



Appendix C

Screening Criteria Checklist



Criterion	Potential Environmental Effect?		Additional Information
	YES	NO	
1. Surface and Ground Water			
1.1 cause negative effects on surface water quality, quantities or flow?	X		- As per the Screening Level Environmental Assessment guideline, additional information has been developed including a discussion of the potential for impact and then possibly the completion of detailed studies and the development of impact management measures (including mitigation measures and a commitment to operational statements). Sections 6.1.1.1, 7.1 and 9.2
1.2 cause negative effects on ground water quality, quantity or movement?	X		- As per the Screening Level Environmental Assessment guideline, additional information has been developed including a discussion of the potential for impact and then possibly the completion of detailed studies and the development of impact management measures (including mitigation measures and a commitment to operational statements). Sections 6.1.1.1, 7.2 and 9.1
1.3 cause significant sedimentation or soil erosion or shoreline or riverbank erosion on or off site?		X	No negative impacts related to sedimentation or soil erosion are anticipated for the site due to relatively level site topography, a mature vegetative buffer surrounding the site, and the absence of surface water courses in the vicinity of the active and proposed waste disposal locations.
1.4 cause negative effects on surface or ground water from accidental spills or releases (e.g. leachate) to the environment?	X		- As per the Screening Level Environmental Assessment guideline, additional information has been developed including a discussion of the potential for impact and then possibly the completion of detailed studies and the development of impact management measures (including mitigation measures and a commitment to operational statements). Sections 6.1.1.1 and 7.0
2. Land			
2.1 cause negative effects or residential, commercial, institutional or other sensitive land uses within 500 metres from the site boundary?		X	<ul style="list-style-type: none"> - The Noise Impact Assessment results indicated that no negative impact at any of the receptors is anticipated. - The maximum number of waste disposal trucks that are anticipated to travel to and from the Site during a normal operational week will be a minimal two (2) to five (5) trucks. It has also been determined that no increase in residential traffic to the Site is expected since the transfer station operations are foreseen to remain the same. - The waste mound is expected to be: eight (8) metres above the original ground surface when complete and contained between natural topographic peaks on the north and the south sides. It is to be located in an area that offers extensive coniferous tree cover on the east and south and will be built up gradually over time (>25 years). Even after more than 25 years, when the waste mound has reached its maximum capacity, the aesthetic affects will be minimal or insignificant. - The Hydrogeological Study completed indicates that the anticipated plume concentrations at the property limit will be sufficiently less than the reasonable use criteria (RUC) value. It is believed the actual contaminant plume will be at concentrations less than those modeled and much less than the RUC when it reaches the property line and therefore not impact any groundwater sources offsite.
2.2 not be consistent with the Provincial Policy Statement, provincial land use or resource management plans?		X	<ul style="list-style-type: none"> - The proposed expansion meets the intention of the PPS as it has been designed specifically to accommodate present and projected future waste requirements and to include aspects of waste reduction and waste recycling. - The project has also been designed in accordance with provincial legislation and standards and has been placed in a location that is meant to minimize impacts to the environment.



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2.3 be inconsistent with municipal land use policies, plans and zoning bylaws (including municipal setbacks)?		X	<ul style="list-style-type: none"> - The project is consistent with municipal planning provisions because the landfill site and the area immediately surrounding the site have been approved to be rezoned by the MNR. - It was recommended by the MNR that necessary assessments should be completed prior to rezoning to ensure there are no significant barriers to the project and to determine the required area needed for the facility.
2.4 use lands not zoned as industrial, heavy industrial or waste disposal?		X	<ul style="list-style-type: none"> - The project is consistent with municipal planning provisions because the landfill site and the area immediately surrounding the site have been approved to be rezoned by the MNR. - It was recommended by the MNR that necessary assessments should be completed prior to rezoning to ensure there are no significant barriers to the project and to determine the required area needed for the facility.
2.5 use hazard lands or unstable lands subject to erosion?		X	<ul style="list-style-type: none"> - No hazardous lands or unstable lands in the vicinity.
2.6 cause negative effects related to the remediation of contaminated land?		X	<ul style="list-style-type: none"> - No remediation being performed in the area.
3. Air and Noise			
3.1 cause negative effects on air quality due to emissions (for parameters such as temperature, thermal treatment exhaust flue gas volume, nitrogen dioxide, sulphur dioxide, residual oxygen, opacity, hydrogen chloride, suspended particulates, or other contaminants)?		X	<ul style="list-style-type: none"> - Not applicable since no incineration is proposed.
3.2 cause negative effects from the emission of greenhouse gases (e.g., carbon dioxide, carbon monoxide, methane)?		X	<ul style="list-style-type: none"> - Regulation 232/98 states that the collection and use of landfill gas generated by a WDS during operation and following closure is only necessary for a WDS having a volume of three (3) million cubic meters (m³) or greater. New rules require operating landfills larger than 1.5 million m³ to have methane collection systems in place by 2010. It has also been stated that if, based on the characteristics of a site and the type of waste to be deposited, the landfill gas generated at the site is not likely a concern, there is no need to collect the gas emitted. Since the total proposed volume of waste will not exceed 100,000 m³ and the rate of fill per year is approximately 4,500 m³, this Site is considerably less than the 1.5 million m³ necessary to capture the landfill gas (less than 10% of the required size). The waste disposed of will also be comprised of household waste and presumably construction materials that have been sorted accordingly and predominantly solid and non-hazardous. For these reasons, it is justifiable that there is little gas produced and it is unnecessary to collect it.
3.3 cause negative effects from the emission of dust or odour?	X		<ul style="list-style-type: none"> - As per the Screening Level Environmental Assessment guideline, additional information has been developed including a discussion of the potential for impact and then possibly the completion of detailed studies and the development of impact management measures (including mitigation measures and a commitment to operational statements). Sections 6.1.1.2 and 7.3



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3.4 cause negative effects from the emission of noise?	X		- As per the Screening Level Environmental Assessment guideline, additional information has been developed including a discussion of the potential for impact and then possibly the completion of detailed studies and the development of impact management measures (including mitigation measures and a commitment to operational statements). Sections 6.1.1.2 and 7.4
3.5 cause light pollution from trucks or other operational activities at the site?		X	- Not operated during evening/nighttime hours. Light would not be generated during these hours, so would not have an impact on the nocturnal movement of wildlife. - The main operations are also located in a low lying area on the Site with a long access road leading to the active area. The tree cover is extensive surrounding the proposed active working face and the topography slopes in such a way that any illumination on the Site would be contained or minimized to a degree as to make the light unnoticeable to the nearest residents.
4. Natural Environment			
4.1 cause negative effects on rare (vulnerable), threatened or endangered species of flora or fauna or their habitat?		X	- The MNR and Snider's Ecological Services have both stated that there are no occurrences of rare or endangered species of flora or fauna or their habitat.
4.2 cause negative effects on protected natural areas such as, ANSIs, ESAs or other significant natural areas?		X	- There are no provincial or federal parks, no Important Bird Areas of Canada (IBA), International Biological Sites (IBP) or Areas of Natural and Scientific Interest (ANSI) in the vicinity of the proposed expanded Site. There are also no Environmental Protection Areas (EPAs) anywhere in the general surroundings of the Site.
4.3 cause negative effects on designated wetlands?		X	- Snider's Initial EIS confirms that there are no wetland habitats on the proposed Site and the lands are well drained. One wetland was identified to the south west of the potential lands for purchase, located approximately 365 meters from the lot boundary. This wetland area was found to be limited in size and lacking any known significant features. In the professional opinion of Snider's Ecological Services, it has been deemed unlikely that this wetland would be a provincially significant wetland, if evaluated by MNR, and as such no evaluation was recommended. - The closest Provincially Significant Wetland to the Site is the Silver Creek Wetland, located approximately 4.25 kilometres south east of the WDS. No impacts to this wetland can be reasonably anticipated as a result of the proposed expansion.
4.4 cause negative effects on wildlife habitat, populations, corridors or movement?		X	- Field investigations by Snider's Ecological Services indicated that there was no evidence of significant deer wintering activity on the existing, or proposed expansion of, the Site. It was indicated that there were no winter deer droppings or heavy browse activity on the forage shrubs, and although the lot does contain some areas of hemlock that could provide thermal cover, it was evident that deer were not using the areas. - Additional studies established that there were no significant wildlife detected other than the ubiquitous monarch butterfly, which is common to early successional and weedy areas.
4.5 cause negative effects on fish or their habitat, spawning, movement or environmental condition (e.g., water temperature, turbidity, etc.)?		X	- A Supplemental Biological Fish Habitat study concluded that no permanent watercourses were identified on the Site. Resultantly, no fish were present and therefore intermittently inundated areas would not be important fish habitats.
4.6 cause negative effects on locally important or valued ecosystems or vegetation?		X	- There are no known locally important or valued ecosystems or vegetation on the Site or in the general surroundings.



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4.7 increase bird hazards within the area that could impact surrounding land uses (e.g., airports)?		X	<ul style="list-style-type: none"> - Nearest airport is 70 km away - No other hazards identified that would impact the surrounding land use with respect to bird populations in the area
5. Resources			
5.1 result in practices inconsistent with waste studies and/or waste diversion targets (e.g., result in final disposal of materials subject to diversion programs)?		X	<ul style="list-style-type: none"> - Waste diversion initiatives currently in place will continue on the proposed expanded Site and will be essentially outlined in the revised CofA. - The practices that are planned for the Site do not include disposal of materials that are subject to diversion programs. - The Township is consistent with their practices associated with waste diversion and currently has an average waste diversion rate of 36% which is based on several years of historical data on the waste interred and that which was recycled (diverted).
5.2 result in generation of energy that cannot be captured and utilized?		X	<ul style="list-style-type: none"> - New rules by the Ontario Ministry of the Environment require operating landfills larger than 1.5 million cubic metres to have methane collection systems in place by 2010. - This does not pertain to landfill operations such as those which are proposed to exist on the Ruby Road WDS since the Site is expected to be no more than approximately 100,000 cubic metres, and is projected to fill at a reasonably slow rate. - The U.S. Environmental Protection Agency (EPA) recommends that at least 1 million tonnes of waste be in place with a minimum depth of 12 m in order to be practical to capture the gas and utilize it for energy. - Therefore, a landfill gas-to-energy system will not be put into place at the proposed WDS based on its infeasibility and limitations imposed by the proposed size.
5.3 be located a distance from required infrastructure (such as availability to customers, markets and other factors)?		X	<ul style="list-style-type: none"> - The Site is proposed to be located on the north-west side of the Township and is presently accessible by all mandatory infrastructure. - The Site is easily accessible to persons living in the area. - The Ruby Road site currently operates and works with other waste disposal facilities in the Township and will continue to do so if the expansion takes place. - Certain areas of the Ruby Road, the main route to the Site, will need occasional additional maintenance by the municipality in order to withstand the truck and residential vehicles coming to the Site to dispose of waste. - The Township has the intention of properly fixing and maintaining Ruby Road to acceptable standards and has acknowledged the need for some additional work and maintenance. - An additional entrance has been proposed to be constructed for utilization by trucks disposing of waste, leading directly on the waste mound. - Personal vehicles would access the waste disposal operations at the current transfer facility entrance and dispose of the waste in the bins provided. The waste in the bins will be collected by the trucks when necessary and transferred to the active waste disposal face.
5.4 cause negative effects on the use of Canada Land Inventory Class 1-3, specialty crop or locally significant agricultural lands?		X	<ul style="list-style-type: none"> - The proposed project does not impact any Class 1 through 3 agricultural lands since it is located in an area designated as Class 6 with no surrounding Class 1 to 3 areas. The WDS land is not of prime agricultural importance.



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5.5 cause negative effects on existing agricultural production?		X	<ul style="list-style-type: none"> - There will be no negative effects on existing agricultural production since there is none that currently takes place on or around the Site. - The Site is designated Extractive Industrial Reserve and as stated above the soils in this area designated as Class 6 and are therefore capable only of producing perennial forage crops, and soil improvement practices are deemed to be unfeasible.
6. Socio-economic			
6.1 cause negative effects on neighborhood or community character?	X		<ul style="list-style-type: none"> - As per the Screening Level Environmental Assessment guideline, additional information has been developed including a discussion of the potential for impact and then possibly the completion of detailed studies and the development of impact management measures (including mitigation measures and a commitment to operational statements). Sections 6.1.1.3 and 7.5
6.2 result in aesthetics impacts (e.g., visual and litter impacts)?	X		<ul style="list-style-type: none"> - As per the Screening Level Environmental Assessment guideline, additional information has been developed including a discussion of the potential for impact and then possibly the completion of detailed studies and the development of impact management measures (including mitigation measures and a commitment to operational statements). Sections 2.7.2, 6.1.1.3 and 7.6
6.3 cause negative effects on local businesses, institutions or public facilities?		X	<ul style="list-style-type: none"> - No local businesses, institutions or public facilities will be affected by the proposed undertaking.
6.4 cause negative effects on recreation, cottaging or tourism?		X	<ul style="list-style-type: none"> - There are no recreational, cottaging or tourism areas located within the 500 m radius surrounding the proposed Site - Those outside the 500 m radius are not expected to be impacted by the small scale landfilling operations if it occurs at the Ruby Road Site. - The operations at the Site are also expected to not change for those who drop off their household garbage and waste. Waste materials will still be accepted in the area currently utilized as a transfer station. - Persons visiting cottages or recreational zones in the area will continue to use the facility as they have in the past with no resulting negative impacts.
6.5 cause negative effects related to increases in demands on community services and infrastructure?		X	<ul style="list-style-type: none"> - Ruby Road has been proposed to be enhanced by the Township to ensure that adequate transportation routes are in proper working order.
6.6 cause negative effects on the economic base of a municipality or community?		X	<ul style="list-style-type: none"> - This project is favorable for the community's economic base and has been determined to be the most feasible option through many studies, consultation and discussion with Township council.
6.7 cause negative effects on local employment and labour supply?		X	<ul style="list-style-type: none"> - The project may create additional jobs in the area. - Shift of employment positions from other waste sites as they close to Ruby Road WDS to accommodate the additional capacity and workload; therefore, no net loss of jobs.



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	YES	NO	
6.8 cause negative effects related to traffic?		X	<ul style="list-style-type: none"> - Traffic impact calculations were performed for the future of the proposed Site operations. The estimates examined the current and projected conditions along the present primary route to the Site and the changes that would be made over the years. - The potential traffic impacts resulting from an expansion of the current facility will be initially decreased and it is anticipated that as other landfills in the Township conclude operations, the garbage generated within the area will be transferred to the Ruby Road site for emplacement. - The traffic that is associated with the existing transfer station will decline if the proposed expansion occurs, since the need to ship waste offsite will decrease and the present flow of recyclable material will remain the same. - Once landfills within the Township reach capacity or choose to cease operation, waste disposal trucks will transfer waste to the remaining operational Site from the transfer stations within the Township. According to the traffic impact study, the number of trucks required annually will decrease from approximately 240 in 2010 to 166 in 2035. - Calculations have determined that the traffic will be minimal if the WDS at Ruby Road were to be expanded. These calculations take into account the probable yearly generation of waste from an estimated population increase as well as the potential waste diversion rate.
6.9 be located within 8 km of an aerodrome/airport reference point?		X	- Not applicable
6.10 interfere with flight paths due to the construction of facilities with height (i.e., stacks)?		X	- No stacks on site presently or necessary for operations due to the waste management system in place, and the volume of waste to be processed.
6.11 cause negative effects on public health and safety?	X		- As per the Screening Level Environmental Assessment guideline, additional information has been developed including a discussion of the potential for impact and then possibly the completion of detailed studies and the development of impact management measures (including mitigation measures and a commitment to operational statements). Sections 2.7.10, 6.1.1.3 and 7.0
7. Heritage and Culture			
7.1 cause negative effects on heritage buildings, structures or sites, archaeological sites or areas of archaeological importance, or cultural heritage landscapes?		X	<ul style="list-style-type: none"> - None present - A Stage I and II Archaeology Study determined that no archaeological or cultural resources are located on the project property. Therefore, there are no significant archaeological concerns associated with this project.
7.2 cause negative effects on scenic or aesthetically pleasing landscapes or views?	X		- As per the Screening Level Environmental Assessment guideline, additional information has been developed including a discussion of the potential for impact and then possibly the completion of detailed studies and the development of impact management measures (including mitigation measures and a commitment to operational statements). Section 2.7.2, 6.1.1.4 and 7.6
8. Aboriginal			
8.1 cause negative effects on land, resources, traditional activities or other interests of Aboriginal communities?		X	Aboriginal communities have been involved throughout the consultation process. No concerns have been raised that would limit the suitability of the Ruby Road WDS for the proposed expansion.
9. Other			



Criterion	Potential Environmental Effect?		Additional Information
	YES	NO	
9.1 result in the creation of non-hazardous waste materials requiring disposal?	X		- As per the Screening Level Environmental Assessment guideline, additional information has been developed including a discussion of the potential for impact and then possibly the completion of detailed studies and the development of impact management measures (including mitigation measures and a commitment to operational statements). Section 6.1.1.5
9.2 result in the creation of hazardous waste materials requiring disposal?		X	The Site would continue to operate as a non-hazardous solid waste disposal site if the expansion is approved, and as such would not handle hazardous wastes on Site.
9.3 cause any other negative environmental effects not covered by the criteria outlined above?		X	No additional known negative impacts.