

November 2004

TRI-R Committee
Township of Armour, Village of
Burk's Falls and Township of
Ryerson

**Proposed Terms of Reference for an
Environmental Assessment to Establish a
Long-Term Waste Management System**

November 2004



**URBAN &
ENVIRONMENTAL
MANAGEMENT INC.**
PROFESSIONAL CONSULTING SERVICES

**JAGGER HIMS
LIMITED**

Environmental Consulting Engineers

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to Establish a Long-Term Waste Management System

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1.0 INTRODUCTION

1.1 Background

The Township of Armour, Township of Ryerson and the Village of Burk's Falls are located in Central Ontario in the District of Parry Sound. The three municipalities together formed the TRI-R Committee, comprising of political representatives from each municipality. The TRI-R Committee is responsible for waste management matters including the recycling program, other diversion activities and management and operation of the municipal landfill. The proponent initiating this environmental assessment (EA) study are the three municipalities. The TRI-R Committee as the representatives of the three communities will manage the EA Study.

The TRI-R Committee completed a topographic survey of the existing landfill in January 2001. At that time it was determined that the landfill will reach capacity near the end of 2006/early 2007. In consideration that there was limited disposal capacity remaining, in 2003, the TRI-R Committee undertook a preliminary study to determine whether the existing landfill could be expanded to provide long-term disposal capacity. The results of the study indicated that there was potential to expand the existing landfill. However, the report indicated that further detailed site specific studies would be required to confirm that the site could be expanded for long-term use.

In August 2003, the TRI-R Committee submitted a request to the Ministry of the Environment (MOE) to exempt the proposed expansion of the existing landfill from Environmental Assessment Act (EAA) requirements. The exemption request was based on a site expansion of less than 40,000 cubic metres, having a cost of less than \$3.5 million and that it would provide for the equivalent domestic waste of 1,500 people (although it was recognized that the actual population of the three municipalities was greater than this). The MOE turned down the EA Act exemption request based on the population of the three municipalities exceeding 1,500 people. Therefore, the TRI-R Committee is initiating an EA Study to address long-term waste management requirements for the three municipalities. The first step in the EA Study process, as required under the EAA, is to prepare this Terms of Reference (ToR) to describe the proposed EA Study approach.

1.2 Purpose of the ToR

The purpose of the ToR is to describe in a clear and concise manner the proposed undertaking and how the proponent intends to carry out the EA in respect of the proposed undertaking. The ToR, once finalized and approved by the Minister of the Environment, becomes the guiding document for completing the EA Study.

This ToR presents the proposed approach to address long-term waste management requirements for the three municipalities, to meet EAA requirements. The EA will be completed in accordance with this ToR, as approved by the Minister of the Environment.

The ToR is being submitted under Section 6(2)(a) of the EAA. This clause indicates that the environmental assessment will be prepared in accordance with the requirements set out in subsection 6.1(2) of the EAA.

1.3 Previously Completed Activities/Studies

Previously completed activities/studies that could be updated and/or included in the EA Study include the following:

- Topographic Survey of Existing Landfill by E.J. Williams Surveying Ltd. (January 19, 2001) and Landfill Capacity Review completed by the TRI-R Committee (November 7, 2001).
- Jagger Hims Limited, TRI-R Committee Landfill, Landfill Expansion Project, Phase I Evaluation Study (July 2003).

It should be noted that the Jagger Hims Ltd. study referenced above is being submitted as supporting documentation to this ToR. The report is being submitted as rationale for possible consideration of the existing landfill as an alternative method if a landfill site selection process is determined to be required to be undertaken

2.0 DESCRIPTION OF THE UNDERTAKING

2.1 Description of the Purpose of the Undertaking

The undertaking, which is the subject of this ToR, is to develop waste management capability for the Municipalities of Burk's Falls, Armour and Ryerson for a long-term, approximately 25-year period. The final description of the undertaking resulting from the environmental assessment evaluation process will be in the EA document.

2.2 Rationale for the Undertaking

Landfilling is the current method of waste management for the three municipalities that manages the majority of waste generated. The TRI-R Committee administers, on behalf of the Municipalities of Armour, Burk's Falls, and Ryerson, a municipal landfill located on Part Lots 8 and 9, Concession 8, Township of Armour, District of Parry Sound.

The landfill site is licensed to receive municipal, solid, non-hazardous waste. Based on the approved landfill site capacity of 42,000 m³, the existing dimensions of the landfill, and the current rate of fill, the TRI-R Committee determined in January 2001 that the landfill will reach approved capacity around 2006/2007.

As such, the rationale for the undertaking is that the three municipalities will be without their current, primary means of managing waste (i.e. landfill disposal) sometime in approximately 2006/2007. Therefore, the three municipalities have to establish additional waste management capability to meet their requirements for the long-term.

If there are no significant changes to the manner in which waste is managed in the three municipalities, then landfill would continue to play a significant role in the future long-term waste management system. Any process to establish new or expanded landfill disposal capacity requires approval under the Environmental Assessment Act (EAA). Diversion programs and facilities do not require EAA approval unless it is a very large facility. Based on the potential that additional landfill capacity may be needed, the three municipalities are following the EAA approvals process, which begins with the preparation of a ToR. Should it be determined at any point in the EA process that the preferred alternative(s) selected do not require EAA approval, then the study would proceed to implement those alternatives, but it would not be necessary to follow and complete the EA process.

2.3 Need

One of the early steps in the Environmental Assessment (EA) process will be to confirm the long-term waste management requirements for the three municipalities.

The EA Study will examine need in greater detail, in order to confirm the long-term waste management requirements. Factors that will be considered will include, but not be limited to:

- the study period (i.e. plan for 25 years or more?)

- estimated population projections and growth rates for the three municipalities over the study period
- consideration of waste generated by permanent versus seasonal residents
- total estimated waste generation
- review of diversion programs and the potential to increase diversion from disposal
- establishment of a diversion goal and the resultant implications to how much if any, landfill disposal capacity will be required to be developed. In establishing a diversion goal for the TRI-R Municipalities, consideration will be given to the Provincial 60% Waste Diversion Goal as outlined in the MOE June 10, 2004 Discussion Paper
- whether a contingency amount should be included, if landfill disposal capacity is required, in order to consider larger than expected growth, not reaching diversion targets or other unforeseen factors.

Once these and other factors are considered, the long-term waste management requirement will be confirmed and the process to establish that capability will be initiated.

2.4 Study Area

When undertaking an EA, the Study Area has different implications depending on what is being examined. The Study Area is the geographic location that will be considered during the course of the EA. The following outlines some of the Study Area considerations:

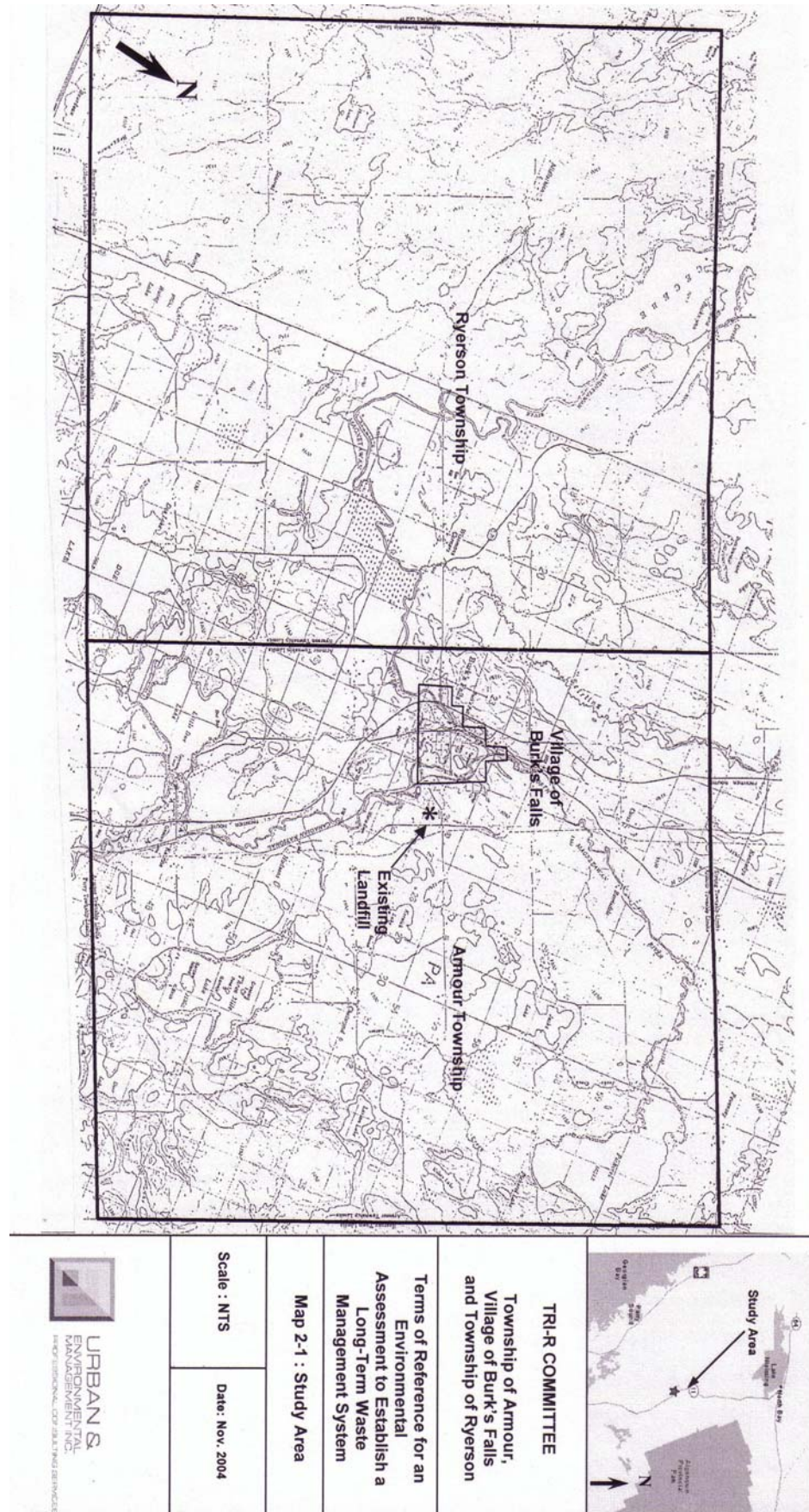
- In reviewing alternative approaches to managing waste (i.e. “*alternatives to*”) the geographic boundaries of all three municipalities will be considered from the perspective of reviewing and expanding existing programs and facilities and implementing new programs and facilities.
- If a landfill site selection process is required to be undertaken, the Study Area will initially include all lands in all three of the municipalities. There are no lands within the three municipalities that would be excluded at the initiation of the process. The process will be narrowed down to long-list, then short-list candidate sites within the three municipalities. When the candidate sites are identified, consideration will be given to examining the site itself, an area around the site (500 meters for long-list candidate locations and 1,000 meters for short-list sites) and primary travel routes to the site.
- Alternative approaches can include waste export. Therefore, when examining export, the Study Area will expand beyond the geographic boundaries of the three municipalities. The boundaries of the Study Area will be dictated by available landfill sites, diversion facilities, and the economics and other environmental impacts of the use of these facilities. Therefore, at this time no geographic limits will be placed on the Study Area considered when waste export is evaluated during the EA Study.

Map 2-1 identifies the location of the three municipalities participating as the proponents in this study.

2.5 Describing the Existing Environment

When completing an EA Study, the EAA [Section 6.1(2)(c)] requires that a description of the existing environment that could be potentially affected be included in the EA Documentation.

A description of the existing environment for the “*alternatives to*”, “*alternative methods*” and the “*preferred alternative*” will be included in the EA documentation.



TRIR COMMITTEE
 Township of Armour,
 Village of Burk's Falls
 and Township of Ryerson

Terms of Reference for an
 Environmental
 Assessment to Establish a
 Long-Term Waste
 Management System

Map 2-1 : Study Area

Scale : NTS	Date: Nov. 2004
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3.0 CONSIDERATION OF ALTERNATIVES TO THE UNDERTAKING

The EAA requires that an EA Study consider alternatives to the undertaking. The undertaking, as presented in Section 2.1, is to establish long-term waste management capability. Therefore, the EAA requires the three municipalities to examine alternative ways to managing waste.

3.1 Current Waste Management System

The following summarizes current waste management activities in the three municipalities:

- TRI-R Committee formed between the three municipalities to promote and implement a recycling program and to manage the disposal facility
- Recycling program initiated in 1989
- Curbside blue-box recycling collection in the Village of Burk's Falls
- Residents of the Townships of Armour and Ryerson do not receive curbside waste or recycleables collection. Residents are required to bring waste to the landfill and blue-box material to a recycling depot at the landfill site in Armour Township
- Materials Recovery Facility (MRF) established by the TRI-R Committee in 1990 and located at the landfill site in Armour Township
- Approximately 900 home composter units have been sold for use in the three municipalities
- Household hazardous wastes (HHW) are not accepted at the landfill. The TRI-R Committee arranges for HHW days locally for residents
- Landfill located in Armour Township to serve the disposal needs of the three municipalities.

The EA Study will examine the existing waste management system to consider ways of expanding existing diversion programs and develop and implement new diversion programs, with the goal of significantly reducing or eliminating the amount of waste that requires landfilling.

3.2 Alternatives to the Undertaking

The consideration of waste management alternatives (i.e. “*alternatives to*” the undertaking) involves the identification and evaluation of many functionally different types of alternatives with the only common basis being that they are approaches to managing some or all of the waste stream. Alternatives can include policies or initiatives (i.e. public education, landfill materials disposal ban), homeowner programs (i.e. backyard composting, reuse of materials), management and collection by the municipality (i.e. waste and blue box materials collection), or operating facilities that require an approved site (i.e. leaf and yard material or centralized compost facility, materials recycling facility and landfill).

The following generally describes the types of alternatives that will be evaluated in the EA Study.

- **“Do Nothing” Alternative** – The “Do Nothing” alternative is a continuation of existing programs and use of existing facilities. The “Do Nothing” alternative is identified and will be evaluated against other alternatives to provide a benchmark for measuring changes (either positive or negative) to the current waste management system.
- **Expand Existing Waste Diversion Programs** – This alternative will examine the existing waste diversion system and considers ways of improving that system. For example, it could include increasing current public education efforts or adding to the types of materials that are accepted in the recycling program.
- **Implement New Waste Diversion Programs** – This alternative will include the introduction of new diversion programs that the three municipalities currently do not have. For example, a reuse centre could be established at the landfill site where useful materials that have been brought in for disposal can be salvaged and sold or given away. Another example is to introduce the collection and composting of household organics waste, other than leaf and yard materials.
- **Waste Export Out of the Three Municipalities for Diversion and/or Disposal** – This alternative will examine the use by the three municipalities, of either public or private diversion and/or disposal facilities outside the geographic boundaries of the three municipalities.
- **Establishment of an Incineration/Energy from Waste Facility** – Incineration/Energy From Waste (EFW) is considered a technically feasible approach to waste management. As such, this alternative will be examined as to the potential for managing all or part of the waste stream of the three municipalities.
- **Mining of the Existing Landfill** – Landfill mining is generally used as a remedial measure to address problems resulting from the landfill disposal process. However, it also has been used in Ontario as a method to gain additional disposal capacity within an approved, licenced landfill. The method used is to excavate all or part of an existing fill area, and separate the waste from the cover material, using some type of screening process. In some instances, the separated waste is also sorted to remove recycleable materials. Waste materials are then placed into the fill area and covered with fill material. There is usually a 40% to 50% gain in capacity through landfill mining process. This alternative will examine whether landfill mining is appropriate at the TRI-R Municipalities existing landfill.
- **Expansion of the Existing Landfill Site** – expansion of the existing landfill site, will be evaluated as a functionally different “*alternative to*” compared to the establishment of a new “*greenfield*” location for a landfill site or any other “*alternative to*” (based on previous MOE advice). In July 2003, the TRI-R Committee completed a preliminary study (Jagger Hims Ltd.) that indicated that there was potential to expand the existing site but that further detailed studies would need to be undertaken.
- **Establishment of a New “Greenfield” Location for a Landfill** – The establishment of a new “*greenfield*” landfill will also be considered as an alternative waste management

approach. Greenfield sites are new locations that are not associated with or otherwise part of an existing landfill or property on which an existing landfill is located.

3.3 Proposed Methodology and Criteria to Evaluate Alternatives to the Undertaking

In order to evaluate the alternative waste management approaches, criteria will be developed and a comparative evaluation methodology applied. The evaluation methodology will be based on a net effects analysis as follows:

- Potential effects associated with the alternative approach based on the application of the evaluation criteria will be identified.
- Measures to mitigate (i.e. minimize or prevent) negative potential effects and enhance positive potential effects will be identified and applied to the potential effects.
- Net environmental effects after applying mitigative and enhancement measures will be determined.
- The net environmental effects of each alternative to will be identified and comparatively evaluated in the EA document.

Each alternative approach will be evaluated considering the trade-off of some factors against others (e.g. cost, environmental impacts, etc.) for the various alternative methods considered. Mitigation, the ability to reduce or eliminate impacts, and the net effects, (those effects remaining after mitigation has been implemented) are important elements in this evaluation.

A preliminary list of the factors for developing criteria that will be considered to comparatively evaluate the alternative waste management approaches are presented in Table 3-1. As noted, the list is preliminary and as such, the development of criteria and the evaluation process may not be limited to just the factors identified in Table 3-1.

Consultation is an important part of evaluating the alternative approaches to the undertaking. Both the evaluation methodology and proposed criteria will be further developed and presented to stakeholders for input and comment when this part of the EA process is initiated. A complete description of the consultation plan for the evaluation of alternative approaches to the undertaking is presented in Section 6.2.1.

At the conclusion of the evaluation of the alternative waste management approaches (i.e. the “*alternatives to*”) the TRI-R Committee will make a decision on whether to proceed to the next step of the EA process. If the preferred alternative approach(s) selected do not result in the need for new or additional landfill capacity or another approach that requires EAA approval (i.e. incineration/EFW), then the EA study process will be complete. The TRI-R Committee will then proceed to implementing the preferred approaches that were identified that do not require EAA approval. Public consultation will also be sought on the evaluation of alternative approaches, before a final decision is made.

If an alternative approach is selected that requires EAA approval, the study process will proceed to the next steps. Section 4.0 of this ToR describes a landfill site selection process, if landfill (either a new “*greenfield*” site or expansion of the existing landfill) is selected as an approach for the long-term system. Incineration/EFW also requires EAA approval. A

process has not been presented in the ToR for the siting of an incinerator/EFW facility. However, the process would be similar to the landfill site selection process that is presented in the ToR. The methodology and criteria would be developed in the EA process prior to initiating site selection.

Table 3-1
Proposed Factor for Developing Criteria to Evaluate
Alternative Waste Management Approaches
(i.e. “Alternatives To”)

Public Health & Safety Considerations

- Potential effect on health and safety of the public, neighbours or facility employees
- Potential effect on air quality (dust and odours)
- Potential effect on traffic safety
- Potential effects due to noise
- Potential effects due to bird hazards.

Natural Environmental Consideration

- Potential effects on terrestrial systems
- Potential effects on aquatic systems.

Hydrogeological, Geotechnical and Hydrologic Consideration

- Potential effects on hydrogeological features including groundwater
- Potential effects on surface water quality and resources

Social/Cultural Considerations

- Land requirements for facility operations and buffer
- Potential displacement of residents and businesses
- Potential disruption of residents and businesses
- Public acceptability of the system
- Ability of the public to participate in the system
- Potential effects on heritage, cultural and archaeological resources and features
- Visual impacts.

Economic/Financial Considerations

- Planning and approval costs
- Site acquisition costs
- Capital and operating costs
- Closure and post-closure costs
- Revenue and available markets
- Effects on municipal finance and budgets.

Technical Considerations

- Proven technology with a record of acceptable operating performance and reliability on a full-scale
- Approvability, having regard for current Ontario legislation, policies and guidelines
- Percentage of the waste stream that can reasonably be managed by the approach
- Operational complexity, sensitivity and requirements.

4.0 CONSIDERATION OF ALTERNATIVE METHODS OF CARRYING OUT THE UNDERTAKING – LANDFILL SITE SELECTION

If during the evaluation of alternatives to the undertaking it is determined that additional landfill capacity is required and that a new “*greenfield*” landfill site is a preferred alternative, then the following describes the proposed evaluation methodology and criteria. As noted, this methodology would also be similarly used if selection of a location for an incineration/EFW facility was undertaken.

A topographic survey of the existing landfill completed for the TRI-R Committee determined that approximately 18,200 m³ of “*air space*” was used for waste disposal over the last 10 years. This airspace would include both the component that is used for waste, as well as that used for daily cover. More recent topographic survey information (January 2001) indicates that approximately 2,400 m³/year of landfill air space has been used over each of the last three years. Therefore, based on a simple extrapolation of these quantities for a 25-year period, this would indicate that approximately 47,000 m³ to 60,000 m³ of additional “*air space*” would be required to meet the three municipalities’ long-term landfilling needs, if current waste disposal continued at current rates and no additional diversion was realized.

4.1 Overview of the Landfill Site Selection Process

A three-level approach is proposed for the landfill site selection process, if required. In general, the three levels would include:

- Level One – Identification of Candidate Areas: - This first level of the landfill site selection process would involve the application of exclusionary constraints to identify lands in the study area that may be suitable for landfill.
- Level Two – Identification & Evaluation of Long-List Candidate Sites: - At Level Two, specific sites will be identified within the candidate areas. Site delineation criteria will be applied that consider site size, configuration, disposal and buffer areas, in order to define the boundaries of the potential sites within the candidate areas. These sites and an area within 500 meters of the “*long-list*” site will be compared based on a set of evaluation criteria to reduce the number to a reasonable number of “*short-list*” sites that can be compared in greater detail at Level Three.
- Level Three – Identification & Evaluation of the Short-List Candidate Sites: - At Level Three, the short-list sites will be comparatively evaluated to identify the preferred location for the three municipality’s long-term landfill facility. Evaluation of the “*short-list*” sites will consider the net effects on-site, within 1 kilometer of the site and the primary travel routes to the site.

The proposed approach will be more fully described if and when a landfill site selection process is initiated and the specific evaluation methodology and exclusionary and comparative criteria are developed and presented for community and stakeholder comment.

4.2 Criteria to Identify and Evaluate Potential Sites

At each level of the landfill site selection process, criteria will be used to evaluate potential locations for a landfill. The evaluation process and the criteria will need to consider the effects to the overall environment as broadly defined in the EAA. If a landfill site selection process is required to be completed, at least three types of criteria are proposed to be developed, as follows:

- Exclusionary Constraints: - Exclusionary constraints define lands where a landfill will not be sited. As such, these lands would be removed from consideration based on applying the exclusionary constraints. This is the process that would be undertaken at Level One and would result in the identification of candidate landfill areas.
- Site Delineation Criteria: - Site delineation criteria are used to define the boundaries of potential sites within the candidate areas. The site delineation criteria consider major linear features within candidate areas to define sites that are large enough to meet the long-term landfill needs. The site delineation criteria are applied at the beginning of Level Two to identify potential long list sites.
- Comparative Evaluation Criteria: - Comparative criteria are developed and used at both Level Two to compare long-list and identify short-list sites and at Level Three to compare short-list sites in order to identify the preferred landfill location. Comparative criteria will be applied to each potential long-list and short-list site so that the resulting net effects of establishing a landfill at each site can be considered and compared in the EA Study.

Table 4-1 provides an overview of the types of criteria that could be considered if a landfill site selection process is required. The criteria will be more fully developed for each level of the evaluation process prior to initiating the site selection process so that there is no potential for bias in the criteria once the process is initiated. The criteria will be presented along with the evaluation methodology prior to initiating the site selection process, and input will be sought from the community and stakeholders in their development.

4.3 The Proposed Landfill Site Selection Evaluation Methodology

The methodology proposed to be used in the landfill site selection process will be both exclusionary and comparative. The exclusionary component will be used at Level One. Any lands in the study area that meet one or more of the exclusionary criteria will be eliminated from consideration at further levels of the study.

The methodology used to apply the comparative criteria at Levels Two and Three will be based on a “*net effects*” analysis. The steps in a net effects analysis include:

- Collecting relevant data to address the comparative criteria
- Application of the comparative criteria to the long-list or short-list site and identification of any potential negative or positive effects

- Identification of reasonable measures to mitigate (i.e. minimize or prevent) the potential negative effects and enhance the potential positive effects
- Identification of the resulting net effect after application of the mitigative and enhancement measure.

The net effects of each long-list or short-list site will then be compared against all other sites at the appropriate level in the EA. At Level Two, the sites that show the least net impacts for landfill will continue to Level Three as short-list sites. At Level Three, the result from the comparative evaluation of net effects will be the identification of the preferred site.

It is also important to note that the landfill site selection process is an iterative process. To that end, if more detailed information is identified at later levels of the process that determine certain sites should have been eliminated or considered differently at earlier levels of the study process, then the evaluation process will return back to that level to make any amendments required.

4.4 Consideration of the Existing Landfill Site

The EAA requires that reasonable alternatives be evaluated. In addition, Section 6.1(3) of the EAA also allows that other information can be considered. The TRI-R Committee completed a preliminary review of the potential to expand the existing landfill for long-term use. That study, completed by Jagger Hims Limited, entitled “TRI-R Committee Landfill Expansion Project, Phase 1 Evaluation Study (July 2003) indicated that there was reasonable potential to expand the existing site, but that further detailed studies would need to be undertaken.

As part of the ToR, the TRI-R Committee proposes, based on the Phase 1 Evaluation Study, that if additional landfill disposal capacity is required (as determined through the evaluation “*alternative to*”), that the expansion of the existing landfill also be considered. The expansion of the existing landfill will be compared at Level Three to other short-list sites identified through the three-level landfill site selection process.

Table 4-1

Proposed Factors for Developing Criteria for a Landfill Site Selection Process

Natural Environmental Considerations

- Potential for loss or disruption of terrestrial sites on or off-site
- Potential for loss or disruption of aquatic systems on or off-site

Geological/Hydrogeological and Hydrological Considerations

- Underlying soil and bedrock conditions
- Surface water systems
- Potential for impacting ground water supplies/resources.

Social/Cultural Considerations

- Potential displacement of residents on site
- Potential disruption to residents off-site
- Potential displacement or disruption of business activities
- Potential impact on archeological/heritage/cultural features
- Potential displacement or disruption of agricultural activities
- Potential tourism impacts
- Potential displacement or disruption of community features.

Transportation/Traffic Impacts

- Potential effects of truck and self-hauled vehicle traffic
- Potential impacts on air traffic safety, due to bird hazards.

Economic/Financial Impacts

- Site acquisition costs
- Approval costs
- Capital costs
- Operating costs
- Closure costs
- Post-closure costs
- Haul costs
- Potential financial impacts to surrounding land users.

Technical/Design & Operations Considerations

- Availability of soil material for landfill liner, daily and final cover
- Leachate management/disposal requirements and availability
- Potential noise, odour and dust impacts
- Vector and vermin impacts
- Accessibility of site and proximity to roadways.

5.0 EA WORK PLAN

An eight-step process to develop the ToR, undertake the EA Study and to make the approvals submission is proposed. Figure 5-1 illustrates the work plan, while the following provides a description of work tasks. Steps #1 to #3 of the work plan relate to the preparation of the ToR, while Steps #4 to #8 relate to the EA Study and its submission for EAA approval. It is important to note that Step #5 onward would only be undertaken if an alternative approach is identified that requires EAA approval.

- **Step #1 – Prepare Draft Terms of Reference**

This step was completed with the release of the draft ToR in May 2004.

- **Step #2 – Community and Agency Input to Draft ToR**

The draft ToR was subject to community, stakeholder and government agency input, review and comment as summarized in Section 6.1 and as described in the separate Record of the Public Consultation submitted as a supporting document to this ToR.

- **Step #3 – Prepare and Submit Final ToR**

The Final ToR is considered “proposed” at this stage since it is still subject to comments received during MOE’s 30-day public review period, the core government agency review and the 7-week MOE review period.

The following tasks of the EA study will be completed once the ToR is approved:

- **Step #4 – Review of Alternatives and Determination of Need**

Step #4 will involve the consideration of waste management alternatives (i.e. “alternatives to” the undertaking). This will include evaluating means of increasing diversion from disposal as well as determining whether there is a role for residuals disposal (i.e. landfill, EFW/incineration) in the long-term system. Should a resulting role for disposal be identified, the requirements will be used as the basis for a site selection process, which is described in Steps #5 to #8.

- **Step #5 – Develop Landfill Site Selection Evaluation Methodology and Criteria (If Required)**

The specific exclusionary and comparative criteria and the method for applying these criteria to evaluate potential candidate areas and sites for landfill will be developed before the landfill site selection process is initiated. If a landfill is identified as a preferred approach, then activities will be undertaken at Step #5.

- **Step #6 – Three Level Landfill Site Selection Process (If Required)**

Step #6 will involve undertaking the three-level landfill site selection process, if landfill disposal capacity is required. The three level process is identified in greater detail in Section 4.1. Step #6 will include data collection activities, the evaluation process and community, stakeholder and government agency consultation, as required.

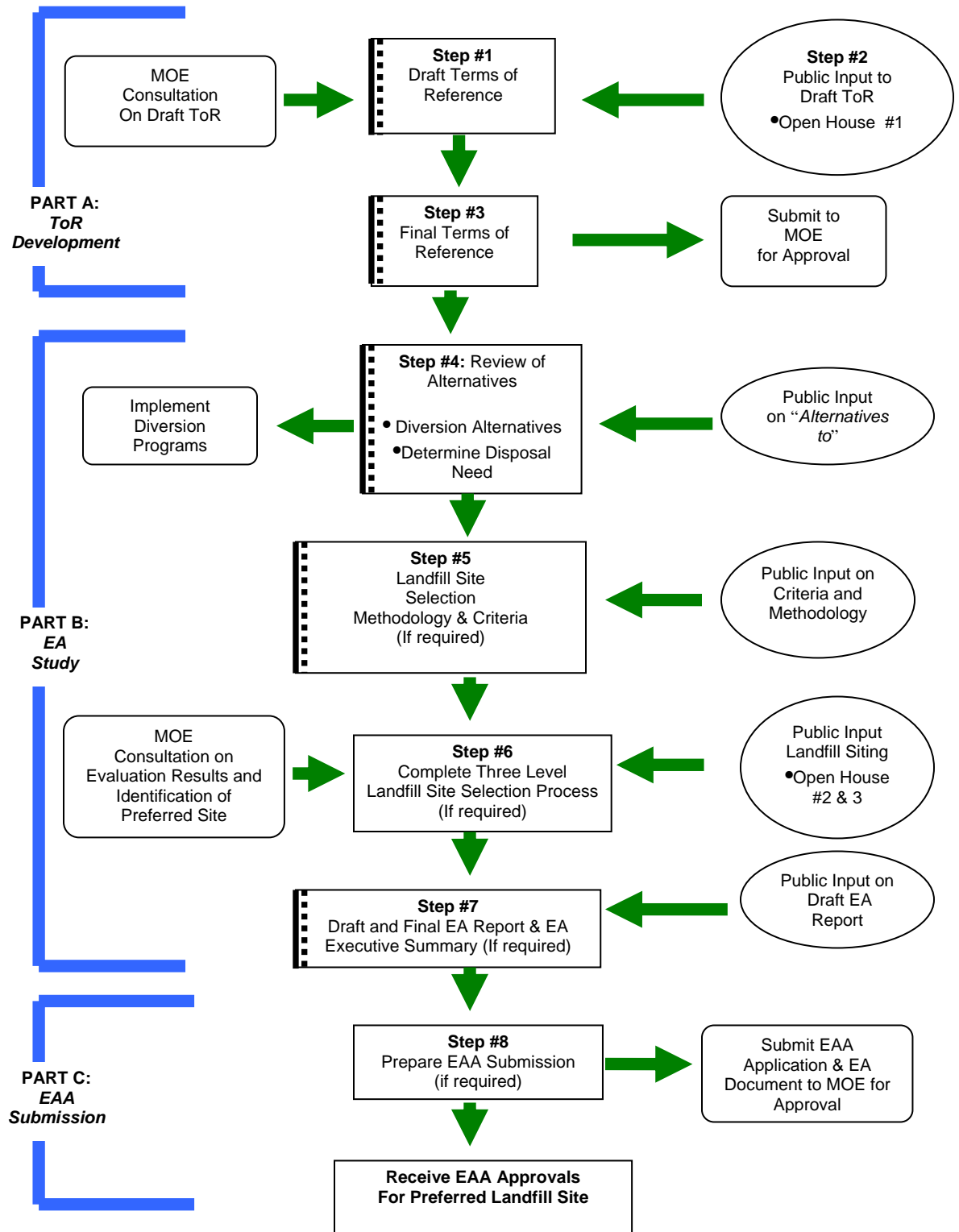
- **Step #7 – Prepare EA Documentation (If Required)**

Based on the results of the evaluation process and community, stakeholder and government agency input received, the EA documentation will be prepared if required, and submitted to the TRI-R Committee for acceptance and to the respective Municipal Councils for approval. The EA document will show the traceability of the decision making process and provide a final description of the proposed undertaking. An Executive Summary will also be prepared for the EA which will include a list of studies, reports and maps showing the location of the undertaking, as required by Ontario Regulation 334.

- **Step #8 – Preparation and Submission of EA Documentation and Notice of Submission of the EA (If Required)**

If the undertaking requires EAA approval, then the final EA Documentation, including the EA Executive Summary, will be submitted to MOE for approval once the EA has been accepted by the TRI-R Committee and approved by the respective Municipal Councils. A Notice of Submission of the EA will be prepared and placed in local newspapers.

**Figure 5-1
 EA Workplan**



6.0 CONSULTATION PLAN

Community consultation is an important component of an EA process. The EAA requires that a proponent undertake consultation during an EA Study and report on the results of the consultation process in the EA documentation. In undertaking this EA Study, the TRI-R Committee is committing to a proactive and meaningful community consultation program. This will allow for early and ongoing opportunities for the community to participate throughout the EA process.

The objectives of the TRI-R Committee's Consultation Plan for this EA Study are as follows:

- Establish early contact with the community, government agencies, and other stakeholders to present the purpose and rationale for undertaking the EA Study, seek input on opportunities to address waste management needs and request input on other study related matters.
- Maximize the exchange of information and ideas during the EA Study.
- Provide regular opportunities for the community to participate in the EA Study process.
- Inform the community, stakeholders and government agencies of study progress findings, and project milestones.
- Provide information, technical data and background reports in a manner and form that is understandable to participants.
- Identify community concerns and issues.
- Listen to the community concerns, goals, attitudes and factual suggestions.
- Respond to community input and identify mitigating measures acceptable to affected parties.
- Prepare, for community, stakeholder, and government agency, review and comment; study reports, operating plans and other technical and informational documents.

In support of the above objectives, the TRI-R Committee recognizes that the Consultation Plan is NOT:

- planning behind closed doors
- presenting and promoting a pre-determined solution
- confrontation between the community and stakeholders with municipal staff, political representatives and project consultants
- one-way communication.

Based on these objectives for the Consultation Plan, the following sections outline an approach to consultation during the development of the ToR and during the EA.

6.1 ToR Consultation Plan

The following consultation activities were undertaken during the development and finalization of the ToR:

- Met with MOE on March 31, 2004 to discuss the TRI-R Municipalities initiating an EA Study and the ToR and EA requirements
- Prepared the draft ToR in May 2004
- On July 16, 2004, informed MOE that the three municipalities are initiating an EA Study. The ToR Project Initiation Sheet and a copy of the draft ToR were submitted to MOE at that time.
- Confirmed with MOE the government review team and the protocol for what should be distributed to government review agencies for review and comment (i.e. issuance of draft versus final reports, interim reports, etc.), and when.
- An advertisement was published in the Almaguin News on May 19, 2004 and in the Market Place News on May 21, 2004 informing the community that the EA Study is being initiated, that the Draft ToR is available for review and comment and that a public open house will be held.
- Establishment and upkeep of a mailing list of those interested in receiving information about the EA Study.
- A copy of the Draft ToR was made available at the municipal offices of the three TRI-R Committee municipalities.
- Copies of the Draft ToR were made available to any member of the public requesting a copy.
- Following release of the Draft ToR, Public Open House #1 was held on May 27, 2004 to obtain input from the community on the report and to obtain any other input from the public on waste management in general and the EA process. Members of the TRI-R Committee and the project consultants were available to answer questions at the Public Open House. Approximately 15 members of the public attended.
- Provided copies of the Draft ToR to the MOE on July 16, 2004 for review and comment. Comments were received on October 27 and 28, 2004. The comments were reviewed and where relevant incorporated into the Final ToR.

Once the appropriate period for receiving comments on the Draft ToR ended, relevant input was incorporated and the final Proposed ToR prepared. A report documenting the ToR consultation process and results was also prepared and is included as supporting documentation in support of the Final ToR. The Final ToR will be submitted to the MOE for posting on the EA Activities portion of the Environmental Bill of Rights (EBR) web-site and for approval by the MOE.

6.1.1 Summary of Input Received on the Draft ToR

A separate Record of Public Consultation regarding the development of the Proposed ToR has been prepared and submitted as supporting documentation. The Record of Public Consultation provides details on the consultation process undertaken, all comments received and how the comments were considered and incorporated into the Final ToR. The following summarizes the main comments that resulted in changes from the draft to the Final ToR. This summary is provided as information only for convenience of readers of the ToR who may not want to review the entire Record of Public Consultation.

- *Mrs. Nancy Shaw*, a local resident, provided three pieces of information/questions at the May 27, 2004 Public Open House. Two of the pieces of information related to operations of the existing landfill and the design of any expansion of the existing site. One piece of information dealt with the draft ToR. Only one comment from Mrs. Shaw resulted in a change in the Final ToR. The first paragraph in Section 4.3 was revised to indicate that “*Any lands in the study area that meet one or more of the exclusionary criteria will be eliminated from consideration at further levels of the Study.*”
- *Comments were received from MOE on October 27 and 28, 2004.* Approximately 34 comments were received from the Environmental Assessment and Approvals Branch, Waste Management Policy Branch and the Water and Wastewater Branch. All of the comments have been reviewed and a response prepared to each comment. The comment by comment response is included in the Record of Public Consultation. Relevant changes have been made in preparing this Proposed ToR.
- *One additional verbal comment* received at Public Open House #1 suggested that landfill mining be included as an alternative. As such, Mining of the Existing Landfill has been added as an additional “*alternative to*” in Section 3.2

6.2 EA Study Consultation Plan

Upon MOE approval of the Proposed ToR, the TRI-R Committee will initiate the EA Study. Community consultation will be an integral part of the EA Study, both during the review of alternatives to landfill and during the landfill site selection process. The following generally describes the types of consultation activities that will be undertaken during the EA Study:

6.2.1 Review of Alternatives

- Obtain community input on the proposed methodology and criteria to identify and evaluate alternatives to landfill. This would be done by publishing the proposed methodology and criteria on the municipalities' websites and making copies available at municipal offices for review and comment.
- Prepare a draft report on the results of the review of the alternatives in order to obtain community and stakeholder input, prior to finalizing and implementing the plan.
- Place an advertisement in the local newspapers and on each of the municipalities' websites indicating that the draft alternatives report is available for review and comment.
- Make a copy of the draft alternatives report available at the municipal offices, local libraries and any other location deemed appropriate.
- Prepare a summary of the draft alternatives report that would be available for wider distribution and be included on each of the three municipalities' websites.

- Notify those on the mailing list that the draft alternatives report is available and provide a copy of the summary report. The mailing list will be kept up to date by adding the names of any interested parties who request information, attend public forums or who are specifically identified as potentially being affected by the process of evaluating alternatives to.
- Prepare a response to any comments received on the draft alternatives report.

Based on the input received, the Final Alternatives Report would be prepared, programs implemented and further required studies initiated.

6.2.2 Landfill Site Selection

Landfill site selection is generally the most contentious component of an EA Study. Many members of the public and other stakeholders become involved at this point because they find out property they are on or live near may have the potential to become the site for a future landfill. Therefore, the TRI-R Committee recognizes that if new/additional landfill capacity is required, engaging those who may be potentially affected, as early as possible in the landfill site selection process, is very important to successfully completing the EA Study.

Section 4.0 of the ToR describes a proposed three-level landfill site selection process that would be undertaken, if additional disposal capacity is required. The three-level process narrows the focus of the search from all lands in the three communities down to a few potential sites, then the identification of a preferred site. The consultation process will request input from the public and stakeholders at critical milestones and allow ongoing opportunities for dialogue between the public and the proponent. The following describes the proposed consultation plan that would be implemented if a landfill site selection process is required to be undertaken:

- Obtain community input on the proposed landfill site selection methodology and criteria. This would be done by publishing the proposed methodology and criteria on the municipalities' websites, making copies available at municipal offices for review and comment and distributing the information to those on the mailing list.
- Notify land owners and neighbours in the vicinity of potential sites that are identified on the short-list. Landowners within initial candidate areas or on the long-list of sites will not be notified during those levels of the process, since this could cause undue concern of a large number of residents or neighbours who would most likely not have their lands further considered beyond these initial levels.
- Distribute for review and comment the report that documents the results of the landfill site selection process to the identification of the short-list of sites. Notification of the availability of the report would be made in local newspapers, published on the municipalities' websites and distributed to those on the mailing list.

- Hold Public Open House #2 to allow the public and stakeholders to meet with the TRI-R Committee and consultants. Information and displays would be prepared for the open house to identify how the short-list sites were identified.
- Allow members of the community to make presentations to the TRI-R Committee at both the short-list and preferred site levels of the process.
- Notify landowners and neighbours in the vicinity of the preferred site that the lands are identified as the preferred location.
- Distribute for review and comment the report that documents the results of the evaluation of the short-list sites and the identification of the preferred site for landfill.
- Place information on the municipalities' websites and notify those on the mailing list that the preferred location is identified and the report documenting the results is available for review and comment.
- Hold Public Open House #3 to allow the public and community stakeholders to meet with the TRI-R Committee and consultants. Displays and information would be prepared.
- Updating the mailing list throughout the landfill site selection process. The mailing list will be kept up to date by adding the names of any interested parties who request information, attend public forums, are specifically notified due to their location in proximity to potential sites or who are otherwise specifically identified as potentially being affected by the landfill site selection process.
- Following completion of the landfill site selection process, an Environmental Assessment Document will be prepared. The report will be prepared in draft and made available for review and comment, prior to being finalized and submitted to MOE for approval.

7.0 ESTIMATED SCHEDULE

The following section provides an estimated schedule for undertaking the EA process, including the development of the ToR. Within the approvals process, there are legislated time frames for public, MOE and government agency review. Throughout the ToR and EA Study process this can involve almost one year of review time.

7.1 ToR Schedule

It is estimated that from the initiation of the study by the TRI-R Committee, it will take approximately 10 to 11 ½ months until the ToR is completed and approval received from the MOE. Specific ToR activities and the schedule for completion are as follows:

<u>Terms of Reference Activities</u>	<u>Schedule</u>
• Preliminary meeting with MOE to determine appropriate means to proceed, discuss ToR process, identify EA Advisor and government review team, etc.	Within first month
• Develop draft ToR including public consultation program.	1 ½ to 2 months
• Implement ToR public consultation program.	½ to 1 month
• MOE review of draft ToR	3 ½ months
• Address comments on draft ToR and finalize ToR.	1 month
• Prepare ToR summary and submit for translation and posting on the EA Activities portion of the Environmental Bill of Rights (EBR) web-site.	½ to 1 month
• MOE Review of ToR and Issuance of Decision by Minister of the Environment.	3 months
Total ToR	10 to 11 ½ months

Based on the approval by the TRI-R Committee on February 11, 2004 to proceed with the preparation of the ToR, it is estimated that completion of the ToR and a decision on approval from the Minister of the Environment could be received between January and February 2005.

7.2 Estimated EA Schedule

The schedule for undertaking the EA Study is estimated to take approximately 21 to 34 months. This includes almost 10 months of MOE and government agency review time. Currently anticipated EA activities and the anticipated schedule for completion are as follows:

<u>Environmental Assessment Process Activity</u>	<u>Estimated Schedule</u>
• Consideration of alternative approaches to landfill and determination of need, disposal requirements.	2 to 4 months
• Development of landfill evaluation criteria and methodology (if required).	1 to 2 months
• Data collection (dependent on level of existing information).	2 to 4 months
• Exclusionary constraint and net effects analyses and identification of preferred alternative.	2 to 3 months
• Public consultation on environmental assessment process.	1 to 2 months
• Prepare draft Environmental Assessment documentation.	2 to 4 months
• Consultation with public and agencies on draft EA document.	2 to 4 months
• Consider input and finalize EA document and submit to MOE.	1 to 3 months
• Initial comment period.	7 weeks
• MOE review completion.	5 weeks
• Final comment period (i.e. public review of MOE review).	5 weeks
• Minister's decision to be made.	<u>13 weeks</u>
Total Estimated EA Study Schedule	21 to 34 months

There are some EA Study activities that can be initiated while the ToR is being reviewed by MOE. For example, the review of alternative approaches and identifying means to increase diversion is very important to the TRI-R Committee and could be initiated before the ToR is approved. In addition, some of the other activities are overlapping.

Based on the above noted EA Study activities being initiated around January to February 2005, with some activities being started before ToR approval is received, and others overlapping, it is estimated that the EA Study could be completed and MOE approval received as early as April 2006 or as late as Late-2007.

7.3 Other Studies/Approvals

Once EAA approval is received, application must be made under the Environmental Protection Act (EPA) for a Certificate of Approval. The EPA review and approval process can also take up to 1 ½ to 3 years to complete. Certain EPA activities could be undertaken during the EA Study or while the EA Study is under formal review. The schedule for initiating EPA studies will be discussed with MOE at the appropriate time.

Other approvals that may be required could include Ontario Water Resources Act (OWRA) approval for stormwater management facilities and leachate collection and disposal systems, Planning Act and local planning approvals. The need and extent of these approvals and schedule for completion will be determined at the appropriate time.

8.0 EA MONITORING PLAN

As described in this ToR, the component of the EA Study process that would require EAA approval could be the establishment of a new landfill or expansion of the existing landfill. As well, establishment of an EFW/incineration facility would require EAA approval. The process described to select a location for long-term landfill capacity (and which will generally be used if EFW/incineration is a selected alternative approach) will be based on a comparative evaluation and the tradeoffs of net effects. The preferred site will have the least net effects based on the criteria considered and applied.

When EAA approval is issued for an undertaking, the MOE generally includes conditions to that approval. A monitoring plan will be developed as part of the EA process. The purpose of the plan will be to provide for post-EA approval monitoring of net effects identified for the preferred site and to ensure that the conditions of EA approval are being met.

9.0 FLEXIBILITY OF THIS TERMS OF REFERENCE

Once approved by the Minister of the Environment, the ToR will provide the basis for undertaking the EA Study. The EAA does not provide a basis for amending the EA Study approach once the ToR is approved. MOE indicate that any major changes to a ToR that result in changes to the EA Study approach must be addressed by the Environmental Assessment and Approvals Board (EAAB) and may require submission and approval by MOE of a new ToR.

However, it is understood that, given the nature of the ToR, it is not intended or possible to predict and present every detail of all activities that will occur during the EA Study. It is therefore possible that in carrying out the work presented in this ToR it may become evident that certain minor modifications to the ToR and iterations to the resulting EA study process may be necessary. It is envisioned that such changes may include, but not be limited to the following type of activities:

- requirements for additional or expanded studies or work, to ensure that the nature and magnitude of potential environmental effects are accurately identified;
- changes in methodology in order to be responsive to the results of studies that show environmental effects to be greater or less than previously estimated; or
- modifications to the proposed public consultation program to add consultation events and activities.

The above list of changes is not intended to be exclusive. It is simply to provide an example of the types of changes that will be considered minor and/or that are likely to result in an insignificant impact on the environment, and that could be accommodated within the framework of the Proposed ToR. Essentially, MOE have indicated that providing or obtaining additional information, or undertaking additional studies or consultation activities over and above what is committed to in the ToR is acceptable, however, anything less, or different from commitments in the ToR is unacceptable.

If a change to the ToR or EA Study process is required and there is uncertainty as to whether that change should be considered minor in nature or is more significant, the MOE will be consulted through the Project Officer.