11 lunch so if you just let me know what a convenient
12 point is for the break.

13 THE CHAIRMAN: Yes. Not later than
14 12.30.

15 MR. GARROD: Fine. Feel free to
16 interrupt me at a convenient point.

17 CROSS-EXAMINATION BY MR. GARROD:

18 Q. Dr. Schiff, I would like to
19 explore with you for a moment, before I get into the
20 details of your report, the field of social impact
21 assessment and try to understand a little bit about
22 what it's all about.

23 From what I've been able to determine,
24 it appears that it is some kind of an attempt to
25 predict the adverse effects that might result to



1 people if a project is approved in certain locations;
2 does that sound reasonable?

3 A. To predict the changes, yes.

4 Q. So you are predicting positive
5 and adverse results then?

6 A. Yes.

7 Q. And in the instance of this
8 type of project, are there positive results that
9 you've identified during the course of your study?

10 A. In the course of this particular
11 project, no.

12 Q. So I guess then for our
13 purposes here at least, we're attempting to predict
14 the adverse impacts that might result?

15 A. Yes.

16 Q. And I understand your field
17 is, relatively speaking at least, a new one and
18 that it's a developing art or science, as you may wish
19 to characterize it?

20 A. It's relatively new, yes.

21 Q. And that, in fact, there
22 hasn't been any experience in Ontario prior to your
23 work at evaluating social impact assessment of
24 landfills; is that correct?

25 A. That's correct.



1 Q. And am I correct that this
2 exercise in social impact assessment was largely
3 motivated by the application of the Environmental
4 Assessment Act to municipal undertakings in 1980 ...
5 You're not following me?

6 A. No, I'm not following you.

7 Q. Are you aware that the
8 Environmental Assessment Act requires proponents to
9 evaluate alternative undertakings on the basis of
10 a number of things, including the impact on social
11 environment?

12 A. Yes.

13 Q. And prior to that, that
14 requirement wasn't in place?

15 A. In Ontario, that's right.

16 Q. And does that, you think,
17 explain at least in part the relative newness of the
18 type of exercise that you've been going through here
19 and trying to assist the Board in this process?

20 A. I think so.

21 Q. So you are, if you like, in
22 your report, in your work, breaking new ground?

23 A. Yes.

24 Q. And would you agree with me
25 also that previously when impacts of landfill sites



1 were studied in Ontario, under the Environmental
2 Protection Act or the Planning Act, that impacts on
3 people were normally covered under the general
4 heading of "Land Use Plan"?

5 A. Yes, I would say so.

6 Q. And, in addition to that, of
7 course, the physical type of impact that you referred
8 to, such as the dust and noise and things that you
9 are referring to as components of the social environ-
10 ment study were also independently done?

11 A. Yes.

12 Q. And you agree, I take it,
13 since you have included them in the general topic of
14 Social Environment, that all of those disciplines
15 still have important contributions to make in determining
16 social impact?

17 A. Yes.

18 Q. And your work is one part of
19 that?

20 A. Correct.

21 Q. And without meaning to be
22 derogatory in any sense of the word, the parts of
23 the social environment study that you have been
24 charged with responsibility for are the ones that
25 are relatively more difficult to quantify and



1 objectify than the physical impacts that are also
2 included within the broad topic of Social Environment?

3 A. Yes, I'd agree.

4 Q. Yes. Those three being:
5 the population impacts, the social equity issue
6 that you identified, and the community impacts --
7 impacts on community facilities?

8 A. Right.

9 Q. And would you agree with me
10 that at least among those three parts that you had
11 responsibility for, population impacts are the ones
12 that are most concrete, and the community facilities
13 and certainly social equity are less so?

14 A. Some of the population impacts
15 are most concrete. I think we realized that this
16 assessment is kind of a fuzzy issue.

17 Q. But notwithstanding the fact
18 that your field is a relatively new one, I understand
19 that there are some sort of generally accepted steps
20 in terms of methodology that are reasonably well
21 accepted in your field?

22 A. Yes.

23 Q. And if I could maybe just run
24 through that. Would you agree with me initially
25 what you were attempting to do as a first step in



1 your methodology is to define an existing social
2 environment?

3 A. I'm sorry, is to ...?

4 Q. Define an existing social
5 environment?

6 A. Yes.

7 Q. And that means, in essence,
8 that you want to collect data and identify what it is
9 that is presently there in the way of a social
10 environment?

11 A. Yes.

12 Q. If you like the "before
13 additions"?

14 A. Yes.

15 Q. And you've done this for both
16 sites?

17 A. Yes.

18 Q. And that was by your exercise
19 with the questionnaires and by your follow-up
20 telephone calls and so on?

21 A. That's right.

22 Q. And I suppose that continued
23 by your public meetings, workshops and that type of
24 activity, whereby you gathered information about
25 existing social environment?



1 A. Yes.

2 Q. The second step of your
3 methodology or in what I gather is accepted methodology
4 is you try to predict or you try to project in some
5 way what social changes are likely to occur to that
6 existing social environment in the event that a project
7 goes ahead?

8 A. That's correct, that would be
9 the second stage.

10 Q. So you want to know how something
11 is going to change people's lives, if you like?

12 A. Yes.

13 Q. And you undertook that step
14 in your methodology as well?

15 A. Yes.

16 Q. And, thirdly, you then have
17 to, if you like, what I perceive to be, you have to
18 apply some judgment and you have to assess the
19 relative importance of those anticipated changes on the
20 existing social environment for the various groups or
21 individuals that might be affected?

22 A. Mm-hm.

23 Q. And, in doing so, you have to
24 take into account the social conditions that they
25 might experience?



1 A. Yes.

2 Q. So, you're at this stage
3 entering into a little judgmental factor as to how
4 important, how relatively significant are the various
5 changes that might occur in the social environment?

6 A. Yes.

7 Q. And, in doing so, in making that
8 judgment, I suggest you apply your experience, your
9 expertise, your own judgment on that and, in addition,
10 I suggest to you that you use a very large degree of
11 common sense?

12 A. Yes.

13 Q. In terms of deciding what
14 kinds of impacts are more important than others or
15 more significant than others?

16 I've found that common sense
17 is not always so common as perhaps people think it is
18 is but, yes, I would say.

19 Q. You're applying your own common
20 sense at least. Other people's common sense may not
21 agree with your common sense?

22 A. Okay, I'm comfortable with
23 that.

24 Q. And then overall, I think, the
25 last step in the methodology, at least as I understand



1 it in your field, is you evaluate all the various
2 alternatives; having assessed the significance of the
3 impacts in each particular location, you throw them
4 all into a mix and say which location comes out as the
5 logical place, from the point of view of impacts on
6 social environment?

7 A. Yes, that's right.

8 Q. And you recognize those four
9 steps as something that is basically accepted methodology
10 in your view?

11 A. Yes, those constitute a
12 commonly accepted methodological approach to social
13 impact.

14 Q. And you essentially followed
15 those four steps?

16 A. I believe so, yes.

17 Q. You'd agree with me that they're
18 also relatively similar to the steps that were under-
19 taken in what we refer to as the environmental impact
20 assessment, in terms of assessing the environmental
21 impacts; this is probably the same four steps?

22 A. Yes, there is some parallel.

23 Q. We look at the existing
24 environment. We look at the predicted changes.
25 We assess how significant those are. And then we



1 evaluate that versus the other sites?

2 A. Right.

3 Q. The same sort of model?

4 A. Mm-hm, right.

5 Q. Now, carrying out those four
6 steps, there are obviously a lot of details that need
7 to be done and I gather that there is more disagreement
8 in your field about precisely how to do this than there
9 is about what should be done? Perhaps not "disagreement,
10 perhaps lack of unanimity would be a better way to
11 put it?

12 A. Yes, there are various approaches
13 within that methodological framework. There are various,
14 I guess I would say, perspectives on social impact
15 assessment.

16 Q. And your perspective, I take it,
17 has been to try to quantify things, to try to be as
18 objective as possible, but to still take account of
19 the subjective aspects that exist?

20 A. Yes, that's my position.

21 Q. And you have chosen your
22 evaluation factors accordingly and done your analysis?

23 A. Yes.

24 Q. Now, what I want to explore
25 with you just for a minute is some of the inherent



1 weaknesses in social impact assessment, and one of them
2 that strikes me particularly which I suppose is
3 inherent in any attempt to predict the future is
4 the strength of the cause and effect relationships
5 that you are assuming throughout your whole exercise?
6 Do you recognize that as a problematic area in your
7 field generally?

8 A. Yes, I do and I think I've
9 indicated that previously here.

10 Q. For example, perhaps if I can
11 put it in concrete terms: if you identify existing
12 social environment, as you have here, you then must
13 enter into an exercise of predicting impacts on the
14 environment?

15 A. Yes.

16 Q. And those impacts may or may
17 not occur, depending on what they are?

18 A. That's correct.

19 Q. And some types of impacts are
20 much more certain to occur than others?

21 A. Certainly ... yes.

22 Q. And some types of impacts are
23 perhaps reasonably likely to occur and some may be
24 unlikely to occur and some may be completely
25 unpredictable; would you agree with that?



1 A. In general, yes. Obviously,
2 what one wants to do in conducting social impacts is
3 to identify those impacts or to identify those impacts
4 which are most likely to occur and to collect data
5 that is relevant to those because you don't want to
6 just go out and collect data on everything you can
7 think of that might possibly at one time happen.

8 Q. And when you are assessing the
9 relative importance of adverse impacts, would you
10 agree with me that an important part of that assessment
11 is evaluating the strength of the cause and effect
12 relationship that you are assuming? Let's put it this
13 way: if somebody lives on site and the adverse
14 impact that is predicted is that they will have to
15 move if the site is approved, the cause and effect
16 relationship there, I suggest to you, is very certain?

17 A. Yes, it is.

18 Q. There's no doubt that anybody
19 who lives on site, on one of these two sites, is
20 going to have that adverse impact?

21 A. That's correct.

22 Q. All right. And if I can
23 extend that slightly beyond the boundaries of site
24 to have someone living immediately adjacent to the
25 site but not being expropriated, it is less certain



1 that the predicted impacts will occur to them but it
2 is still relatively certain that they're going to
3 experience adverse social impacts as a result of the
4 site being located beside them; is that correct?

5 A. You're saying people who live
6 closer to the site are relatively more certain to
7 experience adverse impacts?

8 Q. Yes.

9 A. Yes, I'd agree with you.

10 Q. So your ability to predict
11 whether or not a given individual or given group of
12 individuals will experience a social impact depends,
13 at least to a large extent, on how close they are to
14 the site?

15 A. To some extent, yes.

16 Q. And the further they are from
17 the site, I suggest to you, the more tenuous your
18 assumption becomes that there will be an effect caused
19 by the location of any project, in this case the
20 landfill?

21 A. For the most part, I would
22 agree with you. I'm thinking, however, of haul routes,
23 for example, as an exception or as a possible
24 exception to that rule.

25 Q. Well, let's just think in terms



1 of the site for the time being because traffic impacts
2 have been dealt with separately. For example, one
3 of the measures that you looked at is how much somebody's
4 social relationships might be disrupted if the site
5 goes in?

6 A. Yes.

7 Q. You'd agree with me that if
8 somebody off site has a social relationship with
9 somebody on site, then that's certain to be disruptive
10 if the person on site is forced to be expropriated?

11 A. Yes.

12 Q. Whereas if they have social a
13 relationship with somebody else in the study area,
14 perhaps as much as half-a-mile away, there may or there
15 may not be to those people an adverse impact as a
16 result of that landfill?

17 A. Yes, that's true.

18 Q. Those people might be completely
19 unaffected if a landfill goes in there, in terms of
20 the impact on their social relationship?

21 A. Yes.

22 Q. Now, you have included that
23 as a potential social impact but it doesn't necessarily
24 mean that it will be a social impact, is that not fair?

25 A. Yes, it does not mean that



1 it will occur in every given case.

2 Q. The only ones that we know will
3 occur are the ones that are right on site?

4 A. Absolutely know? Yes, you are
5 correct.

6 Q. And the closer you are, I
7 suggest to you, the more likely it is that those
8 effects will occur?

9 A. Yes.

10 Q. So by the time you start getting
11 to the fringes of your study area, you are maybe
12 including more people but the impact on them, I
13 suggest, are, first of all, less in magnitude and
14 less in likelihood; would you agree with that?

15 A. In general, yes.

16 Q. So that the people that we're
17 really concerned about in a social impact assessment
18 are the ones, I suggest to you, who would be on and
19 immediately adjacent to the proposed site?

20 A. I would agree that those are
21 the people of the greatest concern. I would not say
22 that those are the people we are really concerned about
23 and suggest that we're not concerned about the others.

24 Q. I'll accept your language.
25 That's what I intended.



1 A. Okay.

2 Q. Now, I'd like to take you, if
3 I can, having dealt with some of those more general
4 concepts, to the specifics of your study.

5 THE CHAIRMAN: Mr. Garrod, might
6 this be a good place to break?

7 MR. GARROD: I'm in your hands, Mr.
8 Chairman.

9 THE CHAIRMAN: Yes. Quarter to
10 two? . . .

11 ---LUNCHEON RECESS AT 12.15 P.M.

12 ---UPON RESUMING AT 1.45 P.M.

13 THE CHAIRMAN: Thank you. Please
14 be seated.

15 MR. GARROD:

16 Q. Dr. Schiff, I just wanted to
17 start this afternoon by asking you about the first
18 step in the methodological model we discussed this
19 morning and that is the step of identifying existing
20 social environment and you undertook two steps, as
21 I understand it, to do this: you first of all
22 identified some study areas and, secondly, you
23 identified certain factors or sub-factors you used to
24 profile the social environment within those study
25 areas; is that correct?



1 A. Yes. I would add that specifical-
2 ly, as part of the process of identifying factors,
3 I held some meetings with people living in the areas
4 in each of the six candidate sites.

5 Q. Yes, as part of that task,
6 of course.

7 Firstly then, with respect to the
8 boundaries of the study areas, am I correct that you
9 essentially want to identify an area to coincide or
10 to capture the areas that you expect would be within
11 the landfill sphere of influence?

12 A. Yes.

13 Q. And so, if you like, you are
14 casting out a wide net to try to catch all the
15 significant impacts that might result?

16 A. Yes, I would say so.

17 Q. And it doesn't mean that
18 everybody within that study area, for example, will
19 experience a significant social impact or that everybody
20 within that study area will have an equivalent degree
21 of social impact, does it?

22 A. No, not necessarily.

23 Q. Your intent is to be as inclusive
24 as you can be within reasonable levels of significance?

25 A. Yes.



1 Q. And you did that then by
2 a process of identifying a half-mile or .8 of a
3 kilometre boundary around the candidate sites, I think
4 they were called, as they were then identified in
5 Stage 2B?

6 A. In Stage 2B there were 55
7 site plan areas. In Stage 2C ... I'm sorry, yes ...
8 May I start over?

9 In Stage 2B, there were 55 candidate
10 sub-areas.

11 Q. Okay, and I'm sorry I got the
12 term incorrect as well.

13 At the beginning of Stage 2C, you
14 had then certain -- I think they were called "candidate
15 sites"?

16 A. That's correct, the six
17 candidate sites in Stage 2C.

18 Q. And those are generally larger
19 than the present site plan areas?

20 A. Yes.

21 Q. And you drew half-a-mile
22 boundary around those six candidate sites?

23 A. Yes.

24 Q. And, subsequent to that, the
25 focus was narrowed within the candidate sites to



1 specific site plans that we're now familiar with?

2 A. That's correct. But I should
3 point out that in addition to drawing the half-mile
4 study area boundary, I then visited each of the
5 six sites to determine the appropriateness of that
6 half-mile boundary in view of local conditions.

7 Q. Yes, I'm sorry, I didn't
8 mean to exclude that. You visited all of the sites
9 and you made certain adjustments to the boundary,
10 depending on the local situation?

11 A. Yes.

12 Q. If there was a natural barrier
13 of some kind, either just sort of beyond or inside that
14 barrier, you adjusted accordingly -- or inside that
15 area, the half-mile distance?

16 A. Yes.

17 Q. But nevertheless it was half-a-
18 mile around the candidate site area?

19 A. More or less, yes.

20 Q. And that, I take it, was because
21 it was your judgment that beyond about half-a-mile
22 distance from a landfill operation, landfill site,
23 there would not be significant social impact?

24 A. It was my judgment that there
25 would not be significant population impacts. We also



1 agreed at that time that if any of the physical social
2 impacts, such as noise, dust, et cetera, were to
3 extend beyond the half-mile boundary they would be
4 included.

5 Q. That's right. And, in fact,
6 the technical work that was done in all of those
7 subjects, has it not confirmed that your original
8 judgment was a reasonable one?

9 A. Yes, I think so.

10 Q. In fact, all of those impacts
11 are within that half-a-mile, I think, with the
12 exception of visual?

13 A. Yes.

14 Q. And we have heard a considerable
15 amount about that from Mr. Wright.

16 A. Yes.

17 Q. So when the site plan areas
18 were shrunk, like, from the original candidate sites
19 down to their present size at A to E, you did not
20 shrink the study area?

21 A. That's right, I did not.

22 Q. And Site F was never shrunk
23 from the candidate area to its present site plan
24 area and so its site plan area was also essentially
25 unchanged?



1 A. That's correct.

2 Q. Now, would you agree with me
3 that the result of that is that you have around Sites
4 A to E, including Site D which my clients are particularly
5 interested in, an area that I would call on the
6 periphery of the study area, an area where social
7 impacts, if they occur at all, will be relatively
8 insignificant in comparison to ones which will occur
9 within a half-mile boundary of those sites?

10 A. I would say so, yes.

11 Q. Okay. So that ... And that's,
12 I think, consistent with what we were saying this
13 morning: that the further out you go, you will capture
14 more people but the significance of that becomes less
15 and less?

16 A. Yes.

17 Q. Now perhaps just before I move
18 on from this study boundary area we can take a look
19 at the map that's in your report. Unfortunately,
20 these are not very well reproduced and I'm hopeful
21 I don't have to get into an area where you've
22 difficulty reading it.

23 This is in, Mr. Chairman, Exhibit
24 H-37. The maps follow page 2-33.

25 And if I could just ask you to refer



1 to the second map, Map 2; this is the one that includes
2 Sites D and E.

3 Mr. Chairman, we could put the over-
4 head up, if that's helpful but I don't remember it
5 being any clearer than these maps.

6 THE CHAIRMAN: It depends what you
7 want to ask.

8 MR. GARROD:

9 Q. Well, I guess what I'd just
10 like to do, Dr. Schiff, is to discuss with you some
11 of the adjustments that were made to the boundary,
12 at area D, for example.

13 A. Yes.

14 Q. I look to the west of Area D
15 and I have attempted to scale this off on my copy of
16 the map, and perhaps you can confirm: what you have
17 done on the west side of Area D is you have shrunk
18 back the study area slightly from what it would
19 otherwise have been, the half-mile boundary, to
20 coincide with the railway lines, I think it's
21 Canadian National Railway line?

22 A. Yes and the shrinkage was quite
23 slight.

24 Q. Yes. And that is consistent
25 with what you did at Site F with respect to the



1 railway line there; is that not correct?

2 A. It's consistent in that in
3 both cases it was felt that there were logical barriers
4 in the landscape, logical barriers and boundaries to
5 the site study area.

6 Q. And, in fact, given the fact
7 that at Site F there is not only the railway track
8 but a large parcel of vacant industrially-zoned land
9 and Highway 403, do you not agree with me that there's
10 even more rationale for doing that at Site F than there
11 is at Site D?

12 A. Yes, I would certainly say so.

13 Q. Now, you've also I noticed
14 at Site D seemed to have shrunk the southwest corner --
15 I use that terminology, assuming north is straight up
16 on this page -- southwest corner, in slightly to a point
17 where I suggest to you, it's considerably within the
18 half-mile of Site D?

19 A. Yes.

20 Q. And was there some rationale
21 for that alteration, in terms of physical boundary
22 or some other reason for that adjustment?

23 A. At this time, I can no longer
24 tell you exactly what that reason was. I would assume
25 it had something to do with the land use in the area



1 around the site.

2 Q. And to the east of the site,
3 you seem to have adjusted the boundary out slightly
4 to roughly coincide with the --

5 A. Yes, we did.

6 Q. -- the trees down there.
7 And that, I suggest, is consistent with your view of
8 trying to keep some kind of a natural barrier as the
9 logical site plan area?

10 A. Yes.

11 Q. Or not "site plan", study area?

12 A. Yes.

13 Q. And then I notice you extended
14 it somewhat to the north and somewhat to the south
15 to include some areas that would otherwise be outside
16 the half-mile area -- I'm sorry, those I suppose relate
17 to the earlier candidate site area,

18 A. Yes, they would.

19 Q. And those are just simply not
20 shrunk back?

21 A. That's correct.

22 Q. And that again is ... we've
23 already dealt with the significance of those areas.

24 In terms of Site D, would you agree
25 with me then, when we're looking at social impact,



1 it's --

2 A. I'm sorry, I just have to
3 clarify something. There were some expansions as
4 well to the study area at Site D. The northern limit
5 of the study area at Site D was expanded to include
6 some additional residences on both 1st Line and
7 Highway 25, that is, we identified the half-mile
8 study area and then if there were, as there were, other
9 homes which were quite close by each other, we would
10 have included those. So we didn't draw lines between
11 neighbours.

12 Q. Because there was no logical
13 physical barrier there?

14 A. That's right.

15 Similarly, by the way, the south end
16 of the site, we included both sides of Lower Baseline
17 Road.

18 Q. And you didn't consider Lower
19 Baseline Road to be a physical barrier, I take it?

20 A. That's right, we didn't in
21 this case.

22 Q. All right. Now, having
23 established those area, you then set out to describe
24 the existing social environment by the choice of
25 certain factors and I suggest to you you had two



1 alternative approaches you could have followed, one
2 of which would have been to measure every conceivable
3 parameter that might provide you with information
4 about social environment and the other one would be
5 to try to measure only those factors where you felt
6 that there was some potential impact?

7 A. Yes.

8 Q. Well, which did you use in
9 this case?

10 A. Well, I've already indicated
11 that I chose those factors which I thought were ...
12 where there would be a potential impact; that it
13 did not seem appropriate to use kind of a scatter-shot
14 approach of collecting data on everything and anything
15 in sight.

16 Q. All right. And then you report
17 the results of that data collection exercise starting
18 At Table 2 of your report, and I'd like you to turn
19 to that, if you would, please.

20 This is, Mr. Chairman, 2-10(a).
21 These are the Measures of Dislocation, first of all,
22 a sub-set of existing social environment?

23 A. Yes.

24 Q. These are the people who would
25 be expropriated and lose their homes?



1 A. At the time that this report
2 was written, yes.

3 Q. And this is not only then a
4 description -- this table is not only a description of
5 the existing social environment, it is also a
6 description of the inevitable impact of locating a
7 landfill at any one of these sites?

8 A. Yes.

9 Q. Would you agree with me that
10 that's not always the case for your tables?

11 A. I do agree, yes.

12 Q. So when we look at this, there
13 are certain patterns that emerge between and among
14 them, the six sites. First of all, if we look at the
15 number of people on site.

16 I have produced, Mr. Chairman,
17 taking a lead from Mr. Lederer's example, a chart
18 which I'd ask the witness to refer to, and it's on
19 the large piece of paper there.

20 Dr. Schiff, I've graphed on there,
21 to scale, the number of people on site at each of these
22 six sites, as identified in this report of yours,
23 Exhibit H-37, and I've added in, as you can see, in the
24 blue, the number of people on site, as you identified
25 it for Site D in Exhibit H-14, which is the update you



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1 did.

2 A. Yes, this one here.

3 Q. And you recognize those numbers
4 as being your numbers that are graphed in? F is the
5 zero.

6 A. Yes.

7 Q. Site E is seven.

8 A. Yes.

9 Q. Site D is 10 and then 14.

10 A. Yes, that's correct.

11 Q. A is 11.

12 A. Yes.

13 Q. And B and C are up at 31 and
14 32.

15 A. Yes.

16 Q. Now, I've graphed them this
17 way because I wanted to compare this with your ranking
18 or your rating system, because it occurs to me, Dr.
19 Schiff, that the data that you collected falls into
20 several logical kinds of categories that group
21 naturally together, and that your rating system --
22 which you admitted was an arbitrary one -- I've
23 attempted to divide this data, these data, up according
24 to one-third, one-third, one-third. And your line,
25 therefore, when you divide these up, would you agree



1 with me, it falls at 10.7 on this graph? Perhaps
2 you could point that out and show the Board where
3 that divides the categories between low and moderate
4 in your report?

5 A. Well, first, as a mathematician,
6 I want to make sure it really does divide it 10.7.

7 Q. Well, that's at page 2-11
8 of your report. Perhaps that would be the easiest
9 way for you to ...

10 A. Oh ... Okay, yes.

11 Q. It does?

12 A. Yes.

13 Q. So that divides immediately
14 between Site A and Site D as it was found at the time
15 that the six sites were evaluated?

16 A. That's correct. But may I
17 remind you that it was precisely for this reason
18 that I then went on to do the evaluation looking
19 at the material in terms of the actual numbers and I
20 said -- I've said it here and I indicated in the text
21 that it was necessary to look for the pattern of
22 results and to look for the spreads between sites.

23 Q. Right. Would you agree with me,
24 therefore, that the grouping I've suggested on this
25 chart, that is, B and C be grouped together, and D,



1 A and E be grouped together, and F be grouped separately
2 is one that more logically fits the data that you
3 collected, in terms of giving us a graphic picture
4 of the existing social environment?

5 A. It does group that way visually
6 and it is a grouping which is, I suppose, intuitively
7 comfortable but I should point out that the distance
8 between F and E is approximately the same as the
9 distance between E and D. So that in terms of the
10 pattern, yes, it does appear to group this way but
11 then I would point out that one needs to be careful
12 about looking at this distance --

13 Q. Let's look at the distance
14 between then, say, E and F, for example. We're talking
15 about putting people out of their homes and off their
16 property against their will. Would you agree with me
17 there is not a quantum difference ... You seem to
18 have trouble with that word ... but there is a
19 fundamental difference between displacing nobody and
20 even displacing one person?

21 A. Yes, I think I would agree.
22 Certainly the goal would be to displace as few people
23 as possible.

24 Q. And so I suggest to you that
25 when you're grouping these things, in order to convey



1 to people some meaning in the numbers, it is very
2 important to distinguish between a situation where
3 you are displacing absolutely nobody and a situation
4 where you are displacing a number?

5 A. Yes, I agree.

6 Q. So you would agree with me that
7 my grouping here is more helpful in this regard than
8 your grouping was?

9 A. I would agree that my grouping
10 was, as I have admitted all along, an artificial
11 grouping.

12 Q. Okay. And if we look at the
13 right-hand side of the chart, I attempted to do the
14 same thing with the number of households, and you'll
15 see that this the second row of your Table 2, the
16 numbers being 11 households for B and eight for C
17 and then D, E and A all the same at four, except
18 that D was found to have -- all the same at three,
19 except that D was found to have a fourth one as a
20 result of your update, and F again had zero?

21 A. Yes.

22 Q. And I put it to you that
23 these same remarks hold as far as the logic of this
24 grouping versus yours?

25 A. Yes, I would agree.



1 Q. And this grouping system is
2 more sensitive to the data in that regard?

3 A. Yes.

4 Q. And that's especially true,
5 isn't it, Dr. Schiff, because what we're measuring
6 now is a dynamic situation that you have frozen at
7 a certain point in time, that is, people move away,
8 people move in, people die, people are born and so
9 on, and at any one point in time the numbers, for
10 example, in a grouping, the number of people in a
11 grouping, such as a grouping of D, A and E on the
12 chart that I've drawn, that order can change over time
13 between those subject sites within that group;
14 is that not fair?

15 A. Yes, that's true, they would
16 change somewhat.

17 Q. In fact, for example, D
18 changed over a period of what time, two years?

19 A. Two to two-and-a-half years.

20 Q. So, over time there's fluctuation
21 in all of these points on this graph within a certain
22 range?

23 A. Yes.

24 Q. Except for Site F --

25 A. That's correct.



1 Q. -- which has not changed?

2 A. With respect to on site, yes.

3 Q. Also I suggest to you that that
4 is true not only for the measures that you have put on
5 Table 2 for the number of people and number of
6 households, it's also true for every other measure
7 in Table 2, that it fluctuates with time within a
8 certain range and depending on who dies, who's born
9 and who moves in and out?

10 A. Yes, I would agree.

11 Q. And, for example again, when
12 you look at Income from Activities on Site, the
13 index that you discussed with Mr. Leitch, at the time
14 that you did this report: in the 2C stage it was
15 127 and it is now, according to your Comparative
16 Analysis update, 321?

17 A. Yes.

18 Q. And that has fluctuated over
19 that same period, that number?

20 A. Yes.

21 Q. And, similarly, the number, the
22 other numbers in that row may go up and down within a
23 certain range depending on who's running a business
24 on the property and who isn't?

25 A. Yes, that's correct.



1 Q. And I'd suggest to you that
2 given the degree of variability from one point in time
3 to another in those kinds of parameters, it is not
4 particularly helpful to say Site D is lower than Site C
5 or Site B or Site A or what have you at any point in
6 time. It doesn't tell us very much other than at
7 that point in time that was what was going on?

8 A. Well, I wouldn't say that it's
9 not very helpful. This work was undertaken with
10 respect to a given point in time and one has to rank
11 the sites with respect to some given point in time.
12 So I wouldn't agree that it's not very helpful.

13 Q. But you'd agree with me that
14 it's perhaps more accurate to say that all of these
15 sites are producing income from activities on site
16 over time. It's going to go up or down in any given
17 year depending on the particular circumstances. And
18 it's not fair to distinguish between those sites in
19 terms of their potential for landfill just based on
20 one year because the order can be completely
21 reversed?

22 A. If you're talking about all
23 six sites, my sense is that that would over-state the
24 case.

25 Q. Well, with respect to Site F,



1 I'll agree with you, it has no fluctuation.

2 A. Well, what I'm saying is this:
3 that yes, I agree that there will be fluctuations or
4 may be fluctuations within each of these values at
5 each site but if you're suggesting that in a year's
6 time the order, rather than being F, E, D, A, B, C
7 would be a complete jumble, with F being at the bottom
8 and any other site being here and any other number
9 being there, no, I don't believe there's that much
10 change that you're going to find a drastic re-
11 orderings of the numbers. You may find some movement
12 a little bit but ...

13 Q. Well, you found at Site D that
14 it had gone from 127 to 321 which, if nothing else
15 changed at the other sites, would put it in second
16 place on that factor instead of fourth. And, obviously,
17 Dr. Schiff, the other ones could be going up and down
18 as well, could they not?

19 A. The others could go up and down
20 on any given factor but, for example, we have 11
21 households at Site B. Now the probability is that it
22 might, under certain obscure circumstances, go down to
23 10 or 9 but it's not going to go down to 2 --

24 Q. Oh, I agree with that. I'm
25 talking about the income of a particular --



1 A. Okay, I'm sorry. Now, would
2 you re-state --

3 Q. There would some minor fluctua-
4 tions in the number of households but that's going to be
5 basically dependent on the number of buildings that
6 are there, building lots that are there. But in
7 terms of income from activities on site, you've shown
8 us with your own data that Site D has more than doubled,
9 almost tripled, in two years or whatever the time is.
10 And I'm just suggesting to you that, as a measure to
11 rank these various sites, potentially it's inaccurate
12 from year to year?

13 A. Yes, that's true.

14 Q. And the only thing you can
15 draw from this, I suggest to you, is that there is
16 a disparity, and a wide one, between all of the other
17 sites and Site F on that factor, on that measurement,
18 to use your terminology?

19 A. I would agree that that used
20 a dynamic factor. I'm not sure that I would agree
21 that all you can assume is that there's a disparity
22 between the sites.

23 Q. Well, all right, I'm not sure
24 I can advance the Board's understanding of this
25 much further with that line of questioning, Dr. Schiff,



1 so I'll move on.

2 I suggest to you there's an
3 additional measure of dislocation which you might want
4 to consider for inclusion in this table, and that is
5 you've counted the number of households and the number
6 of people who live there that would be dislocated
7 but you've not counted property owners who don't live
8 there, whose land would be expropriated in whole or
9 in part and would be dislocated in the sense that they
10 would lose their property; you've not counted that
11 factor in your analysis, have you?

12 A. No, I haven't. I view that as
13 primarily an economic issue and, therefore, to be
14 considered under the economic analysis.

15 Q. But you would agree with me that
16 there might also be a social impact on somebody who
17 owns a piece of land and is forced to sell it against
18 their will? There's an impact on that person, is there
19 not? They may not want to sell it.

20 A. Yes, I suppose there might be,
21 could be a social impact.

22 Q. Well, maybe I could ask you to
23 have a look at the property ownership map for Site D.

24 Mr. Chairman, it doesn't appear that
25 this has been marked as an exhibit yet.



1 It's one of the Region's exhibits.
2 It's entitled "Site D: Milton Site Features and Land
3 Use". If we could mark it, subject to further proof.

4 MR. HODGSON: I'm sitting here
5 wondering where you got it.

6 Mr. Chairman, I don't care if it
7 goes into evidence but I don't want it at this time to
8 go in as my exhibit or the Region's exhibit, even if
9 it's got the Region's name on it. The reason is that
10 an early primitive property owners' map was prepared
11 for purposes of a number of aspects of the study but
12 since then, through our firm, we've had all the
13 properties sub-searched, we've had opinions prepared
14 on ownership where there were some problems on F and D,
15 and we've got surveys which will be introduced into
16 evidence at some point.

17 MR. GARROD: I'm content with that,
18 Mr. Chairman, as a preliminary ownership map. Obviously,
19 if it changes then we'll have to deal with it. I have
20 no quarrel with marking it as one of my exhibits,
21 if that's the Board's preference.

22 THE CHAIRMAN: All right, then.

23 MR. HODGSON: As it has Halton's
24 name on it, it can be marked as Halton's exhibit, and
25 just go in with the caveat we are not presenting it to



1 prove who holds this property. We're going to present
2 a proper exhibit at some point.

3 THE CHAIRMAN: Exhibit H-148.

4 EXHIBIT NO. H-148: Preliminary Ownership Map entitled:
5 "Site D: Milton Site Features and
6 Land Use".

7 MR. GARROD:

8 Q. We won't quarrel about the
9 precise property boundaries, Dr. Schiff, but perhaps
10 you can do for me, if you would, assuming this map
11 to be accurate, a quick count of the number of property
12 owners that would be expropriated in the site plan
13 area, that's identified by the dashed line, is
14 expropriated by the Region?

15 A. There would be one, two, three,
16 four, five, six, seven, eight, I count.

17 Q. And there is, I suggest to you,
18 in addition to those eight, four other properties
19 which would lose part of the backs of their properties:
20 that's the ones that go back here, backing onto
21 Martin's property and Marangoni's property?

22 A. Yes.

23 Q. So there's a total of 12
24 properties that would be expropriated in whole or
25 in part. Some of those people may well be opposed,



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1 some people may not care; is that fair?

2 A. Yes.

3 Q. Now, at Site F, are you aware
4 of the property ownership?

5 A. Yes, I believe I am.

6 MR. GARROD: There's another map
7 here, Mr. Chairman, that has been made an exhibit.

8 Q. Dr. Schiff, if you could look
9 at --

10 I'm sorry, it isn't marked either.
11 Shall we mark this one as well?

12 THE CHAIRMAN: H-149: Site Features
13 and Land Uses for Site F.

14 EXHIBIT NO. H-149: Map: Site Features and Land Uses
15 for Site F.

16 MR. GARROD:

17 Q. And what's your understanding
18 of the property ownership of Site F, Dr. Schiff?

19 A. As I look at it here, I see
20 that there are two property owners.

21 Q. That's National Sewer Pipe --

22 A. National Sewer Pipe and
23 Azova Investments.

24 Q. Right. And so that there are
25 two then who would be expropriated, again in whole or



1 part. And do you know the position of those owners
2 about whether or not they're opposed to these
3 expropriations?

4 A. It's my understanding that ...
5 No, in fact, I don't.

6 Q. You don't know. All right.
7 If they were not opposed, would you agree with me --
8 MR. HODGSON: Well, let's not be
9 cute. They're here, they're represented and they
10 gave opening statements in which at least the NSP
11 said they weren't opposed, so why not present that
12 on that basis? And I believe Azova was not opposed,
13 and they were represented at the opening.

14 MR. GARROD: I'm not trying to hide
15 anything. I just want to --

16 MR. HODGSON: Since it's already, in
17 effect, the equivalent of evidence, let the witness
18 know.

19 MR. GARROD:

20 Q. Then assuming, Dr. Schiff,
21 as Mr. Hodgson has said, that those owners are not
22 opposed, would you agree with me that an expropriation
23 of people that are not opposed is either a minor
24 social impact or no impact at all?

25 A. With respect to that particular



1 issue, yes.

2 Q. Now, you did mention, Dr. Schiff,
3 during Mr. Leitch's cross-examination of you, that
4 you thought there had been an inordinate amount of
5 change at Site D in terms of the population over the
6 last two years since you did the original analysis and
7 the update. And I'm wondering if you're aware of the
8 actual changes that occurred?

9 A. I am not following your
10 question.

11 Q. Are you aware, for example,
12 that Mr. and Mrs. Ford who lived in the Ford residence --
13 Perhaps you can get down that Exhibit H-149 and you
14 can point out the Ford property because that's the
15 house, the heritage house that we've heard about
16 (REFERRING TO H-148).

17 A. That's this property here.

18 Q. Are you aware that Mr. Ford
19 died during that time period?

20 A. Yes.

21 Q. And you're aware that his wife
22 is now in a nursing home?

23 A. Yes.

24 Q. And that, I presume, is an
25 explanation of the turnover of that property?



1 A. Yes.

2 Q. Are you aware that it's now
3 occupied by Michael and Cindy Reid?

4 A. Yes, I am.

5 Q. And their five-year old son?

6 A. Yes.

7 Q. The property immediately to the
8 north of that lot, Dr. Schiff, the other one-acre
9 lot that's there, are you aware there's a house being
10 constructed on that?

11 A. Yes, I am.

12 Q. Do you know who owns that?

13 A. No.

14 Q. Do you know what the people's
15 intentions are about when they plan to move in?

16 A. No, not for sure.

17 Q. You'd agreed with me that if
18 they in fact move in prior to this hearing completing,
19 they would also be people who would be expropriated,
20 in terms of being dislocated?

21 A. ...

22 Q. They're not people who you've
23 presently counted, are they?

24 A. Well, yes, I would agree that
25 they would be dislocated if they move in prior to the



1 completion of the hearing. I guess I have some
2 questions in my own mind about including them as part
3 of the dislocation, from the point of view that it
4 would appear that they purchased this site and proceeded
5 with this after the time that this had been named as
6 a landfill.

7 On the other hand, it is true,
8 number one, that they would be dislocated if they
9 move in beforehand.

10 And, number two, I do not know what
11 their knowledge or understanding of the particular
12 situation at Site D was at the time that they purchased
13 it and decided to build.

14 Q. Nevertheless, this is part of
15 the dynamic situation that we talked about?

16 A. Yes.

17 Q. The influx and the outflux?

18 A. Yes, it is.

19 Q. You are aware of Mr. Walt
20 Martin and Mrs. Doreen Martin's residence? You
21 discussed that at some point with Mr. Leitch?

22 A. Yes.

23 Q. That's the property -- perhaps
24 you can point it out -- at the northwest corner of
25 the site.



1 A. That's this property up here.

2 Q. And the one with the grass
3 airstrip on it that shows up on that photo?

4 A. Right.

5 Q. What can you tell us about the
6 Martins? Do you know how old they are or how long
7 they have been there?

8 A. The Martins have lived on this
9 property for approximately 20 years. They are, I
10 believe, in their ... approximately, Mrs. Martin,
11 approximately in the mid-50s; Mr. Martin in his early
12 '60s. And they live there with two adult children.

13 Q. All right. And you're aware
14 that Mr. Martin runs a business at that property?

15 A. Yes.

16 Q. And you're aware that that's
17 his full-time occupation?

18 A. Yes.

19 Q. And what is that business?

20 A. He repairs and restores antique
21 aeroplanes.

22 Q. And do you have any understanding
23 about the extent of his facility or investment in that
24 business in that property?

25 A. Well, I know that he earns the



1 majority of his income from this business.

2 Q. And you know that he has an
3 airstrip built there?

4 A. Yes.

5 Q. Do you know what other shops
6 or hangars he may have?

7 A. No, I don't.

8 Q. You don't know about that.

9 All right, thank you.

10 Do you know whether he would have
11 any particular difficulties in relocating if he
12 was forced to?

13 A. I would certainly imagine that,
14 given the size of the property that one needs for
15 an airstrip as well as the evenness of the ground that
16 one would need, that it would not be easy to find an
17 additional property or another property for that
18 purpose.

19 Q. You've also indicated in your
20 report that this location is particularly a problem
21 for people who are over 46 years old; and can
22 you explain again the reasons why that is?

23 A. Well, at that stage in one's
24 life, there may be ... First of all, there's the
25 general ... No, I'm sorry, I didn't say that it was



1 a particular problem to people over 46.

2 Q. I'm sorry, I thought that was
3 one of your factors in Table 2.

4 A. No. I did say that it was a
5 particular problem for people 66 and over. And the
6 issue with respect to people 46 and over was with
7 the proportion of income they received from activities
8 that they carry out on site.

9 Q. All right. Do you agree with
10 me that Mr. Martin, being in his early '60s is not
11 likely to be inclined to re-establish a business of the
12 nature of the one he has at present?

13 A. Yes.

14 Q. That it would be quite a
15 difficult matter for someone that close to retiring
16 age to start all over again to relocate?

17 A. I'd agree, yes.

18 Q. And where is that reflected
19 in your Table 2? Where is there any indication about
20 how difficult it may be for any of these particular
21 people to relocate more so than others?

22 A. Well, with respect to your
23 example of Mr. Martin's problem, it's been included
24 under the issue of Income from Activities on Site for
25 People 46 Years and Older. The issue is also addressed



1 for Mr. Martin, not in Table 2 but elsewhere under
2 Special Population Groups. where I've included him as
3 an artisan.

4 Q. But we're talking now about
5 the dislocation and the other tables don't deal with
6 dislocation, do they?

7 A. That's correct.

8 Q. So, we're talking about
9 dislocating Mr. Martin and his special needs. And
10 should there not be something in Table 2 that tells
11 people that if you dislocate Mr. Martin, he's going
12 to have these special problems in relocating?

13 A. Well, as I said, I believe that
14 that is addressed under this income measure because
15 the income measure, if you think back to the rationale
16 for including it, it precisely addresses this
17 problem of people who earn part of their income and
18 the possibility that they may not wish to start up
19 again and may find it difficult to get a job at the
20 age of about 46 when employers are less likely to
21 hire.

22 Q. But it gives no indication in
23 that measure how difficult that particular business
24 might be to locate or whether it's something that's
25 very portable?



1 A. No, it does not.

2 Q. You'd agree that's certainly
3 something that this Board should take into consideration
4 if it were to decide to displace Mr. Martin?

5 A. Yes.

6 Q. Now if I can turn then to
7 page 2-11, you then turn from discussing dislocation
8 to Disruption of Households and Residents in the
9 Study Area?

10 A. Correct.

11 Q. Now this, as I understand it,
12 includes people around the site but not on the site?

13 A. Yes.

14 Q. And you have, as you indicated
15 in this measure which you discuss in the following
16 few pages, included the consideration of special
17 problems of artists, writers, artisans and crafts-
18 people, if I can refer you to the bottom of page 2-12,
19 you talk about their special problems?

20 A. That's right, within the
21 context of income.

22 Q. Do you agree with me that Mr.
23 Martin has at least the same degree of difficulty as
24 those people and probably more?

25 A. Yes.



1 A. No, it does not.

2 Q. You'd agree that's certainly
3 something that this Board should take into consideration
4 if it were to decide to displace Mr. Martin?

5 A. Yes.

6 Q. Now if I can turn then to
7 page 2-11, you then turn from discussing dislocation
8 to Disruption of Households and Residents in the
9 Study Area?

10 A. Correct.

11 Q. Now this, as I understand it,
12 includes people around the site but not on the site?

13 A. Yes.

14 Q. And you have, as you indicated
15 in this measure which you discuss in the following
16 few pages, included the consideration of special
17 problems of artists, writers, artisans and crafts-
18 people, if I can refer you to the bottom of page 2-12,
19 you talk about their special problems?

20 A. That's right, within the
21 context of income.

22 Q. Do you agree with me that Mr.
23 Martin has at least the same degree of difficulty as
24 those people and probably more?

25 A. Yes.



1 Q. Are you also aware or do you
2 know what Cindy Reid does in the way of arts, crafts,
3 those sort of things?

4 A. Yes, Mrs. Reid is an artist and
5 also has a hobby business.

6 Q. A hobby business?

7 A. I'm sorry, Mrs. Reid is an
8 artist and also has a hobby of manufacturing pioneer
9 soap which she hopes eventually to turn into a
10 business.

11 Q. And she does also, in fact,
12 run another business from her home?

13 A. Yes, she raises animals: dogs,
14 goats and pheasants and fancy poultry for breeding.

15 Q. And do you know anything about
16 her dog-grooming business?

17 A. Simply that she is engaged in
18 one at the moment and is hoping to expand it.

19 Q. Hoping to expand it? Do you
20 have any idea how long she's been in that business?

21 A. No, I'm afraid I don't. I
22 know that she has ... No, I don't. I know only that
23 they have recently moved onto the site. I don't know
24 whether she was doing this before.

25 Q. Do you have any idea about what



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2 know what Cindy Reid does in the way of arts, crafts,
3 those sort of things?

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5 also has a hobby business.

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9 soap which she hopes eventually to turn into a
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14 goats and pheasants and fancy poultry for breeding.

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16 her dog-grooming business?

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18 one at the moment and is hoping to expand it.

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20 have any idea how long she's been in that business?

21 A. No, I'm afraid I don't. I
22 know that she has ... No, I don't. I know only that
23 they have recently moved onto the site. I don't know
24 whether she was doing this before.

25 Q. Do you have any idea about what



1 special needs or difficulties she might have in
2 terms of relocating that business?

3 A. No, I have no specific
4 information about that.

5 Q. Now, looking at the people around
6 the site, you've reflected this in Table 4, page 2-13A,
7 and this is Measures of Disruption you have entitled
8 it.

9 A. Yes.

10 Q. But I suggest to you that
11 because it talks about people in the study area but
12 not on the site, it's in fact measures of potential
13 disruption?

14 A. Technically speaking, you are
15 correct. I would say that it is redundant, in a sense,
16 to say that, given the nature of special impact
17 assessment.

18 Q. Well, let me put it this way
19 for you: unlike the previous table, which described
20 the existing social environment and, by implication,
21 told us the inevitable impacts -- that whatever's there
22 is going to be gone -- this table describes the
23 existing social environment around the site but does
24 not tell us the inevitable impacts, does it? It's
25 a description; it's not an analysis?



1 A. Well, I believe it is more than
2 an analysis -- more than a description, in the sense
3 that these measures are included because they are
4 impacts which are likely to occur to at least some
5 of these people.

6 Q. Wait a minute now, Dr. Schiff,
7 you are not describing impacts here. You are describing
8 what is at the present social environment according
9 to these measures; is that not true? That's what this
10 table tells us?

11 A. Strictly speaking, yes.

12 Q. And you have assumed that these
13 people will all suffer an adverse social impact of
14 the same degree, in forming your conclusions; is that
15 not correct?

16 A. I am saying that they may well
17 all experience some negative impact but not necessarily
18 all of the people in the study area will experience
19 impact to the same degree.

20 MRS. TANNER: Mr. Garrod, I hate
21 to interrupt your flow but the Ford farm, is it not
22 going to be expropriated?

23 MR. GARROD: If you'll permit me
24 to give you some evidence ... I'm not sure what you
25 mean by "the Ford farm"?



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1 MRS. TANNER: This person we're
2 discussing now, where are they located?

3 MR. GARROD: I'm not sure what person
4 you mean.

5 THE CHAIRMAN: Reid.

6 MR. GARROD: Reid?

7 MRS. TANNER: Reid.

8 MR. GARROD: The property that would
9 be expropriated by the Region, as I understand it,
10 is outlined here, the limit of the site plan area
11 which is the heavy dotted line around and up beside
12 the road --

13 MRS. TANNER: So they would be
14 expropriated?

15 MR. GARROD: So, they would be.
16 The Reids who live in what has been called the old
17 Ford house, which used to be the farmhouse for this
18 larger farm, that's where the Reids live and they
19 would be expropriated, yes. Although they wouldn't
20 actually be within the area where garbage would be
21 buried, they would, I think, be --

22 MRS. TANNER: So they would be
23 dislocated --

24 MR. GARROD: -- right beside the
25 berm. Yes, they would be dislocated.



1 MRS. TANNER: They would be dislocated,
2 not disrupted?

3 MR. GARROD: By the definition of
4 this witness, yes, that's correct.

5 MR. HODGSON: I would think it would
6 have to be dislocated and disrupted...

7 MR. GARROD:

8 Q. Dr. Schiff, just going back to
9 this Table 4, you are suggesting that it's more than
10 a description. I put it to you that it is only a
11 description together with an assumption that all of
12 these people would experience some adverse impacts?

13 A. A reasonable assumption, yes.

14 Q. I'm not going to quarrel with
15 you whether it's a reasonable or unreasonable one
16 but you did not attempt to undertake in your work
17 an analysis of the degree of impact that might be
18 experienced by people, whether they were immediately
19 across the road, for example, on 1st Line from Site
20 D or whether they were at the edge of the half-mile
21 study area? You didn't distinguish between those,
22 did you?

23 A. No, I did not.

24 Q. Okay. So that would you agree
25 with me on this -- I think it's probably clear from



1 what you told me earlier -- there are 222 people you've
2 identified at Site D in the study area?

3 A. Yes.

4 Q. If you had shrunk back that
5 study area when the site plan areas were shrunk back
6 so that it just roughly included the half-mile and
7 not anything substantial beyond that, except perhaps
8 for minor adjustments, there would obviously, you'd
9 agree, be a certain percentage of fewer people in that
10 site plan area?

11 A. Yes, there would be.

12 Q. There may be -- I don't have the
13 figure but perhaps it's 25 per cent, perhaps it's
14 50 per cent, perhaps it's something in between?

15 A. I don't think it would be as
16 high as 50 per cent.

17 Q. Can we agree on this, that
18 whatever the number would be, that that measure in
19 itself is not as important as the fact that they are
20 farther away from the ones that would still be included
21 in the restricted study area who would likely have
22 the worst impact?

23 A. I'm sorry, could you repeat
24 that?

25 Q. I doubt it ... Can we agree



1 on this: that even if that site area, if it were shrunk,
2 so that it was --

3 MR. HODGSON: The study area.

4 MR. GARROD: -- the study area,
5 I'm sorry.

6 Q. Even if the study area were
7 shrunk down to the half -- roughly half-a-mile around
8 what is now Site D, some of the population would drop
9 off?

10 A. Yes.

11 Q. But they would be the people
12 who would be disrupted the least of all of the people
13 who are within your present study area?

14 A. Because they're from the south side,
15 yes.

16 Q. Yes, and you would still capture
17 in your net the ones that we are most concerned about
18 in terms of social impact?

19 A. Yes.

20 Q. And if my friends from Burlington
21 wanted to argue to you that you should have compared
22 these things on a site study area that was more
23 equivalent, would you agree me that if you did that
24 here Site D would still be a much higher impact than
25 Site F for that reason?



1 A. Yes.

2 Q. And in fact if you looked at
3 these numbers in Table 4 for Site D and Site F,
4 granted that the study area for Site D is presently
5 larger, would you agree with me that there are many
6 times more in all the categories than the numbers for
7 Site F?

8 A. At the present time, yes.

9 Q. And I've done some arithmetic
10 and it ranges from somewhere in the order of four-and-a-
11 half times to about twelve times, in terms of the
12 potential for disruption, as I've described it?
13 Do those numbers sound about right?

14 A. Yes.

15 Q. And that doesn't even take into
16 account the fact that there are more people closer and
17 immediately adjacent to Site D than there are to
18 Site F; is that not correct?

19 A. Correct.

20 Q. That assumes that all of those
21 people have an equal impact? Perhaps I can get you
22 to ... I guess the corollary for that, Dr. Schiff,
23 is that even if you were to have expanded the study
24 area at Site F to include some of those people for
25 all of your factors who were in the Aldershot subdivision,



1 would you not agree with me that those people are at
2 the very fringe of your study area and that the
3 social impact on them, even if you measured it in
4 terms of population impact, other than emotional
5 impact, would be at the low end of the scale?

6 A. Yes.

7 Q. Let's turn for a minute to the
8 emotional impact question which you discuss, starting
9 at page 2-15. Now, in order to understand what you
10 have done, I've tried to look at this factor the
11 way I've looked at the others, and that is I presumed
12 that you were describing an existing social environ-
13 ment of ... or an existing emotional environment or
14 something along those terms; is that what you tried
15 to do or is this factor different in some way?
16 Can you in fact measure, in any meaningful way, an
17 existing emotional environment?

18 A. I would find it difficult to
19 do that, to measure an existing emotional environment
20 except as an aggregate of the emotions of the
21 individuals within it. I believe that ... Well ...

22 Q. So have you assumed then,
23 is it implicit in your work that there is an existing
24 emotional environment at both sites that is equivalent?
25 Is there such a thing as an existing emotional



1 environment?

2 A. Well, we did talk about the
3 kind of emotional environment of a group but I ...
4 I guess I probably wouldn't exactly use that term
5 or that analogy. It's not perhaps a very good one.

6 Q. Well, then, if you can't do
7 that, how do you do a social impact assessment on
8 something like emotional factors? How do you predict
9 what the change in the existing environment will be
10 if a landfill is introduced into an area?

11 A. One could -- and I did not
12 obviously -- one could survey residents in an area
13 and ask them to imagine if there were a landfill in
14 their area how would they rate their particular
15 residential area or their satisfaction with certain
16 facilities. I chose not to do that on the assumption
17 that, in fact, we would, within the tenor or the
18 time that this work was being undertaken, that we'd
19 find very little variability between the sites and
20 that, in fact, everybody would rate things as ...
21 everyone would say that they expected things to be
22 extremely negative if a landfill were to come in.

23 Q. Did you find any evidence in
24 your work that the existence of the present landfill
25 had in any way impeded development in the area or



1 anything concrete like that?

2 A. No, I found nothing to support
3 that position.

4 Q. I suggest to you that this
5 measure of emotional environment is something that,
6 because of the very nature of it, is much more
7 difficult to predict and quantify than the earlier
8 ones we've been discussing?

9 A. I would agree with you and
10 I think I made that point earlier today: that the
11 experience of -- and this in particular is focused
12 upon the issues of stress -- and that the issues
13 relating to stress are very individualistic in several
14 different ways. One is that what some people call ...
15 Well, in some cases, things that some people find
16 extremely stressful, other people don't. As well,
17 there are differences in people's ability to
18 tolerate stress. And besides everything else, one
19 of the factors that's going to affect stress is
20 what other amounts and types of stress exist in
21 your life. If you're dealing, for example, with a
22 very serious illness in your family, you may find that
23 the stress of a landfill pales in comparison, or
24 other people may say, "This is the last straw. I
25 can't handle any more".



1 Q. As a measure for distinguishing
2 between sites though, I suggest to you it has a pretty
3 limited usefulness, because of its inherent
4 weaknesses?

5 A. It's not the fact that I
6 put the greatest amount of weight on.

7 Q. Thank you. I think you have
8 given that opinion in a written submission, and
9 perhaps I can refer you to it.

10 Mr. Chairman, this is H-70 and
11 I apologize, I forgot to inform you I'd be referring
12 to this document. Page 85-9. This exhibit is the
13 Submissions Report which has been prepared by the
14 Study Team in which Dr. Schiff took part.

15 Perhaps I can ask you to turn to
16 page 85-1 and this -- am I correct? -- a response by
17 the Study Team to a submission which had been received
18 from the City of Burlington --

19 A. Yes.

20 Q. -- about draft Stage 2C reports?

21 A. Yes.

22 Q. And if you turn back then to
23 page 85-7, about a quarter of the way down, it refers
24 to Report No. 5, Social Assessment and begins with
25 some comments on that?



1 Q. And were you responsible for
2 preparing this response, this part of this response?

3 A. Yes.

4 Q. And it goes over to page 85-9
5 which is the page I wanted to specifically refer you
6 to. I wonder if you wouldn't mind just taking a
7 moment to read it out loud, the three paragraphs you've
8 written under the heading "Perception of Risk" and
9 tell me if you agree with that and whether that's
10 still your position?

11 A. It says:

12 *The issue of risk perception has*
13 *been carefully reviewed. We strongly*
14 *maintain our position that there*
15 *will not be any physical impact,*
16 *i.e. dust, noise, odor or litter,*
17 *on residents of the Aldershot*
18 *area and that there will not be*
19 *any disruption on their lifestyle*
20 *of the type considered under the*
21 *disruption sub-factor and will*
22 *not make any adjustments on these*
23 *measures.*

24 *Nevertheless, we are prepared*
25 *to acknowledge the validity of the*



1 argument which states that there is
2 an emotional impact of a landfill
3 at Site F on members of the Aldershot
4 community and to use an expanded
5 study area of ...

6 it should read, .8 kilometres where it says one-half
7 mile

8 ... for the measure of stress from
9 living near the site only.

10 In so doing, we reiterate
11 our position that we do not believe
12 that there is in fact any objective
13 reason for this concern, that there
14 will not be any physical impact
15 and we believe that the site is
16 a safe one which will not jeopardize
17 the health or safety of residents.

18 However, we recognize that
19 emotions are not always based on
20 fact but sometimes on perception
21 and it is for this reason that we
22 have agreed to make this adjustment.

23 It should be noted that this
24 adjustment will not alter the
25 ranking of the site. Throughout this



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1 study we have placed less relative
2 weight on the emotional impact
3 than on the measures of dislocation
4 and disruption since we believe
5 these are more profound impacts
6 than the emotional impact.

7 There's one error in this and that
8 is that we used the .8 kilometres not only for stress
9 from living near the site but also, as I think I
10 indicated this morning, with respect to stress from
11 the selection process. With the exception of that
12 qualification, this is the position that I still
13 hold.

14 Q. Thank you.

15 In assessing emotional impact, just
16 before I leave that topic, do you agree with me that
17 if there is any rational basis for emotions and
18 emotional impact, it would be on the people who would
19 be or may be expropriated and lose their homes and
20 be uncertain about their future, in that regard,
21 and whatever emotional impacts there are, those
22 ones would be as severe as any that might be
23 experienced and more rationally based than most?

24 A. Well, I think I indicated this
25 morning that emotions are not always rational.



1 If they were, then I would agree that being forced to
2 dislocate would be the one that would produce the
3 strongest ... that I believe would produce the strongest
4 emotion. But let me point out again that emotions
5 are not always rational, often they're not. So I
6 think what I'm ... Yes.

7 Q. But you'd agree with me that
8 Mr. and Mrs. Martin, for example, or any of these
9 other people on Site D are suffering stress because
10 of uncertainty about their future through this
11 process? That is a fairly rationally based emotional
12 response?

13 A. Yes, I would find that emotion-
14 ally upsetting, so I think it's rational.

15 Q. There's an objective basis
16 for it?

17 A. Well, certainly the research
18 literature indicates that being forced to dislocate
19 can have very severe emotional impacts.

20 Q. But, Dr. Schiff, it's not just
21 being forced to relocate. I put it to you these
22 people have been sitting there for years not knowing
23 whether they're going to be relocated or not, and
24 that's what I'm talking to you about, the stress
25 from that. And would you agree with me that that



1 is rationally based and that is in addition to whatever
2 other normal social impacts that would be associated
3 with simply coming in and expropriating somebody on
4 several months' notice?

5 A. Yes.

6 Q. Now, I want to ask you about
7 your next sub-factor which is Disruption of an
8 Established Community, starting at page 2-21 of
9 your report.

10 THE CHAIRMAN: Mr. Garrod, do you
11 expect to be much longer?

12 MR. GARROD: If you're looking for
13 an afternoon break, Mr. Chairman, this is probably
14 as good as any. I'll probably be another half-an-hour.

15 DR. KINGHAM: I wonder if before,
16 if we did break ... There's a question that did come
17 to my mind in light of what's just happening now
18 and has to do, I guess, with the role of the Board
19 and this very area of social stress. If you were
20 to talk about perceived risk, statistical risk and
21 actual risk, where actual risk is what one will know
22 about somewhere down the line, and you're dealing now
23 in your evidence with perceived risk, on the one hand,
24 as you evaluate people's feelings about things;
25 and statistical risk sometimes when you consider



1 numbers of households and probability of things
2 happening, noise or dust. In your view, if the
3 perceived risk was very high, whether or not it
4 corresponded to the actual risk, should the Board be
5 swayed by a very high perceived risk which is at odds
6 with an actual risk or a statistical risk, in this
7 case?

8 THE WITNESS: The Board is
9 responsible for social impact assessment and the issue
10 of perceived risk is part of social impact assessment,
11 so I think that certainly the Board does need to take
12 that into account in order to do a proper social
13 impact assessment, yes.

14 THE CHAIRMAN: We'll put our own
15 weighting on it.

16 THE WITNESS: Yes.

17 DR. KINGHAM: The point being, of
18 course, that if we made decisions based on perceived
19 risk, then the higher the perceived risk, whether or not it's
20 related to an actual risk, the more likely the
21 decision is to favour those who perceive an unreasonable
22 risk?

23 THE WITNESS: That's why a perceived
24 risk would only be one of several factors that you'd
25 consider.



1 DR. KINGHAM: Thank you very much.

2 ---RECESS AT 3.10 P.M.

3 ---UPON RESUMING AT 3.25 P.M.

4 THE CHAIRMAN: Thank you. Please
5 be seated.

6 MR. GARROD: The opposition seems
7 to have abandoned us. Should I wait, Mr.Chairman,
8 or should I commence.

9 THE CHAIRMAN: We should wait.

10 MR. GARROD: While we're waiting,
11 I wonder if I could have the chart that I drew, that
12 I asked Dr. Schiff to refer to, made an exhibit?

13 THE CHAIRMAN: That will be Exhibit
14 MR-150. What would you call it?

15 MR. GARROD: I would call it a
16 graph of the number of people on site, number of
17 households on site.

18 THE CHAIRMAN: It's more of a
19 grouping ...

20 EXHIBIT NO. MR-150: Graph of Number of People on Site,
21 Number of Households on Site.

22 THE CHAIRMAN: You can go ahead now.

23 MR. GARROD:

24 Q. Dr. Schiff, we were about to
25 turn to page 2-21 -- and I can tell you that I hope to



1 be relatively brief with you from now on -- this is
2 the heading "2.7 Disruption of an Established
3 Community." You have attempted to measure how estab-
4 lished the community it, and I suggest to you that the
5 impact on the established community is particularly
6 severe if people are being dislocated from out of
7 that community and is not nearly as severe if people
8 are not being dislocated out of that established
9 community?

10 A. I would agree that where people
11 would be forced to leave a community the disruption
12 of the community is greater, yes.

13 Q. So, your Table 8 and Table 9
14 are descriptive of the established community but do
15 not reflect the fact that at Site D the impacts
16 would be worse because there would be this dislocation
17 from that community?

18 A. Yes.

19 Q. Turning now to heading 2.8
20 which is on page 2-24, "Special Population Groups,
21 would you agree with me again that, in terms of the
22 needs of these particular individuals, they're worse
23 is they're being dislocated than if they're being
24 left alone?

25 A. Yes.



1 Q. And the same is true of your
2 tabulations in this section: that what you're doing
3 is describing what's there; you're not analyzing the
4 degree of impact that would occur?

5 A. Yes, I would say so.

6 Q. So when you say, for example,
7 that there are only two people out of the 222 in the
8 study area around Site D, which are artists, writers,
9 artisans or craftspeople, those people, if two is
10 the accurate figure, are not necessarily impacted
11 whereas the ones on site would be?

12 A. I'm sorry ... again? One of
13 those is on site and one is in the study area.

14 Q. Oh, I'm sorry, one of those
15 two ... I thought we were dealing here with ...
16 Does this factor include the site plan area as well as
17 the study area?

18 A. Yes, it does.

19 Q. Oh ... So, who are the two
20 artists then? One of them, you say, is on site.

21 A. That would be Mr. Martin
22 who is not an artist but, rather, I would call him an
23 artisan.

24 Q. Special Population Group.

25 A. Correct.



1 Q. And are you saying then that
2 in the other 220-odd people in the study area, there
3 was only other person that fits that description?

4 A. That's all we were able to
5 identify.

6 Q. As a result of your
7 questionnaires?

8 A. That's correct.

9 Q. Does that seem a reliable
10 measure to you?

11 A. We had ... First of all, I should
12 point out that we did not include in this measure
13 people who did this for a hobby. We included people
14 who earned some portion -- it may have been as little
15 as 10 per cent -- of their income as a result of these
16 activities. The two people we identified at Site D
17 were Mrs. Tomoski and Mr. Martin.

18 Q. Mrs. Tomoski is included in
19 this category?

20 A. Yes.

21 Q. And what was the reason for
22 that?

23 A. She is, as I recall, an artist
24 who does some paintings which she sells from time to
25 time.



1 Q. Can you point out to the Board
2 where Mrs. Tomoski lives?

3 A. (REFERRING TO H-148) Mrs.
4 Tomoski lives here. She would remain on site but,
5 as you indicated, part of her property would be
6 expropriated; this back portion would be expropriated.

7 Q. So what you're telling us then
8 is that your data would indicate that there are no
9 other artists, writers, artisans or craftspeople in
10 this study area?

11 A. That's what my data indicates,
12 yes.

13 Q. And Sites A, B and C, there
14 are 10, 7 and 12?

15 A. That's correct.

16 Q. Are you suspicious that these
17 data may not be particularly reliable?

18 A. The data is based on a high
19 return rate at all the sites and it was a question
20 that was specifically included on the questionnaire.
21 My sense is that I trust this data. At Site D, the
22 total return rate was 87.5 per cent over the on site
23 and in the study area.

24 Q. All right. Would you agree
25 with me that, in terms of the special needs of these



1 people, again it's the people who would be dislocated.
2 that are going to be the hardest done by?

3 A. Yes.

4 Q. Now, I'm not going to discuss
5 the next few pages with you, Dr. Schiff, but I would
6 like to turn to page 2-33.

7 A. Yes.

8 Q. You conclude with respect to
9 Site F that the site is unique among all of the other
10 sites for the reason that no one is living on site?

11 A. Yes.

12 Q. You also conclude in your
13 last sentence of that paragraph:

14 *There is, in fact, a noticeable*
15 *difference between the values for*
16 *Site F and the second-ranked*
17 *site on a large number of the*
18 *measures used in evaluating the*
19 *Population Impact.*

20 A. Yes.

21 Q. So, therefore, I suggest to you
22 that Site F is not only first but It's first by a
23 relatively large margin?

24 A. Yes.

25 Q. Okay. Now, you'll be pleased



1 to know that I'm not going to ask you about Social
2 Equity.

3 Turning now to Community Facilities,
4 page 4-1 --

5 A. Yes.

6 Q. -- I just wanted to refer you
7 to your discussion on Site F, page 4-5 of that section.
8 You identify a number of uses. Burlington Rifle and
9 Revolver Club I think you indicated, and do you agree
10 that this is already a noisy operation that many
11 people would find obnoxious?

12 A. Inside the building is noisy.
13 I don't know what it's like ... On the one occasion
14 I was there, I was ... they weren't shooting at the
15 time that I arrived, so I can't speak to that.

16 Q. In terms of the horse ring,
17 riding ring and so on, would you agree with me that,
18 when it is active, would create social impacts, such
19 as dust and odors for the people that are there as
20 spectators?

21 A. Yes.

22 Q. And, as far as the model
23 aeroplane club -- on the next page -- would you agree
24 with me that that is a relatively noisy and obnoxious
25 in many people's opinions?



1 A. In many people's opinion, it
2 is noisy, yes.

3 Q. And probably they would have
4 difficulty finding another place to operate if they
5 had to move?

6 A. They would need very specific
7 kinds of facilities in which to operate, yes.

8 Q. And they're quite content to
9 have the landfill go there in order to allow them to
10 continue their use?

11 A. They didn't indicate that.
12 They did indicate that they have no concern about
13 locating the landfill at Site F.

14 Q. Now, at the bottom of that
15 page, Woodhill Farm, you pointed that out on the map
16 as being the farm to the northwest.

17 A. Yes.

18 Q. You say that is used for ...
19 approximately 1,000 people in the community visited
20 that. Do you assume from that that it doesn't appear
21 these 1,000 people would be particularly bothered
22 by the existing landfill site?

23 A. They continue to come to the
24 farm, yes.

25 Q. And the bottom of page 4-15,



1 the very last sentence, you conclude:

2 *The impact on community facilities*
3 *is not a very significant factor*
4 *in differentiating between the*
5 *sites.*

6 A. At the time that this was
7 written, that's correct.

8 Q. Right. And I put it to you
9 that it is not as important a factor as the factor
10 of population impacts?

11 A. I'd put more weight on popula-
12 tion impacts, yes.

13 Q. And that Social Equity is
14 not a very important factor either?

15 A. Oh, I didn't say it wasn't
16 important. I said that I could not distinguish between
17 them.

18 Q. I think I'm almost finished,
19 Dr. Schiff.

20 I wanted to ask you about a submission
21 that was made regarding the draft Stage 2C report.

22 Mr. Chairman, this is found in
23 Exhibit H-72, which is a volume of submissions which
24 have been bound; this is Book 2 of 2, page 408.

25 Dr. Schiff, if you turn to page 374,



1 you would see that this is part of the submission from
2 the West Burlington Citizens Group commenting on
3 your work. Do you recognize that? The comments on
4 the Social Impact begin at page 404.

5 A. Yes.

6 Q. And I'd like to refer you to
7 the conclusion on page 408, discussing your report.
8 It says:

9 *This report is constructed on the*
10 *inadequate basis of dealing only*
11 *with the issues raised by effective*
12 *parties but then selecting only*
13 *some and ignoring other issues*
14 *raised. The report totally lacks*
15 *independent concept of social*
16 *impact measurement and objectivity*
17 *and is not even a valid opinion*
18 *poll. Counting 26 issues ignored*
19 *and 48 inconsistencies, mostly in*
20 *respect to favouring the Site F,*
21 *we view this report as a blatant*
22 *and biased attempt to justify a*
23 *predetermined choice of a site.*
24 *A valid assessment of this subject*
25 *alone would be sufficient to*



1 *reject Site F totally.*

2 I want to ask you, Dr. Schiff,
3 whether or not you had a predetermined site in mind
4 when you commenced your work?

5 A. Certainly not.

6 Q. Do you consider this an
7 accurate criticism or a fair criticism of your
8 work?

9 A. Certainly not.

10 Q. Do you agree with the last
11 sentence on that page --

12 A. The sentence which reads:
13 *A valid assessment of this subject*
14 *alone would be sufficient to*
15 *reject Site F totally.*

16 Q. Yes.

17 A. I do not.

18 Q. Do you believe you did a
19 valid assessment of the social impact at Site F?

20 A. I do.

21 Q. I put it to you, in conclusion,
22 Dr. Schiff, that the existing social environment at
23 Site F, the facility at Site F, already includes a
24 landfill and has included a landfill for some number
25 of years?



1 A. Yes.

2 Q. You would agree with that?

3 A. Yes.

4 Q. Are you aware that when a
5 landfill was first established in that area?

6 A. I believe that landfill was
7 first established in that area at least as early as
8 1960 when Bayview Park was a municipal landfill site.

9 Q. And am I correct that the
10 City of Burlington has twice chosen this area of their
11 municipality for a landfill site: once when the
12 Bayview site was established in 1960 and once when
13 the existing Regional site was established in 1972?

14 A. Yes.

15 Q. And that there was no time
16 period between the two sites when there was not
17 landfilling?

18 A. I would assume not, that is,
19 I assume that if one site ran from '60 to '72 and
20 the other from '72 onwards --

21 Q. If there was a gap, it was
22 a short one?

23 A. That's right.

24 Q. So that anyone ... Is it fair
25 to assume that anybody that's moved into the Aldershot



1 area since 1960 has moved into an environment that
2 contains an active landfill site?

3 A. ...

4 Q. If that's considered part of
5 the same social environment?

6 A. If that's considered part of
7 the same social environment, yes.

8 Q. And anyone, I suggest to you,
9 who has been there longer than 1960 and is still there
10 today, I suggest to you, on any objective basis,
11 cannot find the operation of these landfill sites
12 to be sufficiently obnoxious to want to move or to have
13 in fact moved?

14 A. No, they will not have found
15 them sufficiently obnoxious to have moved if they
16 are still there.

17 Q. Do you agree that if the site
18 is located at Site F between the existing landfill
19 site and the closed Bayview site, that this would be,
20 relative to Site F, an incremental change in the
21 existing social environment and a much more fundamental
22 change at Site D?

23 A. Yes.

24 MR. GARROD: Thank you. Those are
25 all my questions, Mr. Chairman.



1 THE CHAIRMAN: Thank you.

2 Mr. McQuaid.

3 CROSS-EXAMINATION BY MR. McQUAID:

4 Q. Dr. Schiff, I wonder if I could
5 just review with you for a moment your role in the
6 early part of the proceedings. And Mr. Hodgson did
7 take you through the document which was marked as
8 H-11; that's the Consolidation Report, Phase 2, Stage
9 2B, Selection of Candidate Sites. And you may recall
10 that you went through with him at pages 95 and follow-
11 ing the early comments that you had on your social
12 analysis of what was at that time 55 sites, as I
13 understand it?

14 A. Yes.

15 Q. Now, that report is dated April,
16 1984; okay? And you were retained when?

17 A. In November, 1983.

18 Q. November, 1983.

19 And when did you do the work which
20 we find summarized in this Exhibit H-11? When did
21 you review the 55 sites?

22 A. Between November, 1983 and
23 probably approximately the end of February, 1984.

24 Q. Did you inherit some factual
25 bases from the earlier social impact studies that had



1 been undertaken?

2 A. I'm not sure what you mean by
3 that.

4 Q. Were you given any data base
5 from the earlier studies? You had indicated there had
6 been somebody who had been involved before you.

7 A. Yes.

8 Q. Did you obtain any information
9 from that --

10 A. Yes, I did.

11 Q. What did you obtain from that
12 source?

13 A. I obtained from them the maps
14 indicating the population densities within the areas
15 of the 55 candidate sub-areas and the beginnings of
16 their work on community facilities within the area
17 of the candidate sub-areas.

18 Q. You say "the beginnings of
19 their work". What exactly did you receive?

20 A. I received a map showing those
21 community facilities which they had identified to date
22 and I believe, but I'm not certain, a list of the
23 facilities that were on the map -- but I'm not certain
24 about that.

25 Q. And do you recall, would that



1 have been for all 55 candidate sites or for most of
2 them?

3 A. I believe ... I cannot say what
4 technique they had used to identify the material in
5 that list. As I've said before, I considered that
6 to be the beginnings of work.

7 Q. I realize that. I just want
8 to know what you were given when you started?

9 A. Okay, my recollection is that
10 there were some things marked at many of the sites.

11 Q. "Many of the sites"? I said
12 most of the 55 sites or not? In other words --

13 A. Probably most.

14 Q. It's a pretty large job for
15 you to come in in November of 1983, examine 55 sites
16 and get a report out by February of 1984; isn't that
17 true?

18 A. Yes, but there were resources
19 available for me to use.

20 Q. Well, one of the resources
21 was what you inherited --

22 A. Yes.

23 Q. -- from the earlier social ...
24 How would you characterize it: Social Impact ...?

25 A. Consultant.



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M. Schiff
cr.ex. (McQuaid)

1

Q. Consultant. All right.

2

And so you had a data base from ...

3

Who was that, by the way?

4

A. It was the Institute for

5

Environmental Research.

6

Q. Can you give me the name of

7

the social environmental consultant?

8

A. I'm not certain any more.

9

Q. You didn't have any consultations

10

with him or her?

11

A. Not at that time.

12

Q. Did you have any subsequently?

13

A. I had a brief conversation with

14

them later.

15

Q. Who was it that you talked to?

16

A. I believe it was Jim

17

Morgenstern.

18

Q. Jim Morgenstern?

19

A. Yes.

20

Q. When would that have been?

21

A. It was after the 2B work was

22

completed.

23

Q. That would have been after

24

your draft then which appears in H-11?

25

A. Yes.



1 Q. What was the nature of that
2 discussion?

3 A. It was a discussion with respect
4 to the half-mile study areas and the basis, if any,
5 that they had had in using those during 2B.

6 Q. Okay. And the many maps that
7 you received, would I understand that on those maps
8 there would be a radius or perhaps a circle of some
9 nature indicating what community facilities there were
10 located within the half-mile radius?

11 A. No, on the maps that I received,
12 the community facilities ... I believe they were in
13 the very early stages of their work and so the
14 community facilities were simply marked on the maps.

15 Q. And you had a discussion about
16 the half-mile study area radius -- radii -- and had
17 that figure been chosen by the Institute for
18 Environmental Studies?

19 A. I'm not sure who chose it.
20 It was the figure that was in operation at the time
21 I began this work and I continued to use it in 2B.

22 Q. Now, looking at the section
23 that Mr. Hodgson took you through, pages 95 and
24 following, this was your work, as a result of the
25 time period that we've just discussed, on the 55 sites.



1 But I noted, as I went through, that there seemed to
2 be references to areas perhaps greater than a half-a-mile
3 on occasion. Or did you try to stick to the half-mile
4 itself? I thought I saw one reference ... Oh, yes,
5 if we look at Site F, page 102, actually there was
6 reference in Q-1, as it's noted there --

7 A. That's right.

8 Q. -- second entry on page 102,
9 there was one reference there to a facility, a treatment
10 centre residence for emotionally disturbed adolescents
11 one mile west of the area.

12 A. Right.

13 Q. Now, I haven't gone through all
14 the others, but were you looking beyond the half-mile
15 at this particular point in time or was it just this
16 one facility?

17 A. No, I was generally limiting
18 it to the half-mile. I think I indicated earlier that
19 I had included that primarily for information
20 purposes because of the concern about special
21 population groups.

22 Q. All right. Now, just while
23 we're at this point, you did answer -- and I've forgotten
24 who it was that asked you -- but you were asked
25 about your role in the screening down or the winnowing



1 down of the 55 sites down to the six?

2 A. Yes.

3 Q. Do I understand that you were
4 not really at all of the meetings? Did you just submit
5 your reports to Mr. Walker?

6 A. No, I also attended the
7 meetings.

8 Q. You attended the meetings. All
9 right. If it were to be social impact alone, would
10 I be right that the sites that you would have preferred
11 would have been the sites that you see on pages 95
12 through, generally that had lower or all low ratings;
13 and we could go through and pick out the numbers that
14 there might be but I see there's a number of them at
15 various points?

16 A. If it had been social
17 impacts alone, yes.

18 Q. All right. But at that point
19 you had not had a chance to put a questionnaire out,
20 had you, to all the 55 sites and to all the community
21 groups or the populations within those 55 sites?

22 A. No, I had not.

23 Q. All right. So that this would
24 be, at best, a very quick run-through of social
25 analysis, wouldn't it? It wouldn't be what you'd



1 characterize as a full social analysis?

2 A. No, certainly not.

3 Q. So, to that extent, at the
4 Stage 2B you were limited by the constraints of time --
5 and maybe a budget for all I know, I don't know --
6 but the constraints of time and possibly budget
7 as to what real social analysis of those 55 sub-areas
8 that you had agreed to undertake?

9 A. Yes. And by something else
10 which was what would be an appropriate level of
11 analysis for that phase. I want to point out as well
12 that in addition to looking at the community facilities
13 within those areas I also looked at population densities
14 in the vicinity of those 55 candidate sub-areas.

15 Q. All right. So you looked at
16 population densities and community facilities?

17 A. Yes.

18 Q. Those were the two items that
19 you were specifically instructed you should look at;
20 is that correct?

21 A. They were the issues that IER
22 had started to look at. As I reviewed their material,
23 it made sense to me and I proceeded on that basis.

24 Q. Now, am I right, were you
25 working to a timetable which the Region had set up?



1 A. Yes.

2 Q. Was it that you were to have a
3 report in by February of 1984, approximately?

4 A. I believe so, yes.

5 Q. And would I be correct there
6 were some budgetary discussions as to how much work
7 you could do on each of the sites, or perhaps a budget
8 had been set so it was confined to just these two
9 inquiries we were just talking about?

10 A. I don't remember that budgetary
11 considerations were a major factor at this time.

12 Q. Do you have a staff, Dr. Schiff,
13 who does this for you or did you do all this?

14 A. At this time, I did this myself.

15 Q. You did this all yourself?

16 A. Yes.

17 Q. So then that takes us down
18 to, I guess, the six sites and to the report H-37.
19 And I want to ask you to go to page 1-1 and there we
20 see, I guess, the headings, six headings, six major
21 evaluation factors that were considered in Stage 2C
22 under Social Environment --

23 A. I'm sorry, there are seven.
24 It says six but there are actually seven.

25 Q. You're quite right. And we



1 see then those seven factors summarized there and,
2 as you've explained in your evidence, the last four,
3 I guess, are to be dealt with by other disciplines?

4 A. That's correct.

5 Q. You were charged with the
6 responsibility of examining the first three?

7 A. Yes.

8 Q. Okay. And then going over to
9 page 1-1, you have the definitions --

10 A. I'm sorry, page ...?

11 Q. 1-2, the Definitions Section,
12 Section 1.1?

13 A. That's correct.

14 Q. And there we see -- and I'm
15 going to, as we go through this, I want the Board ...
16 and I want you to confirm for me: sometimes we see
17 the word "sites" without the reference "candidate"
18 in front of it or "site plan area"; but you've got
19 "Candidate Sites" which are clearly defined as the
20 Stage 2B landfill sites. And,

21 Site Plan Area: Refers to the actual area of
22 landfilling selected within each of
23 the six candidate sites.

24 And then you go on to make the note:

25 The Site Plan Areas are reduced in



1 size from the original Candidate
2 Site, with the exception of Site F,
3 which remains the same.

4 Then in that case,

5 The Site Plan Area is equivalent
6 to the site.

7 Is that not right?

8 A. I think what I was intending
9 to say there was that the phrase that I used ... I
10 would often refer to the "site" and in which case I
11 meant the "site plan area", so I would use the phrase
12 "on-site".

13 Q. "Site" or "on-site" is equal;
14 is that what you're saying? Because you have a
15 definition of "on-site",

16 Refers to the Site Plan Area.

17 A. That's right.

18 Q. You see, from the ... Well,
19 we can pick that up; that's no problem. But that's
20 just, for future reference, we've got it clearly set
21 out.

22 Now, turning to page 2-1, as I
23 understand the way you set the report up, here we
24 see the major heading "Population Impacts" and under
25 the first sub-paragraph under 2.1 you describe the



1 methodology that you followed insofar as your
2 questionnaires were sent out and so on, and you described
3 that to Mr. Hodgson.

4 A. Yes.

5 Q. The thing I wanted to ask you
6 about, the second last paragraph indicates that:

7 *Questionnaires from industries and*
8 *businesses were excluded from the*
9 *analysis in this section, also on*
10 *the grounds that the social impact*
11 *is intended to focus on individuals*
12 *and households living on-site*
13 *in the study areas.*

14 A. I'm sorry, it should be
15 "on-site and in the study areas".

16 Q. Then it goes on to say:
17 *The impact of a landfill on*
18 *properties used exclusively for*
19 *commercial use and on properties*
20 *held by individuals or corporations*
21 *for investment purposes is considered*
22 *as part of the economic assessment.*

23 Now, was that your decision or
24 was that the decision, in terms of sharing the load,
25 that was made by the group? As a Social Impact



1 consultant, would you or would you not ordinarily
2 be interested in some of the impacts that might be
3 involved in terms of impacts on commercial enterprises
4 or corporations or so on?

5 A. It would depend on the particular
6 situation, and in this situation I felt that it was
7 appropriate that those impacts be viewed from the
8 economic point of view.

9 Q. All right. And going over to
10 page 2-3, you indicate ... you deal with, at the top
11 of the page the 358 households on the original
12 Candidate Sites, and you indicate:

13 *Information was not obtained from ...*
14 *55 households for the following*
15 *reasons: ...*

16 Can I ask you how did you isolate
17 information from households as opposed to individuals
18 that live in the house?

19 A. Well, the questionnaire seeks
20 to obtain information on who lives there; and when
21 you have information on a household's composition,
22 obviously you can aggregate it or disaggregate it
23 as ...

24 Q. But you don't specifically
25 ask for ... specific questions and so on to be answered



1 by the -- quote -- "head of the household" or someone
2 speaking on behalf of the household. You aggregate
3 or put the information back together; is that what
4 I understand?

5 A. Some of the questions were
6 asked about activities and behaviours of the household.

7 Q. All right. And do you have a
8 questionnaire that I could look at overnight?

9 A. There --

10 Q. In your report?

11 A. I'm sorry?

12 Q. Is it in the report?

13 A. There is a copy of the
14 questionnaire in the ... I don't know whether it's in
15 the report or it's in another report called the Interim
16 Report. I can certainly --

17 Q. That's the same questionnaire
18 that was sent to everyone?

19 A. That's right.

20 Q. All right.

21 MR. HODGSON: Mr. Chairman, Dr.
22 Schiff prepared an Interim Report during the course of
23 Stage 2C, called Interim Report on Public Concerns and
24 Issues and it contains the questionnaire. I wasn't
25 sure whether I wanted to put it in as an exhibit, but



1 it does contain the questionnaire and, in the
2 circumstances, it probably should simply be filed with
3 the Board and marked ... Do you have a copy?

4 MR. McQUAID: If you like. I was
5 just going to look at it overnight.

6 THE CHAIRMAN: Perhaps you'd give
7 it to Mr. McQuaid and then we'll consider that tomorrow.

8 MR. McQUAID:

9 Q. Now, I want to go with you to
10 the next step, Population Impacts, the sub-heading
11 "Study Area Boundaries", and there we see your
12 discussion with respect to the initial determination of
13 the study area as being .5 mile, within .5 miles

14 ... of the candidate sites in keeping
15 with the procedures used in Stage 2B.

16 A. Yes.

17 Q. And you described -- and I guess
18 we've had reference to the drawings or the maps
19 which we find at pages 2-33A, B and C, as I have
20 numbered them. There's three maps just preceding 3.1.
21 And I'm just going to ask you, if you would, to
22 double-check some distances.

23 First of all, let's deal with Map D or
24 Site Plan Area D, which is your Map 2, page 2-33B.
25 Now, I find it hard to pick out the scale and everything



1 on that map, Dr. Schiff, just because of the size;
2 and what we did is we took from the Visual Assessment
3 book, we took the maps of Site D, and I'm showing you
4 this series of documents, and I'll explain them to you
5 in just a moment.

6 If I can just file that. There's
7 a set for each of the Board members ...

8 The map is, one of the maps in the
9 Visual report, Map B-2, and you'll see there, Dr.
10 Schiff, the first drawing ... the first drawing should
11 be the same outline as on your ... as on the map you
12 have. That's what we had intended and understood.
13 And I think if you take a look around the outline of
14 your Map 2 and this map ...

15 Sir, did you give us a number?

16 THE CHAIRMAN: Not as yet.

17 MR. McQUAID: I wonder if I could
18 ask you to mark this group of drawings as an exhibit.

19 THE CHAIRMAN: Exhibit B-151.

20 MR. McQUAID: Thank you, sir.

21 THE CHAIRMAN: That's a set of three
22 maps.

23 MR. McQUAID: Could we call them
24 151A, B and C?

25 THE CHAIRMAN: Yes.



1 These were taken out of something?

2 Mr. McQuaid, these were extracted from a report?

3 MR. McQUAID: The base map in each
4 case, Mr. Chairman, is the same as the Map B-2 from
5 Exhibit H-22, the Visual Study.

6 THE CHAIRMAN: Thank you.

7 MR. McQUAID: And what we've done
8 is we've superimposed on what will be Sheet 151A, we've
9 superimposed the study area boundary for Site Plan Area
10 D from Dr. Schiff's report, which is the H-37 report
11 Map 2, page 2-33B.

12 EXHIBIT NO. B-151A: Map 2, Exhibit H-37, Site Plan
13 Area D superimposed on Map 2
 Exhibit H-37

15 EXHIBIT NO. B-151B: As above.

18 EXHIBIT NO. B-151C: As above.

19

20

21 MR. McQUAID:

22 Q. Now, Dr. Schiff, looking at
23 that first map, you'll see that on there, there have
24 been two distances that have been noted -- and you
25 can check the scale overnight, if you want to check



1 that -- but I want you to take that as an assumption,
2 that is 2.2 kilometres from -- I think that's the
3 Mason Temple to the most northeasterly part of Site D,
4 the actual site area of Site D?

5 A. Correct.

6 Q. And approximately 1.4 kilometres
7 from the southerly boundary of the site area to your
8 study area?

9 A. Mm-hm.

10 Q. Now, the reason those distances
11 would be greater would be because you extended the
12 .5 mile or .8 kilometre further to the north and to the
13 south; is that correct? Or you followed -- I'm sorry,
14 the candidate area?

15 A. Part of the reason that the
16 distance is greater is that these boundaries were
17 established at the time that we were still working with
18 the candidate site area.

19 Q. Okay. Then the second page --
20 and this is one that I might ask you to double-check
21 over the evening, if you could just check the scale
22 and so on -- but I believe, if you check it, you
23 will determine that that is the map or the drawing
24 which would ... the outline area that would result
25 from taking the .8 kilometres or .5 mile around what



1 ended up being the actual site area of Site D. I'm
2 going to ask you to double-check that for me overnight,
3 over the evening, if you would.

4 A. Yes, I will.

5 Q. Okay. And then what would be
6 151C or the third page is both together. In other
7 words, 151A and 151B are the same map and it gives
8 us or depicts for us the difference that occurs as
9 a result of the extension or the use of the candidate
10 site area as opposed to the .5 miles --

11 A. With all respect, it doesn't,
12 because what it indicates is the relationships to
13 the site plan areas, not the candidate site areas,
14 which is what we were working with at the beginning
15 of the study.

16 Q. I realize that but when it
17 comes to this part of the hearing and you've got a
18 site plan area now, you know that Site D is smaller
19 than the site plan area -- the candidate site area;
20 right?

21 A. Mm-hm.

22 Q. Aren't you called upon to
23 do a social impact analysis for the actual site
24 that's selected not for the candidate area?

25 A. Yes.



1 Q. All right. And you've indicated
2 that one of the things you want to do is be as
3 mathematically accurate as you can. Shouldn't you then
4 when you're doing your mathematics, shouldn't you
5 confine your study to the actual site plan area and
6 to the distance that you've chosen from that site plan
7 area?

8 A. Well, one of the factors that
9 I took into consideration is that because the Social
10 Impact Assessment was being done in conjunction with
11 other aspects of the Environmental Impact Assessment
12 and they were going on at the same time, when I
13 began my work the site plan areas had not been
14 determined and I had ... I thought about bringing the
15 impact areas in or readjusting the boundaries of the
16 study areas but I also felt somewhat uncomfortable
17 about suddenly saying to some people, "You're no longer
18 in the impact area".

19 In addition, while my goal is
20 indeed to be mathematically precise, one doesn't want
21 to do that at the expense of the reality of the world
22 out there, and one wants to establish these boundaries
23 not simply by cutting off a half-mile and saying,
24 "That's it" but, rather, by looking at the way, as
25 I've indicated before, by looking at the actual



1 conditions at each of the six sites.

2 Q. Well, as I read your text in
3 H-37, page 2-3, you comment on the fact that,

4 *When Stage 2C was initiated, the*
5 *half-mile limit was reviewed.*

6 *As part of this review, precedents*
7 *were sought from other sites and*
8 *operators of existing sites were*
9 *contacted to determine the*
10 *distances from which complaints*
11 *were received.*

12 So I gather from the remainder of
13 the text over on the page 2-4, you didn't really get
14 anything which was of any real assistance to you as
15 to whether .5 of a mile was a good distance or not?

16 A. That's correct, with respect
17 to that, yes.

18 Q. And I think you indicated to
19 Mr. Garrod that this whole area of Social Impact
20 Analysis is in its infancy --

21 A. It's not a fully evolved field,
22 yes.

23 Q. Would I also be correct, Dr.
24 Schiff, that as far as your specific experience is
25 concerned, this particular landfill proposal is the



1 first one that you've been called upon to do a social
2 impact study?

3 A. Yes.

4 Q. So, you don't have, you have
5 not been able to find in your investigations of other
6 situations nor have you had experience as to whether
7 the area studies should be .5 of a mile or .6 of a
8 mile or some other figure -- I don't know what it
9 would be -- one of the things, a key determinant you
10 have to consider, isn't it?

11 A. Yes.

12 Q. All right. You inherited .5 of
13 a mile from the earlier Social Impact consultant?

14 A. Yes.

15 Q. Are you able to tell us ...
16 could you indicate: was there a difference of opinion
17 of some nature that arose as to whether that Social
18 Impact consultant would continue or not?

19 A. I don't know anything about
20 that.

21 Q. You don't know. You wouldn't
22 know whether there was any discussion or problem about
23 where the study areas, whether that was a factor or
24 not?

25 A. I have no idea.



1 Q. You used the same figure that
2 they had been working on?

3 A. Yes.

4 Q. However, when it came time for
5 the actual study areas to be determined, you had to
6 restudy this particular situation?

7 A. Yes.

8 Q. All right. Now, I guess I'm
9 having trouble in understanding which comes first:
10 the study area is determined and you study it or
11 you study the problem, the communities and everything
12 around it, and then you determine what the study area
13 is. Now, can you help me on which is first, the
14 chicken or the egg, or is that what the dilemma is?

15 A. No matter what, one would at
16 some point early on have to identify some form of
17 study area in order to determine the areas in which
18 you wanted to meet with people and find out what their
19 perceptions and concerns and issues are.

20 Q. What is it you're looking for,
21 again? The area in which people are living and which
22 you're concerned about: their concerns ...?

23 A. Their perceptions --

24 Q. -- perceptions --

25 A. And the issues --



1 Q. -- and issues --

2 A. -- that is, what it is that one
3 is going to include in the social impacts.

4 Q. All right. Now, I stopped
5 you. You were going to tell me that you have to
6 select the base area to begin with.

7 A. That's right. You were asking
8 which came first, and I was suggesting that initially
9 you have to identify an area to which you're going to
10 direct your attention.

11 Q. I realize that. And we see
12 that the initial area was half-a-mile of a candidate
13 site area but now you're at a study area in which you
14 know exactly what the site is and you haven't had any
15 questionnaires from the 55 candidate sites?

16 A. No, that's correct.

17 Q. Now you've got to go out and
18 decide what your area is that you're going to study?

19 A. Yes.

20 Q. And I guess I'm asking you
21 why did you decide that you would go, if these
22 mathematics are correct, as far as 2.2 kilometres on
23 the north and 1.4 kilometres on the south from Site D?

24 A. Well, let me repeat: at the
25 time that I made this decision, it was not 2.2



1 kilometres and 1.4 kilometres, it was closer to half-a-
2 mile -- and I can check those distances as well.
3 And also to point out that I wanted to reflect in
4 the delineation of the study area the reality of the
5 context within which the candidate sites were located.

6 Q. I realize that but I think ...
7 I guess the difficulty I'm having is you said, for
8 example, that what you chose was not 2.2 kilometres
9 or 1.4 kilometres, what you chose as being appropriate
10 was .5 of a mile, one-half of a mile, of the candidate
11 sites?

12 A. Yes.

13 Q. I take from that that you were
14 satisfied that you would get the context that you
15 just referred to if you examined within a half-a-mile
16 of what you then knew would be the area of the candidate
17 sites? You had to assume that the whole candidate
18 site might be selected at that point; correct?

19 A. Yes.

20 Q. So you were satisfied, were
21 you, that half-a-mile from what might be a site, a
22 selected site, would give you the context that you
23 were looking for; is that correct?

24 A. More or less. But, as I
25 indicated previously, having established that half-mile,



1 I then went out and looked at the particular ... I mean
2 where did that particular half-mile fall and did it
3 make sense to maintain that boundary at that location.

4 Q. Are you telling me that the
5 study area is determined by going out and just looking
6 around the site and sort of just selecting where you
7 think the study area should be? And did you not do
8 that before you selected the .5 mile around the
9 candidate site?

10 A. No, I did not. I chose the
11 half-mile distance and then went out to see whether
12 there were factors which would lead me to adjust
13 that.

14 Q. Did you do anything else
15 other than go out and do a visual examination, drive
16 around the sites? Did you study documents or letters
17 or reports or anything of that nature?

18 A. No.

19 Q. So, it was a visual examination?

20 A. Yes.

21 Q. Now, you do concede that
22 the result ... By the way, was that decision made by
23 you or was that sort of a group thing, group decision?

24 A. Which decision?

25 Q. To choose the .5 mile and then



1 to go out and look at where the boundaries should be
2 extended to?

3 A. My recollection is that that
4 decision was made in conjunction with Walker, Wright
5 and their rankings analysis.

6 Q. And if you can give me a specific
name? Was it Mr. Walker or was it one of his
8 assistants?

9 A. No, it was someone who is no
10 longer with them, Joan Biddel.

11 Q. Biddel, B-I-D ...

12 A. ... D-E-L, I believe.

13 DR. KINGHAM: I wonder if I could
14 just ask a point of clarification right here:

15 At this stage, you knew what the
16 candidate site areas were, the larger areas?

17 THE WITNESS: Correct.

18 DR. KINGHAM: And what the half-mile
19 line was?

20 THE WITNESS: Yes.

21 DR. KINGHAM: And then evaluating
22 the six candidate site areas, did you at that time
23 know what the site plan areas were going to be?

24 THE WITNESS: No.

25 DR. KINGHAM: So, you didn't know



1 to go out and look at where the boundaries should be
2 extended to?

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16 candidate site areas were, the larger areas?

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18 DR. KINGHAM: And what the half-mile
19 line was?

20 THE WITNESS: Yes.

21 DR. KINGHAM: And then evaluating
22 the six candidate site areas, did you at that time
23 know what the site plan areas were going to be?

24 THE WITNESS: No.

25 DR. KINGHAM: So, you didn't know



1 that information?

2 THE WITNESS: No.

3 DR. KINGHAM: So you drew the half-
4 mile around the site area and treated all six, based
5 on that original site area, as you went from six sites
6 down to two sites?

7 THE WITNESS: Yes.

8 DR. KINGHAM: And then when you
9 got down to two sites you were in a different ball game
10 and you'll get to that, I guess, in due course. I
11 just want to understand: the rules are all the same.
12 You're working with site areas, six of them, the
13 larger ones, at this stage?

14 THE WITNESS: Not "site" areas,
15 "candidate" sites --

16 DR. KINGHAM: Candidate sites.

17 Thank you.

18 THE CHAIRMAN: Mr. McQuaid, we've
19 interrupted you now. I wonder if this might be --

20 MR. McQUAID: If I might just have
21 about four minutes. I'll try and finish by four-thirty.

22 Q. I want to pick up on what
23 Dr. Kingham just asked, because I'd like you to
24 review this overnight for me, Dr. Schiff, because
25 it was ... First of all, we know that this is during



1 that information?

2 THE WITNESS: No.

3 DR. KINGHAM: So you drew the half-
4 mile around the site area and treated all six, based
5 on that original site area, as you went from six sites
6 down to two sites?

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17 Thank you.

18 THE CHAIRMAN: Mr. McQuaid, we've
19 interrupted you now. I wonder if this might be --

20 MR. McQUAID: If I might just have
21 about four minutes. I'll try and finish by four-thirty.

22 Q. I want to pick up on what
23 Dr. Kingham just asked, because I'd like you to
24 review this overnight for me, Dr. Schiff, because
25 it was ... First of all, we know that this is during



1 1985. This is the final Technical Report No. 5 --

2 A. Yes.

3 Q -- H-37. And I don't know if
4 it's an exhibit or not but we have draft reports from
5 January, 1985, Social Impact Assessment by you --

6 A. Yes.

7 Q. -- and at that point in time,
8 and I believe even earlier, it was known what the
9 site plan area would be and that, for example, Site D
10 would be smaller than the candidate site area; is
11 that correct?

12 A. Yes.

13 Q. So you had at least the period
14 from January, 1985, if not earlier, down to the final
15 report of June of 1985 in which you could have
16 adjusted your studies, questionnaires, whatever it was,
17 to within .5 of the actual site plan area; isn't
18 that correct? In other words ... Is that correct?

19 A. Yes.

20 Q. Right. And would I not be
21 correct, you would even have known earlier, because
22 I believe if we look in the documentation that cutting
23 the site back from the candidate areas was known, you
24 know, fairly early on in the process in late 1984.
25 But if you could just check your notes on that.



1 In other words, you would have known that even before
2 your draft report in January, 1985. So I'm having
3 a little trouble understanding the answers that you've
4 given to Dr. Kingham. Did you not know that the sites
5 were going to be cut back, such as Site D to much
6 smaller site and you just went on and treated all
7 your studies as if the candidate site might have been
8 selected in Stage 2C?

9 A. Yes, I did know. I indicated
10 earlier that I was uncomfortable with the idea of
11 saying to people, "You once were in the study area
12 and now you're not".

13 Q. But if the .5 mile is the
14 area that you had determined that would be correct
15 in order to approach a social impact study -- and that's
16 what you told me a little earlier you had concluded --
17 correct? -- shouldn't you have been consistent and
18 when it was reduced substantially, have initially
19 studied or further studied the social impact within
20 the .5 mile?

21 A. Let me remind you that it was
22 not until the completion of at least the concurrent
23 2C documents that I got confirmation that the other
24 impacts, such as noise, dust, odor, litter, would
25 not extend beyond the 2 ... or beyond the study area.



1 Q. I realize that. I hear what
2 you're saying. But you're studying the three areas
3 of population -- to go back to 1.1 -- you're studying
4 Population Impacts, Social Equity and Community
5 Facilities; am I correct?

6 A. Yes.

7 Q. And you've made the judgment,
8 indeed you've actually inherited the judgment from
9 some other group, that it should be within .5 mile,
10 and it appeared that the sites were going to be cut
11 back but you continued to use a much larger area.

12 Now, as a mathematician, you know
13 that if you've over-stated your social area, you're
14 going to over-state the population impact or the
15 other impacts that you're going to be studying;
16 isn't that correct?

17 Similarly, if you under-state them,
18 you're under-stating.

19 So, in other words, it's very
20 important that you draw a line which is something
21 which you, as a Social Impact consultant, have applied
22 your mind to as the area that you should be studying?
23 So it ends up that in fact, if the distances we
24 have on Map B-151A are confirmed, that as far as
25 Site D is concerned your catchment area or your area



1 for study goes as far as 2.2 kilometres to the north
2 of what ended up being the Site Area D, Site Plan Area
3 D; correct? I mean, that's what the map seems to
4 indicate.

5 A. That's what the map indicates.

6 THE CHAIRMAN: Fine, thank you.

7 We'll adjourn till nine-thirty.

8 ---HEARING ADJOURNED AT 4.30 P.M.

9

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12

13 CERTIFIED CORRECT:

14 *Sarah Nicholson*

15 Sarah Nicholson, CVR.
16 Reporter.

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