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**Social Impact Assessment Principles and Approaches:  
Reflections on 15 Years of Practice**

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## **SOCIAL IMPACT ASSESSMENT PRINCIPLES AND APPROACHES: REFLECTIONS ON 15 YEARS OF PRACTICE**

### **INTRODUCTION**

After reviewing recent articles from **Canada, the United States, Australia and New Zealand** and discussing social impact assessment (SIA) with colleagues from other countries, it is clear that SIA continues to develop at varying rates and to different degrees internationally. In Ontario, SIA practitioners generally agree on the purpose of SIA and the key methodological steps. Various approaches also are being developed. However, among many project and policy decision-makers there is still confusion about what SIA is; what it can do; and, how it should be done.

The purpose of this paper is to address these questions by presenting three key principles that ought to guide SIA and by describing three related approaches to SIA that respect the three principles.

The ideas are based largely on my experience in practicing SIA for over 15 years. For nine years, I developed SIA methods and approaches in Ontario Hydro for waste management, fossil, thermal and hydroelectric generation and electricity transmission. Subsequently, in consulting practice, I have managed project and policy SIAs on landfill siting processes, waste minimization, forestry and transportation. I have also conducted issue management and public consultation on a broad range of topics.

### **WHAT IS SOCIAL IMPACT ASSESSMENT?**

Social impact assessment is a process of analyzing, evaluating and predicting the future effects of proposed policy, program and project decisions and actions on the well-being of people, businesses, institutions and community features. Its goal is to help protect and enhance the quality of life of people. Social impact assessment involves identifying: changes that might occur in peoples' ways of life, their physical and psychological health, their cultural traditions and lifestyles, their institutions and their community as a result of the development and implementation of a new policy, program or project; changes likely to be experienced by people and communities as significant events; and, ways of managing the change (i.e., mitigation and enhancement). (adapted from: D'Amore, 1978; Armour and Associates and Institute of Environmental Research, 1987; and Wolf, N.D.).

In short, a complete SIA should address all of the potential effects on a community's people, formal and informal decision-making processes, businesses, institutions and other features.

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### THREE PRINCIPLES FOR SOCIAL IMPACT ASSESSMENT

Over the past 15 years SIA has emerged as an interdisciplinary field of social science knowledge and practice. In general, there is agreement on the goals of SIA, the types of impacts to be considered, the process for conducting SIA and mitigation and enhancement processes. However, few have articulated the principles that should guide SIA.<sup>1</sup>

What I see as three of the most important principles for SIA can be expressed as the three I's:

- Interaction;
- Integration; and,
- Iteration.

These principles address a fundamental goal for SIA: that the effects on people and communities from a policy, program, or project be minimized and that opportunities for enhancing the quality of life be provided. For example, on a transportation project the potential effects of noise on local residents could be minimized through the use of sound barriers, while an improved street scape could enhance the quality of life for the residents.

It is from these three principles that the real power and promise of SIA stems. If SIA consistently accommodates these principles, it should be comprehensive, accurate and defensible, and should have a significant influence on decision-making.

#### ***Principle 1: Interaction***

A social impact assessment is not complete unless there has been effective interaction with those potentially affected (both positively and negatively). This major principle has been recognized in the literature generally as the need for greater consultation (Burge, 1991; Craig, 1990; Gagnon et al., 1993; Gramling et al., 1992; Taylor, 1990; Wildman, 1990).

The SIA practitioner's technical knowledge and analytical capabilities must be blended with the community's knowledge to determine how the community and its people might be affected by a project, policy or program. This can only be done with input from those potentially affected, they should have opportunities to influence the judgements about the significance of the potential effect. 7

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<sup>1</sup> An initial attempt was made in the United States: Interorganizational Committee on Guidelines and Principles for Social Impact Assessment. 1994. *Guidelines and principles for Social Impact Assessment*. U.S. Department of Commerce.

A participatory approach to SIA must be initiated ~~at~~ the beginning ~~of~~ the impact study. The community should have input to the design of the social impact assessment. The various public concerns identified during the scoping phase should assist in designing an SIA approach that will address the concerns. As the SIA proceeds, the public can be involved in the development of the methods to be used to evaluate the potential effects (e.g., evaluation criteria).

Through the interaction with the people and the community, the SIA should strive to incorporate the informal community evaluation processes into the formal assessment process. This would ensure that the community has a greater influence and possibly a greater stake in the outcome of the assessment. Such interaction can provide the community with greater control over technical input to the SIA, and, through the SIA, input into the type and design of the technical and environmental studies.

### *Principle 2 Integration*

The social impact assessment should be integrative. It should ensure that the other technical studies focus on how people and their communities may be affected, and that the results of all studies are integrated to determine the overall potential effects. Only in this way can thresholds of effects on the human environment be better understood and addressed. For example, the noise, traffic and odour studies for a proposal may each independently find that, with mitigation, there is a minor net effect on residents in a particular area. However, all of the effects together may violate a threshold of effect for those particular residents.

The SIA must also, of course, integrate the public's knowledge and responses into the study plan and analysis. There is little point in interacting with the community if you can't or won't integrate what you have learned from them.

Throughout the implementation phase of the project. SIA should assist in the integration and coordination of the delivery of social programs and the infrastructure related to the mitigation and enhancement of the potential effects.

The primary challenge for SIA is that it must integrate the findings of other disciplines or run the risk of being perceived as a public consultation exercise with each of the component disciplines functioning independently. This threat is very real in Ontario. Two key influences on the future of SIA in Ontario are Intervenor Funding and Participant Funding. Through Intervenor Funding, a legislated requirement in Ontario, opponents to an undertaking can apply for funding to critically review the environmental assessment prior to a hearing. Participant Funding is increasingly provided by proponents to provide a critical review before the final environmental assessment document is submitted to the government for approval. Justice Berger

initiated the **first** such program in **Canada** (Berger, 1983).<sup>2</sup>

The **positive** influence of **these** funding programs is that they tend to provide for improved power sharing in environmental assessment by providing those potentially *affected* with the necessary resources to review the studies and provide their perspective on the potential impacts. However, while they certainly assist with the Interactive Principle, they jeopardize the integrative potential. The funding for review of the environmental impact statements tends to focus on individual disciplines, placing less relevance on the integration of the individual study results.

### ***Principle 3: Iteration***

Over the years it has become evident that:

- When it comes to SIA, the practitioner is not the only expert; the community's expertise is also critical.
- Each assessment situation is unique; each relationship between the undertaking and the community can be unique.
- The people and the community must be treated with respect for their knowledge. We must listen to what they have to say about what might affect them, how it might affect them and how important it is to them. Local community knowledge is real and should be used. This means that an interactive, integrative SIA requires that the SIA be iterative.

Iterative refers to the need to be prepared to re-evaluate the SIA analysis (and approach) and undertake additional investigations as required. This can mean going back to the public and modifying the approach and analysis as the assessment proceeds. We must be flexible enough to stop and possibly re-direct the SIA as the public becomes more involved.

The community's involvement could result in the need for additional technical studies or a requirement to retrace some steps in the SIA approach to address new concerns that arise with the community's increased understanding of the undertaking,

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<sup>2</sup> The Berger Commission, 1974 - 1978 was a milestone in establishing public consultation and social impact assessment as integral components on project assessment. The Commission provided funding for the local groups to review material and present their evidence and views and expended considerable effort and analysis to assess the potential social impacts on Aboriginal people and communities. And the Commission.

Justice Berger recognized and accommodated a detailed review of the technical expert evidence and the community evidence through formal technical hearings where experts were subjected to cross examination and informal community based hearings where community members provided their evidence on how they would be affected.

There can also be some surprises from the technical studies. For example, late in the assessment phase, studies can identify unanticipated potential effects on the natural environment which can have direct social effects. About 10 years ago elevated methyl mercury levels were found to occur in hydroelectric reservoirs. The mercury moves up the food chain and people who consumed fish on a regular basis could be at risk. At the time, I was in the process of completing the SIA of a proposed hydroelectric facility in Northern Ontario. With this "new" information, I had to retrace some steps in the SIA to ensure that the community and I were able to complete the evaluate the potential effects of the project.

### THREE CURRENT APPROACHES

Although the overall intent of SIA is clearly established by the definition, approaches to SIA can vary. One of the difficulties in developing a "template" or standard approach to SIA is the generally accepted view that each situation is unique. This suggests that because SIA deals with the interaction between people and the proposal, the approach to SIA can and should be modified to address the uniqueness of each assessment situation. That is, the approach to identifying potential changes, the significance of those changes, and the ways of managing those changes may vary depending on the type of project, policy or program; the characteristics and concerns of the people and communities potentially affected; and, the general trends and attitudes in the broader society (e.g., province).

In our office we have three different approaches to SIA underway: (1) a site-specific project SIA; (2) an issue-oriented SIA; and, (3) a policy/program SIA (see below). Other approaches are possible. The approaches are all based on the general approach to SIA that has developed over the past 15 years. The approach typically includes:

Scoping

Problem Identification

Formulation of Alternatives

Profiling

Projection

Analysis of Alternatives

Evaluation

Management (including Mitigation/Enhancement and Monitoring)

**One of the most important features of the approaches is the emphasis on impact management (i.e., mitigation/enhancement and monitoring). Due to the limited forecasting capabilities of the social sciences particularly for larger and longer term projects, impact management process were developed to monitor the process of social change and to avoid or mitigate potential adverse impacts early.<sup>3</sup>**

A brief outline of the three approaches and their key features is presented below,

### ***Site-Specific Social Impact Assessment***

**Our approach to site-specific social impact assessments is to undertake a rigorous analysis using quantitative and qualitative techniques. One of our goals in planning and completing the site-specific SIA is to provide thorough analysis and documentation that can provide decision-makers with the data and recommendations they need to improve and defend their decisions. The typical approach to SIA (identified above) was developed for site-specific project SIAs. The emphasis generally is on preparing a detailed profile and ensuring that all potential social effects have been identified and their significance determined. Mitigation measures are then developed for the significant effects (i.e., impacts).**

### ***Key Features of a Site-Specific SIA***

- **The practitioner can draw on the experience of many other social impact assessments that have been completed on site-specific projects to identify the probable effects of a project.**
- **The SIA is conducted in a limited geographic area,**
- **It does not address policy issues associated with the proposal. The focus of the assessment is on the specific community(ies), although regional effects can be addressed.**
- **Generally, there are more precise data for the practitioner to work with than is the case with a policy or program SIA.**
- **The public consultation for a site-specific SIA typically includes meetings with potentially affected people in a variety of settings to: discuss issues; develop an understanding of the project and how it might affect them; develop the evaluation criteria; and, develop mitigation and enhancement strategy and measures.**

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<sup>3</sup> Ontario Hydro developed impact management processes beginning in the late 1970s. See Baril, R.G. 1983. *Community Impact Management: Models for Compensation*. Paper presented at the Fourth Annual Conference of the Canadian Nuclear Association, June, Montreal, Quebec; and, Hardy, D.R. 1982. *Impact Monitoring and Mitigation: The Case of Ontario Hydro's Atikokan Generating Station*. Paper presented at the Symposium on Psycho-Social Impacts of Resource Development in Canada: Research Strategies and Applications, December, Toronto, Ontario.

### ***Issue-oriented Social Impact Assessment***

**Issue-oriented SIA emphasizes an interactive process of assessment focused on problem solving and conflict resolution.**

Greater emphasis **is placed** on the first three assessment **steps** (i.e., **scoping**, problem identification and formulation of **alternatives**) than has been **the case in** the traditional **site-specific SIAs**. **Scoping** identifies the issues and those potentially **affected**. This, in turn, helps to **define early in the assessment the study area, and the key variables (what data to collect to describe the area)**. This **step** can include: **literature reviews; media report monitoring; interviews, surveys, meetings with key people/groups; reviews of complaint files where available; and, reviews of concerns raised about other similar undertakings**. The potentially **affected parties and communities are actively engaged in clarifying the problem and in formulating alternative ways of solving the problems**.

**Hardy Stevenson and Associates is applying this approach to the proposed change in operation of an existing landfill where significant operational issues have occurred in the past, The initial emphasis on the issues helps to focus the other technical studies. For example, this approach should help to ensure that assessments of potential nuisance effects are focused on those most likely to be affected or those who believe that they will be affected. The approach does not exclude professional judgement and must incorporate a review of the findings of the other disciplines (e.g., hydrogeology and odour and dust) to determine the implications for the people and the community.**

### ***Key Features of the Approach***

**The key features of the issue-oriented SIA include the following:**

- **The approach enables conflict resolution to begin early. It helps those involved to articulate their concerns and to hear the concerns of others. It can initiate discussion between the permanent and those potentially affected before rigid positions are formed.**
- **A thorough on the scoping of the issues, allows for changes to be made early in the study approach and the project design before large financial commitments are made.**
- **It is more efficient and effective. It avoids unnecessary data collection and the associated costs. It focuses the assessment on the people and the community(ies) that are likely to be affected, reducing the amount of profiling required.**
- **It must be interdisciplinary (integrated).**
- **Participation by those potentially affected is essential.**

### ***Program and Policy Social Impact Assessments***

A SIA of a policy or program requires a somewhat different approach than a site-specific project! Because the program or policy is likely to be applied to a broad geographical area, the assessment will need to consider: potential impacts throughout the region to which the policy applies; potential impacts to special/sensitive groups within the region; inter- and intragenerational impacts; and, potential impacts in localized areas (as a result of specific aspects or components of the policy/program).

Hardy Stevenson and Associates recently had the opportunity to conduct a SIA of a major policy/program. This assessment identified and assessed the effects to the social environment which might occur as a result of the implementation of Residential and Industrial, Commercial and Institutional (IC&I) Reduction, Reuse and Recycling (3Rs) systems in four regional municipalities.

Understanding how residents and municipalities might respond to 3Rs systems was central to analyzing the social effects of the systems. The analysis assessed how each component of the 3Rs systems might affect people in their homes and places of work. It assessed the behavioural changes that might occur in response to six alternative systems and considered the social changes that could result for residents and businesses from the introduction of each of the 3Rs systems and whether the changes were fair,

From the outset, it was recognized that the social environment analysis would need to address local effects (i.e., affecting a specific community/neighbourhood), region-wide broad social effects and intra- and inter-generationat effects. For example, 3Rs facilities such as materials recycling facilities and composting facilities might have noise, dust, odour, health, litter, and truck traffic effects for local residents and the local community/neighbourhood. On the other hand, 3Rs programs could also have a broader influence on the attitudes and behaviour of residents and employees in a region and could force or induce lifestyle changes. And, each of the systems could vary in the distribution of impacts within one generation and between generations.

### ***Key Features of the Policy or Program SIA***

A policy or program SIA has the following key features:

- It deals with an overall policy or strategy and not a specific project. It could involve consideration of specific types of facilities and programs both public and private.
- Social criteria and indicators can be used to guide the assessment as is often done for a

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<sup>4</sup> This could be called Strategic SIA to correspond to the term Strategic Environmental Assessment used to connote environmental assessments of policy.

**site-specific SIA. However, specific policy criteria and indicators need to be developed to reflect the potential impacts and those potentially affected.**

- **It can and should deal explicitly with the issue of equity on an intra-generational basis and inter-generational basis.**
- **The analysis can address the social acceptability of the policy/program as an important factor in the likely success of the proposed actions.**

## **CONCLUSION**

**Over the past 15 years, SIA in Ontario has evolved in response to the opportunities created through the Environmental Assessment legislation and with the decisions by Ontario Hydro and the provincial government to conduct environmental assessments of policies and programs. But the evolution is not complete. SIA has not achieved the recognition it could have achieved during this period. In part, this can be attributed to a lack of understanding of the role of SIA by project and policy decision-makers. However, it is also attributable to the SIA practitioners and theorists; we have not sufficiently articulated the goals, purpose and principles of SIA.**

**I have outlined three key principles which I believe all SIAs must respect: they must be *Interactive, Integrative and Iterative*. The real power and promise of SIA stems from the application of these three principles. If SIA consistently accommodates them, it should be comprehensive, accurate and defensible, and should have a significant influence on decision-making.**

**Various approaches to conducting an SIA are possible. The SIA approaches may be modified to reflect the goal of the SIA, the nature and type of proposal and the unique character of the communities. However, the approach must respect the key principles of SIA. I have outlined three approaches that we currently have underway which incorporate these principles: site-specific project SIA, issue-oriented SIA and policy/program SIA. These are variants of the general approach to SIA as it has evolved.**

**This paper offers some ideas to stimulate dialogue among practitioners, theorists and decision-makers to refine principles and approaches which will ensure that the full potential of SIA is achieved. It is only through the development and articulation of sound principles and approaches that the practice of SIA will fulfill its promise of improved decision-making.**

## REFERENCES

- Armour and Associates and Institute of Environmental Research, 1987. Investigations for Landfill Sites in Areas I, II, and VI in the City of Brampton: Social Impact Assessment. The Regional Municipality of Peel.**
- Baril, R.G. 1983, Community impact Management: Models for Compensation. Paper presented at the Fourth Annual Conference of the Canadian Nuclear Association, June, Montreal, Quebec.**
- Berger, T.R. 1983. "Resources Development and Human Values", *Impact Assessment Bulletin* Vol.2(2): 129-147.**
- Burdge, Rabel J., 1991. "A Brief History and Major Trends in the Field of Impact Assessment." *Impact Assessment Bulletin*. 9(4):93-104.**
- Craig, Donna, 1990. "Social Impact Assessment: Politically Oriented Approaches and Applications." *Environmental Impact Assessment Review*, 10(1-2):37-54.**
- D'Amore, L.J. 1978. "An Overview of SIA." *Social Impact Assessment: Theory Method and Practice*. F.S. Tester and W. Mykes (eds). *Calgary*:Detsweig, pp. 366-73.**
- Gagnon, Christiane, Philip Hirsch and Richard Howitt, 1993. "Can SIA Empower Communities?" *Environmental Impact Assessment Review*, 13(4):229-253.**
- Gramling, Robert and William R. Freudenburg, 1992. "Opportunity-Threat, Development, and Adaptation: Toward a Comprehensive Framework for Social Impact Assessment." *Rural Sociology*. 57(2):216-234.**
- Hardy, D.R. 1982. *Impact Monitoring and Mitigation: The Case of Ontario Hydro's Atikokan Generating Station*. Paper presented at the Symposium on Psycho-Social Impacts of Resource Development in Canada: Research Strategies and Applications, December, Toronto, Ontario.**
- Interorganizational Committee on Guidelines and Principles for Social Impact Assessment. 1994. *Guidelines and principles for Social Impact Assessment*. U.S. Department of Commerce.**
- Province of Ontario, 1989. *The Environmental Assessment Act*. Ministry of the Attorney-General, April, 1989.**
- Stevenson, M.A. and Rogers, B.G., 1983. "Developing Social Impact Methodologies for Long-Term Disposal of Irradiated Fuel." *Canadian Nuclear Society Conference*.**

Taylor, C. Nicholas, 1990. "A New Zealand Issues-Oriented Approach to Social Impact Assessment." In Finsterbusch, et al. *Methods for Social Analysis in Developing Countries*. Boulder: Westview Press.

Wildman, Paul, 1990. "Methodological and Social Policy Issues in Social Impact Assessment." *Environmental Impact Assessment Review*. 10(1-2):69-80.

Wolf, Charlie P., N.D. "What is Social Impact Assessment", Social Impact Assessment Centre. New York