REPORT ON PUBLIC HEARINGS SOLID WASTE MANAGEMENT -CAPITAL REGION

SEPTEMBER, 1995

(Disponible en français sur demande)

MANITOBA CLEAN ENVIRONMENT COMMISSION

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EXECUTIVE SUMMARY

Responding to a number of concerns and interests related to the management of solid waste, the Minister of the Environment instructed the Clean Environment Commission to investigate the nature of these concerns specifically related to the Capital Region.

A public hearing was held in mid August of 1995 in the City of Winnipeg where interested parties were asked to identify opinions and concerns related to such issues as waste ownership, competitive sites, regional systems, sustainable development strategy elements, and other issues pertaining to solid waste management.

During this investigative hearing, the Commission heard participants voice their interests related to the need for strategic planning and identified concerns over the lack of cooperation between some local governments. Several interested parties raised concerns over the lack of understanding regarding the contents of the waste stream and the rate of progress towards minimization of waste generated. A particularly important issue of concern to the City of Winnipeg related to waste stream flow control and tipping fees - a significant revenue source for the city.

Following the hearings, the CEC Panel concluded that there was a need for leadership in addressing regional strategies for solid waste management and a need to continue the pursuit of new markets for recyclable waste. A clearer picture of the content of the waste streams would assist the waste minimization effort.

The need for waste ownership provisions and flow control mechanisms was seen by the Panel as useful only in situations where there is a demonstrated threat to resources or the environment.

PREFACE

As a result of a number of initiatives related to solid waste management, including the Manitoba Product Stewardship Program, improvements to waste disposal ground standards, and the development of a Capital Region Strategy, the City of Winnipeg and other stakeholders raised a number of broad issues and concerns related to solid waste management in the Capital Region.

In order to respond to these concerns, and to assist in the development of a strategic plan within which specific solid waste management initiatives can be considered, the Clean Environment Commission was requested by the Minister of Environment to conduct a public investigation of solid waste management in the region.

The Commissioner conducted 4 days of public hearings in Winnipeg, deliberated over the information provided, and arrived at the observations and recommendations contained in this report.

A detailed account of the evidence presented to the Panel is contained in the *Verbatim Transcript* of the hearing, which is available for review at the Manitoba Clean Environment Commission office and at designated Public Registries.

1.0 THE ENVIRONMENTAL HEARING PROCESS

Under the Manitoba Environment Act (1988), the Clean Environment Commission provides a process for the public to participate in environmental decision-making. Based upon this public input, the Commission advises the Environment minister with recommendations on environmental issues, on environmental licensing matters, and on other issues as requested by the Minister. The primary mechanism used in achieving this has been public hearings.

In order to facilitate and encourage public participation, the Commission will hold Hearings in the community where the prospective development is under consideration, as well as in other centres where interest is high or where environmental impact is sufficient to elicit interest from individuals or environmental groups located elsewhere.

The Commission strives to ensure that the evidence and opinions of all presenters is respected.

1.1 The Clean Environment Commission

The Clean Environment Commission is comprised of a full-time Chairperson, Secretary, a Technical Advisor and a minimum of ten part-time Commissioners. The Commissioners are appointed by Order-in-Council. Together, the Commissioners represent various occupations and reside in different locations throughout Manitoba. A Panel with a minimum of three Commissioners is selected for each hearing.

Five Commissioners comprised the Panel respecting the investigation of solid waste management in the Capital Region:

- Mrs. Doreen Buchholz, of Winnipeg;
- Mr. Roger Young, of Winnipeg;
- Mrs. Donna Plant, of Winnipeg;
- Mr. David Huebert, of Winnipeg; and
- Mr. Dale Stewart, Chairman of the Clean Environment Commission.

EnviroScribe Consulting was contracted to assist in the preparation of the Commission's report.

1.2 Reason for Hearing

As a result of a number of initiatives related to solid waste management such as the <u>Waste Reduction and Prevention Act</u>, regulations respecting the requirements for waste disposal grounds, the Manitoba Product Stewardship Program, and the preparation of a Capital Region Strategy, the City of Winnipeg and other stakeholders raised a number of broad issues and concerns related to solid waste management in the Capital Region, beyond the consideration of any single solid waste initiative.

In April, 1995, in response to these concerns, the Minister of Environment asked the Clean Environment Commission to conduct a public investigation which would review solid waste management in the Capital Region. This investigation would provide information which is necessary in the development of a strategic context from which specific solid waste management initiatives could be considered in the future.

The Commission prepared a brochure for public distribution to help draw attention to the broader solid waste management issues in the Capital Region, and posed eight (8) questions for comment at the Hearing.

1.3 Hearing Mandate

The Commission is charged to hold hearings, pursuant to subsection 6 (5) of the Environment Act. In this particular case, the Commission was asked to conduct a public investigation with respect to solid waste management within the Capital Region, and provide advice and recommendations to the Minister of Environment (Appendix A - Terms of Reference). The Commission was asked to take the Principles and Guidelines of Sustainable Development (Appendix B), into consideration when preparing recommendations.

1.4 Scope of the Review

The Clean Environment Commission was instructed by the Minister of Environment to obtain information from the public and stakeholders, and provide recommendations and advice regarding:

- 1. The concerns of the public and various stakeholders respecting the management of solid waste in the Capital Region.
- 2. The ownership and control of solid waste in the Capital Region.
- The activities which should take place at waste management facilities in the Capital Region.
- 4. The economic & environmental impacts of having competitive sites for receiving the waste.
- The advantages and disadvantages of having regional or multi-municipal waste management sites.
- Solid waste management issues that will, in the future, be faced in the Capital Region.
- 7. The elements of an environmentally and economically sustainable solid waste management strategy for the Capital Region.
- 8. Any other issues which the Commission believes are pertinent to the management of solid waste in the Capital Region.

Solid waste is limited in this investigation to all waste other than hazardous, liquid or bulky metallic waste generated by individuals and industrial, commercial and institutional operations. Often distinguished as residential and ICI waste streams, solid waste typically consists of paper, beverage containers, tires, food, yard wastes, packaging material and scrap from manufacturing processes.

2.0 BACKGROUND

2.1 The Area

The Capital Region of Manitoba includes the City of Winnipeg which is the Provincial Capital, the Towns of Selkirk and Stonewall and thirteen nearby rural municipalities including Springfield, Tache, Richot, MacDonald, Headingley, Cartier, St. Francois Xavier, Rosser, Rockwood, West St. Paul, St. Andrews, East St. Paul and St. Clements (see Figure 1, page 7). While the total land mass of the region consists of about 1.4% of the Province, in 1991, this small area contained approximately 64% of the Province's population. The highest concentration of population in the Capital Region is in the City of Winnipeg (85-90%).

2.2 Legislative Overview

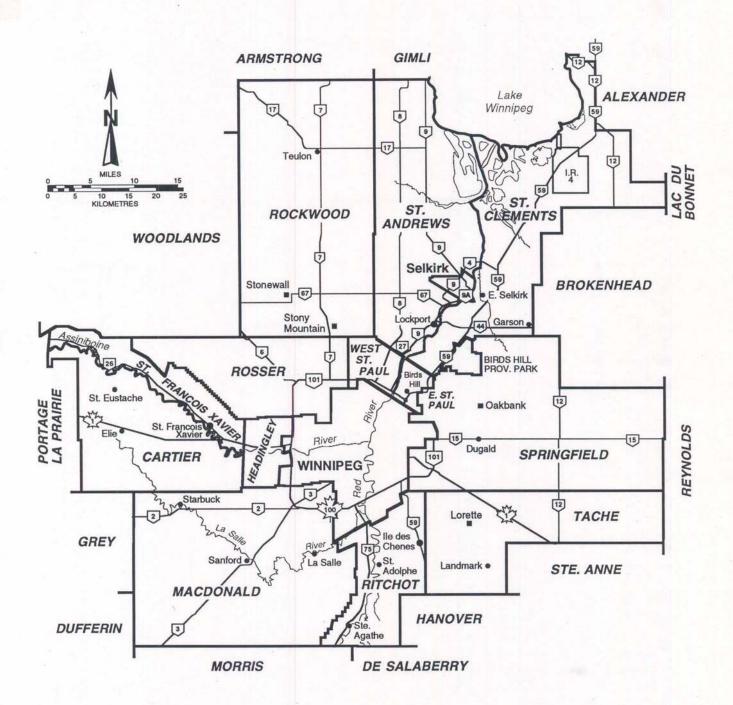
Solid waste disposal is regulated by the Province of Manitoba through the Environment Act. Local governments are given authority for the operation of municipal landfills and collection systems under the Manitoba Municipal Act.

In 1991, growing concern about the environmental impact of waste disposal practices resulted in the Waste Disposal Grounds Regulation under the Environment Act. This Regulation, as well as the physical limitations and diminishing capacity of sites generally will necessitate the closure of approximately 16 municipal waste disposal grounds in the Capital Region over the next 5 years.

There are 30 waste disposal sites currently operating in the Capital Region. Many municipalities face one or more site closures in the future. This has caused some local governments to explore alternative waste disposal options including upgrading and/or consolidating existing sites, or forging partnerships with neighboring municipalities to develop regional sites (Regional Waste Management Authorities Act).

In 1990, the Province adopted the goal of a fifty percent (50%) reduction in the 1988 per capita waste flow in Manitoba by the year 2000. Through broad

FIGURE 1 - MANITOBA'S CAPITAL REGION



public consultations, policies, regulations and programs enabled by the <u>Waste Reduction and Prevention Act</u>, a twenty percent (20%) reduction of waste had been achieved by 1994, through waste diversion initiatives involving reduction, reuse, recycling and recovery. Many waste minimization initiatives such as recycling, bag limits, weigh scales and composting have started in the Capital Region.

2.3 Policy Considerations

The Provincial policy for solid waste management is discussed in the <u>Workbook</u> on <u>Solid Waste Minimization and Management</u> (1995) by the Manitoba Round Table on Environment and Economy. The draft goals of the Provincial strategy are:

- 1. to promote waste reduction, maximize the reuse of goods and materials and enhance opportunities for recycling throughout the Province;
- to promote reduction in the amount of resources used and waste generated in the manufacturing and distribution of products;
- to enhance awareness and understanding of the need for waste reduction, the
 potential for the reuse and recycling of products and by-products and the costs
 of waste disposal; and
- 4. to promote the development of sustainable recycling and waste management industries.

Another document released by the Round Table on Environment and Economy, the <u>Capital Region Workbook - Partners for the Future</u> (1995), includes a draft waste minimization policy and action plan for the member municipalities. Policy 2.7, Waste Minimization, recommends that the management of solid waste be planned and coordinated on a regional scale, and adopt the provincial waste reduction goal of a 50% reduction in solid waste by the year 2000.

This Policy is accompanied by five proposed actions which state:

- 1. Reduce consumption, re-use, compost and recycle.
- Adopt procurement policies and make purchasing decisions which favour low waste, reusable, non-toxic and recycled materials.
- 3. Develop and adopt technology which uses waste and waste exchanges.

- 4. Participate in the planning of regional waste management and minimization.
- Introduce full-cost user-pay pricing for waste management, for domestic, industrial and hazardous waste, including the life-cycle costs associated with pick-up, disposal, maintenance, decommissioning of landfill sites and monitoring.

The Manitoba Association of Urban Municipalities Waste Management Task Force has also adopted goals for municipal solid waste management programs, which:

- ensure that solid wastes are managed so that the environment and human health are protected;
- 2. ensure a 50% reduction of solid wastes from the waste stream;
- ensure that waste disposal grounds are sited and operated so that the environment is protected; and
- 4. ensure effective communication among stakeholders.

2.4 Summary

It is within this context of legislation, regulation and policy, that citizens and stakeholders were asked to respond to eight questions regarding the future of solid waste management in the Capital Region. The responses are summarized in Sections 3.1 - 3.8 which follow.

3.0 RESPONSE TO MINISTERIAL QUESTIONS

Presentations were made by the City of Winnipeg, Browning Ferris Industries (BFI), representatives of Capital Region municipal governments, and concerned citizens, as individuals, or as representatives of industry or interest groups (Appendix C - List of Registered Presenters; Appendix D - List of Exhibits).

3.1 What concerns do you have respecting the management of solid waste in the Capital Region?

There were wide and varied concerns respecting the current management of solid wastes.

A common theme throughout the Hearing was the need for a coordinated and cooperative regional approach to solid waste management. For example, it was noted that while existing regulations have made small sites cost-prohibitive, cooperative initiatives between various municipal governments have not always yielded positive results. It was also recognized that there is a need for a long term commitment to the planning process.

Options for locating regional sites were also discussed. It was suggested that there should be a plan in place to guide the future location of Capital Region Sites, in particular to minimize hauling charges. It was observed that Federal Infrastructure Funding has been awarded to some municipalities for the development of waste management facilities, in the absence of a regional plan. The impact of existing sites on adjacent property holders was raised, and the need to ensure that future planning be sensitive to environmental issues and respect provincial land use policies.

The issue of flow control for cost-recovery purposes was also raised (see also Section 3.2.4). Flow control was largely perceived to benefit publicly owned waste management sites where there could be an assurance of financial "stewardship" within a jurisdiction, or utilization of tipping fee revenues to fund environmental projects such as the promotion of waste reduction. Others suggested that the number of "players in the field" should be determined by full-market forces.

There was a great deal of concern that excess landfill capacity in the Capital Region may result in additional decreased incentive to conserve. Others wondered how waste diversion to another regional site(s) would affect the waste minimization services and programs established by the City of Winnipeg and other municipal jurisdictions, or the facilities constructed by municipalities that have received Infrastructure Funding. There was also concern about maintaining quality waste management jobs in the future.

A number of presenters stated that there is too much emphasis on the demandside of solid waste management and suggested that attention focus on waste reduction, recognizing that this may have negative financial consequences to landfill site owner/operators. The need to explore source reduction options was identified, particularly for the ICI waste stream. One presenter identified the need to recover problematic wastes, such as fluorescent light tubes, because of their potential risk(s) to the environment and human health.

3.2 Who should own and control solid waste in the Capital Region?

3.2.1 The Legal Framework

Four Provincial statutes that reference aspects of solid waste management in Manitoba were cited frequently during the Hearing.

In summary, regulations under <u>The Environment Act</u> govern the development, operation and maintenance of sites. The <u>Manitoba Municipal Act</u> enables local government control of waste management sites and collection systems. The <u>Regional Waste Management Authorities Act</u> allows partnerships to develop between municipal governments to create cost-effective solid waste management systems. And finally, the <u>Waste Reduction and Prevention Act</u> provides incentives to decrease the amount of solid waste entering Manitoba landfills.

One presenter provided an ownership scenario based on the common law. In this interpretation, solid waste belongs to the waste generator until such time as it is collected. When this transaction takes place, title voluntarily passes to the other party, such as a waste collector.

It is common for most businesses in the industrial/commercial/institutional waste sector to contract directly with waste collection firms for waste disposal, whereas the City of Winnipeg has both its own employee waste collectors, as well as contracts with private haulers, for residential waste collection. In one presentation it was noted that when businesses contract directly for disposal services, the transaction often explicitly transfers the title of the waste, but not necessarily liability, to the other party.

One party challenged the legal effectiveness of Section 442 of the City of Winnipeg Act which authorizes City Council to pass by-laws for certain purposes relating to solid wastes. In particular, Section 13 (b) of the Solid Waste By-law (By-law 1340/76) states that solid waste collected by the City becomes the property of the City (see also Section 3.2.4 Flow Control Issues).

3.2.2 Solid Waste Management Monopolies

The merits and disadvantages of government monopolies were brought forth during the hearing.

One presentation explained that efficiency is the principal rationale for natural monopolies. While it was conceded that it may be possible to achieve efficiency in a waste *collection* monopoly, some presenters felt that waste *disposal* monopolies are not efficient. Opinion was divided respecting public monopolies.

Some presenters suggested that waste disposal does not lend itself to either of these situations. Others were in agreement that public monopolies, such as the City of Winnipeg waste disposal system, serves "the public interest in both economic and public health terms". Frequently cited benefits of the City's management of solid wastes were the residential programs: Leaf it to Us, Chip-It, regional recycling depots and the upcoming curbside recycling service.

3.2.3 Public Vs Private Ownership of Disposal Sites

Public vs private ownership scenarios were also discussed. One presenter referenced the County of San Diego Privatization Study Final Report by Deloitte & Touche and R.W. Beck and Associates (October, 1991), which recommends that "... public ownership of waste facilities in San Diego County is a preferred approach due to cost, liability and control advantages over privatization." This report was also cited to conclude that "public ownership provides greater opportunity to proactively comply with environmental requirements and to effectively manage [the jurisdiction's] waste objectives."

On the other hand, it was noted that the full cost of public waste management systems should be evaluated. It was suggested that only if private enterprise can operate a waste management system to applicable provincial and municipal standards, should the private sector be able to offer the service. One presenter suggested that if public enterprise can not compete financially, it should be removed from the competition.

3.2.4 Flow Control Issues

Flow control issues were raised throughout the investigation. Some people believe that there should be specified disposal location(s) for contracted waste handlers while others feel that there should be freedom of choice.

As in the case of waste ownership, much of the debate over the *control* of the solid waste stream arises from interpretation of legislation. For example, it was noted that while the <u>Manitoba Municipal Act</u> gives local governments control over waste disposal and collection systems, it was reported that the province has twice deferred the City's request to make a flow control amendment to the <u>City of Winnipeg Act</u>.

While one presenter referenced a United States Supreme Court decision that "flow control was unconstitutional", it was noted that the rationale for this decision would not likely be applicable in Canada (reference: <u>Carbine</u> decision). Instead,

the presenter suggested that legislated flow control, while "constitutionally competent", might in effect, "expropriate rights of waste owners and managers".

3.2.5 Tipping Fee Structures

Several presenters criticized the commercial tipping fee structure in Winnipeg as being a "back door tax grab". It was noted that there has been little economic incentive for residential customers to reduce waste, even though the upcoming residential curbside recycling program, which will be free of charge to single family dwelling customers in Winnipeg, will remove any cost barrier which may have obstructed participation in the past.

As waste is viewed more as a commodity in the future, some presenters recommended that commercial tipping fees should start to reflect the increased value of recyclable materials. While one presentation contended that increases to tipping fees create an incentive to reduce waste, others suggested that graduated tipping fees serve to reward those who reduce waste. It was also noted that the City of Winnipeg may move toward a user-pay system for residential waste collection and disposal in the future.

3.3 What activities should take place at waste management sites in the Capital Region?

There was consensus amongst participants that, for various economic and environmental reasons, there should be a limited number of waste management sites in the Capital Region. It was also generally agreed that these sites should offer a full spectrum of services to facilitate the provincial goal of a fifty percent (50%) reduction of solid waste by the year 2000.

3.3.1 Regional Waste Management Sites

Participants suggested that regional waste management facilities should offer a variety of services beyond the disposal and burial of non-hazardous wastes. These could include:

- · public and commercial drop-off;
- · screening for hazardous contents;
- · household hazardous waste storage; and
- · yard waste composting.

Presenters also recommended that these sites include recovery and processing facilities for a wide range of recyclable and reusable materials such as:

- Manitoba Product Stewardship Program recyclables (e.g. plastic, paper, tin, aluminum, tires);
- construction and building materials (e.g. wood, concrete/masonry, cardboard, drywall, asphalt);
- · white goods salvage; and
- storage capacity for reusable and repairable goods.

Site maintenance activities were identified, such as:

- litter control (e.g. blowing debris);
- · bird control;
- · ground water monitoring;
- methane gas flaring and energy recovery (if economically feasible); and,
- · long-term or perpetual post use care of the site

as well as the need for:

- · waste tracking through record keeping;
- · public education;
- an information centre; and
- · site remediation.

3.3.2 Regional Transfer Stations

The idea of a regional system for solid waste management was discussed by many participants. Not all participants agreed that transfer stations were feasible in Winnipeg. Some presenters expressed an interest in the concept of transfer stations

for convenience, cost-sharing opportunities between municipalities, and to minimize hauling costs.

It was noted that transfer stations could provide more services to the community than just transferring waste to other locations for disposal. For example, they could have recycling facilities, storage for household hazardous waste, white goods and tires, provide litter control and utilize computerized waste tracking systems.

3.4 What might be the impacts on solid waste management of having competitive sites for managing waste in the Capital Region?

Participants identified many positive and negative impacts of competitive waste management sites in the Capital Region. These ideas fall loosely into environmental, economic and service-oriented impacts.

3.4.1 Environmental Considerations

Competition was perceived by some to bring about the benefits of new technologies and expertise to waste management in the Capital Region. It was observed that new sites will be subject to more stringent environmental standards and it was suggested that there would be better management and control of future environmental liabilities through Corporate performance bonds or letters of credit, rather than the use of tax dollars. Others asserted that competition would be a good thing if landfill waste could be reduced further by recycling.

There were some presenters who wondered if competition would encourage solid waste minimization or conversely, waste *generation* due to convenience and cost. The question of excess landfill capacity was raised and it was suggested that the overall situation be evaluated. Some concern was expressed about the "export" of waste to small rural centres and that more regional landfill sites are an unnecessary use of wooded and high quality agricultural land.

3.4.2 Economic Considerations

Lower rates and service costs (e.g. tipping fees) were perceived to be one of the most common economic benefits accruing to competitive waste management sites. Other presenters, particularly in the outlying municipalities, indicated that alternative sites may enable them to make more cost-effective decisions on the basis of hauling costs. It was also suggested that waste management competition would benefit both the economy and taxpayers.

Others presented a different view. Some individuals wondered what the capacity might be for waste management in the Capital Region, suggesting that competition may result in tipping fee wars. One presenter indicated that the market will support only a certain number of facilities as an infinite number of companies compete for a finite supply of waste.

There was concern that waste diversion from City of Winnipeg landfills would result in a substantial reduction in revenue, reduce funding available for public environmental education programs as well as other initiatives, and possibly result in an increase to City property taxes of 2%, to cover an operating budget deficit.

3.4.3 Impacts to Waste Management Service

It was suggested that in a competitive environment, waste management services would have to be more efficient, and in addition to improved services, there would be a wider variety of services available. Some believe that recycling could become more competitive, with expanded services, and that there would be more opportunity for salvage operations.

On the other hand, a number of presenters were concerned that competition would result in a reduction and/or elimination of solid waste minimization and management programs in Winnipeg, the most concentrated area of population in the Province.

3.5 What are the advantages/disadvantages of having regional (multimunicipality) waste management sites?

3.5.1 The Advantages

It was noted that new facilities would have to comply with stringent environmental standards in the siting, design, operations, closure and post-closure of the sites. Their development in turn, would facilitate the closure of poor sites elsewhere. Multiple regional sites could shorten hauling distances for customers which would result in reduced wear and tear on Provincial roads. It was also suggested that the Brady Road site in the City of Winnipeg could easily become the regional site.

Host communities would realize financial benefits from having regional solid waste management facilities in their jurisdiction. Cost-sharing opportunities with other parties could develop. It was suggested that it would be more feasible for recycling and composting services to be located at regional sites and possibly, lower solid waste disposal unit costs due to the economics of scale.

3.5.2 The Disadvantages

Some presenters cautioned that a high level of investment is required for regional sites and that many small rural municipalities are unable to afford modern facilities of their own. There was some concern about high traffic levels to regional sites and the need for long-distance hauling to and from distant communities.

One presenter indicated that the feasibility of regional facilities will depend upon economics and that a critical volume of waste is required to support any landfill. It was noted that the focus of waste management is shifting from waste disposal to "waste as a resource".

It was also suggested that there may be some difficulty siting waste management sites across the Province due to the *not in my backyard* or NIMBY syndrome, and concern was expressed that regional sites will result in less local involvement since waste will become of "out of sight [and therefore,] out of mind".

3.6 What do you see as future solid waste management issues for the Capital Region?

3.6.1 Broad Issues

Some presenters expressed concern that waste minimization, not disposal issues, should be the future emphasis of waste management planning. It was also suggested that there should be Provincial assistance for research and development into waste management technologies.

Others observed the need to improve regional planning and evaluate the waste management needs of the Capital Region as a whole. Many presenters recommended that if a long term strategic plan were developed, with coordinated regional initiatives for waste management, the model could also be used to evaluate other issues within the same region.

It was demonstrated that by making simple changes to government policy, certain sectors of the waste management industry could grow. For example, civic and provincial governments could specify the reclamation of used building materials in their demolition/construction contracts. Changes to policy could also help to overcome inequities in the present system, such as the implementation of "user-pay" systems for residential waste generators.

The need to change public attitude about solid waste minimization and management was raised. The issue of environmental education arose, and suggestions made to develop programs specifically aimed at adults.

3.6.2 Specific Issues

Some presenters pointed out that as economic disposal of solid waste diminishes in the rural municipalities of the Capital Region, a key issue in the future will be the inability of local governments to provide the level of waste management services that is demanded by law. It was also suggested that site liabilities will continue and possibly increase in the future as old waste disposal grounds are closed.

There was also some concern about the need to develop clear and consistent criteria to divert other components of the waste stream, such as construction and demolition wastes, for recycling and re-use.

3.7 What would be the elements of a successful (environmental and economically sustainable) solid waste management strategy for the Capital Region?

Leadership was identified as an important element of a successful solid waste management strategy for the Capital Region. Although the existing Capital Region Committee was seen by some as a good forum for information exchange, some presenters suggested that a unified and cooperative Capital Region Waste Management Authority should be created, and delegated decision-making authority. Alternatively, districts could form where most economic and/or where required, and enable smaller municipalities to keep control over their own waste management systems.

There was varying opinion about the number of landfill facilities that would best serve the Capital Region. Some presenters favoured smaller, strategically located sites; others felt the Brady Landfill alone could serve the Region. A scenario of two regional sites, one servicing the region to the north of Winnipeg and the other to the south, was presented. Regardless of location, it was advised that the strategy for waste management in the Capital Region should adhere to the principles of waste reduction, reuse, recycling and recovery.

It was noted that the fee structure of waste management systems could be improved. In addition to implementing a user-pay system for waste disposal, it was suggested that there could be penalties for disposing materials with economic value or an environmental levy per unit of waste disposed, and policies put into place to ensure that a portion of revenues generated be used to support waste reduction programs.

3.8 Are there other issues or concerns that you have regarding solid waste management in the Capital Region?

Some presenters expressed concern that solid waste management was too narrow a focus for the Hearing and that it ought to have considered waste minimization first and waste management second.

Several concerns were raised about current waste management policy in Manitoba (Section 2.3). It was noted that the Capital Region Committee is powerless and that there is an apparent unwillingness on the part of the Province to manage regional affairs. There was also an assertion that Government doesn't monitor municipal sites as closely as private waste management sites. One individual raised a concern about the regulation of private *industrial* waste disposal sites.

It was recommended that future waste management initiatives be dealt with utilizing the framework of a comprehensive strategic plan and account for sites that have received infrastructure program funding. The need for greatly improved communication between municipalities, particularly between the City of Winnipeg and adjacent municipalities, was also identified. Several municipalities alleged that they had been refused access to City of Winnipeg solid waste disposal sites.

Some suggested that the City of Winnipeg should manage the regional waste management system because there is substantial scope for private-sector involvement and/or partnerships, and room for expansion within the current system.

Lastly, concern was expressed about the continuing need for comprehensive siting criteria for solid waste management sites.

4.0 PANEL OBSERVATIONS AND RECOMMENDATIONS

The Clean Environment Commission panel consider the following matters to be of utmost concern respecting the management of solid waste in the Capital Region.

4.1 An Integrated Approach to Solid Waste Management

Effective solid waste management requires an *integrated approach* which emphasizes waste minimization, and incorporates residential, industrial, commercial, and institutional (ICI) solid waste streams. An *integrated approach* must take product life cycles into consideration and maximize opportunities for waste reduction at source as well as promote reuse, recycling, recovery of waste components, and composting. In addition, a strategic solid waste minimization and management system for the Region should address comprehensive landfill siting and management criteria which take into account environmental, health, social, and economic criteria.

Integration of solid waste minimization and management within the Capital Region as it presently exists, or with modified regional boundaries, is in keeping with the Manitoba Round Table's <u>Principles and Guidelines of Sustainable Development</u>. The use of transfer stations could provide the opportunity to rationalize the movement and sorting of waste in rural areas.

4.2 The Need for Leadership

The most efficient and productive solid waste minimization and management strategies in the Capital Region will be achieved through strong leadership. It is evident that communication and cooperation have been lacking in past decisions, particularly concerning inter-jurisdictional access to existing waste disposal facilities. The critical first step is for the Government to assume a coordinating role, and bring municipalities together to discuss, negotiate, and develop practical and cost effective programs and partnerships for the management of solid waste within the Region.

There is a need to ensure that the planning and establishment of solid waste management sites will be guided by appropriate siting criteria, and that there is initiative to safeguard the 'resources' in the solid waste stream by identifying and facilitating access to recyclable materials markets.

Recommendation #1

The Manitoba Government should provide leadership in the development of an integrated system for solid waste management in and around the Capital Region. This system should include components to facilitate waste reduction, reuse, recycling, and recovery. The integrated system should incorporate consideration of environmental and economic impacts within the context of the principals and guidelines of sustainable development. The use of transfer stations should be included in the integrated system.

4.3 Waste Management Capacity in the Capital Region

It is evident that the capacity of landfill sites is not a universal concern in the Capital Region, in fact, many years of capacity exist at some sites. As Municipalities strive to achieve the 50% reduction in solid waste by the year 2000, capacity will only increase further, particularly at two sites with capacity ratings of 75 and 100 years each.

It is recognized that there may be justification for regionally located solid waste management facilities in addition to the Brady Road site, whether landfills or transfer sites, providing they meet or exceed applicable environmental regulations and criteria. Hauling distances and nodes of concentrated industrial, commercial and institutional (ICI) waste generation would likely be factors influencing the type, size, number and location of solid waste management sites required.

The Commission also observes that Regulations for Class 2 and 3 waste disposal grounds largely designate the classification of waste management sites on the basis of population which may not be effective in ensuring proper environmental protection. As an alternative, site classification could be assigned on the basis of type and quantity of waste disposed.

Recommendation #2

Further examination of the waste stream is required to identify opportunities for waste reduction in sectors where they have not taken place or been adequately developed. Particular attention should be paid to the appropriate processing of problematic material that persist in the waste stream.

4.4 Consideration of Regional Boundaries

Administrative boundaries do not necessarily provide the most effective parameters upon which to develop waste management strategies. As currently drawn, the boundaries defining the Capital Region may not meet waste management needs in the most efficient, or environmentally acceptable manner. Proper site location of waste management facilities, based upon vigorous criteria and standards, may be a more important consideration than the total number of sites within any region.

Rural Municipalities may form partnerships with other local governments through the Manitoba Regional Waste Management Authorities Act. Waste management districts would be useful when a group of municipalities determine that the most effective solution would arise from combined resources.

4.5 Markets for Recyclable Materials

It is apparent that markets for recycled material rapidly change and that they are sensitive to a wide variety of factors from material supply and availability, to price, quality, proximity to active markets and consumer demand. Recyclable materials markets can also be influenced by changes and access to technology, and by initiatives to develop new markets for recycled goods.

Recommendation #3

New markets and new technologies for recyclable materials must be actively researched, developed and vigorously pursued if the stated target of a 50%

reduction in landfill waste by the year 2000 is to be realized. Annual public reporting on progress should be made to increase awareness and encourage participation.

4.6 Solid Waste Ownership Issues

Through the Hearing, there was a divergence of opinion regarding the relative impacts of public and private ownership of solid waste management sites. Some parties, including the City of Winnipeg, believe that among other reasons, public ownership and control of solid waste ensures a source of revenue which enables the delivery of a variety of programs. Others feel that private ownership will bring innovation and improved management of solid waste to the region.

The controversy associated with the ownership of solid waste management facilities is rooted in a long-standing philosophical debate respecting the supply of services by governments versus the private sector. Ownership issues will have to be evaluated on a case by case basis since environmental, economic and philosophical circumstances that could influence planning decisions, will vary throughout the Region and within communities.

Competition between sites or services, regardless of ownership, may result in some loss of profit to existing stakeholders but generally bring about an increase in innovation.

4.7 Tipping Fees

There was insufficient evidence provided during the Hearing to clearly indicate the relative impact(s) of private or public facility ownership on tipping fees. It was suggested that tipping fees may influence the volume of waste disposed and the degree to which recyclable materials are extracted from the waste stream.

Regardless of ownership, it would be desirable for a portion of the revenue from tipping fees to be retained and later used towards the decommissioning and reclamation of waste management sites. Tipping fee revenue can also be used to offset the cost of waste minimization information and education programs.

Differential tipping fees should be adopted to encourage responsible waste management and may result in an overall reduction in the amount of non-sorted waste entering landfills. Differential rates can also be used to equalize the overall costs of operating a waste management system, and to rationalize the hauling costs for site users who must travel longer distances to a regional facility.

4.8 Flow Control Considerations

Flow control has been implemented in a number of jurisdictions, particularly in the United States, to establish ownership of solid waste. According to a U.S. Environmental Protection Agency Report that was entered into evidence, flow control has been demonstrated to be useful when specific and constant quantities of solid waste are required (e.g. waste to energy facilities). Flow control has also been found to be a factor in funding strategies for the development and operation of waste management facilities.

Local governments in the Capital Region do not currently operate under specific "flow control legislation" which would provide authority to designate where municipal solid waste must be taken for processing, treatment or disposal. It is possible however, for local governments to state, as a contractual condition, that specific disposal sites be used by contracted haulers.

The Commission heard a divergence of opinion on the issue of flow control, largely of a philosophical nature, as to whether local governments should or should not have control over waste collection and disposal. After reviewing the evidence presented in relation to the issue of flow control, the Commission believes that the only basis upon which flow control should be considered, is if flow control can be shown to ensure significant environmental benefits.

Recommendation #4

Decisions concerning solid waste minimization, ownership and delivery of solid waste management systems, and legislated flow control, should primarily be based on environmental protection and resource conservation standards.

5.0 SUMMARY OF RECOMMENDATIONS

The following is a summary of the Clean Environment Commission recommendations regarding the management of solid waste in the Capital Region.

Recommendation #1

The Manitoba Government should provide leadership in the development of an integrated system for solid waste management in and around the Capital Region. This system should include components to facilitate waste reduction, reuse, recycling, and recovery. The integrated system should incorporate consideration of environmental and economic impacts within the context of the principals and guidelines of sustainable development. The use of transfer stations should be included in the integrated system.

Recommendation #2

Further examination of the waste stream is required to identify opportunities for waste reduction in sectors where they have not taken place or been adequately developed. Particular attention should be paid to the appropriate processing of problematic material that persist in the waste stream.

Recommendation #3

New markets and new technologies for recyclable materials must be actively researched, developed and vigorously pursued if the stated target of a 50% reduction in landfill waste by the year 2000 is to be realized. Annual public reporting on progress should be made to increase awareness and encourage participation.

Recommendation #4

Decisions concerning solid waste minimization, ownership and delivery of solid waste management systems, and legislated flow control, should primarily be based on environmental protection and resource conservation standards.

APPENDIX A

TERMS OF REFERENCE

FOR

CLEAN ENVIRONMENT COMMISSION PUBLIC INVESTIGATION OF SOLID WASTE MANAGEMENT IN THE CAPITAL REGION

BACKGROUND

As a result of a number of initiatives related to solid waste management, such as the Manitoba Product Stewardship Program, improvements to waste disposal ground standards and the development of a Capital Region Strategy, the City of Winnipeg and other stakeholders have raised a number of broad issues and concerns related to solid waste management in the Capital Region. These issues go well beyond the consideration of any single solid waste management initiative.

Therefore, in order to assist in the development of a strategic context within which specific solid waste management initiatives can be considered, the Clean Environment Commission is being requested by the Minister of Environment to conduct a public investigation of solid waste management in the region.

MANDATE OF THE INVESTIGATION

Pursuant to subsection 6 (5) of The Environment Act, the Clean Environment Commission shall conduct public hearings with respect to solid waste management within the Capital Region and following the hearings, the Commission shall provide its recommendations to the Minister of Environment.

SCOPE OF THE REVIEW

The Clean Environment Commission is to be guided by the Principles and Guidelines of Sustainable Development as contained in the document Sustainable Development Strategy for Manitoba.

The Clean Environment Commission will seek information from the public and stakeholders and provide recommendations regarding the following matters:

- The concerns of the public and various stakeholders respecting the management of solid waste in the Capital Region.
- 2. The ownership and control of solid waste in the Capital Region.
- 3. The activities which should take place at waste management facilities in the Capital Region.
- The economic and environmental impacts of having competitive sites for receiving the waste.
- The advantages and disadvantages of having regional or multi-municipality waste management sites.
- 6. Solid waste management issues that will, in the future, be faced in the Capital Region.
- The elements of an environmentally and economically sustainable solid waste management strategy for the Capital Region.
- Any other issues which the Commission believes are pertinent to the management of solid waste in the Capital Region.

The Commission may at any time request that the Minister of Environment review or clarify these terms of reference.

APPENDIX B

Principles of Sustainable Development

Fundamental Guidelines for Sustainable Development

Principles:

1. Integration of Environmental and Economic Decisions

This principle required that we ensure economic decisions adequately reflect environmental impacts including human health. Environmental initiatives shall adequately take into account economic consequences.

Stewardship

This principle required that we manage the environment and economy for the benefit of present and future generations.

Stewardship requires the recognition that we are caretakers of the environment and economy for the benefit of present and future generations of Manitobans. A balance must be struck between today's decisions and tomorrow's impacts.

3. Shared Responsibility

This principle requires that all Manitobans acknowledge responsibility for sustaining the environment and economy, with each being accountable for decisions and actions, in a spirit of partnership and open cooperation.

4. Prevention

This principle requires that we anticipate, prevent or mitigate significant adverse environmental (including human health) and economic impacts of policy, programs, and decisions.

5. Conservation

This principle requires that we maintain essential ecological processes, biological diversity and life-support systems of our environment; harvest renewable resources on a sustained yield basis; and make wise and efficient use of our renewable and non-renewable resources.

6. Recycling

This principle requires that we endeavor to reduce, reuse, and recover the products of our society.

7. Enhancement

This principle requires that we enhance the long-term productive capability, quality and capacity of our natural ecosystems.

8. Rehabilitation and Reclamation

This principle requires that we endeavor to restore damaged or degraded environments to beneficial uses.

Rehabilitation and reclamation require ameliorating damage caused in the past. Future policies, programs and developments should take into consideration the need for rehabilitation and reclamation.

9. Scientific and Technological Innovation

This principle requires that we research, develop, test and implement technologies essential to further environmental quality including human health and economic growth.

10. Global Responsibility

This principle requires that we think globally when we act locally.

Global responsibility requires that we recognize there are no boundaries to our environment, and that there is ecological interdependence among provinces and nations. There is a need to work cooperatively within Canada, and internationally, to accelerate the merger of environment and economics in decision making and to develop comprehensive and equitable solutions to problems.

Fundamental Guidelines:

1. Efficient Use of Resources

We shall encourage and support development and application of systems for proper resource pricing, demand management, and resource allocation together with incentives and disincentives to encourage efficient use of resources and full environmental costing of decisions and developments.

2. Public Participation

We shall establish appropriate forums which encourage and provide opportunity for consultation and meaningful participation in decision-making processes by all Manitobans. We shall endeavor to ensure due process, prior notification and appropriate and timely redress for those affected by policies, programs, decisions and developments.

3. Understanding and Respect

We shall be aware that we share a common physical, social and economic environment in Manitoba. Understanding and respect for differing social and economic views, values, traditions and aspirations is necessary for equitable management of these common resources. Consideration must be given to the aspirations, needs, and views of various regions and groups in Manitoba.

4. Access to Adequate Information

We shall encourage and support the improvement and refinement of our environmental and economic information base and promotion of the opportunity for equal and timely access to information by all Manitobans.

5. Integrated Decision-Making and Planning

We shall encourage and support decision-making and planning processes that are open, cross-sectoral, incorporate time horizons, relevant to long-term implications and efficient and timely.

6. Substitution

We shall encourage and promote the development and use of substitutes for scarce resources where they are both environmentally sound and economically viable.

APPENDIX C

LIST OF REGISTERED PRESENTERS

Bray, John Browning Ferris Waste Systems Inc

Beachell, Allan Rural Municipality of Rosser

Carroll, William City of Winnipeg

Chambers, Alice Pinawa Recycling Inc.

Dowhanik, Shelley Browning Ferris Waste Systems Inc.

Duguid, Terry City of Winnipeg

Emberley, Kenneth Private Representation

Flemming, Elizabeth Committee of the Council of Women on Urban and Regional Issues

Garlich, Carolyn Committee of the Council of Women on Urban and Regional Issues

Gibson, Dwight Water and Waste Department, City of Winnipeg

Gillespie, Colin Browning Ferris Waste Systems Inc.

Greasley, Gervin Manitoba Construction Environment Task Force

Haddad, M. Private Representation

Hamilton, Judith Private Representation

Hicks, David City of Winnipeg Holle, Peter Manitoba Taxpayers Association

Holtmann, Henry Citizens Advisory Group, Rural Municipality of Rosser

Kaufmann, Peter Kaufmann Foods

Koroluk, Glen Recycling Council of Manitoba Inc.

Kuluk, Tony City of Winnipeg

Lamoureux, Kevin Member of the Legislative Assembly, Inkster

Lee, Cliff Manitoba Environment

Lethbridge, Dave Town of Stonewall

MacFarlane, Dawn Town of Selkirk

Masniuk, Patricia Private Representation

McMurren, Clay Rural Municipality of Rockwood

McNicholl, Dave Habitat Re-Store/Habitat for Humanity/ Used Building Material Industry Assoc.

Miller, Peter Private Representation

Moist, Paul Canadian Union of Public Employees Local 500 Mollard, Tom Rural Municipality of St. Clements

Morrison, Alexandra Recycling Council of Manitoba Inc.

Oster, David Rural Municipality of West St. Paul

Regiec, Marilyn Rural Municipality of St. Andrews

Sedley, John Browning Ferris Waste Systems Inc.

Sigurdson, Kim Browning Ferris Waste Systems Inc.

Strachan, Larry Manitoba Environment

Thomas, Ken Rural Municipality of St. Clements

Thompson, Susan City of Winnipeg

APPENDIX D

LIST OF EXHIBITS

DESCRIPTION

- 1. <u>Letter</u>, dated April 6, 1995, from Hon. J. Glen Cummings, Minister of Environment, Province of Manitoba, to Dale Stewart, Chairman, Manitoba Clean Environment Commission.
- 2. <u>Letter</u>, dated June 16, 1995, (with <u>attachment</u> Terms of Reference for Clean Environment Commission Public Investigation of Solid Waste Management in the Capital Region), from Hon. J. Glen Cummings, Minister of Environment, Province of Manitoba, to Dale Stewart, Chairman, Manitoba Clean Environment Commission.
- 3. Manitoba Environment Presentation to the Clean Environment Commission Solid Waste Management in the Capital Region (with attachment). Submitted by Cliff Lee and Larry Strachan, Manitoba Environment.
- 4. Preserving Responsible, Effective Solid Waste Management for Manitoba's Capital Region: Background and Supporting Information Prepared for The Manitoba Clean Environment Commission Hearings, August, 1995. Submitted by William Carroll, Terry Duguid, Dwight Gibson, Dave Hicks, Tony Kuluk, and Susan Thompson, City of Winnipeg.
- 5. City of Winnipeg: Waste Reduction Programs. Submitted by William Carroll, Terry Duguid, Dwight Gibson, Dave Hicks, Tony Kuluk, and Susan Thompson, City of Winnipeg.
- 6. Presentation by the Canadian Union of Public Employees, Local 500 to Manitoba Clean Environment Commission Public Hearing: Solid Waste Management Capital Region, August, 1995. Submitted by Paul Moist, Canadian Union of Public Employees Local 500
- 7. Brief, untitled, submitted by David Oster, Rural Municipality of West St. Paul.
- 8. Presentation to Manitoba Clean Environment Commission, August 15, 1995: Solid Waste Management in the Capital Region, Rural Municipality of St. Andrews. Submitted by Marilyn Regiec, Rural Municipality of St. Andrews.
- 9. The Rural Municipality of Rockwood: CEC Environmental Hearing, August 15, 1995. Submitted by Clay McMurren, Rural Municipality of Rockwood.
- 10. Rural Municipality of St. Clements Presentation to the Clean Environment Commission: Solid Waste Management in the Capital Region. Submitted by Ken Thomas and Tom Mollard, Rural Municipality of St. Clements.
- 11. Solid Waste Management. Submitted by Gervin Greasley, Manitoba Construction Environment Taskforce.
- 12. Manitoba Clean Environment Commission Hearing Re: Solid Waste Management in the Capital Region (with attachments). Submitted by Allan Beachell, Rural Municipality of Rosser.

- 13. Presentation to the Manitoba Clean Environment Commission, August 15, 1995 The Taxpayers Perspective on Solid Waste Management in the Capital Region (with Appendices). Submitted by Peter Holle, Manitoba Taxpayers Association.
- 14. Solid Waste Management in the Capital Region. Submitted by David McNicholl, Winnipeg Habitat for Humanity, The Habitat Re-Store, and The Used Building Material Industry Association.
- 15. Brief to the Clean Environment Commission Concerning Solid Waste Management in the Capital Region (with Addendum). Submitted by Elizabeth Flemming and Carolyn Garlich, Provincial Council of Women of Manitoba and the Council of Women of Winnipeg.
- 16. <u>Brief</u>, *untitled*, submitted by Henry Holtmann, Citizens Advisory Group for the Rural Municipality of Rosser.
- 17. Position for the Capital Region Solid Waste Management Hearings Aug/95. Submitted by Alexandra Morrison and Glen Koroluk, Recycling Council of Manitoba Inc..
- 18. Solid Waste Management in the Capital Region Presentation to the Clean Environment Commission, August 15, 1995. Submitted by Alice Chambers, Pinawa Recycling Inc.
- 19. Mercury Loading of Landfill from Batteries and Fluorescent Tubes (with attachments). Submitted by Patricia Masniuk.
- 20. <u>Brief</u>, Clean Environment Commission Public Investigation of Solid Waste Management in the Capital Region. Submitted by Kim Sigurdson, Shelley Dowhanik, John Bray, John Sedley, and Colin Gillespie, Browning Ferris Waste Systems Inc.
- 21. <u>Transparencies</u>, Clean Environment Commission Public Investigation of Solid Waste Management in the Capital Region. Submitted by Kim Sigurdson, Shelley Dowhanik, John Bray, John Sedley, and Colin Gillespie, Browning Ferris Waste Systems Inc.
- 22. Supporting Documentation Clean Environment Commission Public Investigation of Solid Waste Management in the Capital Region. Submitted by Kim Sigurdson, Shelley Dowhanik, John Bray, John Sedley, and Colin Gillespie, Browning Ferris Waste Systems Inc.
- 23. Presentation to the Clean Environment Commission Public Hearings on "Solid Waste Management in the Capital Region", August 14, 15, 1995. Submitted by Dave Lethbridge, Town of Stonewall.
- 24. Manitoba Clean Environment Commission Public Hearing Solid Waste Management in the Capital Region. Submitted by Mary Ann Haddad.
- 25. Brief, untitled, submitted by Judith Hamilton.
- 26. The Town of Selkirk Presentation to the Manitoba Clean Environment Commission on Solid Waste Management in the Capital Region, August 14 & 15, 1995. Submitted by Dawn MacFarlane, Town of Selkirk.

- 27. Notes for a Brief to the Clean Environment Commission on Solid Waste Minimization and Management in the Capital Region (with attachments). Submitted by Peter Miller.
- 28. Manitoba Environment Commission Re: Solid Waste Management in Winnipeg Area (with attachments). Submitted by Kenneth Emberley.