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# Report

Planning, Design & Development Committee

Standing Committee of the Council of the Corporation of the City of Brampton

Date: July 18, 2007

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DATE: July 30, 2007

PLANNING. DESIGN & DEVELOPMENT COMMITTEE

Subject: INFORMATION REPORT INCINERATION AND WASTE PROCESSING TRANSFER AND DISPOSAL STUDY DIRECTION TO PROCEED TO A PUBLIC MEETING

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### **Overview:**

- MMM Group Ltd. (formerly Marshal Macklin Monaghan) has been retained by the City to conduct the Incineration and Waste Processing, Transfer and Disposal Study, and to recommend a planning framework based on the findings of the study including Official Plan and Zoning By-Law amendments where appropriate.
- The City of Brampton has passed an Interim Control By-Law, which prohibits the expansion or development of any waste transfer or recycling stations along with combustion-based power generation facilities within areas of the City of Brampton defined in the by-law. The Interim Control By-Law is set to expire on October 10, 2007.
- The Interim Control By-Law was required so that the City could assess the current policy framework for dealing with waste incineration, waste processing, and energy generation.
- MMM Group has completed Phase 2 of the study, which includes a recommended policy approach and recommendations to amend the Official Plan and Zoning by-law.
- The purpose of this report is to present the policy framwork recommended by MMM Group and to seek direction to proceed to a statutory public meeting to present the findings of the study, including the recommended Official Plan and Zoning By-Law amendments as attached.

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### **RECOMMENDATIONS:**

- 1. THAT the staff report dated July 18, 2007 and entitled "Information Report: Incimeration and Waste Processing Transfer and Disposal Study" be received;
- 2. THAT staff be authorized to hold a statutory pubic meeting to present MMM Growp's study findings and the recommended draft planning policy approach and Official Plan and Zoning By-Law amendments as attached.

### BACKGROUND:

Incineration, waste processing, and energy generation have become prominent land use issues in Brampton, the GTA and many other municipalities. Forecasts projected for the Greater Golden Horseshce show an additional 3.7 million people by 2031. This growth poses implications and presents challenges for energy generation, waste management and the associated policy frameworks. There are numerous municipal responsibilities associated with the consideration of waste and energy infrastructure including land use compatibility and consideration for public health and safety as identified through the *Planning Aqt*.<sup>F</sup> Provincial Policy Statement (PPS).

The waste processing, transfer and disposal issues are combined with the issues of an emerging energy supply shortage. Additional supply of fossil fuels and electricity is needed in the province and prices have risen sharply. It is expected that incinerators will be used for waste disposal and the generation of power. It is recognized that the current policy and land use regulation framework in Brampton needs refinement in order to deal with the challenges associated with the pressures that are anticipated.

City Council approved Interim Control By-Law 312-2005 (ICB) on October 12, 2005 to prohibit new and expanded incinerators and waste processing, transfer and disposal facilities (except as is necessarily incidental to any permitted industrial or manufacturing use) for a period of 1 year, for specific areas of the City, which generally includes all employment lands in the City.

On September 23, 2006, Council endorsed the extension of the Interim Control By-Law by one year to October 10, 2007. The purpose of the Interim Control By-Law is to prohibit new or expanded uses under study while the City carries out the planning study.

The purpose of the Incineration and Waste Processing Transfer and Disposal Study is to:

 to evaluate the appropriateness of the City's land use designations, applicable land use policies, as well as transportation modes and routes; and

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 to recommend implementation policies and zoning measures to guide development of incineration and waste processing, transfer and disposal sites.

Early in 2006 the firm of MMM Group Ltd. was selected to undertake the study. A technical working group was assembled consisting of City and Regional staff to work with the consultants in completing the study and assessing the City's current and future policy framework. Included in the working group were representatives of the City's Planning, Legal, Emergency Services, Economic Development Office and Emergency Measures divisions. The Region's Waste Management and Public Health Division were also represented.

### Phase 1: Research Compendium

Phase 1 was submitted on June 13 2006 and summarizes the existing policy framework of the various levels of government and public agencies, provides a regulatory overview and discusses the potential land use effects from existing and emerging technologies. This included a review of the approach and policy framework of the other municipalities faced with similar issues, to identify general requirements, patterns and anomalies.

According to Phase 1 the City's planning policy and approvals process will need to:

- a. address issues of local interest;
- b. reflect/relate to the approval responsibilities of Provincial & Federal Agencies; and
- c. fulfill the City's responsibilities that are not addressed in the Provincial or Federal levels, without unnecessarily overlapping them.

There are numerous municipal responsibilities associated with the consideration of waste and energy infrastructure including land use compatibility and the consideration for public health and safety as identified through the *Planning Act, Provincial Policy Statement (PPS) and the Municipal Act.* 

The study identifies 5 key areas of municipal responsibility in matters of waste management:

- Waste management infrastructure and energy supply need to be considered as part of the broader municipal planning framework as essential infrastructure to be included in municipal plans;
- The City has a responsibility for orderly distribution of land uses;
- The City has to ensure compatibility with adjacent land uses;
- The City has a responsibility to ensure the orderly development of individual sites;
- The City has a responsibility for public health and safety (e.g., fire prevention and emergency response)

Phase 1 describes the emerging types of technology that are being used to process

and recycle waste, which include physical, biological, thermal and chemical processes. It is recognized that the Region of Peel is using some the latest technology emerging in the field of waste management. The Research Compendium identified seven categories of facilities, which exist in the City and/or may be anticipated through emerging technologies.

The types of existing or potential waste management and relevant power generation facility uses are classified as follows:

- 1. Solid Waste (Non-hazardous) Transfer Site;
- 2. Solid Waste (Non-hazardous) Processing Site;
- 3. Waste Transfer and Processing (Hazardous) Site;
- 4. Thermal Degradation (Non-Energy Producing) Site;
- 5. Thermal Degradation (Energy from Waste) Site;
- 6. Power Generation (Fuel Combustion) Site; and
- 7. Landfill Site.

### CURRENT SITUATION:

Phase 2: Evaluation and Analysis

Phase 2 is now complete in the form of a draft Planning Policy Approach and recommended amendments to the Official Plan and Zoning By-Law. Phase 2 of the study involved the identification of possible strategies to manage waste and energy uses. The Planning Policy Approach and recommended amendments are attached as Appendix A.

The consultants began Phase 2 by drafting a set of planning principles that the City intends to accomplish through the regulation of such uses, and preferred policy directions such as:

- ensure compatibility between existing and proposed land uses (may vary by extent/intensity of the potential hazard);
- ensure the adequate provision and efficient use of waste management systems;
- ensure the protection of public health and safety;
- ensure the protection of the natural environment;
- ensure the provision of adequate transportation system, which directs truck traffic away from residential neighbourhoods;
- encourage and promote efforts to reduce, reuse, recycle and conserve energy;
- promote sustainable local energy production and alternative energy source that adhere to the planning principles;
- ensure appropriate site design, through such matters as access, aesthetics,
- safety, fire protection, protection of natural features/watercourses; and
- allow for extended producer responsibilities (i.e., material recovery operations).

The consultants worked with staff to formulate strategies for dealing with types of incineration, waste processing, and combustion-based power generation uses. This

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included considering the potential risk for the City of Brampton associated with land use development adjacent to waste management and power generation facilities.

Using the set of principles as a guide MMM Group formulated policy direction for dealing with applications related to waste management. The policy direction was developed in the context of the categories of waste described above and the jurisdiction and interests of the municipality.

Table 1 identifies the types of operations/uses and corresponding policy direction provided by MMM Group based on their understanding of the potential impacts and required extent of municipal regulation through the planning approvals process.

| Type of Operation/Use*   |   | Policy Direction   |  |   |
|--|---|--|--|---|
|  |   | A<br>Permit within certain<br>industrial land use<br>designations and zones,<br>subject to performance<br>criteria | B<br>Permit within certain industrial<br>land use designations subject<br>to performance criteria. Use<br>would require a site-specific<br>zoning by-law amendment | C<br>Require an<br>Official Plan and<br>Zoning By-law<br>Amendment,<br>subject to full<br>justification |
| 1. Solid Waste (Non<br>Hazardous Waste)<br>Transfer Site                                       | Primary Use /<br>Accessory Use                    | X<br>(if greater than 300 metres<br>from a sensitive land use)   | X<br>(if less than 300 metres from a<br>sensitive land use, but no less  |   |
|  | Outside Cterrens                                  |  | than 70 metres)  |   |
| 2. Solid Waste (Non-<br>Hazardous Waste)<br>Processing Site                                    | Outside Storage<br>Primary Use /<br>Accessory Use | X<br>(if greater than 300 metres<br>from a sensitive land use)   | X<br>X<br>(if less than 300 metres from a<br>sensitive land use, but no less<br>than 70 metres)  |   |
|  | Outside Storage                                   |  | X  |   |
| 3. Waste Transfer<br>and Processing<br>and Thermal<br>Degradation<br>(Hazardous<br>Waste) Site | Acute Hazardous<br>Waste Chemicals                |  | 2  | X**   |
|  | Corrosive, Reactive<br>or Radioactive<br>Waste    |  |  | X**   |
|  | Hazardous Waste<br>Chemicals                      | X<br>(if greater than 1,000<br>metres from a sensitive<br>land use)<br>(excluding thermal degradation)             | X<br>( if less than 1,000 metres from<br>a sensitive land use, but no<br>less than 300 metres)<br>(excluding thermal degradation)                                  | X<br>(for thermal<br>degradation)   |
|  | Medical, Veterinary<br>or Pathological<br>Waste   | X<br>( if greater than 1000<br>metres from a sensitive<br>land use)  | X<br>( if less than 1000 metres from<br>a sensitive land use but no less<br>than 300 metres)   |   |
|  | Other Hazardous<br>Wastes                         |  |  | X**   |
|  | PCB Waste   |  |  | X**   |
| I. Thermal<br>Degradation (Non-<br>Hazardous   | Primary Use                                       | ана сталина (тр. 1997)<br>1977 — Прила Парила, сталика (тр. 1997)<br>1977 — Прила Парила, сталика (тр. 1997)       | X<br>(if greater than 300 metres from<br>a sensitive land use)   |   |
| including Energy<br>from Waste) Site   | Accessory Use                                     | X<br>(Energy from Waste)   |  |   |

### Table 1 - Summary of Policy Direction by Operation/Use

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| 5. Power Generation<br>(Fuel<br>Combustion) Site | Primary Use/<br>Accessory Use | X<br>(if greater than 300 metres from<br>a sensitive land use) |  |  |
|--|-------------------------------|--|--|--|
| 6. Landfill Site                                 |                               | Landfill Sites are not contemplated in the City                |  |  |

Source: MMM Group Limited

- X Indicates the policy direction recommended for each type of operation/use
- Existing uses that legally existed prior to the passing of the Interim Control By-law will be permitted to continue.

\*\* Sites operated by or on behalf of the Region (i.e., Community Recycling Centres) may be subject to Policy Direction B, excluding the thermal degradation of hazardous waste.

### Amendments to the Official Plan and Zoning By-Law

The preferred policy framework is to be implemented through amendments to the existing Official Plan (1993) new Official Plan (2006) and to the City's Zoning By-Law. These draft amendments are included in the appendices of MMM Group's report.

The draft amendments to the City's key planning documents are meant to implement the planning principles and policy direction described above, including the addition of new definitions to help clarify new terminology and processes, and impose minimum separation distances from sensitive land uses according to the Ministry of Environment Guidelines (D-6) on "Compatibility Between Industry Facilities and Sensitive Landuses".

The policies in the draft amendments are also intended to provide a formalized framework to guide the City's role in reviewing Certificates of Approval applications made to the Province.

#### Proposed Hazardous Waste Policies

Of particular concern to residents, industry representation and the general public has been the policy framework respecting the transfer and processing of the hazardous waste. Processing or transfer of Hazardous Waste Chemicals (i.e. pharmaceutical, detergents and soaps, photo processing wastes...) or Medical Wastes are proposed to be permitted a minimum of 1000 metres from a sensitive land-use in Industrial designations and subject to criteria to be addressed through the site plan review process. The uses may be permitted a minimum of 300 metres from a sensitive landuse subject to a site specific zoning by-law amendment with specific issues to be considered through the rezoning process.

However, the transfer or processing of Acute Hazardous Waste or Radioactive and Corrosive Waste and the thermal degradation of any hazardous waste would <u>not be</u> <u>permitted</u> except by full site specific OPA and rezoning.

### Public Consultation to Date

Part of formulating the above recommended policy framework involved consultation with the general public, industry representatives and key community stakeholders.

the General Public (May 22, 2007) to present findings of the study and to solicit feedback. Each of these meetings provided valuable insight and ideas to help guide the formulation of the proposed policy framework. Notes and submissions from these meetings can be seen in the Appendix of MMM Group's report.

### CONCLUSION

Staff intend to present the findings of the Incineration and Waste Processing, Transfer and Disposal Study at a Statutory Public Meeting on September 5, 2007. Staff will report back to Planning, Design and Development Committee to provide the results of the public meeting and to recommend approval of a policy framework for dealing with incineration, processing, transfer and disposal of waste, which will include the adoption of appropriate amendments to the Official Plan and Zoning By-Law, prior to the expiry of the Interim Control By-Law on October 10, 2007.

Respectfully Submitted:

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Appendix A - Planning Policy Approach - Incineration and Waste Processing Transfer and Disposal Study

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Appendix B - Interim Control By-Law 312-2005

Appendix C - Interim Control By-Law 325-2006