
Appendix 2

Step 1: Facility Site Selection Methodology and Criteria

Overview of Facility Site Selection Methodology and Criteria

Overview of Evaluation Methodology

To measure and evaluate the potential impacts and to maximize the potential of locating it with optimum conditions supporting a thermal treatment facility operation, the scope of the evaluation criteria to be used in the siting process must consider a broadly defined environment. Consideration of a broadly defined environment is also a requirement of the EAA, and for the purpose of this study includes:

- Public Health and Safety and the Natural Environment;
- Social/Cultural Considerations;
- Economic/Financial Considerations;
- Technical Considerations; and,
- Legal Considerations.

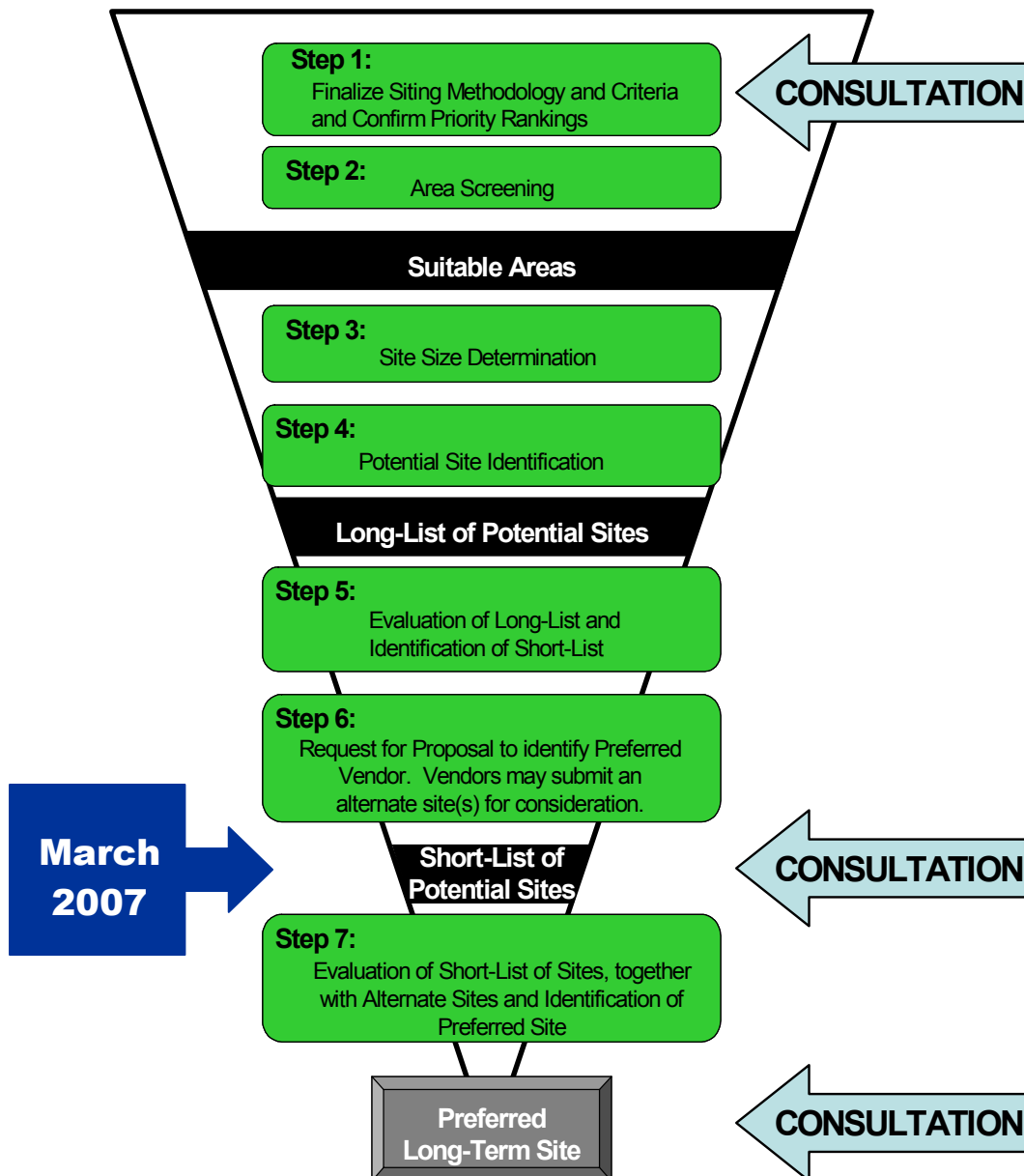
To identify a preferred site, a seven-step facility site selection process, outlined in Figure 1 is being applied. This step-by-step methodology was originally presented in the approved EA Terms of Reference¹ and Background Document 2-3² (prepared as supporting documentation to the approved EA Terms of Reference).

The following Section provides an overview of the evaluation methodology and criteria that were presented in the approved EA Terms of Reference.

¹ Durham/York Residual Waste Study - Approved Environmental Assessment Terms of Reference, March 31, 2006.

² Durham/York Residual Waste Study - Background Document 2-3 “Consideration of Alternative Methods of Implementing the Undertaking”, December 16, 2005.

Figure 1: Overview of the Proposed Facility Siting Process



Description of Evaluation Methodology and Criteria

Step 1: Finalize Siting Methodology and Criteria and Confirm Priority Rankings

Once the preferred “Alternative To” (i.e. Disposal System) had been identified through the EA study, (Approved by both Regional Councils in June 2006) and prior to the evaluation of “Alternatives Methods”, the evaluation criteria and methodology proposed in the EA Terms of Reference were reviewed with Agencies, stakeholders and the public to:

- Ensure the methodology and criteria can be suitably applied to the preferred “Alternative To”;
- Identify and incorporate any changes in relevant policies and legislation that may have come into effect since the EA Terms of Reference was approved, including the possibility of restrictions to the transport of residual wastes from Durham and York to the United States thereby requiring an accelerated evaluation of “Alternative Methods”;
- Provide a final opportunity for interested parties/people to comment on the methodology and criteria prior to the initiation of the evaluation process and with the knowledge of what it is that’s going to be sited (i.e. thermal treatment facility).;
- Solicit input from the public to confirm priority rankings for each category of the environment provided by the public during the development of the EA Terms of Reference; and,
- Allow the proponents to address any questions or concerns with respect to the “Alternative Methods” evaluation process before its initiation.

Once the above was finalized and confirmed, the foundation was laid to allow for the initiation of the evaluation of “Alternative Methods” which will ultimately provide the basis for the identification of a preferred site.

Step 2 Methodology and Criteria: Area Screening

The starting point for the area screening process is to identify the boundaries of the study area in which a suitable site could be identified. For this siting process, the study area being considered includes all lands within the municipal boundaries of Durham and York Regions.

Initiation of the facility siting process begins with the delineation of the limits of the broad area, within Durham and York that consists of features and land uses considered unsuitable for the establishment of a thermal treatment facility. It is important to conduct this high level screening early in the planning process to focus serious effort within potentially suitable areas, such as designated industrial lands, and to avoid and prevent

undue disruption on unsuitable areas, such as significant natural features, agricultural lands and existing residential areas.

The result of this second step is the identification of areas within the study area that are considered generally suitable for the purposes of locating a thermal treatment facility.

In Step 2, the criteria listed in Table 2 – 1 below, and outlined in detail in Appendix 2, Table 2-2, were used to delineate the areas within Durham and York that would be considered unsuitable for the establishment of a thermal treatment facility. These criteria are consistent with established federal, provincial and municipal land use planning policies and appropriately address the treatment of particular land uses. The list of land use designations for exclusion in the siting process was developed based on a review of applicable Official Plans/Municipal Policy Plans and Federal/Provincial statutes and regulations.

The areas remaining and that are considered potentially suitable for the location of a thermal treatment facility are therefore considered representative of current land use regulations and policies applicable to the study area.

Table 2-1 below outlines the preliminary exclusionary criteria that were identified in the approved EA Terms of Reference, Appendix “F”, Table F-1.

Table 2-1 Preliminary Exclusionary Criteria for the Identification of Suitable Areas

▶ Exclude designated³ lands located within areas protected by Provincial/ Federal legislation. ▶ Exclude designated residential areas and areas within an appropriate separation distance⁴ of these designations. ▶ Exclude designated Natural Heritage Features and Areas and areas within an appropriate separation distance of these designations. Examples include: • Significant Habitat of Endangered and Threatened Species; • Significant Areas of Natural and Scientific Interest; • Significant Wetlands, Woodlands, etc.; • Designated Hazard Land; and, • Conservation Areas. ▶ Exclude Prime Agricultural Lands. ▶ Exclude designated Park / Recreational Lands and areas within an appropriate separation distance of these designations. ▶ Exclude Institutional facilities and areas within an appropriate separation distance of these facilities or lands (e.g. schools, hospitals). ▶ Exclude areas around federally regulated airports as per Transport Canada Guidelines.

Step 3 Methodology & Criteria: Site Size and Configuration Determination

To identify potential sites within the remaining areas, considered potentially suitable for the establishment of a thermal treatment facility, the minimum required site size was determined. The factors used in determining this size are outlined below.

- Type of technology to be sited (i.e., the Preferred "Alternative To" which was determined during the initial stages of the EA Study) and technology specific requirements;
- Design throughput of a facility considering the need for contingency capacity, the management of seasonal variations in municipal waste generation and the possibility of establishing capacity for Industrial, Commercial & Institutional (IC&I) wastes or wastes from a surrounding municipality;

³ Designated refers to land uses and related policies as set out in Federal/Provincial Statutes and Regulations and applicable Municipal Official Plans/Municipal Policy Plans. These designations will be clearly defined at the outset of the evaluation of “Alternative Methods”.

⁴ Appropriate Separation Distances will be defined following the identification of the preferred “Alternative to” and in consultation with the public, agencies and the MOE.

- Typical set back requirements from property boundaries (i.e., residences, roads, utilities, etc.), which may be specified in local municipal zoning by-laws;
- The minimum buffer area that is required around the site to secure environmental approvals;
- Information provided by vendors of the preferred technology(ies) on site size requirements; and,
- Conceptual layout for a facility and on-site ancillary features (i.e., roads, weighscale, administration facilities, etc.) that corresponds with the decisions made regarding the above considerations. This conceptual layout is important to ensure the configuration of a potential site (i.e., shape) is suitable for the proposed facility.

Step 4 Methodology & Criteria: Potential Site Identification

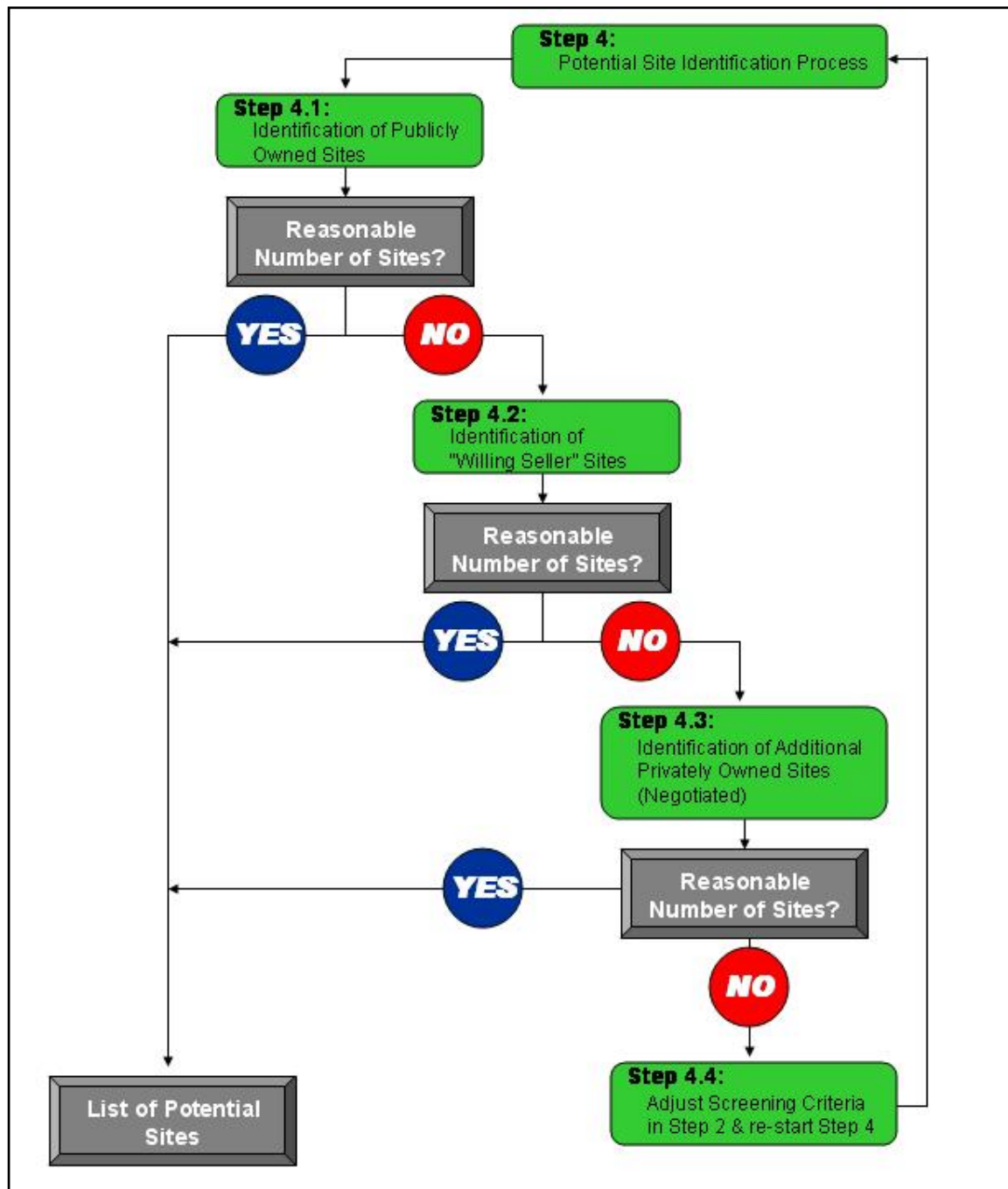
Following the identification of potentially suitable areas, and determination of the minimum site size and configuration requirements Step 4 sought to identify potential siting opportunities within the potentially suitable areas that meet the minimum site size requirements. Consideration to siting opportunities was given in the following preferential order with the ultimate goal of arriving at a “long-list” of sites that represent a reasonable range of siting options for further study.

- Identification of Publicly Owned Sites.
- Identification of “Willing Seller” Sites.
- Identification of Additional Privately Owned Sites.

Once a suitable “long-list is established, there is no need to move down the the list of site identification options (e.g. if the list of publicly owned lands provided a reasonable range of siting options then there would be no need to look at identifying and negotiating the control of additional privately owned lands)

Figure 2-2 outlines the Step 4 site identification process. The application of these measures is outlined in greater detail in the following sections of this document. To establish a range of siting opportunities, it was anticipated that the first two measures above (i.e. publicly owned and “willing seller” sites) would be pursued at a minimum.

Figure 2-1 Overview of Step 4 – Potential Site Identification



Step 4.1: Identification of Publicly Owned Sites

Publicly owned land that is considered surplus or is currently un-used or un-developed within the suitable areas (identified in Step 2) that meet the minimum site size requirement (Step 3) identified.

Step 4.2: Identification of “Willing Seller” Sites

In addition to publicly owned land, sites where the owner would be interested in selling the site (“willing sellers”) may also be considered as potential sites. A “willing seller” site must be offered for consideration by the owner of the subject property and the owner of a “willing seller” site must be prepared to enter into an option agreement with Durham and York.

To identify potential sites that meet the “willing seller” criteria, the identified suitable areas, determined site size requirements, and the siting objectives were publicly advertised to solicit interest from landowners (see Section 5.3).

Step 4.3: Identification of Additional Privately Owned Sites (Negotiated if Necessary)

If, following Step 4.1 and 4.2, it is determined that a “reasonable” number of prospective sites have not been identified, privately owned Sites within the suitable areas would be identified by considering key factors such as proximity to required infrastructure and site accessibility. These additional private sites would be at least equivalent to the previously identified sites in terms of environmental suitability. To determine suitability, the following criteria would be applied and the results compared against results from the other sites identified in Steps 4.1 and 4.2:

- Proximity (distance) to required infrastructure;
- Site accessibility; and,
- Other factors identified by the public, if applicable.

Step 4.4: Adjust Screening Criteria and Re-Apply Criteria to Identify New Areas

If Steps 4.1 to 4.3 failed to identify a reasonable range of sites (privately or publicly owned), then Step 4.4 would involve review of the area screening criteria in Step 2 and appropriate adjustments. Step 2 would then be repeated using the adjusted area screening criteria to identify new areas and then Step 4 re-started.

Step 5: Evaluation of “Long-List” & Identification of “Short-List” of Sites

Following the identification of potential sites in Step 4, Step 5 reduces the number of sites that will be compared in greater detail to a “Short-List” of sites. It is preferred to conduct this level of evaluation to ensure that only sites with a reasonable chance of being selected undergo the more detailed comparative evaluation process and to minimize exposure of the study area community(s) to the potential of a nearby facility and the associated community disruption. For the purpose of this level of study, sites would be deemed unsuitable for further consideration if they exhibited significant

technical, social and/or environmental disadvantages relative to other sites on the list considering an established set of initial comparators. Sites that pass through this evaluation step do not exhibit any obvious disadvantages of significance and would be included on a “Short-List” of alternative sites and will be carried forward to Step 6 for a detailed comparative evaluation.

The “long list” evaluation criteria used to identify sites for the “short list” are outlined below and identified in greater detail in Appendix 2, Table 2-3.

- Proximity to required infrastructure
- Site accessibility
- Potential impact of the haul route (i.e., traffic, noise, land use, cost)
- Property size
- Land use compatibility
- Availability of site
- Potential impacts on unregulated airport operation

These factors will be applied on a comparative basis and identify the relative advantages and disadvantages of the sites at a very preliminary level of study. These are not the same as exclusionary criteria applied in Step 2 to identify suitable areas within the study area, but rather, are used to identify sites exhibiting relative advantages or disadvantages. The relevant consideration at this level of study is that sites exhibiting substantive disadvantages based on some relatively basic siting requirements present little to no potential as a preferred siting option and therefore warrant no further consideration in the process.

Similar to the approach of identifying a reasonable range of opportunities at the site identification step, the determination of a suitable “short list” aims to maintain a range of options but avoids detailed study on duplicate / similar sites (e.g. same type of ownership, area and locale) and on sites with obvious / significant disadvantages. In the case of similar or duplicate sites the aim is to carry forward an opportunity exhibiting the best potential for selection as the preferred site.

There is no set rule on the number of sites representing a “short list” but typically the number fall in the range of three to five.

Step 6 Methodology & Criteria: Engaging Vendors of the Preferred Technology

At Step 6 of the process, prospective Vendors of the preferred technology(ies) will be requested to submit their qualifications and invited to submit their own alternative site(s) or facilities for consideration. In order for an alternative site or facility to be considered:

- It must be located in Ontario.

- If it is not located in Durham or York, it preferably would have a Certificate of Approval that would allow it to receive waste from Durham or York or at a minimum, the proponent offering the site must have an approved EA Terms of Reference and be in the process of completing an Environmental Assessment that would lead to obtaining the required approvals for all required facilities.
- If it is located in Durham or York it must meet all the screening criteria as set out in this document used to identify the “Short-List” sites.

In the event that prospective alternative site(s) are received from a qualified vendor and are found to comply with the above requirements, the site(s) would be added to the “Short-List” and included in the Step 7 comparative evaluation.

The “Short-List” of sites will then be released for public review and comment together with the evaluation criteria, indicators and methodology to be used in the comparative evaluation of the sites.

Step 7 Methodology & Criteria: Evaluation of “Short-List” of Alternative Sites

The purpose of Step 7 is to undertake a detailed evaluation of the “Short-List” of sites to identify a site exhibiting the preferred balance of advantages and disadvantages given the established priorities of Durham and York Regions (i.e. the “Preferred Site”). The assessment will consider the sites as well as the haul routes, transfer requirements and requirements for additional infrastructure to develop the site. Sites will be compared based on a broad range of criteria to identify the “Preferred Site”.

It is important to note that each criterion at the “short list” evaluation step does not necessarily carry the same priority. The intent of comparing alternatives for a range of criteria is to identify potential impacts and, where possible, avoid them, and to identify and assess tradeoffs between sites. It is not likely that one alternative will completely satisfy all criteria, and therefore, where possible, measures would be required to mitigate impacts.

The evaluation criteria to be applied at Step 7 have been assembled under the 5 broad categories of consideration:

- Public Health and Safety and Natural Environment;
- Social / Cultural Considerations;
- Economic / Financial Considerations;
- Technical Suitability Considerations; and
- Legal Considerations.

Step 7 will entail a comparative evaluation of the “short list” sites utilizing criteria and indicators to measure potential effects within the above categories. The criteria and indicators have been included in Appendix 2, Table 2-4.

There are different methods (qualitative, quantitative or a combination of both) that can be used to evaluate a ‘Short-List’ of sites. There is no requirement to apply any specific methodology except that the process must be rational, traceable and replicable and must consider advantages and disadvantages based on a net effects analysis. A net effects analysis is commonly applied to address the approval requirements of the EAA and provides for the selection of siting preferences considering relative advantages and disadvantages based on net effects after the application of reasonably available mitigative measures.

A net effects analysis consists of the following steps:

1. Undertake data collection and apply the comparative evaluation criteria to each of the “Short List” sites to identify potential effects to the environment. The net effects analysis will initially be carried out based on secondary data sources (i.e., Official Plans, aerial photographs, existing base maps etc.) and limited field reconnaissance.
2. Consider measures that may be reasonably applied to mitigate potential effects identified in the previous step for each site. The result of this step will be the identification of net or post-mitigation effects for each of the sites.
3. Compare the net effects associated with each site and establish the relative advantages and disadvantages of each site. Under each criterion, sites would receive a High, Medium or Low ranking based on the comparative analysis against the other sites. The site that best meets the objective of the criterion will receive a High ranking and the site that least meets the objective of the criterion a low ranking. It is not intended that specific ranges would be pre-determined for the ranking, instead they will be developed based on a comparison between the potential sites.

For this study, a qualitative evaluation methodology will be applied which considers tradeoffs between sites using professional judgment and experience in the context of priorities set by the community.

The preferred site will be the one with the preferred balance of advantages and disadvantages relative to the established category priorities and rankings. This decision will be based on the priorities and professional judgement exercised by both Regions and in consideration of the technical database, advice from technical experts and input received from stakeholders (i.e., public, neighbours, agencies, etc.)

The decision-making process, and in particular where professional judgement or stakeholder input is specifically applied, will be carefully documented for the purpose of tracing the rationale or reasoning behind the eventual outcome. Such documentation will be important for the purpose of confirming the reflection of community priorities in the preferred undertaking and in testing the sensitivity of certain decision points throughout the study.

Table 2-2 Step 2 – Area Screening Criteria and Rationale

Criteria	Constraint	Rationale
Exclude designated lands located within areas protected by Provincial/ Federal legislation	Remove areas protected by Provincial/ Federal legislation from further consideration.	Areas protected by Provincial/Federal legislation are significant features that are typically a combination of geological and ecological features.
Exclude designated residential areas	Identify designated residential areas in official plans and remove them from further consideration.	Designated residential areas are not compatible land uses for a waste processing facility. To reduce the potential impacts from the facility(ies) during construction and operation, the facility should be located a suitable distance from designated residential areas.
Exclude designated Natural Heritage Features including: Significant Habitat of Endangered and Threatened Species; Significant Areas of Natural and Scientific Interest; Significant Wetlands, Woodlands, etc.; Designated Hazard Lands; and, Conservation Areas	Identify designated Natural Heritage Features and Areas (including Significant Habitat of Endangered and Threatened Species and Species at Risk; Significant Areas of Natural and Scientific Interest; Significant Wetlands, Woodlands, etc.; Ground water Discharge/Recharge Areas; Wellhead Protection Areas and Infiltration Areas; Designated Hazard Lands; and, Conservation Areas) and remove them from further consideration.	Designated Natural Heritage Features and Areas contain both valuable natural environmental and ecological resources and offer natural environment oriented outdoor education and recreational amenities. These functions can be compromised by waste processing facility activities.

Criteria	Constraint	Rationale
Exclude Prime Agricultural Lands	Identify lands designated for agricultural use in local or regional official plans and remove from further consideration.	- The Provincial Policy Statement requires that <i>Prime Agricultural Areas</i> (i.e., those areas predominated by specialty crop lands and/or Canada Land Inventory Classes 1, 2, and 3 soils) be protected for agriculture. Permitted uses and activities in these areas are: agricultural areas; secondary uses and agriculture-related uses. Proposed new secondary uses and agriculture-related uses will be compatible with, and will not hinder, surrounding agricultural operations. - For this study, waste processing facilities are considered an inappropriate use of prime agricultural land and incompatible with prime agricultural areas as defined in local official plans.
Exclude designated Park / Recreational Lands	Identify designated Park / Recreational Lands and remove them from further consideration.	Park land and/or recreational establishments with a significant outdoor component are generally not compatible with waste processing facilities, in particular with the potential noise, dust and odour nuisance impacts from these facilities. Special consideration may be given to outlying recreational uses which are primarily indoor and which may directly benefit from one or more of the products from a waste processing facility.
Exclude Institutional facilities or lands (e.g. schools, hospitals)	Identify institutional facilities or areas and remove them from further consideration.	Sensitive institutional facilities tend to be located in built-up areas, which are not compatible with waste processing facilities. Depending on the type of institution and scope of the waste processing operation, the institution itself may be sensitive to and incompatible with a waste processing facility.

Criteria	Constraint	Rationale
Exclude areas around federally regulated airports as per Transport Canada Guidelines	Exclude regulated lands around an airport, which falls under the Federal Aeronautics Act.	The Federal Aeronautics Act and Transport Canada guidelines prohibit the use of land outside an airport property boundary where such land uses are hazardous to aircraft operations (i.e., organic waste at waste processing sites that may either attract birds or adversely affect flight visibility).

Table 2-3 Factors for Identifying Sites for the “Short-List”

Item	Constraint	Rationale
Proximity to required infrastructure (dependent on technology selected)	• Example: Maximum distance (to be specified) from electrical grid interconnection point or heat load if an EFW facility was part of the preferred “Alternative To” • Distance to required sewer and water services	Depending on the technology selected, a maximum distance can be identified from an electrical connection as sites within that range would likely be more economically feasible.
Site accessibility	• Maximum distance (to be specified) from major highway, rail line and/or transit system	Sites that are closer to a highway or railway line are preferred since the haul route impacts could be more easily mitigated. As well, preference would be to minimize the distance to an interchange with a 400 series highway.
Potential impact of the haul route (i.e., traffic, noise, land use, cost)	• Length of haul route (distance to main waste generation source(s)) • Land use along haul route • Road type, width and traffic volumes along haul route	Sites that would be less preferred would be ones that: – are located away from the main source(s) of waste generation and therefore would require longer haul routes; – traverse through densely populated areas; and, – include narrow and/or congested roads.
Property size	• Minimum size (determined in Step 3) in comparison with the actual site size (ie. amount of surplus land available beyond the minimum site size requirement)	The minimum site size was determined in Step 3 but sites that exceed the site size would be preferred since the siting layout would be easier to develop and the potential would exist to have a greater on-site buffer area to mitigate potential impacts.
Land use compatibility	• Designated industrial or industrial type land use adjacent to the site	Sites that are located within compatible land use areas such as designated industrial areas or industrial type areas would be preferred as it would be easier to mitigate the potential impacts from the facility.
Availability of site	• Requirement to acquire site through expropriation	Sites that can only be acquired through expropriation are less preferred.
Potential impacts on unregulated airport operation	• Proximity to unregulated airports	Transport Canada Guidelines identify a concern with waste disposal operations around airport operations. Airport Zoning By-laws govern land use around federally regulated airports. For other operations, a radius of approximately 8 km around airports is identified as a zone of concern regarding waste disposal operations. Sites within this zone should be considered with regard to their proximity to an unregulated airport.

Table 2-4 Step 6 – Evaluation of “Short-List” of Sites

EVALUATION CRITERIA		
Public Health & Safety and Natural Environment		
Criteria	Indicator	Rationale
Air Quality Impacts <i>Note: The preferred technology must at least meet all applicable air quality regulations.</i>	Local meteorological conditions	Close proximity of the site to areas with sensitive meteorological conditions could result in negative impacts to the air environment. This indicator would take into consideration prevailing wind directions, existence of sensitive micro-climates, etc.
	Distance travelled from main source(s) of waste generation to the site.	Air impacts from transportation of waste along haul routes to the facility are related to the distance travelled from the area of waste generation to the waste processing site. Air impacts associated with the facility are addressed under other criteria related to sensitive uses (i.e., residential areas, institutions, etc.)
Water Quality Impacts (Surface Water and Groundwater)	Relative distance to and type of watercourses (aquatic habitat) present within close proximity of site for wastewater or surface water discharge from facility (if applicable).	Close proximity of site to sensitive watercourses could result in negative impacts to the aquatic environment due to potential discharges from the facility.
	Receiving body for wastewater discharge from the facility (if applicable)	Depending on the location and nature of the receiving body for wastewater discharge, negative impacts could result to the natural environment and/or social cultural environment due to potential discharges from the facility.
	Quality of water in the receiving body based on size and flow of watercourses.	Smaller watercourses with low flow could experience greater impacts from wastewater or surface water discharges from a facility.

EVALUATION CRITERIA		
Environmentally Sensitive Areas and Species Impacts	Species of special concern, threatened and/or endangered species identified by Ministry of Natural Resources (MNR) in the area potentially impacted by the site or haul route.	Proximity of site to sensitive environmental features could result in impacts during construction and operation of a facility and along the haul routes.
	Distance from site or haul route to areas that are designated Natural Heritage Features and Areas including: Significant Wildlife and Fish Habitat; Significant Areas of Natural and Scientific Interest; Significant Wetlands, Woodlands, etc.; Designated Hazard Lands; and, Conservation Areas	Proximity of site to sensitive features could result in impacts during construction and operation of a facility and along the haul routes.
Aquatic and Terrestrial Ecology Impacts	Amount of woodlands, hedgerows, etc., affected or removed at the site and the degree of impact on the edge of a woodlot/hedgerow.	Negative impacts to the natural environment could result from removal of woodlands or hedgerows on a site, including edge impacts on a woodlot/hedgerow.
Social and Cultural Environment		
Criteria	Indicator	Rationale
Compatibility with Existing and/or Proposed Land Uses	Consistency with current land use, approved development plans, and proposed land use changes.	Fewer impacts to mitigate if current and future land use plans are consistent with a waste processing facility (i.e., avoid sites with an adjacent land use such as proposed residential development).
	Compatibility with existing land use designations.	Minimize impact on social environment with sites that are compatible with existing land use designations (i.e., industrial lands) and would not require re-zoning.
	Size of buffer zone available on the site.	Sites larger than the minimum site size would be easier to accommodate the facility (including design opportunities) and potential impacts could be mitigated with greater distance between the site and surrounding land uses.

EVALUATION CRITERIA		
	Opportunity for brownfield development.	Opportunity for beneficial use of existing brownfields, which means that undeveloped land, could be avoided and used for future uses of higher community value than a waste processing facility.
Residential Areas	Distance from site to designated residential areas within an appropriate separation distance of the site and within an appropriate separation distance of the haul route(s).	Greater distances between the facility and residential areas is preferred to reduce the potential impacts. Along the haul route determining the impacts from emissions and noise from transportation vehicles and the mitigation measures needed.
	Number and distribution of residences within an appropriate separation distance of the site and within an appropriate separation distance of the haul route(s).	Impacts on, and the need for, mitigation measures are reduced for sites that are located farther away from residents, so rural or lower density residential areas are preferred surrounding the site and along the haul route(s).
Parks and Recreational Areas	Number and type of recreational areas (i.e., parkland) within an appropriate separation distance of the site and within an appropriate separation distance of the haul route(s).	Potential nuisance impacts (noise, odours and visual) may be detrimental to park and recreational areas and greater distances to the site would minimize potential impacts and the need for mitigation measures.
Institutional Facilities or Areas	Number and type of institutions within an appropriate separation distance of the site or area and within an appropriate separation distance of the haul route(s).	The type of institutions in close proximity should be considered to determine if the waste processing facility is an incompatible land use. If the institution(s) represents an incompatible land use, then a greater distance to the site would minimize potential impacts and the need for mitigation measures. There is also the potential that some institutional facilities could benefit from close proximity to a waste processing facility (i.e., university or hospital could utilize the facility for energy use or research/training).

EVALUATION CRITERIA		
Archaeological and Cultural Resources	Number and significance of known archaeological and cultural areas at the site based on review of documented sites and the potential for uncovered resources to be located at the site.	Cultural and archaeological resources are valuable, non-renewable and should be avoided since sites within known areas could result in disturbances during construction activities, as well consideration should be given to the potential for uncovered resources at the site based on the location and its amenities.
Traffic Impacts	Type of roadway (i.e., paved, gravel) and access to businesses and/or subdivisions & proximity of site to major arterial roads or highways.	Convenient access to the site will reduce impacts on traffic and to residents/commuters and would ease development of the site as a regional facility.
	Existing and projected volume of traffic along haul route (i.e., high, moderate or low).	Minimizing traffic impacts will improve community acceptance of the facility and haul routes. Generally, the higher the projected traffic volumes along the route, the lower the overall impact along the route and to the community. For example, a road that currently has a low volume of traffic (i.e., 100 vehicles per day), would experience a higher impact if traffic increased by 100 additional trucks per day. Conversely, a major road with thousands of vehicles travelling it daily would experience far less net impact.
	Conformity with Durham’s Goods Movement Network	Specific to Durham Region, conformity with Durham’s Goods Movement Network as outlined in its Transportation Master Plan (currently under review) will ensure that waste transfer vehicles are travelling road networks that have been identified for this type of traffic.
Economic / Financial		
Criteria	Indicator	Rationale
Capital Costs	Site development costs, including: infrastructure	Sites with lower development costs would be more

EVALUATION CRITERIA		
	required, upgrades to existing infrastructure (roads, sewers, etc.), property acquisition and possible site remediation.	economically feasible.
Operation and Maintenance Costs	Distance from waste generation points, transfer stations (e.g., length of haul route), annual operating costs and maintenance costs.	Impact of facility on Durham and York ’s financial resources must be assessed and deemed affordable.
	Mitigation requirements	Anticipated costs with respect to the mitigation of potential impacts. (i.e., may include site development costs, site maintenance costs, etc).
	Monitoring requirements	Anticipated costs to maintain required monitoring programs. (i.e., sites closer to environmentally sensitive features in a rural environment may require additional monitoring efforts than sites located in a developed urban/industrial area.)
	Distance from potential markets for sale of marketable materials (ie. heat, electricity, recovered metals, etc.).	Sites that are closer to potential markets have the potential for reduced O&M costs.
Technical Considerations		
Criteria	Indicator	Rationale
Compatibility with Existing Infrastructure	Distance from required infrastructure (i.e., sewers, hydro, road access, water).	Construction may take additional time and extend beyond site location if site does not have existing access to required utilities.
Design/Operational Flexibility Provided by Site	Area surplus to minimum requirement provided by site.	Surplus lands will enhance the potential to design a facility capable of managing additional sources of residual wastes (e.g. IC&I wastes or other municipalities) or may be used to enhance the on-site buffer area.

EVALUATION CRITERIA		
Legal Considerations		
Criteria	Indicator	Rationale
Complexity of Required Approvals	Nature of approvals required.	The need for complex approvals and possibly a public hearing present a legal risk to the successful implementation on a particular site. These risks should be considered in the selection of a preferred site.
Complexity of Required Agreements	Nature of property acquisition (related to the need for expropriation, Region owned or willing seller site).	Sites that have fewer property acquisition issues associated with them would be less costly from the perspective of time and money. The order of preference based on property acquisition timing would be Region owned sites, willing seller sites and sites requiring expropriation.