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POTENTIAL SOCIAL IMPACTS OF HALTON'S LANDFILL PROPOSAL
ON COMMUNITIES AT SITE F IN BURLINGTON

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EXECUTIVE SUMMARY

The term "social impacts" refers to changes in people's lives -- changes that result from introduction of a project into their community environment, changes that may adversely affect their well-being, and changes that they consider important.

This report provides a critical evaluation of the Region of Halton's assessment of the social impacts of a sanitary landfill located at Site F in Burlington.

Background work for the evaluation included a review of relevant documents and other data on the proposal and the community, together with a search of the literature on social impacts of waste management facilities and the stress they can create. Interviews were conducted with key informants in the two communities affected by the proposal, Aldershot and Forestvale. This provided further information on the community context as well as on resident perceptions of existing and past landfill operations, the proposed landfill, the site selection process and the issue of equity.

Examination of the community context showed Aldershot to be an old, well-established community with a population exceeding 15,000, a strong community identity, considerable social interaction and participation in community activities, and a high level of residential satisfaction. Forestvale (pop. 900) emerged as a newer community with its own distinctive character, mobile yet closely knit but with few community facilities.

The Aldershot/Forestvale area has considerable experience with waste disposal, dating back three or four decades. The Bayview dump, open from the mid-1940s to 1972, accepted all forms of waste from anywhere. Its environmental legacy includes polluted

streams and an advancing leachate plume. The present landfill, opened up beside the old dump in 1974, has since been expanded several times even though its capacity was originally expected to be reached in 1978. The landfill has been accepting waste from elsewhere in the region since 1979.

* Reg. should say this

Drawing upon their "ordinary knowledge" and based on their long experience with waste disposal, residents of the two communities are quite concerned about a landfill at Site F beside the existing facility. Aldershot residents are especially alarmed since their community lies downstream of the past, present and proposed landfills. Resident concerns focus on surface and groundwater pollution (the #1 issue), unsightliness, noise and dust, truck traffic, litter, odour, effect on property values and community image, and stress. The interviews indicated pervasive dissatisfaction with the way the Region has handled community concerns in the past and little confidence that it will do better in future.

Three themes were found to characterize the community perspective on the proposed landfill:

First, the proposal is seen as illogical. It simply does not make sense to residents that a landfill with considerable potential to pollute the environment should be located on high ground and on fractured shale, above an established residential community and so near Lake Ontario. Residents of Aldershot have extensive experience with leachate pollution and other problems from previous landfill operations. They do not accept the Region's assurances that the new landfill will be engineered and operated so as to be "safe".

Second, residents believe, the community should not have been excluded from social impact assessment. They cannot understand how the study boundaries, intended to capture the proposed landfill's social impacts, could have excluded their

communities, especially in the face of strong submissions from the residents indicating that they had experienced impacts from landfill operations in the past and expected further impacts in the future. Respondents in the interviews rejected outright the consultants' claim that Highway 403 and the CNR tracks buffer their communities from the effects of landfilling. They point out that the area above this so-called barrier has long been part of the Aldershot community, that people know that landfilling is going on there, and that many of its effects do not stop at the "barrier" and will not respect it in future. By introducing a psychological approach to social impact assessment, the Region was obliged to be consistent and include in the SIA all residents who perceived themselves and their community to be affected. Instead, the consultants ignored these perceptions in favour of "actual impacts" (i.e., perceived and measured by the consultants) and used the psychological argument to limit the study.

Third, residents feel that the proposal is inequitable. Respondents to the interviews unanimously agree that it is quite unfair to burden them with another landfill. They feel betrayed as a result of promises that the existing landfill operation would be closed down -- first in 1972, then in 1980 and again in 1984. They agree that every community and all parts of the region share responsibility for disposing of waste that all produce but they maintain that their community has already done more than its share. They note that efforts to reduce the amount of garbage requiring disposal in Halton have been minimal (except in Aldershot) and that adds to their sense of inequity -- others should be sacrificing too. Some respondents believe that the landfill site selection process also was unfair, because it excluded their community from social impact assessment and because the selection of Site F appeared predetermined.

The critical evaluation of the Region's SIA included examination of the consultants' basic approach to social impact assessment, deficiencies in that approach and in the SIA that resulted, and the equity issue which has special significance for Site F. A comparison was made between Halton's SIA and a similar study recently completed for the Region of Peel; this highlighted the shortcomings of the former. Overall, the results of the evaluation confirmed the validity of the residents' position and indicated that the Region's SIA, in its treatment of Site F, was fundamentally flawed.

Much of this can be attributed to the decision of the Region's consultants to take a "technical" approach to social impact assessment. The technical approach stresses scientific method, objectivity, quantified empirical analysis, measured impacts and a primary role for experts. By adhering to this approach, rather than combining or replacing it with an interactive approach, the consultants severely limited the area studied, the range of social impacts addressed and the evidence considered valid.

The main deficiencies in the SIA that resulted were: its inappropriate study design; its lack of comprehensiveness and internal consistency; and its failure to provide an integrated picture of the landfill's potential social impacts. Of special concern for Site F was the selection of inadequate study area boundaries. By applying the 0.8 km limit and by assuming that a "psychological barrier" effectively would buffer the Aldershot community from adverse social impacts -- an assumption that was never field-tested or backed up with references to the literature -- the consultants excluded Aldershot and Forestvale from social impact assessment. This fundamental error was compounded by another: the focus on individuals and consequent failure to take "community" adequately into account. As a consequence of this narrow application of the technical approach, a study area that was too small and a set of social impacts that was unduly limited, the Region's SIA ignored social impacts on the affected

communities of Aldershot and Forestvale as well as the impacts on most of the people who live and work in them. Omission of this large population from the study's quantified inventory of social impacts seriously distorted the ranking of sites which showed Site F as least impacted.

The Region's SIA exhibited a further major shortcoming. It dismissed equity as a factor in ranking the sites on the grounds that all sites could claim inequitable treatment. This decision, which worked to the disadvantage of Site F, ignored the fact that not all sites have an equal claim to unfair distribution of waste disposal facilities in Halton region. The Aldershot area has more years of experience with landfilling than anywhere else in the region and it has received waste, not of its own or even Burlington's creation, for a long time. Principles of natural justice and political equality call for equal treatment of citizens and a fair distribution of the "bads" in society. No one would argue that one group of people or one part of the region should bear the social and environmental costs of waste disposal for generation after generation. By downplaying these and other equity considerations, the consultants avoided the difficult but "do-able" task of assessing competing equity claims, just as they assessed the varying levels of impact on other factors.

Regional Council ought to have debated equity issues in advance to guide the consultants in site selection. Leaving equity to "politics" at the end of the process, as the SIA proposes, is equivalent to giving equity no consideration since elected representatives are hard pressed to reject on equity grounds sites that they allowed to be studied for years and at considerable public expense. This report suggests equity guidelines which, if applied at the outset of the site selection process, likely would have led to the exclusion of Site F.

Equity is an important consideration in social impact assessment. Inequity, whether "real" or "perceived", can generate and

contribute to other social impacts such as stress, diminished residential satisfaction, reduced quality of life, and outmigration from the community, with further adverse effects on it. It now falls to the Board to more fully assess equity as a social impact at Site F and to include this impact in its final deliberations.

As a consequence of the foregoing deficiencies in the Region's SIA, the Board does not have before it a complete social impact assessment of the landfill at Site F. To assist the Board in this regard, this report provides an indication of the social impacts likely to occur if the landfill is located at Site F. These potential impacts, of deep concern to the residents of Aldershot and Forestvale who would have to live with another landfill, fall into five categories:

1. disruption of residents and others in the communities. This includes disruption to the way of life of people living in the vicinity of the site and the haul routes, of businesses and industries, and of people who work in the area.
2. displacement and disruption of community facilities and services. The Region's SIA addressed this but only in part since its study area was restricted.
3. loss of community character, due to the basic incompatibility of landfill with the residential environment. This includes damage to the image of the Aldershot and Forestvale communities as well as the stigma that would attach to the area if it became Halton's "dump city" for a total period of six to ten decades.
4. loss of community cohesion and stability, which have to do with the nature and extent of social interaction in the community, and the willingness of residents to allocate personal and financial resources to the community and its future. This applies especially to community activists and other long-term residents who have given the community much

energy and commitment, the loss of which would have a serious detrimental effect on the community.

5. increased stress, a factor downgraded in the Region's SIA. The interviews revealed an ominous array of deep feelings that would follow a decision in favour of a landfill at Site F; increased stress, and the consequent exacerbation of other community impacts, could well be the consequence. Although stress (both individual and community) is speculative in terms of occurrence and severity of outcome, it nonetheless looms large in potential importance in the lives and well-being of community and residents. The likelihood of increased stress due to introduction of this feared and unwanted facility into the community environment seems especially high in the Aldershot community. It has long experienced the unknown risks of pollution from past waste disposal, it will continue to experience these risks whether a landfill is located there or not, and it is an area where there are profound and justified feelings of inequitable treatment.

The Environmental Assessment Act requires that social impacts be assessed as one of the necessary inputs to the Board's deliberations. This report demonstrates that, as a result of basic deficiencies in the Region's SIA, it did not provide the Board with the full range of information with respect to Site F. This leaves it to the Board to complete the social impact assessment -- filling in the information gap and integrating social impacts with other impacts of the proposed landfill. While this report is not a full-scale SIA, it can assist in closing that gap by providing the Board with the "next best thing", an indication of the social impacts that could well occur if the landfill is located at Site F.

1. INTRODUCTION

This introductory section summarizes the report's theme and structure, describes the underlying method and notes the report's limitations.

1.1 Theme and Structure of the Report

Since its inception in 1974 the Regional Municipality of Halton has been studying its waste management needs. A recent and major outcome of this work has been a proposal to construct a new sanitary landfill at one of two sites, in either Milton or Burlington. This proposal is now the subject of hearings before a Joint Board under The Consolidated Hearings Act.

A landfill at Site F in Burlington is being opposed by the West Burlington Citizens Group, among others. One of the Group's contentions is that the Region's environmental impact assessment did not take adequate account of the social impacts that the proposed facility could have on the urban areas adjoining Site F. This report finds that concern to be valid. It concludes that the Region's social impact assessment (SIA) of the landfill proposal is fundamentally flawed, that it overlooked significant potential impacts associated with a new landfill at the Burlington site, and that as a result the Board lacks the complete information it needs to assess the impacts of the proposed facility at that site.

This overall conclusion is backed up and elaborated in the sections that follow.

Section 2 provides necessary background by outlining the landfill proposal and its social impacts, as determined by the Region.

Section 3 describes the community context (Aldershot and Forestvale), presents a brief history of garbage disposal in Halton Region, and outlines the residents' perspective on the proposed landfill.

Section 4 offers a critical evaluation of the Region's SIA. The evaluation begins by contrasting two different approaches to social impact assessment and concludes that the Region's "technical" approach was responsible for many of the deficiencies in its SIA. The five main deficiencies are examined more closely in the next part of the critique. The equity issue, representing a further deficiency, is addressed separately because fairness of locating the landfill at Site F is a special concern of a community that has long borne the brunt of waste disposal. The critique concludes that the deficiencies in the Region's SIA resulted in the Board receiving a quite insufficient picture of the impacts of a further landfill on residents and community at Site F. Section 5 therefore closes with an outline of these potential impacts, in five categories, as a means of assisting the Board to fill the information gap.

Method

Background work for preparation of this report involved the following:

- o A preliminary investigation, prior to accepting the assignment, to ascertain that the West Burlington Citizens Group had grounds for concern and that the Region's SIA exhibited serious shortcomings. This involved perusal of documents, a local meeting and a site visit.
- o Detailed review of the Region's SIA and other pertinent documents. This included inspection of the Region's files and landfill diaries on the existing landfill for 1985-86 (the only period for which these materials were available) and the minutes of meetings of the Burlington Landfill Advisory Committee. Included in this phase of the work was a comparison of Halton's SIA with a recent state-of-the-art social impact study conducted for the Region of Peel as part of its search for a landfill site, along with perusal of the social impact study done for the Ontario Waste Management Corporation.
- o Examination of statistical material on the community context and the official plan. This was accomplished at the offices of the City of Burlington's Planning Department.
- o Interviews with selected community leaders and other key informants in Aldershot and Forestvale, the communities directly affected by a landfill at Site F. The intent was, within the limitations imposed by the budget and time available, to obtain information considered relevant to determination of the potential social impacts. This included information on: the community context (community boundaries,

community character, community cohesion and stability, interaction and activities, and satisfaction with place); local perceptions of existing and past landfill operations as well as of the proposed landfill, to identify impacts that residents have experienced and impacts expected to occur; residents' confidence in the Region to address community concerns and their satisfaction with its attempts to consult them during the landfill siting process; and, finally, their perceptions of the fairness of past, present and proposed landfilling activities in their community. Sixteen individuals were interviewed. The set of interviewees was determined using a "snowball" technique; i.e., it began with the local aldermen and President of the West Burlington Citizens Group and then added other key informants as the interviewing proceeded. Interviews were semi-structured, i.e., they were based on a common Interview Guide to focus the discussion and to ensure that one body of information was obtained from the informants. The Appendix provides a copy of the Guide, summaries of the individual interviews, and a summary of the results from the set of interviews as a whole.

- o Independent research, including a literature review, on social impact assessment of waste management facilities and on the stress they can produce for individuals and communities.¹
- o Additional consultations with key individuals regarding certain aspects of this work.²

Limitations

It is important to be aware of what this report is not, and what it deliberately did and did not set out to do.

1 The report is not an in-depth social impact assessment of the landfill at Site F. Rather, the study attempted to do two things. The first was to determine whether the Region and its consultants had adequately assessed the proposed landfill's social impacts on the communities at Site F, especially the Aldershot community downstream of the site. When the Region's SIA was found to be quite inadequate in this regard, the second step was to identify and evaluate the potential social impacts on residents and community at Site F. Because this information was missing from the Region's SIA, its final ranking showed Site F to be a much more desirable location than it is, according to the findings of this report. With this new information in hand, the Board will be in a better position to reach its own conclusion in this regard.

Another limitation has to do with methodology. The "key informants" method was employed here because it offers credible information with a modest input of time and effort.³ The set of interviewees was not intended to be a representative sample of the general population in the two communities; rather, it was used as a way of securing the views of certain individuals who have the pulse of the community and therefore whose views are widely held by others in the community. This method can -- and, in this case it is argued, does -- produce valuable and valid information on how residents perceive their community and what the impacts of another landfill might be. A full SIA could begin with such a method (as a form of scoping, for example) but it would go much further, to consult a larger cross-section of residents, define issues, and identify and assess impacts.

Finally, no attempt was made to do a comparative study of Sites F and D. The focus here is exclusively on Site F.⁴

2. THE REGION'S SOCIAL IMPACT ASSESSMENT

The Region proposes to landfill 11.3 million cubic yards of solid domestic and commercial waste (no hazardous waste) at one of two alternative sites: Site F in Burlington or Site D in Milton. This initiative would meet Halton's projected solid waste disposal needs for the 20-year planning period 1988-2008.

As part of the environmental assessment and the site selection process that preceded it, Walker Wright Young Associates Ltd. examined the proposed landfill's effect on "the social environment". This involved consideration of seven evaluation factors: population impacts, social equity, community facilities, airborne contaminants (including dust and odour), noise, visual impact, and land use compatibility (later, litter became a further category). The first three factors were addressed in the report, *Social Impact Assessment*, by Myra Schiff, while the remaining factors were covered in separate technical reports.¹

This section provides a summary description of the Region's social impact assessment approach, method and results. Critical to this work were two decisions made by the consultants: what areas to study at each site; and what social impacts to assess.

2.1 Study Area Boundaries

For each candidate site, the consultants delineated a Study Area that extended 0.8 km (one-half mile) beyond the Site Plan Area of the landfill; they then adjusted this boundary at each site to take account of local conditions, namely, existing settlement

patterns, natural areas and cultural features. In the case of Site F, the adjustments included: expanding the northwest corner of the Study Area to include residences in the Rennick Road and Old Waterdown Road area; including an area of vacant land between Highway 403 and the CN rail line; setting the railway as the southerly boundary; and taking in the North Service Road, expected to be a haul route, over to Brant Street. Figure 1 shows the Study Area that resulted.

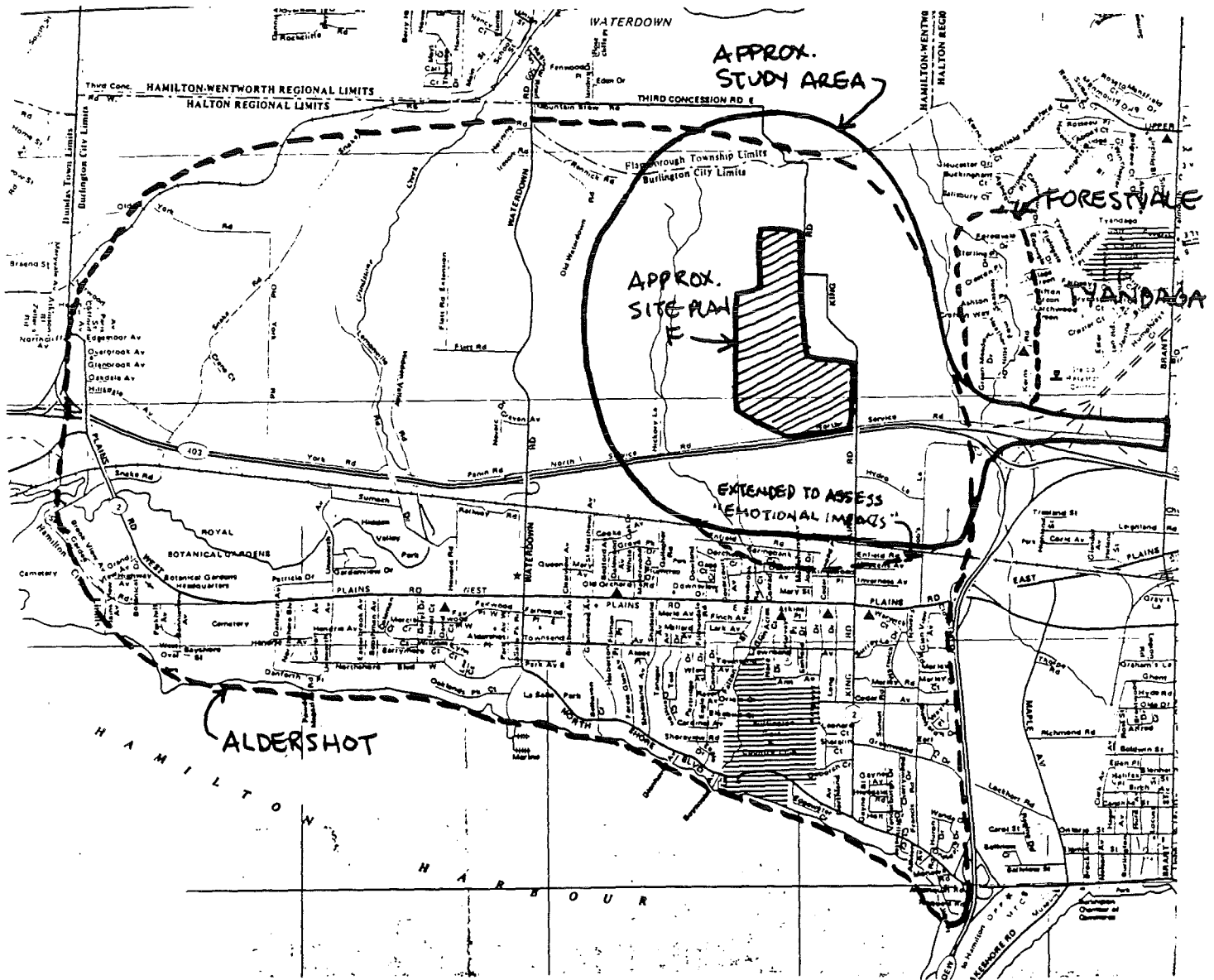
The principle of using a 0.8 km study area for each site was established by Walker Wright Young before Schiff was retained. She reviewed the 0.8 km limit and decided it was appropriate in the absence of specific information on how far away people live who complain about a landfill's adverse effects, and "because (1) after careful consideration we felt it would encompass the area of landfill impacts, (2) it was consistent with Stage 2B work, and (3) it was consistent with the study area for the land use analysis".²

The most important boundary decision made by the consultants was to exclude from the Study Area the residential communities to the south and east -- Aldershot and Forestvale respectively.

Aldershot was excluded on the grounds that Highway 403, the CN tracks and the industrial land between them constituted "a major psychological barrier" beyond which social impacts of the landfill would not be experienced.³ (Application of the barrier concept also excluded a portion of Aldershot (approximately 200 residents) that was within the one-half mile limit.) Later, for purposes of assessing "emotional impact", one of the population impact sub-factors, Schiff brought this portion of Aldershot back into the Study Area. Her reluctance to do so as evident from her subsequent testimony: "It was in response to pressures from

*fe Dorothy
Sullivan*
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Figure 1
Study Area, Site F, in its Community Context



people in Burlington that I added this additional space or area".⁴ Schiff remained firm in her belief that the "psychological barrier" effectively would buffer Aldershot residents from the landfill's social impacts and therefore that there was no "objective reason" for their concerns.⁵

The exclusion of Forestvale from the study area apparently was based on it being outside the 0.8 km limit.

The consultants' choice of study area boundaries was pivotal to the social impact assessment that followed. These boundaries had a direct effect on the measurements made on factors used to assess the social impacts, the comparative ratings that resulted, and the final determination of the most and least impacted sites.

2.2 Social Impacts Considered

Schiff defined social impact assessment as "the systematic assessment of those impacts of an undertaking which may have social consequences".⁶ She followed a general model of social impact assessment that involves: defining the existing social environment; predicting changes likely to occur if the project goes ahead; assessing the significance of those changes for individuals and groups affected; and, if the study is comparing alternatives, evaluating them and recommending the most appropriate one. Five principles guided this work:

1. results should be quantifiable, wherever possible;
2. measures should be relative and ordered so that sites can be compared;
3. several different measures should be used to assess social impacts;

4. measures should consider various levels (from individual to community); and
5. measures should be responsive to the concerns of residents.⁷

Schiff articulated four objectives for the Halton study: 1. to minimize the size of the population that would be affected by a landfilling operation; 2. to minimize the impact of the landfill on that population; 3. to minimize the number of special groups it could affect; and 4. to minimize the landfill's impact on the use and enjoyment of community facilities and services by local residents.⁸

For the three evaluation factors within her terms of reference, Schiff addressed a range of social impacts (summarized in Figure 2). She developed various measures to quantify impact. The resulting values were then divided into High-Medium-Low categories and the six candidate sites were compared for each measure according to these ratings. For the first two factors, Population Impact and Community Facilities, an overall rating summarized each impact category, enabling the sites to be compared, taking mitigation into account.

According to Schiff, social impacts associated with the final four evaluation factors -- air quality, noise, visual impact and land use compatibility -- were taken into account in her social impact assessment but were assessed separately in each of the technical reports. Litter, added later as a further factor, was also assessed separately. Factors considered and results are summarized below.

A final comparative analysis by Walker Wright Young updated and listed all of the impacts on the social environment.

Figure 2
Social Impacts Considered in Halton's SIA

<u>Evaluation Factor</u>	<u>Impacts Considered</u>	<u>Measured by</u>
Population Impact	Dislocation of households in Site Plan Area	No. of people forced to relocate No. of households forced to relocate No. of people age 66+ forced to relocate Income from activities on-site Income from activities on-site for people aged 46+ No. of households with 4+ members No. of children 16 and under living on-site
	Disruption of households and residents in Study Area	No. of people in Study Area No. of households in Study Area Income from activities in Study Area No. of children 16 and under in Study Area No. of households with children 16 and under in Study Area Income from activities in Study Area for people over 46
	Emotional impact: Stigma from landfilling in the community; Stress from living near the site; Stress from selection process; Stress from uncertainty about the future	Visibility of site from a major road Proximity of site to major entrance to the community No. of people in Study Area* No. of households with children in Study Area No. of people on-site and in Study Area* No. of people in Study Area Index of income on-site Index of income in Study Area
	Disruption of an established community	Maximum length of residence on-site and in Study Area Median length of residence
Social Equity	Disruption of unique and special population groups	No. of residents of institutions on-site, in Study Area or along haul routes No. of artists, writers, artisans and craftspersons on-site and in Study Area
	Considered a single impact (fairness of locating landfill at each of the six sites)	Landfilling history of area near site Availability of municipal garbage collection to area near site Proportion of Region's waste stream generated by municipality in which site is located Whether area accepts regional waste other than landfill
Community Facilities	Use of public facilities in vicinity of site	Existing facilities Effect of landfill on services provided
	Extent to which area around landfill serves the larger community	Each site considered on its merits; comparison not made

*For these two sub-factors only, the south boundary of the Study Area for Site F was "extended" to the full 0.8 km, which then included some 200 residents of the Aldershot community south of Highway 403 and the CN tracks.

2.3 Site F Impacts and Rankings

Schiff's report ranked Site F as follows:

Population impact: Low impact on dislocation, disruption and special population groups; Low/Medium on disruption of an established community; and High on emotional impact. Overall rating: Low/Medium. Schiff judged the Site F would experience the least population impact of all six candidate sites, largely because there would be no residents on-site.

Community facilities: Site F was originally rated Low-Moderate, placing it among the five most-preferred sites on this factor; Schiff's update changed this rating to Moderate/High.

Social equity: each site was deemed to have a claim on this factor and Schiff was unable to rank the sites on the basis of equity.

Overall rating: Not provided in the report. In her witness statement, however, Schiff indicated, "It is my opinion that, while either Site D or Site F would be acceptable landfill sites with respect to impacts on population and community facilities, Site F is preferred over Site D".⁹

For the remaining social impact factors, the results for Site F (in comparison with Site D) were as follows:

Air quality. The main impacts considered were total suspended particulate matter (dust) and odour.¹⁰ Both Site F and Site D were judged acceptable from an air quality perspective but Site F was marginally preferred.¹¹

Litter. Mitigative measures would reduce off-site windblown litter to "a minimal level", the consultants concluded.¹² Both sites, therefore, were considered acceptable.

Noise. The consultant's comparative analysis indicated that "with proposed mitigative measures in place, neither Site D nor Site F would impact residences with noise levels exceeding MOE criteria".¹² Site F was "marginally preferred".

Visual. The assessment took account of each site's visual characteristics, designated viewing areas, residences and roadways affected, and other visual concerns expressed during the public participation program.¹⁴ Sites were compared by applying factors designated primary, secondary and tertiary. Primary visual considerations included reduction of visual impact on people who would view the landfill for the greatest length of time, areas of significant views, and sensitive viewing opportunities (such as schools and hospitals) over which large numbers of people could see the site. Less important considerations were the effects on people such as motorists who would view the site for shorter lengths of time, future land uses, and opportunities for mitigation. The assessment concluded that visual impacts at Site D would be slightly greater than at Site F.

Land use. This assessment ranked the sites based on potential conflicts between the proposed landfill and existing and future land uses.¹⁵ Sub-factors considered included existing local context, on-site land use, existing and futures land uses in the Study Area, and potential land use conflicts. After-use was also examined. Site F was considered preferable.

The Region's original SIA presented Site F as the least socially impacted (by a considerable margin) on the basis of population impacts, and impacted equally with Site D in terms of community facilities. Later, in an update, the latter ranking was changed. Community facilities at Site D were then considered less impacted than at Site F. However, the consultants stated, in differentiating between sites, population impacts were more important than impacts on community facilities.¹⁶ Consequently, Site F remained the preferred site within the "social environment" category.

3. COMMUNITY CONTEXT AND PERSPECTIVE

People in the communities affected by a landfill at Site F have a perspective on social impact that differs considerably from the Region's.¹ This section provides a synopsis of the community perspective as expressed by local individuals, groups and organizations at hearings and other public occasions, in written submissions and during the interviews conducted during preparation of this report. The main communities that would feel the impacts of the landfill proposal -- Aldershot and Forestvale -- are described briefly to establish the proposal's community context, something that is missing from the Region's documents. This background information, together with a historical perspective on garbage disposal in Halton, enables the impacts of the landfill to be considered in a way that is directly relevant to people living in the communities it affects.

3.1 Aldershot

Aldershot is the older, more established and more distinct of the two communities directly affected by the landfill proposal.

The Aldershot area was settled in 1783 (before Burlington was). A distinct community presence in the area dates back to the early 1800s. In the 19th century Aldershot was well known as a busy port, because of Brown's wharf, and as a melon and fruit growing area. Various community facilities -- East Plains United Church, St. Matthew's Anglican Church, West Plains United Church and several local schools -- trace their origins to more than a hundred years ago. Publications describing Aldershot's history

tell us that it "always had a strong sense of identity"² and that it possessed a "fiercely independent quality".³

Along with the rest of the Township of East Flamborough, Aldershot was amalgamated with the Town of Burlington in 1958. Nonetheless, the Aldershot community retained and continues to have its own identity. Testimony to that fact is the Ontario provincial road map which identifies Aldershot by name (but no other part of Burlington) even though it is not and has never been legally incorporated.

Aldershot residents identify strongly with their community. They interact a great deal, feel a clear "attachment to place", and enjoy an array of local services and facilities which they use fully.⁴ Standard sociological indicators of community -- such as identity, interaction, activity and residential satisfaction -- which were part of the interviews conducted during preparation of this report, establish objectively what people in Aldershot already know and experience to be so: that they live in a real community and that it is important to them.

There is general agreement on the community's boundaries to the east, south and west: the Q.E.W., the Lake and Highway 6 (Burlington's city limits). Most of those interviewed perceived that Aldershot to the north encompasses an area well beyond Highway 403. Some see the community extending all the way to the Escarpment.⁵ These differing perceptions of community may be due in part to the designation, "Aldershot", which some residents equate with West Burlington; a contributing factor has been ward changes which, over the years, have expanded the old Aldershot community to encompass the Francis Road, Q.E.W and Indian Point areas.

The 1981 Census and the City of Burlington's assessment data provide a statistical picture of Aldershot, contrasted with Burlington as a whole.⁶ Aldershot's 1985 population was 15,636 (14,462 below Highway 403 and 1,174 above it), 14% of the city total of 115,593. Proportionately, Aldershot has more older residents than Burlington as a whole.⁷ Aldershot residents have somewhat higher levels of formal education than Burlington residents generally⁸ and they enjoy slightly higher incomes.⁹ In terms of housing, Aldershot is much like the rest of Burlington -- predominantly low-density and owner-occupied -- although the Aldershot community does contain a fair amount of higher-density housing.¹⁰ Aldershot housing is somewhat older than in the rest of the city; half of Aldershot's units were built before 1960, compared with only 30% for all of Burlington.¹¹

3.3 Forestvale

Forestvale, part of the Tyandaga community, developed much more recently than Aldershot. Forestvale was built in the mid-1970s (the rest of Tyandaga was developed in the early 1960s). It possesses a distinctive physical identity and, despite a high turnover, appears to be a closely knit community. Compared with Aldershot, however, Forestvale displays lower levels of community identity, interaction and activities.¹² In part this reflects the far fewer community facilities in Forestvale, e.g., its children are bussed to schools in Aldershot.

The available data allow only an approximate demographic picture to be provided for Forestvale.¹³ Its population is estimated at nearly 900.¹⁴ Compared with Aldershot, Forestvale has more younger and fewer older people,¹⁵ not as individuals with either considerable or little formal education,¹⁶ higher family

incomes,¹⁷ and newer homes (most are only about ten years old).¹⁸

Residents' impressions of the two communities reveal similarities and differences.¹⁹ Aldershot is described as a great place to live, offering much ambience and amenity, a pleasant living environment and a highly accessible location. Forestvale is similarly portrayed, though with more reference to individual property. That suggests a significant point of contrast between the two communities. Aldershot is described as having much "community spirit" whereas this is said to be absent in Forestvale.

3.3 A Brief History of Garbage Disposal²⁰

The Aldershot area has had a long encounter with waste and its disposal. Garbage was deposited at the Bayview dump (an accurate term to describe it, apparently), a 38-acre property near the north end of King Road, from about the mid-1940s until the dump was abandoned in 1972.²¹ Until the mid-1970s Bayview apparently took garbage, at no charge, from all over; no one knows what was dumped there. A Ministry of the Environment official is reported to have stated recently, "All wastes produced by local industries could have wound up in that dump; of all the municipal sites in the area this has the highest priority".²² Long-term residents also talk about other dumps in the vicinity, for example, one used on Kerns Road (now the site of the Forestvale plaza) before 1950, and another at the West end of Ward 1.

Shortly after the Bayview dump was closed, Burlington began operating a landfill only a half mile away. The Regional Municipality of Halton assumed jurisdiction over this facility in

Region took over

1974 at which time it also inherited a waste management study that included a search for a new regional landfill.

As of 1978 the Burlington landfill was described as follows: "Limited land area and leaking problems with the existing site limit the life".²³ Its capacity was expected to be reached by September of that year.

A year earlier, Regional Council, after examining 11 sites in Halton, approved a regional landfill at a site in Milton (Brittania Road and Tremaine Road). A long and costly legal battle ensued as the Town of Milton and residents opposed the proposal strenuously. Before a resolution could be reached, the Minister of the Environment in 1981 ordered Halton to proceed with landfill site selection under The Environmental Assessment Act, which requires full consideration of alternatives. The search for a regional landfill began anew and in 1982 the Region retained Walker Wright Young for this purpose.

Aldershot and Forestvale residents are concerned about equity, i.e., fair sharing, among communities and residents of the region, of the burden of its waste disposal. The distribution of waste management facilities among the area municipalities, especially when origin and generation of waste is taken into account, presents a complex and difficult task, with the results open to varying interpretations. A starting point can be taken at 1974 when the Regional Municipality came into being. At that time there were operating landfills at Acton, Esquesing Township, Nassagewega Township, Georgetown, Oakville and Burlington.

1974. The first three of these facilities, judged to be below MoE standards, were closed in 1974. All solid waste from

Halton Hills and Milton then went to the Georgetown site; Oakville and Burlington took care of their own waste.

1979. The Georgetown landfill was closed. Solid waste from Halton Hills and Milton was re-routed to Oakville. (However, some private haulers from Milton started using the Burlington landfill.)

1980. All of Milton's waste was directed to the Burlington landfill in order to extend the life of the Oakville facility. The Region applied for expansion of the Burlington landfill.

1982. The Oakville site, which had been operating since the early 1960s, was closed; it had accepted waste region-wide for the past eight years. (All of the Region's solid waste now went to the Burlington landfill.)

1982. Regional data show each area municipality to be generating the following proportion of the total waste stream: Burlington 41%; Oakville 42%; Halton Hills 10%; Milton 7%. Much of the waste (43%) is municipally collected, the majority of that coming from residential development; rural residential accounts for 8%. Private haulers bring in the remaining 57% from large industries, industrial and commercial malls, institutional users and apartment towers.²⁴

1984. The Region, bogged down in its search for a new landfill, applied for a second expansion of the Burlington landfill. Burlington City Council approved a leachate collection system for the Bayview dumpsite. The Region endorsed an interim plan providing for export of waste to Occidental Corporation's energy-from-waste plant in Niagara Falls, New York.

1988. The Burlington landfill is scheduled to close.

This historical overview is a useful background for considering the concerns of residents of the two communities. It is clear that they, and Aldershot in particular, have a longer continuing experience with waste disposal than any other part of Halton, and not only with their own waste and that of the rest of Burlington but also with waste from all over the region.

3.4 Resident Concerns

This subsection outlines residents' concerns about and perspectives on a proposed landfill at Site F. Much of this is based on "ordinary knowledge" rather than on professional scientific knowledge.²⁵ Ordinary knowledge is drawn from experience, common sense, personal analysis and reflection, intuition and accumulated wisdom. That is not to say that members of the community do not possess some of the other kind of knowledge as well; clearly they do, as their briefs and presentations have often demonstrated. But the uniqueness of their position lies in the everyday knowledge they have of their community and their sense of how it might be affected by a landfill at Site F. Ordinary knowledge is important because it renders complete the knowledge base that decision makers rely on when they are required to make a final determination on a proposal such as this. For it is then their ordinary knowledge, more so than their expertise, that is most likely to influence their decisions.²⁶ That knowledge deserves to be informed by the ordinary knowledge of people who they represent.

Numerous submissions and complaints over the years bear witness to the concerns that residents of the two communities have about

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garbage disposal in their midst.²⁷ Aldershot residents have been especially vocal; that community correctly sees itself to be most affected by the proposed landfill. People living in Forestvale have been less outspoken and appear not as concerned. Because they do not live "downstream" from existing or proposed landfills, they are not threatened by leachate migrating off-site. Also, a large treed area separates their community from the landfill areas. If that woodlot were to be removed -- and it could well be since the land is designated Residential Low Density in the City's Official Plan, is zoned Development and is owned by National Sewer Pipe -- it is quite likely that Forestvale residents would show much more concern. Development of these lands would also mean that another 500-600 people, not taken into account in the studies so far, would be living in close proximity to a landfill.²⁸

The West Burlington Citizens Group's 1986 brief to the Minister of the Environment summarized the concerns of its members regarding further landfilling in their community, the Region's proposal and the process by which it had been reached.²⁹ In general, they claimed that: the Region's Environmental Assessment did not meet the requirements of The Environmental Assessment Act; the Region's site selection process was fundamentally flawed; the candidate sites were not evaluated equally; site selection was not based on the full range of relevant data, especially regarding hydrogeology, social impacts and visual impact; Site F is too small and otherwise inappropriate for the landfill that is required; the Region's analysis ignored simple justice and equity considerations; and public participation did not take sufficient account of residents' concerns.

The interviews conducted with key informants from Aldershot and Forestvale corroborate and amplify the foregoing concerns.³⁰ The

Aldershot community is particularly apprehensive because it lies in the path of leachate migration. Stream and groundwater pollution, and associated risk to health, are prime concerns but there are others as well, in both communities: noise, dust and odour affecting those living near the facility; its unsightliness and the litter it would create; increased truck traffic accompanied by reduced safety and convenience, especially on North Service Road; damage to community image; declining property values; and various forms of stress, with attendant ill effects on individual and community well-being. The interviews also revealed considerable dissatisfaction with the way the Region has handled residents' complaints and concerns in the past. As a result, few respondents are confident that the Region would or could adequately address their concerns should a new landfill be opened up at Site F. This finding is important because lack of trust in government affects people's perceptions of impacts and contributes to their severity.

The community perspective on the proposed landfill can be seen in another way, as three recurring and strongly expressed themes: the apparent irrationality of the landfill proposal; the exclusion of most of the community from social impact assessment; and the unfairness that this and the proposal itself represents.

1. A landfill at Site F makes no sense. Aldershot residents, as indicated in the interviews, cannot understand how the Region and its consultants could contemplate siting a potentially polluting facility on high ground above an established community and so near Lake Ontario. Residents, who already suffer the adverse effects of landfill-originating water pollution in streams that run through their community, fear further leachate migration. They look at the considerable and costly efforts of governments to clean up Lake Ontario (e.g., the Remedial Action Plan being

prepared for Hamilton Harbour, designated one of the Great Lakes' 42 "toxic hot spots") and ask themselves how a site so close to the lake and on fractured shale could even be considered for solid waste disposal. Residents do not accept as realistic the 5% leachate escape rate projected by the Region's consultants, and they are not at all convinced that sound engineering and landfill operation would prevent the leakage of leachate from the site. Despite such assurances in the past, landfills now represent one of North America's most urgent pollution problems. Nor do residents believe that no toxic wastes would find their way into the new landfill; newspapers routinely report irregularities in landfill operations³¹ and no one can say for sure what gets packed away into garbage bags. Residents question why engineering is being counted on at Site F as the sole defence against groundwater pollution. Surely, they argue, either Nature (proper subsurface conditions, away from a watercourse, etc.) should be the primary defence with engineering only as backup; or, if technology is to be the front line of defence, then Nature as backup should be assured (which it isn't at Site F) since technological systems inevitably fail in the long run.

The foregoing application of ordinary knowledge cannot be dismissed as ill-informed, fearful and emotional expressions of vested interest. On the contrary; ordinary knowledge comes across as prudence and wisdom. Residents are naturally quite concerned and wish to protect their environment; no reasonable person would do otherwise. As intelligent people they are reflecting on their extensive experience with living next to garbage dumps and landfill -- experience that tells them they have much cause for concern. They learn from the media that landfills elsewhere continue to create problems for those who live nearby. They are aware that no one can guarantee that nothing will go wrong or that a facility will always be safe. And they suspect (for

example, from the experience of the Burlington Landfill Advisory Committee, observing the Region's infractions under MoE guidelines) that once the landfill is licensed and operating, safety and environmental protection may not receive the priority now promised.³²

2. The community should not have been excluded from social impact assessment. Arguments concerning the inappropriateness of excluding Aldershot and Forestvale from full social impact assessment have been voiced by the WBCG and others in the past. They find it impossible to grasp how the study area boundaries, which were intended to capture social impacts of the proposed landfill, could have been established without knowing what these social impacts might be. And they consider incomprehensible the unwillingness of the Region's consultants to adjust these boundaries to include a sizable portion of the community after the SIA was underway and residents had made known that they would experience social impacts.³³ Schiff defended her position simply by saying, "It was my judgement that no social impacts would occur beyond the study area". Residents understandably wonder how she could know this without doing any studies.

In the case of Aldershot, Schiff maintained that the CNR tracks, Highway 403 and the land between them formed a "psychological barrier" that effectively would buffer the community from the adverse effects of the landfill. Key informants interviewed (Appendix B) strongly disagreed with that assertion. They noted that:

- a. historically, the area above the CNR tracks has been part of the Aldershot community and many people still regard it as such, community facilities on both sides of the "barrier" are shared by members of the community (pupils in Aldershot schools live beyond the "barrier", residents

regularly cross it to attend churches and use other facilities, friendship ties extend across the "barrier", etc.), and therefore what happens above the "barrier" is of direct concern to the whole community;

- b. the so-called barrier is not a buffer at all since effects of the existing landfill frequently penetrate it (streams in Aldershot are polluted by leachate, the landfill can be seen readily from parts of Aldershot, noise reaches the community and so does dust); and
- c. people in the community know the landfill is there, irrespective of what is between it and themselves.

In the minds of residents, therefore, the psychological buffer is non-existent. They do not feel protected against the landfill's impacts. Since they experience these impacts now and expect to experience them further if another landfill locates at Site F, they believe they should have been part of the study area.

3. The proposal is quite unfair. Judging from the interviews with key informants, many people in the Aldershot and Forestvale communities strongly believe that it is not fair to burden them with another landfill. "We've had to live with garbage dumps for many years, now it's someone else's turn", is a common refrain. A sizable proportion took a balanced view, however. They felt the community had been treated fairly with respect to waste disposal in the past -- up to a point. There are differences of opinion on the point at which equity became inequity:

1972-74. That was when the old dump closed but another landfill opened. The position here is that it was unfair to expand the facility then and to keep expanding it thereafter.

1980. This was when the Environmental Assessment Board held a hearing into the Region's interim application to expand landfilling operations at the existing facility, beside Site F. At that time residents understood the Region to have made a commitment -- that it was seeking only "a small expansion" and none beyond that.³⁴ It turned out that "small" was a matter of interpretation and that what came across as a "commitment" was only an "intention". These semantic distinctions were experienced as deception and betrayal of trust.

1984. This was when, despite earlier assurances, the Region made a second application to expand the Burlington landfill. The Minister of the Environment allowed the hearing to proceed under The Environmental Protection Act (over the objection of residents who had forced the hearing in the first place and wanted it under The Environmental Assessment Act) on condition that landfilling at the Burlington site was to cease when sufficient capacity became available at another site in the Region.³⁵ Again, residents took this as a commitment to end landfill operations in their community (not merely at the existing landfill) in the very near future. The Region, however, saw Site F not as an expansion of landfilling in their community but as a "new" site. Residents perceived this as further verbal hair-splitting, as devious and as quite unjust.³⁶

If the interviews are any indication, a fair number of residents concur in the belief that every community must share responsibility for disposing of waste that everyone generates. But they believe that their community has already done more than its share and that it will continue to do so even if the new landfill is located elsewhere, since the effects of past and existing landfills (especially ground and surface water

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pollution) will be experienced for some time to come. To back up this point, one respondent drew attention to a Burlington newspaper article last year which referred to the old Bayview dump/landfill as having a massive leachate problem. The article quoted an MoE official as saying:³⁷

By far the most significant problem is the contamination of Indian Creek, so the first priority was to address that. We don't know the extent of any sub-surface contamination. We do, however, know what contaminants have been found in the creek. They included: elevated levels of coliform and fecal coliform as well as trace readings of heavy metals, pesticides and PCBs. The fact that heavy metals have been found in the creek that far from the dump is particularly significant because they migrate through the ground extremely slowly...We're certainly talking at least a degree of health risk.

No one among the respondents felt it would be fair to locate a further landfill in the community. Nor did anyone feel it to be fair that people in their community be asked to sacrifice their environmental quality, their quality of life, their peace of mind, and perhaps their health and that of their children, while the community-at-large takes minimal responsibility for the waste it produces. In this regard, some respondents expressed the view that it is blatantly unfair to impose a landfill on any community until significant recycling and similar programs are in effect that reduce to a minimum the amount of waste requiring disposal (Aldershot residents note that in the early 1970s their community, without any government involvement, initiated a recycling program that began in a resident's garage, later moved to a City building and continued until Burlington started its own recycling program). Promised or proposed programs are not sufficient since the existence of a new landfill takes the pressure off the four Rs. So far, such programs have had only a marginal effect on the waste problem in Halton; e.g., as of 1983, the Region was recovering only 1.7% of its total waste through source separation (it proposes to increase this but only to

5%).³⁸ The fact that waste is being called a crisis in Halton while little effort is going toward waste reduction suggests that the real crisis is the finding of a landfill site. That adds credence to the residents' suspicions.

Some respondents also believe that the siting process has been unfair. As evidence, they cite the exclusion of the community from full social impact assessment. More fundamentally, they are convinced that the Region had its collective mind made up on Site F long before the process was concluded. That the Region's consultants heard resident concerns but did not listen to what people were saying appears to be a widespread feeling in the community.

Concerns of residents are significant part of social impact assessment. The main reason for doing it in the first place is to enable decision-makers to consider the full range of impacts that a proposal has on the people, social institutions and communities it would affect. The proponent's view of these impacts can be expected to give greater emphasis to one side of the picture. The other side is comprised of the views of those affected; it includes their perceptions of the changes that the proposed project would bring and the meaning that these changes would have for them. These people's views, presented by them directly but also subjected to full and rigorous assessment by the proponent and before the Board, are necessary to make an SIA complete and to provide decision-makers with a total picture of the proposed undertaking.

As the next section demonstrates, the concerns of residents of Aldershot and Forestvale were not fully and adequately taken into account in the Region's SIA. Consequently, the Board now has before it an incomplete package of information on the social

impacts of a landfill at Site F.

4. CRITICAL EVALUATION OF THE REGION'S SIA

This section presents a critical evaluation of the Region's SIA. It begins by contrasting two competing approaches to social impact assessment -- a technical approach stressing objectivity, scientific method and the measurement of impacts by an expert assessor, and an interactive approach emphasizing the meaning of social impacts to those who will experience them. It is shown that the technical approach, adopted by the Region, led to an inappropriate design of the SIA study for Site F, especially its selection of study boundaries, along with insufficient recognition of impacts on community and the concerns of residents. Prominent among these concerns is their sense that the proposal to site another landfill in their community contravenes ordinary justice and principles of equity.

These deficiencies in the Region's SIA resulted, inevitably, in a major gap in the information received by the Board. Subsection 4.4 responds, within the limitations imposed on this study, by providing an outline of the social impacts that seem likely to occur if a landfill is located at Site F.

4.1 Competing Approaches to Social Impact Assessment

The goal of social impact assessment, according to a recent text in the field, is "to estimate the effects of a proposed action on the social organization of the community and on the well-being of people over the short- and long-term".¹ To do this, social impact assessors typically employ a methodological framework that includes scoping, profiling, prediction, evaluation and recommendation. Application of this more-or-less standard method to a given situation, however, can yield quite different results, depending on how the assessor looks at and approaches social impact assessment.

Two broad conceptual approaches have emerged in the literature and practice of social impact assessment. Appearing under various labels, these opposing orientations, each with its distinctive values and methodology, can be summarized as follows:²

SIA as a technical process. This approach "stresses the value of the scientific method as an objective means for providing information to decision-makers".³ Emphasis is placed on rigorous analysis, resulting in clear and "unbiased" statements of a proposal's social impact. The technical approach assumes that any social situation has an underlying structural dynamic that forms the basis of social life and is amenable to rational, empirical analysis.

SIA as an interactive process. This approach focuses on affected community "interests", which are seen to be at the heart of decisions about the environment, and on the social reality experienced by members of the community themselves. It emphasizes the dynamic nature of impacts, determined in part by people's perceptions of whether the interpreted changes will be in their best interest. Rigorous scientific analysis,

especially quantitative, takes second place to qualitative research, communication and organizational skills, and "the ability to make known the attitudes, beliefs and values of those who might be affected by proposed projects in such a way that all interests are openly debated by the involved decision-makers".⁴

The technical approach dominates impact assessment practice, along with such other fields as engineering, urban planning, economics and the law. Philosophically rooted in technical rationality, the technical approach reduces complex wholes (such as community) to a few variables abstracted from their contexts. It compartmentalizes problems for purposes of study, assuming that they can be re-combined to produce a sufficient understanding of the original larger problem, and it searches for the "best" or optimal solution. Technical rationality is founded on a firm belief in facts as the basis for knowledge, arrived at through scientific investigation. The technical approach relies heavily on data and models as modes of inquiry, and it favours quantified information, believed to be more "objective", closer to "reality" and necessary for rational social discourse. The prominence given to objectivity is based on the belief that fact ("pure information") can be separated from value (subjectivity), that the analyst can be an emotionally neutral observer outside the system being studied, and that personal bias can be consciously controlled. Findings and conclusions are presented as "the truth", the implication being that if it is accepted the right decision will follow.⁵ Opposing views that are not based on technical rationality -- such as statements by laypersons in the community -- are rejected as ill-informed, emotional and biased.

Technical rationality is unquestionably a useful way to see the world, and its application, especially in science, has brought society many benefits. But the applicability of technical

rationality has limits. As one critic puts it, "Increasingly we have become aware of the importance to actual practice of phenomena -- complexity, uncertainty, instability, uniqueness and value conflict -- which do not fit the model of technical rationality".⁶ The last phenomenon is especially relevant here. In the social sciences it is well understood that technical/analytic problem-solving alone is insufficient where conflicts are about values.⁷ What is demanded then is an approach that enables differing values to be aired through processes of social interaction, not an approach that substitutes analysis for interaction.

There is a further fundamental shortcoming of relying exclusively on the technical approach to social impact assessment: it fails to capture the reality of "community" as residents experience it. A technical approach applies better to the natural world, which has no "intrinsic meaning structure"; data collected and functions described by a hydrogeologist, for example, do not mean anything to the soil, rocks and water in the natural system. The social world, however, does have inherent meaning -- created, interpreted and experienced by people in that everyday world. The social scientist, unlike the physical scientist, cannot establish from the outside which events and facts are relevant to people who are part of that social system.⁸ Rather than imposing a structure on a social/community situation, the impact assessor must attempt to understand the community as it is experienced by its residents. If this is not done, the assessor may fall into the trap of substituting, for the residents' view of reality, the assessor's own (subjective) opinion of what is relevant.

The interactive approach to social impact assessment takes as its starting point an analysis of a community from the perspective of its residents.⁹ Central to this analysis are the meaning and value that the community has for its members. The analysis is

based on a recognition that social impacts are objective and subjective; both aspects are "real". In other words, social impacts are an outcome not only of the landfill itself but also of people's perceptions, attitudes and beliefs which in turn shape the interpretations they place on the landfill and its effects. If people feel that the landfill will affect them in some adverse way, and if they act on that perception (by moving out of the community, withdrawing from its activities, becoming stressed to the detriment of their health, feeling a loss in their quality of life, etc.), then social impacts have occurred.¹⁰ Qualitative research methods, such as interviewing and participant observation, therefore, become more important than (but do not supplant) quantitative measures, and public consultation takes precedence over data manipulation. Impacts are defined not just by the assessor but also by affected individuals and groups in the community, accessing their "ordinary knowledge". Prediction of impacts follows from an analysis of community interests and the concerns of community members.

SIA as technical process and SIA as interactive process should and can be complementary. Both approaches are needed if decisions are to be fully informed. The "objective" environment of facts and figures, and subjective or perceptual responses to that environment and to the proposal, are equally important information inputs.¹¹ Typically, however, social impact assessment dominated by the technical approach makes only token adaptations in the direction of the interactive approach -- by adding some public participation, for example, but limiting it to the agenda of the experts who retain the right to listen or not. So it was in Halton's SIA which imposed an analytic structure onto the community setting, selected a few variables to represent "community" in the study area, opted for quantified data-gathering and evaluation methods, and presented the outcome as the social reality. This approach excluded much of the

affected communities at Site F, despite strongly voiced local concerns, and largely ignored the perceptions and experience of people living in these communities. It is small wonder that many of them responded with disbelief and outrage to the social impact assessment. Based on a "way of seeing" foreign to them, it presented a quite incomplete and highly misleading picture of the situation as they live it and know it to be.

A more appropriate impact assessment strategy would have used both approaches, in a manner that examined social impacts systematically and equally from differing points of view. Social impact assessment conducted in this way would begin with the interactive approach in order to gain first-hand understanding of how people perceive their community, view the proposed facility, expect it to produce impacts, and interpret the social changes that might result. The technical approach would then be undertaken to further define and refine these perceptions and to introduce the reality as perceived by outside experts. The two approaches would each inform and stimulate the other through information exchange, debate and revision of documents; e.g., technical analysis can provide data that community residents do not ordinarily have (on leachate migration, for instance) while the community's analysis offers information (e.g., on values, central to determining the importance of impacts) that is not accessible to experts. This back-and-forth interaction would yield a more complete range of information for decision-makers. Such information is essential if a holistic perspective is to be taken to the assessment of social impacts, if these decisions are to be sound and defensible, and if the Region is to avoid an aftermath of bitterness, disillusionment and alienation that can lead to serious long-term social impacts.

4.2 Deficiencies in the Region's Approach

Halton chose to take a technical approach to social impact assessment. This resulted in a number of fundamental deficiencies in the resulting SIA for Site F.

1. The study design was inappropriate. The study's "frame of reference" and study area boundaries (addressed further below) were not tailored to the unique social context of Site F, the only site among the six candidates that is located within an urban community. This shortcoming effectively eliminated from consideration two identifiable communities potentially affected by the landfill, along with some important dimensions of social impact assessment such as community character, cohesion, identity and lifestyle. Moreover, because it used a technical approach almost exclusively, and because it relied heavily on quantification, the Region's study applied only a narrow range of impact assessment methods to a limited set of impacts (those that could be measured). This caused "emotional impact" to be downgraded and social equity to be relegated to the catch-all category of "politics". Public participation was used primarily to support technical analysis rather than to probe public concerns, discover community perceptions of impact, and test the consultants' perceptions of impact significance. These deficiencies are reflected in the study itself -- mainly a quantified inventory of a few impacts, confined principally to the site itself, with little regard for the impacts on community and on the many people living nearby.

2. The study was not comprehensive. This follows directly from the previous point. The Region's SIA for Site F did not encompass a sufficiently large study area; it thereby overlooked the impacts on most of the community residents; it ignored certain expressed social concerns (such as those of workers at Tridon,

CUMIS and N. Pollard' & Son); and it omitted mitigation of and compensation for unavoidable impacts. The method of defining the affected social system was insufficient and arbitrary (it was done prior to determination of the social impacts and was only marginally adjusted during this assessment); consequently, key social factors, representing attributes of the affected communities that residents consider quite important, were left out of the study. The social profiling step neglected key concerns of residents and failed to convey a real sense of the current social conditions in the urban community of which Site F is a part. In addition, the study did not work through the levels of social impact and interrelationships among levels (e.g., nuisance effects create disruption, disruption detracts from enjoyment of property and desirability of the community as a place to live, this in turn can generate stress and possible a withdrawal from community affairs, and so on). Understanding, analyzing and communicating the dynamics of this impact process is a key part of the SIA task.

3. The study was internally inconsistent. The consultants did not apply analytic assumptions and procedures uniformly. The most serious inconsistency involved the setting of study area boundaries. Relationship of candidate study area to site plan area was not the same across the six sites (only at Site F were the two identical). It is readily apparent from Schiff's report (Maps 1-3) that the study areas are dissimilar in size (for example, if the study area for Site F was the size of the study area for either Site A or Site B, it would take in an area down to the Lake and include thousands more people). Furthermore, adjustments to study area boundaries at each site appear not to have followed the same decision rules. For example, the consultants' concern about not allowing the boundary to separate neighbours at Site D did not apply to Site F when the boundary was extended (for purposes of assessing emotional impact) to

encompass an additional couple of hundred houses south of the CN tracks at Site F. Similarly, when assessing visual impact the consultants extended the study boundary to include the Milton District Hospital, about 4 km from Site D, but gave no such consideration to Joseph Brant Hospital which is about the same distance from Site F (Schiff argued that the "psychological barrier" prevented social impacts from being experienced at the Brant hospital even though the landfill could be seen from there).¹² These inconsistencies in study method meant that the social impacts at the candidate sites were not assessed equally, to the disadvantage of the urban-oriented Site F.

Another inconsistency was between what the study said it would do and what it actually did. In describing the social impact assessment method in advance of conducting the SIA, the consultants stated, "Each of the six social impact factors will carry equal weight in the evaluation process."¹³ Later, however, after the SIA had been completed and a comparative analysis was done of Sites D and F, the consultants changed their minds and gave population impacts more weight than impacts on community facilities, while social equity carried no weight at all.¹⁴ In another example, the consultants assured concerned residents:¹⁵

Impacts will not be assigned ratings (e.g., severe, high, medium and low) since there are no absolute criteria which can be used for this purpose. Furthermore, even where there are a small number of people in a given category, each of these individuals would feel the impact to be severe.

Yet Schiff did rate the social impacts. She stated, "Because there are no absolute standards against which to measure social impacts, it is necessary to develop a system for determining what constitute low, moderate and high impacts".¹⁶

4. The study of Site F neglected to take sufficient account of "community" and of resident concerns. The study focused on

individual residents (and even then on only a subset of those affected) but not on the community of which they are a part. As Branch notes, "An appropriate understanding of social effects cannot be attained without considering how this higher order unit of social organization, the community, will be affected".¹⁷ This basic premise of social impact assessment recognizes that while people experience social impacts directly as individuals or families/households, they can also be subjected to social impacts indirectly if their community is adversely affected. Changes in the composition of the community, its organization and its activities, the resources it offers and the services it provides, and thereby the benefits it enables its members to enjoy (such as the support people lend to each other in times of hardship), will be felt by residents of the community. If these changes result from or are seen to result from the landfill, it will affect people's responses to it and the impacts they experience from it. Halton's SIA, by arbitrarily dismissing the Aldershot community as "psychologically buffered" from the landfill and therefore unaffected by it, neatly avoided the challenge of assessing social impacts at the community level. This resulted in fundamental and important information being missing for Site F.

The notion of a "psychological barrier" separating their community from the landfill has been firmly rejected by Aldershot residents, for good reason. Schiff cited no references to support her position that such a barrier, under similar circumstances elsewhere, has been determined to exist; nor did she provide evidence of its existence here. "Psychological" suggests that such a barrier is real in someone's mind. Whose mind? Community residents could reasonably expect that their minds ought to count more than that of the Region's SIA consultant, who has no personal experience with the community. It is they, the residents, who have lived in the community and who have co-existed, some of them for many years, with a landfill.

Furthermore, they are the ones who will have to bear the brunt of any social and other impacts that a new landfill may create. "Psychological approaches to the community take into account peoples' feelings, needs, perceptions, motives and personality characteristics in various environmental contexts."¹⁸ Having adopted a psychological approach, the Region ought to have followed it up by (a) opening the SIA process to all those who perceived they were affected by the landfill, not just the ones that the Region's consultants thought were affected, and (b) recognizing the validity of these people's feelings, needs, perceptions, motives and characteristics. Instead, the Region's consultants used a psychological approach as a means of preventing psychological perspectives from being considered.

By applying the "psychological barrier" concept and by assuming that social impacts would not be experienced beyond the 0.8 km limit, the Region's consultants were able to dismiss the concerns of most of the residents of the two communities at Site F. These concerns, which ranged from water pollution to equity, did not find expression in either the SIA or the summary ranking that showed Site F as the least impacted.

The Region's SIA exhibited a further, curious inconsistency in this regard. While Schiff rejected resident perceptions as valid indicators of social impact (an example is provided in her quoted statement three pages hence), she had no difficulty accepting her own perception that a "psychological barrier" existed. Obviously the question was not whether perceptions were valid but rather whose perceptions were most valid. In a technical approach the answer is clear: the expert's.

5. The study failed to provide an integrated picture of the landfill's potential social impacts. In the impact assessment literature, "integrated" refers not just to assessing the full

range of possible consequences of a proposed undertaking (which Halton's SIA did not do) but also to accomplishing this in a manner that is holistic -- that sees and presents impacts as inseparable and immeasurable apart from the whole system from which they are derived.¹⁹ While social impacts are necessarily divided into categories for purposes of analysis, there must also be synthesis if these impacts are to be fully and meaningfully assessed in their contexts. The assessor's final task, therefore, is to interrelate the various social impacts so that a total, coherent representation results, one that reflects the unified nature of community and the residents' experience of it.

This the Halton SIA failed to accomplish. No systems approach was set out to guide the analysis and synthesis. No discussion was provided to show how impacts relate causally: for example, how water and air pollution adversely affect (among other things) human health, both physical and mental; or how inequity can produce stress directly as well as indirectly (e.g., through economic effects). The Halton SIA was subdivided -- Schiff addressed population impact, equity and community facilities while air pollution, noise, visual effects, litter and land use were left to other consultants -- but it was never reassembled to present a whole picture, more than a sum of its parts, to reflect the interrelated and cumulative nature of social impacts. Schiff claims to have taken the work of other consultants into account but it is not clear how this was done or to what extent they reciprocated. Nor is it apparent that these other consultants (whose expertise lay outside the SIA field) approached their studies as "social impact assessment". The studies of air pollution, noise, litter and visual impact did not assess social impacts as such; they merely reported on the presence or absence of air pollution (measured against standards), noise (calculated, then set against standards) and visual effects (what could or could not be seen). Yet Schiff did not assess these as social

impacts either. Her testimony indicated that she deferred to these other consultants rather than letting their work provide inputs to a holistic analysis under her direction. Two examples, from the visual impact assessment report, underscore this point:

The report simply identified from where the landfill could be seen. Merely seeing something, however, is not a social impact. It is the meaning that is attached to what is seen, the feelings that it arouses, and the behaviours that are generated by this perceived unsightliness, that constitute real social impact. But these were not assessed by either the visual impact consultants or by Schiff.

Although visual impact is a form of disruption, the visual impact consultants did not assess disruption. Meanwhile, Schiff, within whose responsibility the assessment of disruption lay, did not address the visual aspects because they were another consultant's job. This contradiction extended to the study area boundaries. Noise and visual impact assessment were said to be part of the basis for assessing disruption yet the boundaries of the study area within which Schiff assessed disruption did not take noise and visual effects into account.

This illustrates a basic shortcoming of a compartmentalized, reductionist approach. A study that separates out impacts but then does not get around to re-uniting them again -- i.e., a study that fails to take an integrated approach -- runs the risk of certain key impacts "falling through the cracks". In Halton's case, this lack of integration was compounded by use of the technical approach where, if experts say there is no impact then there is no impact. In a technical approach, no serious consideration is given to citizen concerns once it has been "objectively" established that an emission or effect falls below

some specified standard or is otherwise judged to be of no concern. For example, in testimony Schiff stated:²⁰

On the basis of not the perceived impacts which I have just been talking about, but rather on the basis of the actual impacts as predicted by the technical consultants, I rated these sites. (emphasis added)

In other words, "real" is determined by what is predicted rather than by what is actually experienced. The shortcoming of this approach, and the reason why it is incomprehensible to residents, is further illustrated with reference to noise. Sound can be measured objectively using instrumentation and established scales. Noise -- i.e., unwanted sound -- cannot be because noise has a dimension of meaning (noise to one person may be sweet music to another).²¹ Consequently, to residents for whom a landfill generates adverse emotional reactions -- fear of its health-related effects, anger at having been mistreated by government authorities, bitterness over broken promises, depression about lost battles, etc. -- the sound of a garbage truck or bulldozer at the landfill site, even at levels below what is normally considered noisy, can trigger intense feelings and stress.²² Expert technical measurements (rather, in this case, calculations of potential sound levels based on models) cannot take such factors into account, and therefore cannot convey how real they are to the people who experience them. This demonstrates that social impact assessment must involve more than technical analysis by experts if it is to be complete and credible.

Halton's SIA neglected to adopt the necessary integrative approach, therefore leaving it to the Board to do. The SIA omitted key impacts, it did not interrelate the impact categories (there were gaps where there should have been overlaps), and it provided no single document that "brought it all together" to

show social impacts in a total, holistic sense. The study did not do justice to social impact assessment, which is inherently integrative, and in so doing it trivialized social impacts. More fundamentally, it failed totally to grasp the essence of social impacts as people experience them.

The foregoing five deficiencies amount to a seriously flawed study, one that presents a far-from-complete picture of the social impacts of the landfill proposal on the people and communities affected at Site F.²³ To bring the shortcomings of the Region's SIA into sharper focus, it was compared with another SIA document, recently prepared for the Region of Peel as part of its search for a landfill site.²⁴

SIA approach. The Peel study specifically rejected the technical model in favour of a "political/community development model" because "the social impact assessment process has to be not only scientifically sound but, more importantly, socially responsive".²⁵ Peel's approach distinguished between "standard impacts" (economic, demographic, community services, fiscal, etc.) and "special impacts" (such as fear and other forms of psychological stress, equity concerns and ethical issues). The Peel report argues:²⁶

Special impacts are largely subjective in nature and result from the perceptions and attitudes residents have toward the proposed undertaking and its proponents. For example, if residents fear that the project will pollute the environment in ways that will affect their health and/or livelihood, they may experience increased stress and anxiety which, if prolonged, could result in illness or family breakdown. Or they may come to feel dissatisfied with their community and, if they feel strongly that the project is an unwanted intrusion or risk, they may move on. Such reactions, while subjective and perceptual, result in real consequences for the individuals involved, their families, and their community.

...Special impacts can't be "dealt with" through scientific analysis alone. Such impacts are not simply problems to be solved; they embrace issues to be resolved. For this reason, special impacts require a more interactive process of assessment, one which involves consulting with concerned and potentially affected interests to draw out the concerns and issues associated with the project and the differing attitudes and perceptions that underlie them. Often such concerns and issues revolve around disruption of lifestyle expectations and community goals, feelings of loss of control over the quality of one's environment, perceived inequities, fears and uncertainties regarding potential impacts, and lack of trust in proponents and regulators to mitigate impacts and manage risks effectively. Knowing what is at the root of public concern is essential to the development of possible measures that could alleviate potential impacts and make the facility more socially acceptable to the community which ultimately receives it. And it facilitates the development of issue resolution strategies that focus on "what matters" to those who are affected.

Boundaries. The Peel study made use of three kinds of boundaries: social analysis (which included impacts on individual residents, impacts on local services and facilities, and impacts on the community in each area); temporal (five time horizons were examined); and spatial. For the latter, not one but four study area boundaries were employed at each candidate site: a Primary Impact Study Area to encompass the landfill site as well as 500 m and 1000 m beyond it; a Secondary Study Area to include additional residents affected by water supply or truck traffic; a Community Study Area reflecting impacts on each affected community as a whole; and Sub-Community Study Areas which lay beyond the Community Study Area and which Community Liaison Groups felt might be affected by a landfill facility.²⁷

Evaluation factors. For the Peel study these included displacement of services and facilities, disruption of services and facilities, displacement of residents, disruption of residents, loss of community character, and loss of

community cohesion. As well, the SIA examined four sets of impact issues, namely, loss of community control, social impacts of the siting process itself, equity (assessed using a focus group technique), and impact compensation. Also addressed was impact management -- including compensation, mitigation and contingency and control measures.

Community involvement. The Peel SIA approach resulted in extensive community consultation being built into both the SIA process and the study design itself. The stated purposes were to facilitate expression of community interests that might be affected by a landfill, to draw out the meaning of changes that these interests anticipated from the landfill, to identify possible concerns and issues, and to develop impact prevention and management measures. Community consultation techniques included: meetings with local officials and potentially affected residents (using the Community Liaison Groups) at each stage of the study (development of the study design, review of the study workplan, feedback of survey results and screening/ranking of factors and indicators, and feedback on each impact evaluation phase); surveys and in-depth interviews with residents and local service and facility owners/operators in the candidate areas; and informal consultation throughout the social impact assessment.

This comparison further highlights the deficiencies of Halton's approach: inappropriate study design; failure to recognize special impacts, a restricted list of social factors and over-reliance on quantified data; a narrow concept of boundaries; establishment of spatial boundaries prior to social impact investigations and rigid adherence to these boundaries despite clear evidence (strongly expressed resident concerns) that social impacts of the landfill would be experienced beyond the

designated study area; and throughout, limited involvement of the affected communities.

4.3 The Equity Issue

A final and significant deficiency of the Region's SIA is its superficial treatment of the equity issue. Equity -- the fairness of siting a landfill at a particular location, and the fairness of the process for reaching that decision -- is difficult to address in social impact assessment. Equity has only recently been recognized (by MoE, for example) as a form of social impact. It is argued here that inequity can also contribute to and magnify other social impacts. It therefore deserves full consideration, something it did not receive in the Region's SIA.

Residents of the communities at Site F have made their views known about equity. They believe it would be quite unfair to burden their communities with further landfill operations, and they feel the siting process has treated them inequitably.

The residents' position on this matter is both understandable and credible. This was acknowledged by the Environmental Assessment Board in 1984 when it stated, in reference to residents in the communities affected by the Burlington landfill:²⁸

They argue, not unreasonably, that they have borne a disproportionate share of the Region's landfilling needs in the past, and therefore, future operations in the area should not be tolerated.

Similarly, the Ontario Municipal Board, in its 1979 report regarding the earlier proposal to site a landfill at Britannia Road and Tremaine Road in Milton, observed:²⁹

It should also be borne in mind that up until now all of the other three area municipalities have shared the responsibility in receiving the Region's waste. It may now be time for the Town of Milton to assume some of that responsibility.

The residents' position, that another landfill should not be located in their community, represents a great deal more than the classic Not-In-My Backyard stance based on narrow self-interest. Their position, that such a decision would be fundamentally inequitable and unjust, is well grounded in objective reality. As Section 3.3 demonstrated, the Aldershot community has borne the brunt of waste disposal impacts for a long time -- some older residents claim that garbage from elsewhere has been dumped in their community for as long as 80 years.³⁰ Even if there were no further landfilling in the community, it would continue to suffer these impacts for years to come.

The residents' position is also congruent with ordinary justice.³¹ Landfills do distribute the costs and benefits of waste disposal inequitably. No reasonable person would argue that, as a matter of policy, one area ought to bear a disproportionate share of the costs, not just for the next 20 years but for a total of four or five decades, or more. Yet that effectively will be Regional Council's position if it locates another landfill in this community.

Waste disposal presents decision-makers with a moral dilemma. They are being called upon to choose between two equally valid "social goods": the claims of absolute individual rights and the claims of the general welfare. The typical siting process sidesteps this quandary by assuming that "the public interest" takes precedence over individual rights, and that sound technical analysis can justify the imposition of a regional facility on a local community. Time and time again, it has been shown that there is potential for major political controversy in this

approach to facility siting. The public-at-large comes to realize that basic individual rights are being abrogated -- and that if this can happen once it can happen again, perhaps next time to them. Facility-siting proponents have attempted to deal with this by creating an "alternative political system" in the form of extensive public information, consultation, negotiation and compensation.³² Halton Region seems to have pursued this alternative only superficially. That left it with essentially one option, a "solution" that is not only seen as inequitable but ignores equity altogether by opting for a site that already has a long history of waste disposal. To the residents this naturally seems quite unfair.

Halton is not alone in its approach. Evidence from elsewhere in Ontario lends credence to the residents' suspicion that the Region may have been predisposed toward Site F from the start. Data obtained from the Ministry of the Environment indicate that the selection of a site next to an existing landfill, far from being something that in the name of equity would be a regrettable last choice, is actually preferred by the majority of municipalities across the province.³³ More specifically:

Of the 22 waste management planning exercises that have reached the stage of selecting landfill sites under The Environmental Assessment Act, 12 have included as one of the candidates a site that was an expansion of or adjacent to an existing landfill. This number probably would have been larger if it were not for the fact that in two of the remaining ten municipalities there was no room next to the present landfill and in three others the adjoining area was unsuitable; also, one of the municipalities exports its waste (i.e., it has no existing landfill). In other words, of the 14 municipalities who had the opportunity to make use of a site adjacent to an existing landfill, 11 (79%) actively pursued this option. Only

three of the fourteen did not do so. Only one municipality decided, as a matter of equity, to locate its landfill elsewhere.

Of the twelve municipalities who selected a candidate site next to an existing landfill, nine have gone on to designate, as their preferred site, one that was an expansion of or adjacent to an existing landfill. Again, this proportion might have been higher had two of the remaining three municipalities not discovered that an expansion or adjoining site was unrealistic.

In addition, eight of the municipalities conducting environmental impact assessments have expanded or are seeking to expand their existing landfill operations in order to buy time to find longer-term solutions.

With three-quarters of the municipalities engaged in waste management planning favouring what might be called "the proximity option" -- locating new landfills next to existing one -- it is apparent that there is a predisposition toward such sites. The reasons, seldom articulated officially, include these:³⁴

"The existing site has proved to be reasonably satisfactory and therefore we can expect another one beside it to be equally so. Besides, a landfill next to another landfill is a compatible land use."

"We already have a monitoring system in place at the existing landfill. This will save us having to install another."

"The environment at the existing landfill (e.g., groundwater) is already degraded.³⁵ Why spoil another part of the municipality?"

"The people who live beside the existing landfill and along the haul routes have gotten used to it."

"It's much easier to get government approval for an expansion than for a new area."³⁶

These arguments convey a disturbing impression: municipalities and their consultants, searching for new landfill sites, perceive that it will be easier to locate these facilities alongside existing ones than in other places. Facing urgent requirements to get a new landfill sited (often because they waited so long to begin planning or misjudged the amount of time it would take), they feel the "proximity option" is justified. Not surprisingly, residents who have lived with a landfill for many years are infuriated by these arguments, not just because they fail to acknowledge principles of equity but also because they are seriously flawed. For example, combining a monitoring system for an existing landfill with a monitoring system for a new facility makes it difficult if not impossible to determine where leachate migration is coming from; as a result, accountability suffers. Similarly, the position that degraded environments are fair game for further pollution has its priorities backwards; degraded environments deserve remedial action, not more degradation. In the same way, the notion that people have somehow become acclimatized to landfilling is certainly not borne out by the stiff opposition that such proposals encounter from the residents affected.

Arguments that invalidate the proximity option, however, do not appear to lessen its attractiveness for elected and appointed municipal officials and their consultants. For that reason, it

deserves a closer look. Two aspects of this "facility-siting bias" stand out, both of them relevant to Halton.

The first is the presumption, implied in the fourth claim above, that people who have experienced living next to a landfill operation will be less stressed by further landfiling than people who have not had this experience. Common sense suggests otherwise. Communities and their members who have felt the stress of life in close proximity to landfiling and its adverse effects are likely to be more rather than less vulnerable to the stressful effects of another landfill in their midst.³⁷ For one thing, their perceptions of the landfill and its effects will be conditioned by their mostly-negative experience with landfiling in the past (unlike residents of a community which has no previous experience with a landfill). In addition, it is well established, in both the professional and the popular literature, that the effects of stress can be cumulative.³⁸ In other words, the damaging stress that one experiences can add up and as it accumulates, the individual becomes increasingly prone to significant illness.³⁹ Finally, stress experienced by people can be exacerbated, the literature suggests, if they believe they have little control over a particularly stressful event -- a feeling that certainly would exist if the landfill were to be located at Site F despite the residents' strenuous opposition.⁴⁰

Stress is a complex issue. Its full assessment would require an in-depth study by highly qualified personnel -- something that was well beyond the work that went into this report. The literature in the field combined with common sense, however, provides an indication of what can be expected, not just because of the stress-inducing characteristics of the landfill but also because of the stress-sensitive characteristics of the receiving environment adjoining Site F.

In the interviews, respondents were asked, "If you were to find out tomorrow that a final decision had been made to locate a landfill at Site F, how would you feel?" The emotional responses, summarized below from Appendix C, offer a portent of serious problems of stress and its further consequences for the physical and mental well-being of residents of the communities affected by a landfill at Site F:



Fearful about health effects. Very disappointed. Frustrated. Disgusted. Angry. Outraged. Most unhappy. Sad. Terribly let down. Depressed. Betrayed. Wronged. Cheated. Stepped on. Victimized. Defeated. Disillusioned. Resigned". Apathetic; why bother? Sick. Devastated. Glad to be moving out.

Research on community stress suggests that feelings of helplessness, resignation and demoralization can lead to apathy as well as a decline in community involvement and mutual support, to the detriment of the entire community.⁴¹ Such an outcome seems more likely to occur for residents who, over the years, have been using the fight against further landfilling in their community as their way of coping with stress -- a way of gaining a measure of perceived control over this unwanted intrusion into their lives.⁴² People who are inclined toward this "problem-oriented coping style" (as opposed to those who adopt an "emotional coping style", i.e., accept the change and adjust their emotional responses accordingly) tend to have a strong sense of self-efficacy. They believe that their efforts will make a difference; this belief, the research suggests, can have a stress-buffering effect on health.⁴³ It can be expected, therefore, that if such individuals were compelled to accept that a landfill at Site F as inevitable and if they could see no further possibility for problem-oriented coping -- as the respondents' expressed feelings, above, imply -- the result could well be demoralization and increased stress, accompanied by a

greater likelihood of stress-related illnesses. While it cannot be established that this will happen, there is clearly a risk involved.

The second aspect of facility-siting bias has to do with unfairness, both substantive (whether it is fair to locate a landfill at Site F) and procedural (whether the siting process has been fair).⁴⁴ Procedurally it may be fair to consider a site adjoining an existing landfill if those affected, communities and residents, are included in the Study Area (something that was not done at Site F). Substantively, however, it is manifestly unfair to require that the environmental and social impacts of garbage disposal be borne for a long period of time by a single community or part thereof. The political principle of equality provides that people have a right to equal treatment, that is, to the same distribution of goods or opportunities as anyone else has or is given.⁴⁵ Obviously there cannot be a totally fair distribution of all the goods and bads of a society. But to deliberately place the burden of waste disposal on one segment of the community, generation after generation, is undeniably unfair. "Deliberately" is a key word because inequity that is or appears to be random is much more bearable than inequity that is or appears to be premeditated and intentional.

A major shortcoming of the Halton landfill siting process has been the lack of policy guidance on matters of equity. This is somewhat understandable. An equity-based approach to facility siting would be controversial whereas a technical approach appears to make the choice of sites logical, scientific, unbiased and inevitable. Furthermore, if it produces a politically undesirable recommendation, the elected representatives always have the option of overruling it. Officials can also hope that when a site is finally designated, the support of the many who benefit (relieved that the garbage problem will be taken care of,

and not in their backyard) will greatly outweigh and overshadow the complaints of the few who are directly impacted. But, in the end, equity decisions still have to be made; they cannot be disguised. And claims of unfair treatment will persist far beyond the final siting decision, as will broader public uneasiness about the precedent of trampling on individual rights. A further problem is that, by the time that a long and costly selection process has designated a site, it is quite difficult for elected decision-makers to reject it on equity grounds. They would face the counter-argument, "If you now reject the site because you feel that to locate a landfill there would be inequitable, why did you consider that site in the first place?" Equity is a matter of politics, but leaving equity considerations until the end of the siting process -- which Schiff's report and testimony indicate the Region's approach to be -- is tantamount to giving equity no consideration at all.

An alternative approach would have been to debate equity principles openly at the outset, and then to provide guidelines for the landfill site selection process. Such principles might have included the following:⁴⁶

- a. All elements of society share responsibility for the generation of waste and its disposal.
- b. Each region has a responsibility to take care of its own waste. A region should not export its waste problem to another region unless agreed reciprocal arrangements have been made.
- c. Adverse impacts should not be imposed on people and their environments, or on future generations, if these impacts can be avoided. Every effort should be made, therefore, to reduce the amount of waste that requires disposal.

- d. Waste creates social and environmental costs that are not borne equally. Within the region, all efforts must be made to distribute waste management facilities equitably, in terms of both space and time. Each area must bear its share of this responsibility.
- e. It is inevitable that some individuals, groups and communities will be called upon to assume a disproportionate amount of the impacts and risks associated with waste disposal. Every effort must be made to minimize adverse impacts, share unavoidable risks, mitigate impacts that remain, and compensate those who bear the burden of these impacts.
- f. Individuals and interest groups who are affected by a proposed facility can reasonably expect that an analytically sound and politically fair process will be followed in site selection.
- g. A community, or part of a community, that is selected for a landfill can expect, and should receive firm assurance, that it will not be selected for further waste management facilities in the future.
- h. After the facility is in place there should be ongoing opportunities for those directly affected to be kept informed about and involved in its operation. Their involvement should include a measure of control (e.g., shutdown of the facility when it exceeds operating guidelines) to ensure conformance, and the appearance of same, to requirements and promises of performance set out when the facility was assessed and approved.

- i. Imposing unwanted risks and impacts upon a few for the benefit of many is fundamentally an ethical problem. It therefore deserves open consideration at the beginning of a facility siting process. That process, and the planning that precedes it, must have sufficient lead time so that site selection will not occur in an atmosphere of crisis that may cause other equity principles (such as provision for full environmental assessment) to be set aside.

Had equity guidelines such as these been in place, it is highly unlikely that Site F would even have been considered.

 The Region's SIA assessed equity only marginally. The SIA:

- implied that people at or near all of the sites have or have had to deal with garbage disposal (this point was stretched quite thin for sites D and E, and even for Site A)
- provided a breakdown of each municipality's contribution to the waste stream as of 1982 and showed roughly where they had taken regional waste (but did not offer any method for determining equity in relation to this information)
- indicated which areas received garbage collection (implying that absence of service exempted an area from responsibility for waste)
- argued that each of the sites had a "strong claim" with respect to equity (without evaluating the strength or validity of these claims) and concluded that it was not possible to rank the sites on this factor.

The Region's SIA gives the impression that the consultants were either unable or unwilling to assess equity to an extent consistent with other impact factors. Had they applied to all other factors the principle they used in dismissing equity -- that if all sites have a claim to a factor, it can be excluded from further assessment -- there would have been no need for the

environmental assessment (all sites have hydrogeological impacts, all have health and safety impacts, etc.). The point is that all sites do have some claim to unfair distribution of the responsibility for waste disposal in the region, but the claims are not the same. It is precisely this, the analysis and sorting out of different degrees of impact, that impact assessment is about. Conversely, to remove from consideration a factor as important as equity is in itself unfair to the sites and the people who really have borne the burden of waste disposal. In this case, that is Site F and the community of which it is a part.

In the absence of policy and equity guidelines for site selection, the consultants could have subjected the candidate sites to a more rigorous assessment of social impacts related to equity. This could have included the following:⁴⁷

Establishment of criteria for considering equity, making these explicit rather than (as the SIA did) leaving them hidden.

In-depth examination of the history of solid waste disposal in Halton, including to what extent, over time, each area had assumed responsibility for its waste and that of other areas.

Presentation and analysis of the equity concerns of residents at each site, recognizing that equity is both "objective" and perceptual.

Use of techniques such as the focus group to provide a further analytic base for assessing equity-related impacts.⁴⁸

A summary and comparison of the equity-related social impacts at each site.

Equity is an important consideration in social impact assessment. It may be argued that inequity itself is not a social impact, just as noise and other nuisance effects are in themselves not social impacts. But equity can produce social impacts. A belief that one has been and is being deliberately treated unfairly in relation to others can generate strong feelings, such as outrage and demoralization, that can lead to or aggravate social impacts such as stress, increased probability of illness, reduction in residential satisfaction, diminished quality of life, and out-migration from the community. Adverse effects on the community itself are possible if perceived inequity and an accompanying sense of stigma cause a decline in commitment to and involvement in community life. Equity, therefore, is both a social and a political issue that deserves full consideration in waste management policy, planning, siting and impact assessment. That it did not receive this in the Region's SIA may be its most significant shortcoming.

While it is too late now to create the policy framework that ought to have been in place when the facility siting process began, it is not too late to consider and weigh the equity implications of this proposal. Because equity is an integral part of social impact assessment, this task necessarily becomes part of the Board's deliberations.

4.4 Potential Social Impacts on Community and Residents at Site F

As a consequence of these basic deficiencies in the Region's SIA, Regional Council did not have, and the Board now lacks, sufficient information on the impacts of the proposed landfill on the social organization of the community and on the well-being of its present and future residents. The Board does not have before it a complete SIA, one that identifies the full range of

potential social impacts, assesses their likelihood and magnitude, determines their relative importance, evaluates their overall implications, and considers prospects for mitigation and compensation. Nonetheless, the Board does have the Region's SIA for Site D, along with submissions from residents of that area. And, from the foregoing analysis and submissions by residents, it is possible to provide an indication of social impacts that are likely to be experienced by residents at and near Site F.

These impacts are at two levels: community and individual/household. The latter impacts are experienced most directly and therefore usually receive most of the attention. But social impacts relate not only to individuals and groups but also to the community as a whole. The reasoning is that, because the community provides certain resources and benefits to its members, detrimental effects on the community can adversely affect its individual members.

The potential impacts on community and residents at Site F include: disruption of residents and others in the community; displacement and disruption of community facilities and services; loss of community character; loss of community cohesion and stability; and increased stress. Each of these five categories, elaborated below, comprises direct and indirect social impacts that the Region's SIA did not take adequately into account. Note that the categories necessarily overlap. That is because social impacts occur in complex, interrelated ways and often as a process over time rather than as isolated immediate events. Causality in the social impact process is seldom a simple matter of cause-effect; it tends instead to be multiple (numerous causal factors) and circular (causes and effects being co-determinant).⁴⁹

1. Disruption of residents and others in the communities.⁵⁰

Disruption could result from landfill-related nuisance effects such as noise, dust, litter, odour and increased truck traffic as well as from air and water pollution and the landfill's unsightliness. There is potential for:

- a. disruption to the way of life of residents in the vicinity of Site F and along access roads. Disruption can take the form of interference with daily activities, diminishment in value and enjoyment of property, erosion in expectations of quality of life (possibly to the point where people feel compelled to move), and a qualitative reduction in the positive experience of living in the community. "Way of life" (which includes lifestyle, quality of life and standard of living) refers to how people go about their daily activities. "In the vicinity of" must be determined as part of the SIA process, through consultation with individuals, groups and organizations who perceive themselves to be affected by the landfill; it is clear that "in the vicinity of" extends well beyond the study area used in Halton's SIA.
- b. disruption to businesses and industries in the vicinity of Site F, and disruption to people who work in the area. This was not factored into the Region's SIA despite submissions from those who would be disrupted.⁵¹

2. Displacement and disruption of community facilities and services.

Addressed by the Region's SIA only in part due to its restricted study area, this category of impacts includes loss (to the community) of such facilities and services that would be displaced by a landfill at Site F (i.e., Bayview Park, together with the new park that would be created by after-use of the current landfill) as well as reductions in the operation and/or

effectiveness of services and facilities in the vicinity of the site (such as the proposed Park Avenue complex in Forestvale) and along the haul routes. Inhibited use of such facilities can lessen the quality of the services they provide and reduce the demand for them. It could also reduce the commitment, to the community, of groups such as the Lion's Club who have dedicated much time and effort to developing and operating such facilities.⁵²

3. Loss of community character. "Community character" refers to the distinctive physical and socio-cultural qualities or attributes of the community -- here, Aldershot and Forestvale. In this case, loss of community character would be a function of the proximity of residential areas to what residents regard as a fundamentally incompatible land use. Loss of community character affects the desirability of the community as a place to live, be from, own property and do business in, and visit.⁵³ One aspect of community character is image -- the mental picture or impression formed of a place, and how it is perceived from within and outside. That in turn ties in with stigma, which residents claim is already attached to their community and which would be worsened if it becomes the main concentration of landfill activity ("dump city") for the Region. Stigma and image perceptions reinforce equity concerns, i.e., the sense of being seen and treated unfairly.

Forestvale residents have a special concern about the significant loss of community character that would result if the tree buffer between their residential area and the landfill were to disappear.

4. Loss of community cohesion and stability.⁵⁴ Cohesion has to do with the level of interaction and degree of interdependence among individuals, groups and institutions in the community. Social

cohesion would be adversely affected by the landfill if it altered the ways that people in the community interacted or if it lessened their sense of belonging and attachment to place. Aldershot in particular, with its high level of cohesion, has a lot to lose in this regard. Stability refers to the community's propensity to maintain its essential character and structure as it changes in response to growth (or decline) and development pressures. In a social sense, a "stable" community is one that exhibits a continuity of values and aspirations over time. Such continuity can be disrupted if residents become less committed to the community. In this case, it seems likely that certain Aldershot residents, whether in response to or in anticipation of changes in their physical/social environment, would become less willing to allocate personal and financial resources to the community and its future. Decreases in cohesion and stability could lead to residents being less involved in community activities, along with a deterioration in the social support that members of the community provide to each other. Community activists and long-time residents, of which Aldershot has many, are especially vulnerable to such effects. The loss of their energy and commitment, and perhaps of their presence altogether, could have serious detrimental effect on the community.

5. Increased stress. This final category, closely related to the other four, has various possible sources: specific direct impacts of the landfill (such as more noise and truck traffic); indirect impacts (such as a decline in the value of one's property or a sense of loss of valued attributes of the community); fear and uncertainty concerning further and ever-increasing impacts of landfilling (ground and surface water pollution and effects on health are prime examples); anger and frustration over the ways people feel they are being treated (this relates to the issues of equity and trust in government); and the lengthy and protracted siting process itself, with its accompanying uncertainties and

the demands it makes on those involved. As noted earlier, stress -- or, more accurately, distress (damaging stress) -- can have a range of adverse effects, both direct and indirect. An important point about stress is that it depends a great deal on the perceptions that individuals have of the landfill and how they interpret and give meaning to its impacts. It is readily apparent, from the interviews and from submissions by residents, that "landfill" has a very negative connotation; that people are fearful of the emerging effects of past and present landfills (leachate migration, especially) and distrustful of claims made about the safety of the proposed landfill; and that its location at Site F would raise the levels of anxiety and stress within the two communities affected. Such stress could lead to a general deterioration in quality of life and it could also worsen other social impacts.

These five categories represent impacts with a strong likelihood of occurring, to a greater or lesser degree, if a landfill is located at Site F. They deserve to be taken into account in the Board's decision.

4.5 Summary

In summary, from the standpoint of Site F, the following deficiencies in the Region's SIA are especially significant:

- a. adoption and rigid application of the technical approach which, combined with introduction of the "psychological barrier" concept, led to
- b. selection of a study area that was too small, an unduly limited set of social impacts, and the downgrading of "emotional impacts", which resulted in

- c. disregard of social impacts on the affected communities of Aldershot and Forestvale as well as impacts on most of the people who live and work in them, and
- d. omission of this large number of people from the quantified inventory of social impacts, and a consequent major distortion of the ranking that indicated Site F as least impacted, and finally
- e. removal of the equity issue from consideration in ranking of the sites, which then deprived the affected communities of their unique claim to unfair treatment in the disposal of the Region's waste.

These deficiencies, and others cited in this Section, add up to an SIA which is fundamentally flawed. Most importantly in terms of Site F, it failed to assess certain key social impacts on the communities, residents and workers of Aldershot and Forestvale. These potential social impacts include: disruption of residents and others in the communities; displacement and disruption of community facilities and services; loss of community character; loss of community cohesion and stability; and increased stress. These are impacts of deep concern to the people who would have to live with another landfill.

The Environmental Assessment Act requires that social impacts be assessed as one of the necessary inputs to the Board's deliberations. This report demonstrates that, as a result of basic deficiencies in the Region's SIA, it did not provide the Board with the full range of information with respect to Site F. This leaves it to the Board to complete the social impact assessment -- acquiring the missing information and integrating social impacts with other impacts of the proposed landfill. While

not a full-scale SIA, this report can assist in closing the information gap by providing the Board with the "next best thing", an indication of the social impacts that could well occur if the landfill is located at Site F.

ENDNOTES

Section 1: Introduction

1. In addition to the references cited in these endnotes, the following journals were reviewed, with emphasis on issues published during the past ten years: American Journal of Community Psychology; American Psychologist; Clinical Psychology Review; Community Mental Health Journal; Environment and Behaviour; Environment and Planning A; Environmental Impact Assessment Review; Health Relations; Impact Assessment Bulletin; Journal of the American Planning Association; Journal of Applied Social Psychology; Journal of Environmental Management; Journal of Environmental Science and Technology; Journal of Environmental Systems; Journal of Hazardous Materials; Journal of Health and Social Behavior; Journal of Human Stress; Journal of Social Issues; Policy Studies Review; and Waste Management Research Abstracts. The assistance of Sandra Frasson, a Master's student in the Faculty of Environmental Studies, is gratefully acknowledged.

2. These included: Gary Goodman, Planning Director, City of Burlington; Allan Ramsay, Environmental Management Coordinator, City of Burlington; Albert Shames, Environmental Inspector (1986-87) at the Burlington landfill; Lyle Parsons, MoE Regional Office; Peter Homenuck, President, Institute of Environmental Research, Inc.; and Dorothy Pocock, Vice-President, West Burlington Citizens Group.

3. Rabel J. Burdge, "Community Needs Assessment and Techniques," in Social Impact Assessment Methods, ed. Kurt Finsterbusch, et al. (Beverly Hills: Sage, 1983), p. 195; and Pamela Dee Savatski and Elva Dianne Freilich, "Leadership Generated Social Profile," in Methodology of Social Impact Assessment, ed. Kurt Finsterbusch and C. P. Wolf (Stroudsburg, PA: Dowden, Hutchinson & Ross, 1977), pp. 160-166.

4. A comparative study was outside the terms of reference of this report. In any case, for an interactive study such as this it is highly unlikely that a consultant retained by residents at one site could gain the necessary cooperation of residents at another site.

Section 2: The Region's Social Impact Assessment

1. Myra Schiff Consultants Ltd., Social Impact Assessment: Final Technical Report No. 5, Phase 2, Stage 2C, Selection of Preferred Sites, June 1985. Schiff's Interim Report on Public Concerns and

Issues (June 1984) listed only six factors. Apparently litter was added later.

2. Ibid., p. 2-4. Schiff stated, in Submissions Report: Phase 2, Stage 2C, Selection of a Preferred Site (June 1985), p. B8-7: "It was my understanding when I joined the study team that the IER (a former study team member) had determined a half-mile to be appropriate for Stage B, and I continued to use it based on that assumption." Peter Homenuck, President of IER (Institute of Environmental Research, Inc., interviewed on 4 September 1987, denied that his firm had established this limit prior to withdrawing from the project.

3. Walker Wright Young Associates Ltd., Submissions Report: Phase 2, Stage 2C, Selection of Preferred Site, June 1985, p. B2-2.

4. The Consolidated Hearings Board, Transcripts of Hearing Conducted at Oakville Granary Commercial Centre, June 4, 1987, Volume 17, p. 4221.

5. Schiff testified, referring to the estimated 200 people in the added area: "It was not my feeling then and it is not really now that all these people were going to experience stress as a result of landfill at Site F." See Transcripts, Volume 17, p. 422-3. Earlier, in response to a question on environmental impact, referring to Site F and concerns expressed by the Aldershot community, Schiff stated, "We reiterate our position that we do not believe that there is, in fact, any objective reason for this concern, that there will not be any physical impact and that we believe the site is a safe one which will not jeopardize the health or safety of residents." She went on, "Throughout this study, we have placed less relative weight on the emotional impact than on the measure of dislocation and disruption, since we believe these are more profound impacts than the emotional impacts." See Submissions Report, ibid., p. B8-8.

6. Myra Schiff Consultants Ltd., "Witness Statement of Myra Schiff, Ph.D."

7. Schiff's SIA method is outlined in her testimony, Transcripts, Volume 16, June 3, 1987, pp. 4082-4086. The five principles were set out in her Witness Statement, p. 2.

8. Transcripts, Volume 15, June 2, 1987, pp. 3639-3640.

9. Myra Schiff "Witness Statement", p. 11.

10. Senes Consultants Ltd., Air Quality Assessment, June 1985.

11. Walker Wright Young, Comparative Analysis of Alternative Sites for Sanitary Landfilling in the Regional Municipality of Halton, Site D and Site F, June 1987, pp. 30 and F-6.

12. Ibid., p. 31.
13. Ibid. The original noise report was: Barman, Coulter, Swallow Associates, Noise Assessment, June 1985.
14. Walker Wright Young, ibid., p. 4-1. The original report was: The Landplan Collaborative Ltd., Visual Assessment, June 1985.
15. Walker Wright Young, Land Use and Planning Assessment, June 1985.
16. Walker Wright Young, Comparative Analysis, p. 29. Schiff's statement, in Appendix E of this report, indicates, "Since the effects on population are more significant and of greater duration than the impact on users of community facilities, it is my opinion that Site F is preferred over Site D..."

Section 3: Community Context and Perspective

1. "Community" here is taken to mean a collection of people living and interacting in close proximity, with shared identity, social structures and activities. Edward Hassinger and James Pinkerton, in The Human Community (New York: Macmillan, 1986), cite a content analysis that found 94 definitions of community. Three-quarters of them involved area, social interaction and community ties. Most references note that contemporary social actors, such as mobility and the broad range of services and facilities available to most people, have caused "community" to be experienced by many of us over quite a wide geographic area.
2. Clair Emery and Barbara Ford, From Pathway to Skyway: A History of Burlington (Burlington: Confederation Centennial Subcommittee of Burlington, 1967), p. 110. Chapter 19 is devoted to Aldershot.
3. John Lawrence Reynolds, Burlington, Ontario: Who We Are, Where We've Been, and Where We're Going (Burlington: City of Burlington, Burlington Committee for the Ontario Bi-Centennial, n.d.), p. 2.
4. See Appendix A and C.
5. See Appendix C, "Community Boundaries."
6. Aldershot south of Highway 403 includes (approximately) Census tracts 201, 202, 203 and 204. Aldershot north of Highway 403 is Census tract 200. Data from the City of Burlington Planning Department are for 1985.

7. For Aldershot in 1985, 1,826 people were in the age group 51-60; this represented 11.7% of the total community population, 15,636. Another 2,531 were aged 60+ (16.2% of the community total). Altogether, 4,357 residents (27.9% of the community) were 51 or older. In Burlington as a whole, 12,272 (10.7%) were 51-60 years old and 14,483 (12.8%) were 60+. Source: City of Burlington Planning Department.

8. In Aldershot, 10.7% of the 1981 population had university degrees; this compared with 9.0% for Burlington as a whole. At the other extreme, 6.5% in Aldershot had achieved less than Grade 9 whereas in Burlington this figure was 6.0%. Source: 1981 Census of Canada. More recent data are not available.

9. The mean family income in 1981 was \$36,388 for Aldershot and \$33,817 for Burlington. Source: 1981 Census of Canada.

10. In October 1982, Aldershot had 5,004 dwelling units. Broken down by type, these included: low density (single-family and semi-detached) -- 3,424; medium density -- 494; high density -- 1,086. Low-density housing in Burlington accounted for nearly two-thirds (24,791 of a total of 37,955) of the city's housing stock. Source: City of Burlington Planning Department. The 1981 Census showed 69% of Aldershot housing units, and 68% of Burlington's, to be owned.

11. The 1981 Census indicated that 10.4% of Aldershot's housing units were built before 1946 and 39.5% were built in the period 1946-1960; i.e., 49.9% predate 1960. Comparable figures for Burlington are only 6.5% and 23.3% for a total of 29.8%.

12. See Appendix C.

13. The City's assessment data are available only for Tyandaga; Forestvale is not separated out. Similarly, Census tract 207.01 includes all of Tyandaga as well as a portion of Leighland (between Highway 403 and the CN tracks) to the south. The picture presented here of Forestvale, therefore, is only an approximation. It assumes that Forestvale residents share characteristics with residents of Tyandaga as a whole and with people in the adjoining Brant Hills community.

14. Inspection of a recent map of Tyandaga, provided by the City of Burlington Planning Department, indicates that Forestvale contains approximately 290 dwelling units (214 single-detached and 76 townhouses). At three persons per unit, the Burlington average, this represents an estimated population of nearly 900. The population of Tyandaga was 5,336 in 1985, according to City figures.

15. City of Burlington statistics for 1985 show Tyandaga to have 28.6% of its population in the age group 5-19 (cf. 20.4% for

Aldershot) and only 10.9% in the 51+ category (cf. Aldershot's 27.9%).

16. In Tyandaga and Brant Hills (Census tracts 207.01 and 207.02) in 1981, 3.4% of the population had university degrees and 1.6% had less than Grade 9 education. Comparative figures for Aldershot were 10.7% and 6.5%. Source: 1981 Census of Canada.

17. 1981 Census data for Tyandaga and Brant Hills show mean family income of \$41,151 compared with \$36,388 for Aldershot.

18. In Tyandaga and Brant Hills, 83.4% of the houses were less than ten years old compared with only 28.9% in Aldershot.

19. See Appendix C.

20. Sources for this subsection, in addition to those cited in the next three footnotes, are: a chronological summary by the Region entitled, "Halton's Search for a Landfill Site," 1972-1985, received from Walter Mulkewich; Bruce Forsyth, "Waste Disposal in Halton: Its Past and its Future," an essay prepared for an urban studies course at Aldershot High School, n.d.; and the interviews outlined in Appendix B, especially with Sid Chumley, who has lived in Aldershot for 42 years and has a lengthy involvement with waste disposal issues.

21. Forsyth, *ibid.* His research, including conversations with George Gallagher who is a long-time resident of Aldershot and who recalls garbage dumping in the area in the early 1940s, places the date of the opening of the Bayview Dump at 1943. An article in the 10 July edition of The Hamilton Spectator, "Toxic substances leaked from Bayview Park", shows the date as 1946.

22. Dana Robbins, "Here's some dirt on Halton dumps," Burlington Spectator, October 15, 1986, p. T.1, citing George Nelson, District Officer, Ontario Ministry of the Environment.

23. M. M. Dillon Ltd., Region of Halton Special Council Meeting on Solid Waste Management (Regional Municipality of Halton, February 1978).

24. Walker Wright Young, Stage 1: Waste Needs and Systems Analysis. Consolidation (May 1983), Table 8 and page 15.

25. This distinction comes from Lindblom and Cohen, Usable Knowledge. They argue that "professional scientific knowledge" has its origins in "ordinary knowledge", and then go on to express doubt that there is any real knowledge beyond the ordinary.

26. Various studies have made this point, with reference to both the public and private sectors. See especially: Harold A.

Linstone, Multiple Perspectives for Decision-Making, p. 342; and Thomas J. Peters and Robert H. Waterman, In Search of Excellence: Lessons from America's Best-Run Companies (New York: Harper & Row, 1982), Chapter 2.

27. An attempt was made to document complaints made about the Burlington landfill operations in the past. It turned out, however, to be a formidable task, beyond the scope of this report. Files of the Region's Public Works (waste disposal) files were reviewed, together with the landfill diaries, but these were available for 1985-86 only; earlier material is in storage or was not retained. These documents indicated few complaints, most of them dealing with exposed garbage, noise, truck traffic, concern about hazardous waste being dumped, and the transfer station. That so few complaints are recorded is surprising; each of the aldermen for the area has received 20-30 complaints per year, and some of the respondents (Appendix) said that they had complained. MoE requirements in the Certificate of Approval dictate that all complaints be recorded but that has been so only since 1984. In earlier years, when the landfill operation was nearer the residential areas, there was more to complain about. The City of Burlington also has some complaints on record (see its 15 May 1985 report).

There is an obvious need to create a more systematic, thorough and accurate method for ensuring that (a) people know how and to whom they can complain and that complaints will be responded to, (b) complaints are recorded, along with responses, and (c) follow-up action, or lack thereof, is also put on record. This is especially important if the absence of complaints is to be taken as evidence of an acceptable landfill operation. A vigilant citizens group can easily ensure that a municipality receives plenty of complaints.

Schiff indicated, in testimony (Transcripts, 8 June 1987, p. 4013) that she had not investigated complaints, and that in any case information on complaints would have been "difficult to deal with".

28. This information was provided in a letter of 16 June 1987 from Allan Ramsay, Burlington's Environmental Management Coordinator, to Ian MacNaughton. The parcel of land in question could accommodate 200 single-family units.

29. West Burlington Citizens Group, Submission to the Minister of the Environment Regarding the Regional Municipality of Halton's Solid Waste Management System, April 10, 1986. From 1983 to the date of that report, the WBCG made over 45 presentations to the City, the Region and its consultants. See also: Walker Wright Young, Compilation of Submissions, Phase 2, Stage 2C Report, April 1985.

30. See Appendix C, "Existing and Past Landfill Operations", and "Proposed Landfill at Site F".

31. Recent examples of alleged dumping of toxic waste at sanitary landfills in Ontario has been reported by The Globe and Mail at Sarnia (2 June 1988), Thorold (16 May 1988), Vaughan (31 December 1987) and Metro Toronto (11 November 1987).

32. See Appendix B, interviews with Aitken and Chumley, both of whom have considerable experience on the Committee.

33. A study of Love Canal corroborates the residents' view that a study area focusing on the immediate vicinity is unlikely to capture people's concerns. It concludes, "Residential proximity to the landfill, alone, is not a major factor determining beliefs." See Martha R. Fowlkes and Patricia Y. Miller, Love Canal: The Social Construction of Disaster (Washington, DC: Federal Emergency Management Agency, 1983), p. 51.

34. See the transcripts of the 1984 hearings of the Environmental Assessment Board regarding the Region's application for a Certificate of Approval for further extension of the Burlington landfill. The Region's representative (pages 1683 and 1685) made the distinction between its stated "intention" and a "commitment". He claimed that a commitment was never made. Residents present at the hearing interpreted "we intend to do it" as "we will do it". They were unaware of the foregoing distinction, which was made four years later.

35. See the report of the Environmental Assessment Board, 26 July 1984.

36. Since mid-1987 when the interviews were conducted, there has been a further proposal to continue operating a transfer station at the Burlington landfill, even after it is closed. John McKay, Halton's Director of Waste Disposal, is reported to have said, "It's much easier to get government approval for an expansion in Aldershot than to move a waste operation to a new area". See Ray DiGregorio, "Region's dump plans 'dirty pool': Little", Globe and Mail, 13 August 1987, P. C.1.

37. Dana Robbins, "Here's some dirt on Halton's dumps", Burlington Spectator, 15 October 1986, p. T.1.

38. Walker Wright Young, Stage 1: Waste Needs and Systems Analysis. Consolidation (May 1983), p. 64.

Section 4: Critical Evaluation of the Region's S.I.A.

1. Kristi Branch, et al., Guide to Social Assessment: A Framework for Assessing Social Change (Boulder, CO: Westview, 1984), p. 25.

2. For example, the Canadian Environmental Assessment Research Council contrasts the technical/planning approach and the political/community development approach. Livesay, et al., distinguish between a structural approach and a perceptual approach. Lee compares a product approach and a process approach. Lang and Armour refer to technical and sociopolitical perspectives on social impact assessment. And Manheim contrasts a rational model with a technology and community values model. A recent overview of the social impact assessment field by Carley and Bustelo considers these "manifestations of conceptual duality" to be "an important emerging theme". See: Canadian Environmental Research Council, Social Impact Assessment: A Research Prospectus (Ottawa: CEARC, May 1983); J. Michael Livesay, Jefferson C. Boyer and Joe R. Harding, "Social Impact Assessment: Conceptual Frameworks and Their Implications for Planners," in Applied Social Science for Environmental Planning, ed. William Millsap (Boulder, CO: Westview, 1984); Brenda Lee, The Social Impact Assessment of Hazardous Waste Management Facilities: Covering the Bases (Toronto: University of Toronto, Institute for Environmental Studies, 1984); Reg Lang and Audrey Armour, The Assessment and Review of Social Impacts (Ottawa: Federal Environmental Assessment Review Office, 1980); Marvin L. Manheim, "Ethical Issues in Environmental Impact Assessment," EIA Review 2 (1981): 315-334; and Michael J. Carley and Eduardo S. Bustelo, Social Impact Assessment and Monitoring: A Guide to the Literature (Boulder, CO: Westview, 1984).

3. CEARC, *ibid.*, p. 3.

4. *Ibid.*

5. This description of the technical approach is drawn from: Reg Lang, "Achieving Integration in Resource Planning," in Integrated Approaches to Resource Planning and Management, ed. Reg Lang (Calgary: University of Calgary Press, 1986), p. 40; in turn adapted from Harold A. Linstone, Multiple Perspectives for Decision-Making: Bridging the Gap Between Analysis and Action (New York: North Holland, 1984) and Alan Miller, "Technocratic Thinking: Its Impact on Environmental Management," (Fredericton: University of New Brunswick, Department of Psychology, 1983).

6. Donald Schon, The Reflective Practitioner: How Professionals Think in Action (New York: Basic Books, 1983), p. 39.

7. For example, see Charles E. Lindblom and David K. Cohen, Usable Knowledge: Social Science and Social Problem Solving (New Haven: Yale University Press, 1929), p. 11.

8. Frank Fischer, Politics, Values and Public Policy: The Problem of Methodology (Boulder, CO: Westview, 1980), p. 32.

9. Livesay, et al., p. 25.

10. Note that the distinction between "real" and "perceived" impacts, which is critical in the technical approach (it recognizes only the former), is of much less consequence in an interactive approach to social impact assessment. The interactive approach considers social impacts to be people's responses to the undertaking. Their responses are related to their perceptions. "Perception", as used here, combines sensory awareness with cognitive appraisal; i.e., information picked up by the senses is analyzed and interpreted, with meaning added from the individual's attitudes and beliefs, leading (perhaps) to emotional arousal. The individual may then respond. The kinds of responses here termed social impacts include a decision to move out of the community or withdraw from its activities, reduced feelings of satisfaction with the community as a place to live, increased stress which negatively affects the person's physical or mental health, and so on. It does not matter, therefore, whether the initial perception (e.g., of health hazards associated with landfill operations) is based on information that is correct or incorrect, rational or irrational, "real" or imagined. If the individual responds in one of the foregoing ways, there will be a social impact.

This reasoning appears not only in the literature of social impact assessment but also in that of stress and of psychotherapy. For example, see: Roger J. Allen, Human Stress: Its Nature and Control (Minneapolis: Burgess, 1983), pp. 20-25; and Gerald Corey, Theory and Practice of Psychotherapy, third edition (Monterey: Brooks/Cole, 1986), pp. 213-214.

11. Carley and Bustelo, p. 10.

12. Schiff testified, "I did not include the impact, the visual impact at the Brant Hospital, and the reason was that I felt it was -- again it was because of this barrier and the feeling that regardless of the view there was this barrier between the hospital and Site F". See Transcripts, 8 June 1987, p. 4024.

13. Walker Wright Young and Myra Schiff, Interim Report on Public Concerns and Issues: Phase 2, Stage 2C, Selection of Preferred Site (June 1984), p. 46.

14. See footnote 16, Section 2.

15. Walker Wright Young and Schiff, *ibid.*

16. Myra Schiff Consultants Ltd., Social Impact Assessment: Final Technical Report No. 5, Phase 2, Stage 2C, Selection of Preferred Sites (June 1985), p. 2-6.

17. Branch, et al., Guide to Social Assessment, p. 25.

18. Malcolm Weinstein and Mark Frankl, "Ecological and Psychological Approaches to Community Psychology," American Journal of Community Psychology 2 (1974): 7.

19. Frederick A. Rossini and Alan L. Porter, ed., Integrated Impact Assessment (Boulder, CO: Westview, 1983). The concept of integration is explored in Reg Lang, "Planning for Integrated Development", paper to Conference on Integrated Development Beyond the City, Mount Allison University, June 1986. Integration in impact assessment is also addressed in: F. Larry Leistritz and Steven H. Murdock, Socioeconomic Impact of Resource Development: Methods for Assessment (Boulder, CO: Westview, 1981), Chapter 7, "Interfacing Socioeconomic Dimensions"; and Carley and Bustelo, Social Impact Assessment and Monitoring, Chapter 14, "On Integration and Interdisciplinary Studies". An example of the integration of social impacts is provided in Ontario Waste Management Corporation, Environmental Assessment, Waste Treatment Facility. Draft. Volume V: Site Assessment, Part II (Toronto: OWMC, February 1988), Pages 7-290 to 7-299.

20. Transcripts, 3 June 1987, p. 4017.

concluding impacts. The meaning of noise to residents, the patterning of the noise (its unpredictability) and its specific interaction with area lifestyle must be assessed." Michael R. Edelstein, Social Impacts of Al Turi Landfill, Inc. (Goshen, NY: Town of Goshen, 1980), p. 14.

22. John Coulter, the Region's noise consultant, was asked in testimony whether he was aware that people living in Aldershot quite frequently hear the operations on the existing site. He replied, "Sure, I would expect that they would." He also noted that "audibility was never one of our criteria"! See Transcripts, 26 May 1987, p. 2612.

23. There were additional deficiencies in the study. For example, it distorted findings of other researchers. Two instances follow:

William Michelson's study, Environmental Choice, Human Behavior and Residential Satisfaction (New York: Oxford University Press, 1977), was cited by Schiff to support her contention that the larger the household, the more difficult it becomes to move. However, Michelson's research focused on the intention to move (as a function of family size and type) and not on difficulties in moving. He found that large families in high-rise apartments expected to move away; large families in houses, on the other hand, did not expect to move, simply because this type of unit was selected for the very reason that it could accommodate a large family.

Proshansky, et al., the authors cited on page 2-17 of Schiff's study, make the point that the role of physical settings in precipitating or contributing to life crises "depends not only on what event is occurring at the time but on the person to whom it is happening" (p.6). To assess stress from living next to a landfill requires an examination of relevant sociological and psychological characteristics of individual residents, since they may have differential response to the stressor.

These two examples constitute a significant proportion of the total number of references (only seven altogether) that Schiff made to the literature.

24. Armour and Associates and Institute of Environmental Research (1985) Inc., Investigations for Landfill Sites in Areas I, II and VI in the City of Brampton: Social Impact Assessment (Brampton: Regional Municipality of Peel, March 1987), three volumes. The main volume is 145 pages long (cf. Halton's SIA, 58 pages); the other two volumes are appendices which provide the data collected.

In testimony on 8 June 1987 (Transcripts, p. 4049), Schiff acknowledged that she had not conducted a social impact assessment prior to her Halton experience. She also admitted that she had not seen any other examples of social impact assessment of waste management facilities. While few in number and difficult to find, such examples did exist. For instance: Michael R. Edelstein, The Social and Psychological Impacts of Groundwater Contamination in the Legler Section of Jackson, New Jersey (n.p.: Kreindler & Kreindler, 1982) which assesses the effects of a municipal landfill; Edelstein, Social Impacts of Al Turi Landfill, Inc. (Goshen, NY: Town of Goshen, 1980), a similar study; the extensive literature on Love Canal; and the work of the Ontario Waste Management Corporation which, in 1985, released Site Selection Process, Phase 4A: Selection of Preferred Site(s). Social Analysis. There was also, at the time of the Halton study, the closely associated experience with attempts to deal with radioactive waste. An example is: Impact Assessment, Inc., Report on the Socioeconomic Impacts of Potential High-Level Nuclear Waste Repository at the Hanford Site, Washington (Olympia: State of Washington, Department of Ecology, 1987), which includes a bibliography listing earlier social impact studies.

25. Armour and Associates, *ibid.*, main volume, p. 9.

26. *Ibid.*

27. Similarly, the recent SIA for OWMC used a study area that extended approximately 5 km from the site, together with study areas of 150 m and 500 m along both sides of the access routes and five different impact zones. See Institute of Environmental

Research, Inc., Site Assessment, Phase 4B: Social Impact (Toronto: OWMC, March 1988), Chapter 5.

28. Report of the Environmental Assessment Board, 28 July 1984.

29. Decision of the Ontario Municipal Board, 15 June 1979, p. 46.

30. Transcripts of the 1984 E.A.B. hearing, p. 3114.

31. At a deeper level, the residents' position is on solid moral ground. See Peter Timmerman, Ethics and Hazardous Waste Facility Siting (Toronto: University of Toronto, Department of Civil Engineering, 1984). Also: Timmerman, Ethics and the Problems of Hazardous Waste Management: An Inquiry Into Methods and Approaches (University of Toronto, Department of Civil Engineering, 1984).

32. Such approaches, of which OWMC is an example, are documented in the recent literature. An example is Peter M. Sandman, "Getting to Maybe: Some Communications Aspects of Siting Hazardous Waste Facilities," in Resolving Locational Conflict, ed. Robert W. Lake (New Brunswick, NJ: Rutgers University, Center for Urban Policy Research, 1987), pp. 324-344. New approaches are summarized in John Seley, The Politics of Public Facility Planning (Lexington, MA: Heath-Lexington, 1983). See also Gregory A. Daneke, Margot W. Garcia and Jerome Delli Priscoli, ed., Public Involvement and Social Impact Assessment (Boulder, CO: Westview, 1983).

33. According to the Ministry of the Environment (as of October 1987) over 90 waste management exercises are currently underway in Ontario. Only 21 of these have reached the stage of selecting candidate sites, however.

34. These reasons were advanced by officials of Tiny Township (one of the nine municipalities cited) to graduate students who used Tiny as a case study in my course, "Introduction to Planning Processes", Faculty of Environmental Studies, York University, Fall 1987.

35. In fact, that is the position taken in the hydrogeological component of the Region's environmental assessment. It suggests that, because of the existing poor groundwater quality at Site F, escape of leachate would not create a significant impact on the environment. The Halton Conservation Authority, among others, took exception to this position. See Ministry of the Environment, Review Under The Environmental Assessment Act: Regional Municipality of Halton's Solid Waste Management System (Feb. 1986), p. 43.

36. See footnote 38 in Section 3.

37. Stress is commonly defined as either a stimulus (a natural disaster, getting fired, illness, divorce, etc.) or a response in the body (Selye's definition of stress as "essentially the rate of wear and tear in the body"). Many definitions of stress have been advanced but none has gained universal acceptance. One useful approach is taken by Lazarus and Folkman who define psychological stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his/her resources and endangering his/her well-being". See Richard Lazarus and Susan Folkman, Stress, Appraisal and Coping (New York: Springer, 1984), p. 19. A key to this definition is the judgement ("cognitive appraisal") that a particular person-environment relationship, such as living near a landfill, is stressful. The authors argue that it is the way we interpret events, not the events themselves, that produce the physical and psychological effects called stress (or, more accurately, distress). The interpretation can also affect our adaptive or coping response.

38. Schiff acknowledged this in cross-examination. See Transcripts, Vol. 16, June 3, 1987, p. 4062.

39. For example, the Social Readjustment Rating Scale is often used to measure cumulative stressful life changes. Created by Holmes, Rahe and their colleagues in 1957, the Scale has since been subjected to much research and criticism. It has been noted, for example, that life changes can produce varying degrees of stress in individuals, depending on how these events are cognitively appraised. See Thomas H. Holmes and Richard H. Rahe, "The Social Readjustment Rating Scale," Journal of Psychosomatic Research 11 (1967): 213-218.

40. Baum, et al., report the findings of various researchers, indicating that "having or believing that one had control can reduce the aversiveness of stressful events and loss of control may itself be stressful". See Andrew Baum, Raymond Fleming and Jerome E. Singer, "Coping With Victimization by Technological Disaster," Journal of Social Issues 39 (1983), p. 128.

41. Marc Fried, "Endemic Stress: The Psychology of Resignation and the Politics of Scarcity," American Journal of Orthopsychiatry, 52 (June 1982): 4-19. Endemic stress (in contrast to acute stress) is defined as a condition of continuing and manifold changes, persisting or increasing scarcity, perduring conditions of loss or deprivation, and ongoing experiences of inadequate resources or role opportunities. Endemic stress is also referred to as "community stress" or "public stress". See "Societies Under Siege," Maclean's, October 11, 1982, pp. T2-T6, an interview with Dr. Lucille Peszat of Toronto (an expert on stress and former colleague of Hans Selye) who, in citing the adverse effect of public stress, observed, "At a time when we really need to rally together and to support each

other, the support networks are nonexistent because everybody is going into their shell".

42. According to Lazarus, cited in Bachrach and Zautra, an individual first appraises a situation in terms of what is at stake for that person's wellbeing. If the situation is perceived as a threat, then the person will employ two general types of coping to manage the situation. Problem-focused coping, such as getting involved in a citizen's group, is used to directly address the situation posing the threat. Emotion-focused coping, by contrast, is used to regulate the individual's emotional response to the threat; examples are to accept it ("that's life") or to become resigned ("there's nothing I can do"). See Kenneth M. Bachrach and Alex J. Zautra, "Coping With a Community Stressor: The Threat of a Hazardous Waste Facility," Journal of Health and Social Behavior 26 (1985): 127-141. "Community stress" refers to a problem that (a) affects a large number of people in an area, and (b) cannot be resolved by the individual alone and therefore requires collective action.

43. Bachrach and Zautra, *ibid.*, p. 129. The authors refer to "hardiness", a personal quality which includes commitment, control and challenge. Hardy persons, they conclude, involve themselves in life actively rather than passively; they believe they play an important and influential role in dealing with life's experiences; and, rather than fearing change, they welcome it and focus on how they can grow from such change.

44. Extensive discussion of the concept of fairness can be found in Evangeline S. Case, et al., Fairness in Environmental and Social Impact Assessment Processes (Calgary: University of Calgary, Faculty of Law, 1983), the proceedings of a seminar at The Banff Centre convened by the University of Calgary and the Federal Environmental Assessment Review Office. Substantive fairness is related to the decisions themselves whereas procedural fairness has to do with the process by which these decisions were reached.

45. Rodger Beehler, "The Concept of Fairness," in Case, *ibid.*, p. 2, citing Ronald Dworkin, Taking Rights Seriously (Cambridge: Harvard University Press, 1977), p. 273.

46. This list is derived from Reg Lang, "A Critical Review of the Waste Management Master Planning Process in Peel Region", unpublished report, prepared for David Estrin on behalf of the Regional Municipality of Peel, January 1986, pp. 61-63. An "ethical base for siting" is also provided in: Roger E. Kasperson, Hazardous Waste Facility Siting: Community, Firm and Governmental Perspectives (Worcester, MA: Clark University, Center for Technology, Environment and Development, 1986), cited with permission; and Roger E. Kasperson, Patrick Derr and Robert W. Kates, "Confronting Equity in Radioactive Waste Management:

Modest Proposals for a Socially Just and Acceptable Program," in Equity Issues in Radioactive Waste Management, ed. Roger Kasperson (Cambridge, MA: Oelgeschlager, Gunn & Hain, 1983), pp. 331-368.

47. The foregoing equity principles could be the starting point for development of such criteria. An indication of how to operationalize the concept of equity is provided in William Lucy, "Equity and Planning for Local Services," Journal of the American Planning Association 47 (October 1981): 447-457.

48. The focus group technique is a form of qualitative research that is widely used in such fields as public participation, planning and marketing. It involves convening a group of respondents, usually 8-10, for an open-ended discussion about a subject or product. An example of the use of a focus group was by AECL in probing public attitudes toward and concerns about the possible movement of contaminated soil from the Malvern subdivision in Scarborough. In the Halton landfill case, one or more focus groups, comprised of a cross-section of citizens living outside the areas in question, could have been used to explore public attitudes with regard to equity issues, thereby providing an independent set of views on what the larger community regards as fair. The Peel SIA used a focus workshop to assess equity. See Armour and Associates, Social Impact Assessment, p. 27.

49. For example, various impacts can combine to produce stress. Similarly, diminished quality of life can lead to increased stress, and vice versa.

50. Normally, "displacement of residents" would be a special category but in this case there are no residents living on Ste F.

51. A submission from one of the employers in the vicinity of Site F, CUMIS Life Insurance Company, indicates that approximately 600 employees of that firm and Tridon spend 40 hours a week in the area. "Visual impact from the site as well as traces of the transported material which fall from the trucks that transport the waste to the site together with the obnoxious odours are something that these individuals must deal with on a regular basis." See letter of 19 March 1985 from L. Paul Renaud to the Region. A similar submission was made on behalf of 150 employees of N. Pollard & Sons Ltd. who were not considered as being affected by the landfill; they clearly felt otherwise. See 7 March 1985 letter to the Region from Carol and R. Pollard.

52. A letter from the Burlington Aldershot Lions Club to the Region makes this point. The Club expresses its deep concern over selection of Site F for a landfill. It notes that its members contributed over \$30,000 and many man-hours of labour to the development of Bayview Park, yet the Club was never consulted

during the social impact study. The letter calls for "compensation for the full contribution we have made to Bayview Park", should it be closed.

53. Apparently a German pharmaceutical company, which proposed an industrial development on a site off Kings Road, was discouraged by the Region which warned that the landfill proposed for the area would have adverse effects on the firm's operation. This information was received from Burlington's Environmental Management Coordinator.

54. Community character, community cohesion and social stability are all examined in Peel's SIA and in OWMC's SIAs.

APPENDIX A: INTERVIEW GUIDE

Reproduced below is the Interview Guide used in the interviews with key informants in the Aldershot and Forestvale communities. Interview results are provided in Appendices B and C.

Interviews with Selected Community Leaders and Key Informants INTERVIEW GUIDE

Reg Lang, OPPI, MCIP, P. Eng. / June 1987

Preamble

Purpose of the interview:

I'm working for the Canadian Environmental Law Association and the West Burlington Citizens Group to gather information on potential social impacts of a sanitary landfill at Site F in Burlington. This work involves a series of interviews with selected community leaders and other key informants in the Aldershot and Forestvale communities.

How this information will be used:

I will make use of the information obtained from the interviews in the preparation of the report I will submit, as an expert witness, to the Joint Board in Oakville, later this year.

Background on Respondent

1. Name, address and phone number:
2. Occupation:
3. How long have you lived in the Aldershot/Forestvale community?
4. Describe briefly your current and past involvement in the community.
5. Are you or have you been directly involved in the process of siting a landfill in Halton Region? If yes, outline the nature of that involvement.

The Community and Landfill, Past and Present

6. When you refer to the Aldershot/Forestvale community, what area do you mean? Refer to map.
7. The previous question refers to the community's physical boundaries.
 - a. How would you describe (how do you experience) the community in a social sense?
 - b. To what extent do people in the community identify with it? (on a scale of 1-5, from very little to a great deal)
 - c. How much interaction is there among friends and relatives in the community (1-5)?
 - d. To what extent do residents use the community's facilities and services and otherwise take part in community activities (1-5)?
8. What do you value most in, or like best about, this community?
9. What do you dislike most, or like least, about the community?
10. Regarding the existing and past landfill operations, do you feel they have adversely affected the community? If so, how affected?
11. To what extent have current and past landfill operations created problems in the community? Indicate which of the following you feel are serious problems, and which you feel are the most serious.
 - a. noise
 - b. dust and other air pollution
 - c. litter
 - d. odour
 - e. birds, rodents
 - f. truck traffic on haul routes
 - g. water pollution in streams flowing off-site through the community
 - h. pollution of groundwater (wells)
 - i. visual/aesthetic
 - j. property values
 - k. stress
 - l. other, namely:
12. It has been stated that Highway 403 and the CNR form a kind of "psychological barrier" that effectively buffers the Aldershot

community from landfill operations? Do you agree or disagree? Explore reasons.

13. If a landfill was located at Site F, do you think it would adversely affect the community or its residents? If so, what effects would concern you most?
14. With regard to the Region's response to community/resident concerns (expressed as complaints or at public meetings and other forums) about current and past landfill operations:
 - a. Are you aware of what those responses have been?
 - b. If so, how satisfied have you been with these responses?
15. If a new landfill were to be opened up at Site F, are you confident that resident and community concerns would be adequately addressed by the Region?
16. Regarding public consultation in the landfill selection process:
 - a. Do you feel that your community has been adequately consulted?
 - b. Have the community's views been heard and listened to?
17. On the matter of equity:
 - a. Do you feel that your community has been treated fairly with respect to landfilling in the past?
 - b. Would it be fair to locate a landfill at Site F? Explore reasons.
18. In summary, then, if you were to find out tomorrow that a final decision had been made to locate a landfill at Site F, how would you feel?
19. In your opinion, to what extent do the views you've expressed here reflect the views of others in your community? If felt to be widely representative, how do you know this?

Please indicate any other significant community leaders or information sources who you feel ought to be interviewed or consulted on this matter.

Thank you for your cooperation.

APPENDIX B: INTERVIEW SUMMARIES

This Appendix summarizes the interviews conducted with sixteen selected community leaders and other key informants in the Aldershot communities. Interview summaries are presented using a format derived from the Interview Guide (Appendix A). The focus of each question is summarized below.

1. Name, address, phone
2. Occupation
3. Length of residence in the community
4. Current and past involvement in the community
5. Involvement, if any, in the landfill siting process
6. Perceived community boundaries (physical)
7. Community in a social sense: a. general description; b. identity; c. interaction; d. level of activity and use of facilities and services (b, c and d are on a scale of 1-5, from low to high)
8. Most valued features of the community
9. Least valued features of the community
10. Adverse effects, if any, of existing and past landfill operations
11. Specific problems created by landfill operations
12. Existence of "psychological barrier"
13. Adverse effects, if any, of proposed landfill at Site F
14. Region's response to community/resident concerns: a. awareness of Region's response; b. satisfaction with Region's response
15. Confidence in Region to address future concerns re landfill at Site F
16. Public consultation in siting process: a. adequacy of consultation; b. whether community views were heard, listened to and influential

17. Equity: a. fairness of treatment of community re past landfilling;
b. fairness of locating landfill at Site F
18. Feelings if landfill were to be located at Site F
19. Representativeness of views expressed
20. Recommended other key informants

RESPONDENT: J. AITKIN

1. Jim Aitkin
175 Rennick Road (north Aldershot)
689-6928
2. Owner/operator of business, pumping septic tanks and hauling liquid waste.
3. Lived in area all his life; at present residence since 1981.
4. Chairman of Burlington Landfill Advisory Committee for past year and a half. Past chairman of Waterdown scouting association.
5. Private intervenor in 1984 expansion hearings.
6. Considers area he lives in (on Escarpment, below Mountain Brow Road and east off Waterdown Road) to be part of Aldershot but also has some identification with Waterdown.
7. no response
8. no response
9. no response
10. Landfilling has adversely affected the nearby community and especially individuals who live near it.
11. Specific major problems created by past/current landfilling nearby:
 - noise
 - unsightliness of landfill
 - lowered property values (his taxes were reduced 20% due to proximity of his property to the landfill)
 - birds on the landfill

Other problems: dust (not a problem for him but is for those living closer to the landfill); litter (ditto); increased traffic on North Service Road); water pollution (leachate was expected to flow south but there is now an indication that it is moving northwest); stress (he copes by getting involved on the BLAC, by assisting with tree planting programs through the Boy Scouts, etc.).

12. Disagrees that "psychological barrier" exists. Landfill can be seen and heard from below Highway 403; leachate plume is migrating southward (how far it has reached no one knows) and will not stop at the Highway.

13. Yes, landfill at Site F would have adverse effects on the community. Litter can't be contained on the landfill property. Noise will destroy Bayview Park, one of Burlington's most scenic, relaxing, quiet parks. "It is not environmentally safe to put a 20-year landfill on that property. It is doubtful that leachate can be contained." Flooding problems are likely as contours and surface conditions are changed. Loss of deer and other wildlife, plus forest cover; deer will then browse and destroy other areas. Costs will be unnecessarily high as the Region's garbage is hauled to one corner of the Region rather than to somewhere more central.

14. a. Yes, aware of Region's responses? Regarding complaints, MoE recently brought charges based on Sid Chumley's complaint about insufficient covering of the garbage. This spring the Region piled 2,500 tons of garbage, uncovered, prior to shipping it to the USA. Abnormally warm weather caused the garbage to start to rot. The garbage accumulated for six weeks. He called to complain several times. The garbage was finally covered. He also complained earlier about garbage not being covered regularly, daily, with 6" of soil. "They do what they can get away with. People at the top are not aware of what's happening."

b. Satisfied at present, but only for the past year. Earlier, quite dissatisfied, especially with the Region not living up to its promises and expanding the landfill.

15. No confidence in the Region. Size of landfill and buffer zones are inadequate. A smaller (original 42-acre expansion proposed in 1980) would be acceptable.

16. a. Yes, community as adequately consulted.

b. No. Community was heard but not listened to.

17. a. No, community was not treated fairly in the past. The old dump was to have lasted only until 1972 but has continued to be expanded since then despite promises to the contrary.

b. It would not be fair at all to locate a landfill at Site F. "Every community should take its fair share. Milton fought the earlier landfill proposal which was approved for their area; this cost the Region millions of dollars and countless time."

18. Would feel devastated; betrayed by the Region.

19. Views expressed are probably representative, especially of others who live nearby; he received 100% support from neighbours when he solicited funds to support his intervention at the expansion hearings. No one else has been as closely involved or is as informed.

RESPONDENT: J. ANDERSON

1. June Anderson
685 Inverness Avenue (Aldershot)
634-0411
2. Administrative Assistant at Stelco, Hamilton
3. Has lived in the area since 1955.
4. President of West Burlington Citizens Group for the past two years. Involved with WBCG for past four years and off and on since 1955.
5. Involved through activities of WBCG.
6. Aldershot boundaries are QEW, Lake Ontario, Highway 6, Mountain Brow Road and King Road.
7.
 - a. Community is pulled together now. Schools and parks are its central feature.
 - b. Strong identification; 4. Probably because it's an older area with lots of older residents.
 - c. She interacts through WBCG but is otherwise oriented to Hamilton. 4.
 - d. 4. Mostly churches, schools and parks.
8. The country atmosphere. Self-contained community. Central access.
9. Is becoming citified. Busy. Not small or quiet.
10. A lot of adverse effects, especially since the Region took over and landfill expanded.
11. Major problems (in descending order of importance):
 - water pollution in streams. Stream water is dirty, smelly; no fish.
 - truck traffic on haul routes. Inconvenience, hazard, noise, spills.
 - lowered property values
 - stress. "Why am I still here? But why should I have to leave?" She feels angry and discouraged; uses her opposition to the landfill to counter stress.
 - People are caring less about the community. She had difficulty selling tickets to the Dumpster's Ball; people responded by saying "What's the use?" and "I'm fed up", "I'm getting out".
 - air pollution, including dust and odour. Odour where she lives is worse in hot weather. Gas escaping. Lots of people seem to have respiratory problems.

- litter. Includes illegal dumping, especially in vacant lots and along back roads.
- unsightliness of the landfill.

Other problems:

- rats travel down creek beds
- pollution of groundwater. Affects basements, not just wells; also wetlands, where trees are lost, and springs.

12. Disagrees that there is a "psychological barrier". "It's the most ridiculous thing I've ever heard. Rats cross it. Landfill effects cross it. It's not a wall."

13. Yes, the proposed landfill will have adverse effects. Site has been selected for political reasons, not environmental ones. Leachate cannot help get into the water system. Water pollution would be the most serious problem; it will be much greater than predicted. Also, truck traffic will get worse, with problems of safety and access. Litter problems will get worse too. Air quality will deteriorate and dust and odour will increase. Property values will plummet, based on her experience. "Residents will get discouraged and this will destroy the community as people realize they really have no say."

14. a. Somewhat aware of the Region's response to complaints and concerns.

b. Quite dissatisfied. Citizens on the Landfill Advisory Committee have had to watchdog the Region. The Region has not been abiding by MoE requirements. "If it wasn't for citizen reps on the Committee the Region wouldn't do something unless forced into it."

15. No confidence in the Region at all, based on past performance. "Feels like a put-up job. The siting decision came first, the rest is justification."

16. a. No, the community hasn't been adequately consulted. There weren't enough meetings. Meetings were well attended but there was poor response to concerns raised.

b. Region reps heard us but didn't pay attention. "Our concerns were not addressed, from our viewpoint." Residents didn't have much influence on the Site F decision but their credibility has increased as it is realized that they have valid concerns.

17. a. No, the community wasn't treated fairly in the past. The landfill was expanded. "We were promised it would end but it hasn't."

b. No, it would not be fair to locate a landfill at Site F. "There are plenty of problems with the current one; don't put another one there. We've had it." "We've also been treated unfairly in the siting process. Site F was ruled out at the

beginning, when pits and quarries were ruled out, and then it reappeared suddenly. The process is a farce."

18. Angry. Frustrated. Fearful about health effects on people. Disgusted; burying it isn't the answer.

19. Views expressed here are representative of the community. She's talked to lots of people, door to door. Believes her feelings are those of many others, of the majority.

RESPONDENT: S. CHUMLEY

1. Sid Chumley
595 Kingswood Place (Aldershot)
634-3731
2. Retired.
3. Has lived in the community for 41 years.
4. Home and School, Boy Scouts, various environmental issues (e.g., proposal for sewage sludge disposal), member of West Burlington Citizens Group, citizen member of Regional Landfill Advisory Committee. Also, active in having two illegal landfill sites closed in about 1976. Served on citizen's committee formed by the Region to study and report on energ-from-waste, 1985-86 (report is "gathering cobwebs and dust").
5. As member of WBCG and BLAC.
6. Aldershot boundaries are King Road, the Escarpment, the Lake and Highway 6.
7. a. Aldershot, originally part of East Flamborough, was a community before it became part of Burlington. Older residents feel it is a forgotten part of the city.
b. 4. Aldershot has always had its own identity. But it is lessening.
c. 4. Lots of interaction.
d. 4. Many activities in the community.
8. Good place to raise a family. Nice environment.
9. Noise. Knew railway was there from a long time back and accepted it as part of the country's lifeline. But is now a marshalling yard.
10. There have been many adverse effects of landfilling. These have caused bad publicity for West Burlington.
11. The worst problems have been (rated more or less equal):
 - dust. Experienced at his house, especially when the front of the site was being worked.
 - litter. Better recently.
 - water pollution in streams, e.g., Indian Creek. Leachate will reach the Bay. Pollution of wells is an unknown. The Certificate of Approval is to protect Falcon Creek at all costs; leachate breakouts are to be reported immediately. There have been two of these recently and more are possible.

- noise. He can definitely hear the landfill operation from his house.
- stress. Especially from fear of the environmental consequences of past careless actions.

Other problems include the unsightliness of the landfill, litter and traffic nearer the site, the ruination of the property ("park after-use doesn't make sense"), and health effects on some people such as those with allergies.

12. Disagrees with existence of a "psychological barrier". Noise and dust cross it.

13. Proposed landfill would have adverse effects also. "Two wrongs don't make a right." Site is too small. Won't be able to contain the leachate. "The engineers claim it will be a safe operation. But that's 95% safe at best. What about the remaining 5%? It would be better to apply the energy to a better site." Other problems he expects are more noise, more dust, more litter (which will be very costly, especially on such an exposed site), depressed property values, damage to the image of the community and of Burlington, and loss of people from the community. "I would move and so would others if they were forced to be the neighbours of such a massive dump."

14. a. He is quite aware of the Region's responses.

b. Quite dissatisfied. Citizens on the Landfill Advisory Committee have to fight with the Region to get them to police the landfill. For example, it took two years to get a fence erected on the east side of the landfill. There are budget problems. MoE is dissatisfied. Recently things have been better.

15. Not confident that Region will respond to future concerns. This depends on the existence and effectiveness of the RLAC. He's finished with it, after the upcoming decision is made. Frustrating; Council often votes against the Council reps on the Committee.

16. a. Public consultation was adequate. There were lots of meetings. People gave a clear message -- no more garbage in this area.

b. Residents' concerns were listed to only to a limited extent. Their views were not treated as significant whereas paid experts, who sometimes said the same thing as citizens, were listened to. "Our views had some influence, though; prevented them from walking over us."

17. a. The community hasn't been treated fairly during the past five years. All the Region's garbage is now being disposed of here. The Region has delayed unnecessarily. The Region didn't make a sufficient effort to solve the garbage problem before it

became a crisis. Recycling and energy-from-waste haven't been exploited fully.

b. It would be unfair to locate a landfill at Site F. The Aldershot area shouldn't have to bear all the costs for the Region for a further 20 years. The site selection process was unfair also. Walker didn't really answer questions on his reports.

18. Would feel terribly let down. "So many things have gone wrong there now; to rule that Site F is to be landfilled, in the face of all this experience, would be very disappointing."

19. Feels his views are representative. He knows and has spoken to many people in the community.

RESPONDENT: R. COOPER

1. Roy Cooper
(resident of Burlington but not of this community)
637-2383 (w)
2. Principal, Aldershot High School
3. Has worked in the Aldershot community for six years.
4. School-related community activities. Rotarian.
5. No involvement in the landfill siting process. But informed and concerned about the proposal.
6. Boundaries of Aldershot are the QEW, the Bay, Highway 403 and a bit north, and Highway 6.
7. a. Two components of the community in a social sense: an erudite, professional/business group that tends to be higher-income, active and aggressive; and a lower-income group, mainly living in rental housing.
b. 4. Residents of Aldershot definitely see themselves as part of a community.
c. 4. A recent example was a well-attended school reunion, organized by the community.
d. 4. Example: Aldershot Community Recreation Association.
8. Pleasant attractive living environment. "I like the people." Good neighbours.
9. The landfill and the alarming effects of past dumping there. He wouldn't mind living here but would hesitate because of Bay pollution and the landfill (unease about possible pollution of the groundwater). "I wouldn't want to buy property downside of a dump."
10. Yes, landfill in the past has produced adverse effects, especially groundwater pollution. This raises concerns about children coming in contact with the polluted streams and endangering their health.
11. Major problems expected include:
 - water pollution in streams
 - pollution of groundwater
 - unsightliness of the landfill.

Other problems, for those living near the landfill operation, are dust, noise, odour, litter and truck traffic. Stress is a problem for those concerned about the landfill. Also, there could

be a "self-fulfilling prophecy" if the most concerned and most caring people left the community.

12. Psychologically, Highway 403 and the CN tracks may help to define the community. But they don't buffer it from the effects of the landfill. People are quite conscious of the landfill and its bad effects; e.g., some say rats come from there, and then there's water pollution.

13. Yes, a landfill at Site F would adversely affect the Aldershot community. It would definitely have a psychological effect -- "no one likes to feel that there's a dump close by" -- and this could do harm. "The old dump had adverse effects, which will continue. But at least they aren't being added to. To put another dump there, however, would destroy the hope that things will get better rather than worse. This could cause a major reaction." People's morale would also be affected. The fact that the WBCG exists and people in the community are out there fighting this issue suggests that the self-fulfilling prophecy doesn't operate here, yet. But the caring component of this community is especially vulnerable; they could easily lose the hope they now have. And there could be a lot of stress if that happened." He's also concerned about depreciating property values. The main problem, however, would be water pollution from escaping leachate; he's not satisfied with assurances to the contrary. "Site F seems to be one of the worst spots for a landfill (close to a highly urbanized area and the Lake, and already experiencing leachate problems) yet experts say it's one of the best. I'm confused about this, can't understand it."

14. a. Somewhat aware of the Region's responses.

b. Somewhat dissatisfied with these responses, but aware of the difficulties the Region has.

15. Not much confidence in the Region, based on past experience.

16. a. Yes, sufficient opportunities to be heard.

b. The community's views weren't listened to, nor did they appear to be influential in the Region's decisions.

17. a. Initially, the community was treated fairly with respect to landfilling.

b. It would be unfair to locate a landfill at Site F. It could cause deterioration of the community. "When a landfill was first opened up there, we were unaware of problems. We can't fault decision-makers for what was done then. But today, awareness of problems is much greater, especially of water pollution. To perpetuate these mistakes would be unforgivable and unfair." The siting process was unfair also, since the Region appears to have had a closed mind.

18. Frustrated and depressed. "Another nail in the coffin in terms of polluting the environment". Angry; this would be irresponsible to the community. Apathy; why bother?

19. Feels his views are representative of the community. He has talked to others about this issue and has met no resident who holds different views.

RESPONDENTS: E. DRYDEN AND J. DRYDEN

1. Janet and Ernie Dryden
1970 Four Seasons Drive (Forestvale)
332-3508
2. Ernie: Personnel Department, Stelco
Janet: Bronte Creek Provincial Park
3. They have lived in Forestvale for 14 years.
4. Involvement in local planning and development issues.
5. No involvement in landfill siting.
6. Noted on map.
7. a. Middle-class bedroom community. Lots of turnover. Not a great deal of community spirit.
b. 3. Less now than earlier on. A contributing factor is that children are bussed to school in Aldershot and have friends there.
c. 3.
d. 2.
8. Our property. The heavily treed area behind it (the greenbelt separating Forestvale from the landfill site).
9. Lack of community spirit.
10. There have been adverse effects but on individuals (Aldershot residents), not on the Forestvale community.
11. Problems include litter along North Service Road and traffic on North Service Road (a big problem). Effect on property values is a concern.
12. Not applicable
13. A landfill at Site F would create problems. It would generate more traffic and would be unsightly. It would generate leachate which could pollute the streams and groundwater; there would be greater potential for environmental damage. It would also be unfair to Aldershot. "To locate the landfill there would be 'political', not right."

They expressed concern as well about the effects on Forestvale if the tree buffer was removed by development of that area. Surveyors have staked it and drilling equipment has been seen on the land.

14. a. Have some knowledge of the Region's responses, from meetings and newspapers.

b. Region's handling of the problem has been poor.

15. No confidence in the Region and its capability. The Region has wasted a lot of money on studies only to make a "political" decision in the end. The Region isn't responsive to Burlington's concerns.

16. a. The public wasn't adequately consulted.

b. Residents' views weren't listened to.

17. a. Burlington has done far more than its share.

b. It would be unfair and an injustice to locate a landfill at Site F. "We've assumed our share of the responsibility, not just for garbage but also for traffic."

18. They would feel stepped on, angry enough to take direct political action, and glad they are moving out.

19. Not sure if their views are representative. "Most people in Forestvale don't seem to care."

RESPONDENTS: H. DUFF and A. M. DUFF

1. Hew and Ann Marie Duff
276 Garden View Drive (Aldershot)
528-3635
2. Hew is Senior Vice President, Personnel, for The CUMIS Group.
Ann Marie is Research Librarian, Dofasco Inc.
3. They've lived in Aldershot for 20 years.
4. She has considerable experience with local planning issues.
5. No involvement in the landfill siting process other than through CUMIS. He was personally interested in the landfill issue earlier but lost interest after awhile; thought it was a lost cause ("Who cares about Aldershot?").
6. The north boundary is Highway 403 or the North Service Road. They noted, however, that longer-term residents ("we're fairly recent") see the boundary as farther north, to the Escarpment.
7. a. An upper-income community, to a considerable extent; well-educated, a lot of professionals. Low-density, mostly single-family. Many older residents.
b. 5. Unique in Burlington.
c. 4. Considerable interaction. People are friendly, neighbourly.
d. 3.5. A fair extent of local activity and use of the community's facilities and services. People tend to be loyal to local stores.
8. The location; its access and convenience. Little traffic. Great place to live; fabulous. Like going into the country. A lot of amenities nearby -- the woods and water. The beauty of the area. "Wouldn't live anywhere else."
9. Highway 403. Noise.
10. Yes, there have been adverse effects from landfilling. Some problems, such as water pollution in the creek systems, have taken awhile to emerge.
11. The most serious problems are:
 - water pollution in streams. This is extremely serious.
 - Truck traffic. Traffic on the North Service Road adversely affects CUMIS.
 - unsightliness of landfilling
 - effect on property values. CUMIS is concerned about the effect on industrial property along the North Service Road.

12. They disagree that there is a "psychological barrier". The area north of Plains Road is especially affected by the landfill; it isn't buffered from the landfill by the highway.

13. A landfill at Site F would bring further adverse effects. Of special concern are increased traffic and noise. Also reduced property values. But the main concern is leachate migrating off-site and finding its way into Aldershot and eventually to the Bay. They are not persuaded that engineering can contain leachate; shale presents too many unknowns. They deplore the contrast that a landfill creates with the Escarpment, the Bay and the Botanical Gardens.

14. They are not aware of the Region's responses to complaints.

15. They are doubtful; not confident. They respect the Burlington councillors but they are in a minority and are fighting a losing battle.

16. a. The community was adequately consulted.
b. Don't know.

17. a. Ann: the community hasn't been treated fairly with respect to garbage disposal (it hadn't been treated fairly on most things until Walter Mulkewich came along; Aldershot has always had to fight for everything).

Hew: it was treated fairly prior to 1980 but not since then, not since they promised to close the landfill but instead kept expanding it.

b. Both: it would be unfair to locate a landfill at Site F. Hew: not satisfied that it can be done safely, that the environment and people can be protected, etc.; if these could be proved, fairness wouldn't be an issue. Ann: we've had enough, we've suffered enough effects; "you can't clean up and pollute at the same time." Ann: It's not fair to the next generation.

18. Ann: angry, sick.
Hugh: disappointed, sad.

19. They feel their views are representative of those who have lived here awhile and have given this matter thought.

RESPONDENT: D. FILMAN

1. Diane Filman
814 Partridge Drive (Aldershot)
634-2097
2. Public School Trustee
3. Has lived in Aldershot for 16 years.
4. Various work in the community, including on the school board.
5. No involvement in the landfill siting.
6. Aldershot upper boundary is north of Highway 403 extending to Waterdown's boundary. Tyandaga has a close affinity to Aldershot as well.
7. a. Aldershot was originally a farming community. Has deep historical ties. People here are possessive, like things as they are.
 - b. At least a 4.
 - c. 3.5.
 - d. 3. Especially church activities.
8. Peacefulness. Country atmosphere, trees.
9. Nothing.
10. Yes, the landfill has had adverse effects.
11. The major effects of concern are:
 - water pollution of streams. "The creek near our property was once crystal clear; not now."
 - pollution of groundwater.
 - truck traffic.
12. Disagrees that there is a "psychological barrier". People know the landfill is there. "To people who don't know the area (such as consultants and some decision-makers) it may well seem that there is some kind of barrier."
13. A landfill at Site F would have bad effects. "What bothers me most is the thought of it sitting up there and leaking into the shale, and now they're going to do it again." The site is too close to an urbanized area and the Bay. "The Region is being very narrow in assuming that it will affect only a few people."
14. Not aware of Region's responses to complaints.

15. Not confident that the Region will respond effectively in future.

16. a. Public consultation was adequate.
b. Not sure.

17. a. The community was treated fairly, more or less, in the past.

b. It would definitely not be fair to locate another landfill at Site F. It doesn't meet the minimum criteria of being hydrogeologically sound and centrally located. The Region is not taking all of Halton into account: "they're taking the easy way out."

18. Would feel down, depressed/ Would feel disillusioned that people can't make a decision that is fair, and that it had been a foregone conclusion all along.

19. Views expressed here are felt to be representative. She has lots of contacts and has spoken with numerous people.

RESPONDENT: B. FORSYTH

1. Bruce Forsyth
1044 White Oak Drive (Aldershot)
634-3542
2. Student at Aldershot High School, entering Grade XIII.
3. Has lived in Aldershot all his life (18 years).
4. No community involvement other than sports.
5. Attended and was an intervenor at public meetings on the landfill issue.
6. Upper boundary of Aldershot is the Escarpment.
7. a. A nice place to live. Peaceful.
b. 4.5.
c. 4.
d. 4.5.
8. The community's scale and small-town flavour. The feeling of country.
9. Lack of entertainment facilities, such as a movie theatre.
10. Landfilling has had adverse effects on the community. There is a definite health risk associated with it.
11. The most serious problems are:
 - water pollution in streams. This is the major problem.
 - pollution of groundwater
 - the unsightliness of the landfill. "An eyesore."

Other problems are dust, noise and litter (e.g., for people living nearby and those visiting Bayview Park) and truck traffic.
12. He disagrees strongly that Highway 403 and the CN tracks form a "psychological barrier". "That's garbage." The landfill can be seen, heard, etc.
13. A landfill at Site F definitely would have bad effects on the community. It would bring more water pollution (he is not convinced by the Region's argument, feeling there are too many unknowns), it would be a further eyesore, and it would create stress in the community. "The process has already created bad, bitter feelings."
14. a. Aware of the Region's responses.

b. Not satisfied with these responses. The Region and its consultants seem to put down citizen questions and concerns.

15. He has not much confidence in the Region to address future concerns. "The Region is trying to ram the landfill down the community's throat. It doesn't keep its promises."

16. a. There was inadequate public consultation. The Region didn't really "consult" with options; they presented a fixed view.

b. Regional reps didn't listen to the community. "If they had paid attention, Aldershot wouldn't be a proposed site any longer." A lot of good points were raised by the citizens but ignored by the Region.

17. a. The community hasn't been treated fairly in the past. Garbage disposal has been going on in Aldershot for a long, long time. "I know of no community that has had to experience such a long exposure to garbage."

b. It would not be fair to locate a landfill at Site F, for the same reason as in (a).

18. Anger. And outrage; "Why are they doing such a senseless thing? It must have been a foregone conclusion."

19. He feels his views are widely held in the community, from attending public meetings and reading much of the written material submitted. He's not sure whether he represents the views of classmates; not many know about or got involved in the landfill issue although an urban studies class he attended did include an essay (cited in Section 4) on the landfill and its alternatives.

RESPONDENT: J. LITTLE

1. Joan Little
1067 Oneida Place (Aldershot)
634-5924
2. Alderman, Ward 2, Burlington (includes Forestvale and a small part of Aldershot).
3. (inadvertently omitted)
4. Alderman since 1974. She responded to the questions as a person closely familiar with the Forestvale community but not a resident of it.
5. Involved only in her capacity as a member of City Council.
6. Forestvale, noted on map.
7. a. Tyandaga was created as a golf course community in the early 1960s. Forestvale was built in the mid-70s. It's an upper-income community with many business-oriented residents. High turnover. Closely knit. Few community facilities except for a small shopping plaza. Children are bussed to Aldershot public and high schools.
 - b. 5.
 - c. 4. Lack of community facilities stimulates interaction.
 - d. 3. Few facilities; interaction with Tyandaga.
8. Probably is the physical ambience and the built environment.
9. Noise from Highway 403. Inadequate bus service. Heavy traffic on North Service Road; also litter.
10. Not much perceived effect of landfill on Forestvale due to heavily treed buffer separating the two. But awareness of landfilling is increasing in the community, especially since the expansion hearings and the proposal to store sewage sludge at the landfill. The main effect now is the uncertainty.
11. The main problems include:
 - litter
 - truck traffic and safety (the principal problem)
 - unsightliness of the landfill
 - concern about property values
 - noise (mainly regarding haulage, e.g., on North Service Road).
12. She disagrees with existence of a "psychological barrier". The fact of interaction between Forestvale and Aldershot is counter-evidence.

13. A landfill at Site F would be a bad thing. It would bring much uncertainty and many ill effects. A bad situation will only get worse. There can't be sufficient assurances; there are no guarantees regarding safety and the truck traffic is bound to increase. "There has to be an end. Burlington has done its share. We've been dumped on for years."

14. a. aware of Region's responses, e.g., litter complaints (she gets a half dozen of these a year).

b. Somewhat dissatisfied. "They've tried."

15. Quite doubtful that the Region will be able to respond adequately in future. For example, there's not much they can do about increased truck traffic.

16. a. Public consultation was adequate.

b. The residents weren't listened to.

17. a. Up to the time of the first expansion, the community was treated fairly. After that, no. The landfill siting process has been unfair as well. The Region decided to go to Site F, then backed this up with studies. A site on shale that drains to a lake could never be appropriate.

b. It would be unfair to locate a landfill at Site F. This area has gone way past its share. Milton has never taken care of its own garbage since regional government began, yet Milton is now doing an urban expansion study.

18. She would feel cheated.

19. She believes her views are representative of the community. She talks with a lot of people, hears these views expressed, and feels she has political sense.

RESPONDENT: E. MCMAHON

1. Ed (E. J. McMahon)
781 Forest Glen Avenue (Aldershot)
632-4375
 2. Sales Manager, Gibco BRL Canada
 3. Has lived in Aldershot for 17 years.
 4. Separate school trustee, Past-President of the Aldershot Tennis Club; formerly and briefly a member of the West Burlington Citizens Group.
 5. No involvement with the landfill siting process.
 6. Aldershot's north boundary is Highway 403.
 7. a. A well-established community with lots of well-to-do people. Nice place to live.
b. 4.
c. 2.5. Not as much as a newer community where people don't know others.
d. 4. Tyandaga residents are members of Aldershot Tennis Club.
 8. Quiet country-like atmosphere. Compact, convenient to work. Good access to other needs in Toronto and Hamilton.
 9. Traffic building up. The dump to be enlarged.
 10. The landfill certainly has had adverse effects on nearby individuals but also on the community.
 11. The main problems are:
 - water pollution in streams. Leachate entering the watercourses in the community is the problem. The creek behind his house sometimes smells quite foul; he's not sure it's from the dump but suspects so.
 - truck traffic
 - noise, near the landfill and along the roads to it
 - unsightliness of the landfill. They can see it from their tennis club.
- Other problems include litter (and other stuff that falls off trucks), odour, dust and birds.
12. Highway 403 and the CN tracks separate but don't buffer Aldershot from the landfill. "People know it's there and are upset about it."

13. A landfill at Site F would be a "bad thing" with adverse effects. Aldershot would become known as "the dump of Halton". The landfill would detract from the community as a desirable place to live and from its character and charm; this could affect property values. He is not convinced that leachate could be contained and fears further water pollution.

14. a. Familiar with some responses, e.g., to flooding and pollution of creeks.

b. Not satisfied.

15. No confidence in the Region. This is based on experience with landfills and waste management generally. It also reflects his lack of trust in government.

16. a. Region seemed to do a good job of informing people.

b. Doesn't know.

17. a. "I can't say we've been treated unfairly in the past."

b. It would be unfair to locate a landfill at Site F. "We've had it for a long time. It's someone else's turn."

18. He would be most unhappy. It would feel like other parts of the Region have ganged up on Burlington -- a victimized feeling. "Elected representatives ought to take a larger view, what's best for all."

19. Feels his views are widely held. He gets a chance to talk with a lot of people in his various roles.

RESPONDENT: W. MULKEWICH

1. Walter Mulkewich
459 Patricia Drive (Aldershot)
529-2564
2. Regional and City Alderman, Ward 1 (includes most of Aldershot)
3. Has lived in Aldershot for the past 22 years.
4. Ward 1 citizens group in the mid-70s. Member of Aldershot High School Community Council in the early 1970s. Alderman since 1976. Member of West Burlington Citizens Group until a year ago.
5. Involved as a citizen in the 1970s and in ad hoc citizen groups. Member of committee for pollution control. Member of Region's Solid Waste Management Committee since 1970s and Burlington's Environmental Management Committee since 1980. Member of Burlington Landfill Advisory Committee.
6. Aldershot's boundaries are the Hydro right-of-way (the old East Flamborough Township boundary, to 1959), the Lake, the Escarpment and Highway 6.
7. a. Full cross-section of society (class, income). Clear community identity. Stable; lots of long-time residents. Also many older people.
b. 4.5.
c. 4.
d. 4. Aldershot is well-endowed with community facilities and services.
8. Good place to raise a family. Accessible location near cities, work and recreation.
9. None.
10. Landfill has had adverse effects on the community and on individuals, especially those close to the site but also some living north of Plains Road.
11. The main problems include:
 - noise
 - dust
 - water pollution in streams
 - unsightliness of the landfill
 - odour
 - people caring less about the community.

Other problems include truck traffic on the access roads and stress. As well, there is the perception in Aldershot of being on the edge of things, of being asked to take others' garbage but not even having the services that new subdivisions get; a feeling, therefore, of being dumped on. And there is a concern about long-term environmental effects.

12. He disagrees that Highway 403 and the CN tracks form a "psychological barrier". If there is such a thing it is the Escarpment; "You can't see over it as you can the highway". There is access across the so-called barrier and people, including school kids from Tyndaga, cross it all the time.

13. A landfill at Site F would have bad effects on the community. It would put into effective perpetuity the impression of the community and its problems. Creating a massive environmental problem would leave an unsatisfied public. There would be increased cynicism and apathy, along with stress from this "hangover" and the threat of more environmental problems. Water quality would be a problem as would the visual aspect of the landfill.

14. a. aware of the Region's responses.

b. Somewhat satisfied. He recalls 10-15 complaints per year, mostly about litter on the haul route, unsightliness and suspicion that hazardous waste is being dumped. There would be many more except for a kind of defeatist attitude in the community, and the feeling that a landfill is inevitably a "dirty" operation.

15. He is fairly confident that the Region can respond to future concerns, provided that waste management receives a larger budget and more staff for control and monitoring. But he has little confidence about preventing water pollution or in mitigating the effects of truck traffic.

16. a. Public consultation wasn't adequate. Sufficient opportunities for input but that input wasn't listened to and used. The Region's responses appeared to stonewall; the minds of the consultants seemed to be made up, which produced a "what's the use?" attitude on the part of the public.

b. No. See (a).

17. a. The community has not been treated fairly in the past. It has received more than its share of the Region's garbage.

b. It would be unfair to put the landfill at Site F. Alternatives haven't really been addressed (recycling, energy-from-waste, etc.). It's also unfair to overload one environment. Other areas should take their share, at sites that are more suitable than this one and after exploring alternatives fully. Also, the receiving community deserves compensation,

maximum possible protection, monitoring, traffic and similar improvements.

18. Would feel quite angry.

19. Views are representative; was returned with a 77% majority on a campaign that stressed landfilling and a position that is well known.

RESPONDENT: R. O'BRIEN

1. Bob O'Brien
574 Plains Road West (Aldershot)
522-8345
2. Executive Director, Catholic Cemetery, Diocese of Hamilton
3. A lifetime resident, for 60 years.
4. Trustee and past Chairman of the Halton Separate School Board; member of the board of trustees for St. Joseph's Hospital in Hamilton; member, Holy Rosary Parish.
5. No involvement in landfill siting process.
6. Aldershot's boundaries are The Lake, Hamilton city limits, QEW, the foot of the Escarpment.
7. a. The best of all worlds - suburban, access to two major cities yet also to the countryside.
b. 5, for anyone who's been here any length of time.
c. 5.
d. 4.5.
8. Community spirit, openness (i.e., open space), the environment, a pleasant place to live.
9. Nothing.
10. Has no personal, direct knowledge of adverse effects but is aware of others who have been so affected and knows it disturbs them.
11. Problems include stress ("for sure") and the unsightliness of the landfill.
12. There is no such "psychological barrier". Bridges, vehicles and people cross it all the time. Also, the effects of the landfill don't stop these, e.g., you can see it, see the truckloads of garbage arriving, hear them, etc.
13. The landfill would disturb the whole community and that would be a bad thing. "Any area that accepts large amounts of garbage, far beyond what it produces, lessens the value of itself as a community and as a desirable place to live." He perceives a lot of concern in the community about water pollution, truck traffic, the visual aspect and property values. The landfill proposal feels fundamentally wrong to him.

14. Not aware of the Region's responses. But in general, not satisfied with Regional Council, though satisfied with Burlington Council. The regional level doesn't reflect local concerns adequately.

15. Not much confidence in the Region. Some of the effects of the landfill are not totally controllable.

16. Doesn't know.

17. a. The community hasn't been treated fairly in the past.
b. It would not be fair to locate a landfill at Site F.

18. He would feel disillusioned; the lost illusion would be that one part of the Region will treat other parts fairly.

19. He believes his views are representative. He has heard them expressed by others often.

RESPONDENT: J. PERRE

1. Jack Perre
615 Morley Road (Aldershot)
681-2229
2. Salesman.
3. Has lived in Aldershot for 10 years.
4. President, Aldershot Community Recreation Association, for the past nine years. Volunteer, Cablenet.
5. No involvement in the landfill siting process.
6. North boundary of Aldershot goes almost to Waterdown. His Association has members who live up there.
7.
 - a. A mature, stable community.
 - b. 4-5. Strong identity. Many people still call it Aldershot.
 - c. No response.
 - d. 4. Lots of community activities.
8. The community's natural beauty. Its stability and its family orientation.
9. The smell from Hamilton, when the wind is wrong. Excessive concentration of apartments and higher-density housing in one area.
10. The landfill has had adverse effects on the community. He suspects dumping from outside Burlington.
11. Major problems are:
 - litter
 - dust
 - odour
 - truck traffic, especially on King Road
 - water pollution in streams. The most serious of the problems.
 - gulls
 - the unsightliness of the landfill.
12. There is no way that this could be a "psychological barrier". People use the area up there and consider it part of their community.
13. He is very concerned about a landfill at Site F. It would only bring more of the same effects -- litter, dust, etc.) and it would create seepage of pollutants into the watercourses.

14. a. Aware of the Region's responses.

b. Responses to his own complaints, about litter, have been adequate.

15. He is confident that they will try but not that they will succeed. Nor does he believe the Region will allocate the funds necessary. There ought to be more effort given to recycling and to waste reduction, but the system isn't in place to support such intentions. Each community should look after its own garbage.

16. a. Public consultation opportunities were adequate. But meetings were too technical and speakers too long-winded.

b. Region reps heard the residents' views but gave the impression that their minds were already made up. Their attitude was patronizing. The community's input wasn't influential.

17. a. The City did what it could, and a dump was needed for Burlington; fair enough. But not for other municipalities' garbage. When their waste started coming to the Burlington landfill, it became unfair.

b. It wouldn't be fair to locate a landfill at Site F. "This community has put up with this long enough. Burlington garbage, maybe, but no one else's."

18. He would feel defeated. "We knew it was predetermined."

19. He believes his views to be representative. He's had many conversations with others on this; "It's a hot topic".

RESPONDENT: P. SMITH

1. Penman Smith
1552 Tyandaga Mews, Unit 2 (Forestvale)
332-3549
2. Condominium Information Officer, Ministry of Consumer and Corporate Affairs.
3. Has lived in Forestvale for 12 years.
4. Past President, Halton Condominium Corporation #32.
5. No involvement with the landfill siting process.
6. Noted on the map.
7. a. His community is the condominium complex of 76 units. Middle-class, close-knit, mobile.
b. Strong identity, say 4 (speaking for the condominium community only).
c. Fair amount of interaction, say 3 (ditto).
d. No response.
8. No response
9. No response
10. The landfill has had adverse effects on the community, though he doesn't sense a lot of concern.
11. The main problems are:
 - traffic on North Service Road
 - litter
12. Not applicable
13. A landfill at Site F would create further problems. The Aldershot community, downstream, would experience more water pollution in streams and other environmental effects. Property values in the immediate vicinity could be affected. Impacts on Forestvale would depend on whether the greenbelt between it and the landfill site remained.
14. Not aware of Region's responses.
15. Has an open mind on this.
16. Had no involvement in the public meetings.
17. a. No response.

b. It would be unfair to put a landfill at Site F. "Other communities should assume responsibility for waste too. This area has carried the load long enough."

18. No response

19. Feels his views are representative of his community. He has lots of contacts in it.

APPENDIX C: INTERVIEW RESULTS

The Respondents

1. Jim Aitken
Chairman, Burlington Landfill Advisory Committee
Resident of North Aldershot
2. June Anderson
President, West Burlington Citizens Group
Resident of Aldershot
3. Sid Chumley
Member, Burlington Landfill Advisory Committee
Resident of Aldershot
4. Roy Cooper
Principal, Aldershot High School
5. Janet Dryden
6. Ernie Dryden
Residents of Forestvale
7. Ann Marie Duff
8. Hew Duff
Vice-President, Cumis
Residents of Aldershot
9. Diane Filman
Public School Trustee
Resident of Aldershot
10. Bruce Forsyth
High school student
Resident of Aldershot
11. Joan Little
Alderman, Ward 2
Resident of Aldershot
12. Ed McMahon
Separate School Trustee
Resident of Aldershot
13. Walter Mulkewich
Alderman, Ward 1
Resident of Aldershot
14. Bob O'Brien
Separate School Trustee

Resident of Aldershot

15. Jack Perre
President, Aldershot Recreation Association
Resident of Aldershot
16. Penman Smith
Resident of Forestvale

Community Boundaries

This is Question 6 on the Interview Guide. Boundaries, as perceived by the majority of respondents, are shown on Figure 4 and earlier on Figure 3.

Aldershot. Unanimity on its boundaries to the east (QEW), south (Lake Ontario) and west (Burlington city limits or Highway 6). The majority of Aldershot resident respondents felt the north boundary to be Mountain Brow Road or the Escarpment, with the Hydro R-O-W or King Road on the east. Older people and long-time residents were more likely to see the north boundary extending to the Escarpment.

Forestvale. Unanimity on boundaries.

Community Identity, Interaction, Activities and Level of Satisfaction

Community in a social sense: (open-ended Question 7a)

Aldershot. Respondents speak with much feeling about the community as a great place to live. They mention its small-town and country-like atmosphere, its many amenities, its easy access to city and country, its deep historical roots, its maturity and its stability. They also note its income mix and education levels (tending to the higher end of the scale) and the considerable number of older and long-time residents. They call Aldershot the best of all possible worlds.

Forestvale. Respondents describe it as a newer, middle-to-upper-income bedroom community, mobile and with lots of turnover yet closely knit. They do not experience a great deal of community spirit.

The next three questions called for responses on a scale of 1 (very little) to 5 (a great deal). Median responses are shown.

Community identity:

Aldershot. Median response of 4 indicates a strong community identity.

Forestvale. The two resident respondents give it a 3 (the perceptions of other residents may be somewhat higher than this, according to the non-resident alderman's response). Identity appears to be stronger in the higher-density area.

Interaction:

Aldershot. Median response of 4 indicates a high level of interaction within the community.

Forestvale. Rating of 3 indicates a significant level of interaction.

Community activities:

Aldershot. Median response of 4 indicates considerable use of the community's broad array of community facilities and services and generally a high level of participation in community activities.

Forestvale. Rating of 2 reflects the few facilities and services available in the community.

Level of satisfaction: in Questions 8 and 9, respondents were asked what they liked most and least about the community

Aldershot. Most valued are the natural/physical environment (country-like atmosphere, the area's natural beauty and many amenities, open space, pleasant living environment), the residential and social setting (small-town flavour, peace and quiet, very little local traffic, the people, good place to raise a family), the location (ease of access, convenience), the self-containment of the community and its spirit. Least liked are the increasing urbanization (becoming citified, excessive concentration of apartments, more traffic, loss of quiet and small scale), certain aspects of the environment (noise from the 403, smell from Hamilton), absence of certain facilities and services (movie theatre, transit), the feeling that Aldershot is a forgotten part of Burlington, the alarming effects of past landfilling, and the prospect of another landfill. The fact that 3 of the 11 residents could think of nothing they disliked, and the disproportionate number of likes to dislikes, are indicators of a high level of satisfaction with the community.

Forestvale. Most valued are individual properties and the natural/physical environment, especially the heavily treed area west of the community. Liked least are the truck traffic and litter on North Service Road, noise from Highway 403 and the lack of community spirit. Likes and dislikes seemed about equal.

Existing and Past landfill Operations

Adverse effects on community and/or individuals? (Questions 10 and 11)

Aldershot. Unanimous "yes" response regarding effects on the community and effects on individuals. The most serious problems (in descending order of importance indicated by frequency and strength of mention) have been and are: stream pollution (by far the most serious concern), the landfill's unsightliness, dust and air pollution, noise, truck traffic, litter, groundwater pollution, stress, odour, effect on property values, and birds and rodents.

Forestvale. Effects are perceived by respondents to be directed more to individuals than to the community. The most serious problems have been and are: truck traffic on North Service Road, effect on property values, litter and unsightliness.

"Psychological barrier": (Question 12, relevant to Aldershot only)

Respondents expressed strong, unanimous disagreement with the statement, "Highway 403 and the CN tracks form a kind of psychological barrier that effectively buffers the Aldershot community from landfill operations". Respondents argued that adverse effects of landfilling have been and continue to be experienced in Aldershot below the so-called barrier and especially in the area north of Plains Road; effects such as noise, dust, unsightliness and (especially) leachate migration and polluted streamwater do not stop at the highway/railway. Two respondents even referred to rats crossing the "barrier". Respondents also indicated that people in Aldershot are quite conscious of the landfill; they know it's there and are upset about it. In part that is because of the landfill's effects and in part because many residents of Aldershot perceive the area where the landfill is located to be part of their community.

Proposed Landfill at Site F (Question 13)

Respondents were asked whether they thought the proposed landfill would have adverse effects on their community and/or individuals in it, and if so what those effects might be.

Aldershot. Unanimous agreement that the landfill would have adverse effects. These are expected to be (in descending order of perceived importance): stream and groundwater pollution, reduced property values, various forms of stress, noise, litter, damage to the community's image, increased traffic

with associated access and safety problems, unsightliness, further deterioration in the quality of the living environment generally, and a loss of trust in politicians.

Forestvale. Unanimous agreement that the landfill would have adverse effects. These worst of these are expected to be increased truck traffic and reduced property values. Other concerns (in order of importance) include the landfill's unsightliness, litter, loss of environmental quality generally, and damage to the community's image. A special concern is possible loss of the tree buffer between the community and the landfill site.

The Region's Response to Community Concerns (Questions 14 and 15)

Of the eleven who say they are aware of the Region's responses, only three indicate satisfaction with these responses; the other eight are dissatisfied and two of those are quite dissatisfied. One of the satisfied respondents has been that way only during the past year; before that he was quite dissatisfied. Reasons for dissatisfaction include: failure to address people's concerns, and appearing to put them down, at public meetings; and failure to live up to promises; the need for citizens to watchdog the Region and force it to act responsibly at the existing landfill. Two of the dissatisfied respondents acknowledge the Region's difficulties and give them credit for trying.

Respondents were then asked whether they had confidence in the Region to address resident and community concerns at a new landfill, should one be located at Site F. Of the 15 respondents to this question, 14 express a lack of confidence. The remaining respondent indicates confidence only if the necessary resources were allocated to waste management, but still lacks confidence in the Region regarding prevention of water pollution and mitigation of traffic effects. Reasons given for this overwhelming lack of confidence include: past experience with the Region, including its failure to keep its promises or to abide by MoE requirements; inability of the Region to address certain concerns (e.g., nothing can be done about traffic, litter is inevitable and leachate containment cannot be made fail-safe); unwillingness of the Region to give the landfill necessary priority and to commit the necessary funds; the project design (site too large, buffer zone insufficient); and the whole exercise seeming to be "political" (the best interests of the local community aren't the prime concern of regional councillors) and a put-up job.

Public Consultation on Landfill Site Selection (Question 16)

Most respondents (9 of 14) feel that the public was adequately informed and consulted during the site selection process. Most of them also feel that the public's views were heard by Regional representatives but all respondents feel that the public wasn't

listened to (i.e., that attention was not paid to the concerns expressed by citizens). Respondents have a strong suspicion that minds at the Region were already made up when public consultation was undertaken.

Equity (Question 17)

Five of the thirteen respondents to this question feel that their community has been treated fairly with respect to landfilling in the past. The other eight disagree, indicating that their community has had more than its share of garbage disposal, the Region expanded the landfill despite assurances to the contrary, the Region has unnecessarily delayed the search for a new landfill, not enough effort has been made to avoid a crisis, and alternatives (such as recycling) haven't been fully exploited.

The responses of three of the five who feel fairly treated in the past are qualified. They note that garbage disposal in the community was to have ended in 1972 but, despite promises, the landfill has been kept open and continually expanded (landfilling beside an existing facility in the community is seen as an expansion, not a new site). Another view is that the broken promise made at the 1984 expansion hearing was the turning point; after that, they feel, the community was no longer treated fairly.

No one among the 18 respondents feels it would be fair to locate a landfill at Site F. The main reasons are: we've done our share; Milton hasn't taken care of its own garbage since regional government was formed and yet Milton is doing an urban expansion study; other communities should assume their part of the responsibility too, which is what "fair" means; there are plenty of problems with the old landfill, and these problems shouldn't be perpetuated at a site next door; the local environment is over-loaded; our community would be deteriorated further; all concerns about this site haven't been addressed; and it's not fair to the next generation.

Some respondents believe that the site selection process was unfair also; one calls it "a farce". They feel that: long before the process was concluded, decision-makers at the Regional level and their advisors had determined in advance that a landfill should be located at Site F; it remained in contention even though pits and quarries were ruled out; and the consultants didn't really answer questions on their reports.

Feelings if Site F Were to be Selected (Question 18)

Responses to this open-ended question convey a range of negative feelings (no one gave a positive response), quoted below:

Fearful about health effects

Very disappointed (two respondents)

Frustrated.

Disgusted.

Angry (six respondents)

Outraged. Why are they doing such a senseless thing?

Most unhappy

Sad

Terribly let down

Depressed. Another nail in the coffin in terms of polluting the environment

Betrayed by the Region

Wronged

Cheated

Stepped on

Victimized. Other parts of the Region ganged up on Burlington

Defeated. We knew it was predetermined. (3 respondents) A foregone conclusion all along. (3 respondents)

Disillusioned (3 respondents). That people can't make a decision that's fair. One part of the Region should treat others fairly. Elected representatives ought to take the larger view, what's good for all

Resigned

Apathetic; why bother?

Sick

Devastated

Glad to be moving out.

Representativeness of Views

All of the Aldershot respondents are confident that the views they expressed are widely held in the community. They cite as

evidence their contacts with and involvement in the community; also, several are elected.

Two of the Forestvale respondents are less certain of the extent to which their views are held by others but the other two are more confident that their views are representative.