

DRAFT

Land Use Compatibility Guideline

March 2021

Ontario Ministry of the Environment, Conservation and Parks

DISCLAIMER

This document should be read in its entirety. The guidance in this Guideline should be read in conjunction with direction in the [Provincial Policy Statement, 2020](#) and provincial plans (e.g. [Greenbelt Plan](#), [A Place to Grow: Growth Plan for the Greater Golden Horseshoe](#), [Growth Plan for Northern Ontario](#)), as well as the *Environmental Protection Act* and related regulations and policies or guidance relating to specific types of proposals covered by this document. This includes the technical documents related to noise, dust and odour that are referenced. Information, technical criteria and approaches outlined in this Guideline are meant to support from the policies of the Provincial Policy Statement, 2020, provincial plans or from the legislative authority of the *Environmental Protection Act*. Users must meet all applicable legislation, regulation and policies.

The information contained herein should not be relied upon as legal advice.

Other land use planning issues that have not been addressed in this Guideline (e.g. issues related to species at risk, agricultural concerns, impacts to water, cultural heritage and archaeology) must be considered through other assessments and processes required under applicable legislation and policies.

Terms in *italics* throughout this document are defined terms and a glossary can be found in **Appendix G**.

Cette publication hautement spécialisée Land Use Compatibility Guideline n'est disponible qu'en anglais conformément au Règlement 671/92, selon lequel il n'est pas obligatoire de la traduire en vertu de la Loi sur les services en français. Pour obtenir des renseignements en français, veuillez communiquer avec le ministère de l'Environnement, de la Protection de la nature et des Parcs au mecp.landpolicy@ontario.ca.

PREVIOUS GUIDELINES REPLACED BY THIS DOCUMENT

This document replaces the following guidelines:

- [D-1 Land Use and Compatibility](#)
 - [D-1-1 Land Use Compatibility: Procedure for Implementation](#)
 - [D-1-2 Land Use Compatibility: Specific Applications](#)
 - [D-1-3 Land Use Compatibility: Definitions](#)
- [D-2 Compatibility Between Sewage Treatment and Sensitive Land Use](#)
- [D-4 Land Use on or Near Landfills and Dumps](#)
 - [D-4-1 Assessing Methane Hazards from Landfill Sites](#)
 - [D-4-3 Registration or Certificates and Provisional Certificates](#)

- [D-6 Compatibility Between Industrial Facilities](#)
 - [D-6-1 Industrial Categorization Criteria](#)
 - [D-6-3 Separation Distances](#)

The D-Series documents that are not being replaced are:

- [D-3 Environmental Considerations for Gas or Oil Pipelines and Facilities](#)
- [D-5 Planning for Sewage and Water Services and its subsections](#)

The following documents were previously replaced by the document titled [2009-04 Environmental Warnings and Restrictions](#):

- [D-4-2 Environmental Warnings/Restrictions](#)
- [D-6-4 MCCR Bulletin No. 91003 \(Environmental Warnings/Restrictions on Property\)](#)

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Part A: Overview and Policy Context

1. INTRODUCTION AND CONTEXT

1.1 Overview

This Land Use Compatibility Guideline (Guideline) has been developed to assist land use *planning authorities* and *proponents* of development in planning for land use compatibility which protects the long-term viability of *major facilities* while avoiding, or if avoidance is not possible, minimizing and mitigating *adverse effects* to the surrounding community.

The primary purpose of the Guideline is to support the implementation of the Provincial Policy Statement, 2020 (PPS) issued under **Section 3** of the *Planning Act*, including policies 1.2.6.1, 1.2.6.2, 1.3.2.2 and 1.3.2.3 related to land use compatibility. It also supports land use compatibility-related policies in provincial plans, including those in A Place to Grow: A Growth Plan for the Greater Golden Horseshoe (A Place to Grow).

The Guideline acts in concert with provincial noise, dust and odour guidelines, standards and procedures, and refers to these technical guidelines for further direction on undertaking *compatibility studies*, assessments and modelling. The Guideline provides context on how land use compatibility is achieved through Ontario's land use planning process and the *Environmental Protection Act* (EPA) and regulations. It should also be used to inform *Environmental Assessment* (EA) processes carried out under the *Environmental Assessment Act* (EAA) and for compliance considerations.

The Guideline is to be applied to achieve and maintain land use compatibility between *major facilities* and *sensitive land uses* when a planning approval under the *Planning Act* is needed in the following circumstances:

- a new or expanding *sensitive land use* is proposed near an existing or planned *major facility*; or
- a new or expanding *major facility* is proposed near an existing or planned *sensitive land use*.

The Guideline will also be applied when municipalities are incorporating land use compatibility policies and principles into various land use planning tools under the *Planning Act* and other legislation.

The objectives of land use compatibility planning are to:

- protect *employment areas* designated for future *major facilities* from incompatible uses and encroachment by *sensitive land uses*;
- protect existing or planned *major facilities* from potential impacts from new *sensitive land uses*; and
- prevent *adverse effects* to existing or planned *sensitive land uses* from new and/or expanding *major facilities*.

Part A of the Guideline outlines the general approach and guiding hierarchy, key concepts, use of the guideline, roles and responsibilities and policy context for the Guideline.

Part B details the approach for assessing land use compatibility to inform land use planning decisions regarding land use compatibility matters. This Part includes *areas of influence* (AOIs) and *minimum separation distances* (MSDs) for specific types of facilities and various classes of facilities. It also provides a description of the expected contents of a *compatibility study*, including guidance and links supporting technical assessments of noise, dust, odour and other emissions, and of a *demonstration of need*. Mitigation measures that can be used to mitigate land use compatibility issues and impacts are also described.

Part C provides direction on incorporating land use compatibility policies and tools into various tools under the *Planning Act* and other legislation. Additional considerations for transitional land uses and infill and *intensification* scenarios are also provided.

The **Appendices** provide additional detail on relevant policies, completing assessments supporting *compatibility studies*, specific sectors, and planning for land use compatibility for landfills and dumps. They also include a glossary, abbreviations, case studies and helpful references.

1.2 General Approach to Planning for Land Use Compatibility

Land use compatibility is achieved when *major facilities* and *sensitive land uses* can co-exist and thrive for the long-term within a community through planning that recognizes the locational needs of both. These different land uses need to be planned and managed properly to avoid conflicting with or adversely impacting each other. Planning communities effectively to ensure compatibility amongst land uses enables industry and businesses to continue to operate and grow, while enabling the surrounding community to continue about their daily life and activities without experiencing *adverse effects* from emissions and other impacts from *major facilities*.

Given the nature of *major facilities*, they are often a source of noise, dust, odour and other emissions which may have potential impacts on surrounding land uses. *Sensitive land uses* can also have impacts on existing *major facilities* if they are located too close to a *major facility*, resulting in complaints from residents, potential risks to public health and safety, need for additional mitigation, impacts to *major facility* operations and additional costs for the *major facility*.

Consideration of these potential impacts early in the land use planning process, before new land uses are approved, provides opportunities to prevent conflicts. This Guideline contains direction for planning authorities to address land use compatibility through official plan policies and procedures, planning tools and proponent-driven planning applications.

To enable planning land uses that avoid incompatible land uses, this Guideline provides AOI distances associated with various types of *major facilities*. A *sensitive land use* within that AOI could experience impacts. *Planning authorities* should use these AOIs to inform land use designations, zoning by-laws and other planning tools to avoid incompatible uses. These AOIs should also be used to inform policies to trigger land use *compatibility studies* if a development proposal would result in a *sensitive land use* being located within an AOI. That *compatibility study* then becomes the basis for assessing potential *adverse effects* and determining a more specific *separation distance* that would prevent *adverse effects*, potentially together with identified mitigation measures. This Guideline also provides MSDs, within which *sensitive land uses* should not be located, and supports the requirement for a *demonstration of need* to be completed in relation to a proposed *sensitive land use* if mitigation measures are the only possible way to prevent adverse impacts or if the proposed *sensitive land use* is within the MSD of a *major facility*.

1.3 Guiding Hierarchy for Land Use Compatibility Planning

Separation of incompatible land uses is the preferred approach to avoiding land use compatibility issues. In many situations, including in relation to proposals for greenfield development and proposals outside of *settlement areas*, it is expected that separation can be achieved. Doing this would be consistent with achieving policy 1.1.5.6 of the PPS, which indicates that opportunities should be retained to locate new or expanding land uses that require separation from other uses. When avoidance (i.e. separation) alone is not possible, minimizing and mitigating potential impacts may provide a basis for a proposal. If minimization and mitigation of impacts is not viable, the proposed incompatible land use should not be enabled, and related planning or development applications should not be approved. *Planning authorities, proponents* (e.g. developers of *sensitive land uses* and *major facility* owners) and the surrounding community should work together to achieve land use compatibility.

In order to support implementation of the PPS, a guiding hierarchy for land use compatibility is provided as a decision-making framework for *planning authorities* where avoidance of incompatible land uses through adequate separation should be achieved, or if avoidance is not possible, minimizing and mitigating *adverse effects*. See **Figure 1** below.

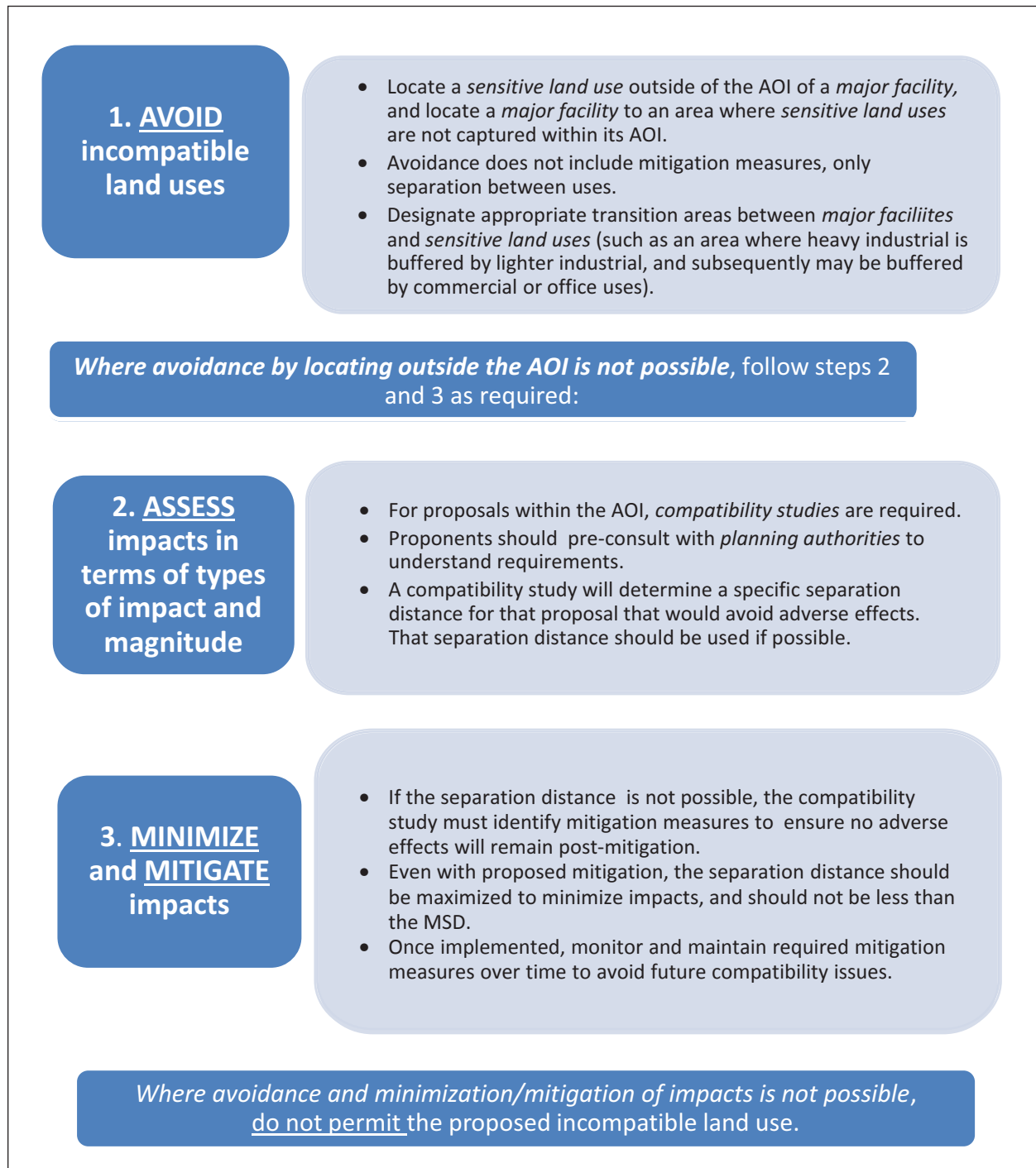


Figure 1 – Guiding hierarchy for land use compatibility

1.4 Key Concepts

The following key concepts are briefly described to provide context for planning for land use compatibility. Further details on the application of these concepts are described in subsequent sections.

Major Facilities: “Facilities which may require separation from *sensitive land uses*, including but not limited to: airports, manufacturing uses, transportation infrastructure and corridors, rail facilities, marine facilities, sewage treatment facilities, *waste management systems*, oil and gas pipelines, industries, energy generation facilities and transmission systems, and resource extraction activities” (PPS).

The above definition does not include a comprehensive list of *major facilities*. Facilities other than those provided as examples with similar potential to affect *sensitive land uses* must be treated in the same manner under the PPS and this Guideline. See **Section 1.5.2** for additional discussion on application of the Guideline to *major facilities*.

Sensitive Land Uses: “Buildings, *amenity areas*, or outdoor spaces where routine or normal activities occurring at reasonably expected times would experience one or more *adverse effects* from *contaminant discharges* generated by a nearby *major facility*. *Sensitive land uses* may be a part of the natural or built environment. Examples may include, but are not limited to residences, day care centres, and educational and health facilities” (PPS).

The above definition does not include a comprehensive list of all types of *sensitive land uses*. *Planning authorities* are expected to identify other similar uses as sensitive under the PPS and this Guideline. While uses such as residential are clearly *sensitive land uses* in all contexts, *sensitive land uses* could also include various commercial, retail, institutional, and office uses. Some additional examples of *sensitive land uses* may include hotels, community centres and places of worship. Under this Guideline residences includes long-term care homes, shelters for emergency housing and detention centres.

Adverse Effects: “means one or more of:

- a) impairment of the quality of the natural environment for any use that can be made of it;
- b) injury or damage to property or plant or animal life;
- c) harm or material discomfort to any person;
- d) an adverse effect on the health of any person;
- e) impairment of the safety of any person;
- f) rendering any property or plant or animal life unfit for human use;

- g) loss of enjoyment of normal use of property; and
- h) interference with normal conduct of business” (EPA, ss.1(1))

Note that minor nuisance effects may not meet the definition of *adverse effect*.

Area of Influence (AOI) (Section 2.1.1): an area surrounding the property boundary of an existing or planned *major facility* where *adverse effects* on surrounding *sensitive land uses* have a moderate likelihood of occurring (see **Figure 2**). Within AOIs, *compatibility studies* are required for *proponents* of proposed *major facilities* or proposed *sensitive land uses* as part of the supporting documentation for a planning application.

Minimum Separation Distance (MSD) (Section 2.1.3): a recommended minimum distance from a *major facility* within which *adverse effects* to a *sensitive land use* are highly likely to occur. *Planning authorities* should not allow *sensitive land uses* within the MSD (see **Figure 2**). Where a *sensitive land use* is proposed within the MSD, a *demonstration of need* is required.

Compatibility Study (Section 2.6): a study that assesses potential *adverse effects* and recommends *separation distances* between land uses and mitigation measures, if needed, to prevent impacts to surrounding *sensitive land uses*.

Avoidance: for the purposes of this Guideline, “avoidance” is achieved if a *sensitive land use* and a *major facility* are sufficiently separated to prevent any *adverse effects* on the *sensitive land use*, without the need of mitigation measures. Locating *sensitive land uses* outside of the AOI of a *major facility* would achieve this outcome, as would locating beyond the *separation distance* assessed through a *compatibility study* as necessary to avoid an *adverse effect* without mitigation.

Demonstration of Need (Section 2.8): an assessment that determines whether there is an identified need for the proposed use in the proposed location, and evaluates alternative locations for the proposed use if avoidance is not possible. A *demonstration of need* is only required to be carried out by *proponents* of *sensitive land uses* in certain circumstances as outlined in **Section 2.8** of this Guideline.

Minimize and Mitigate: under this Guideline, minimizing potential *adverse effects* on sensitive land uses and potential impacts to *major facilities* is achieved by maximizing the *separation distance* between land uses that are incompatible, and mitigation refers to the additional measures necessary to prevent an *adverse effect* or impact.

1.5 Use of the Guideline

1.5.1 Audience

This Guideline is intended for *planning authorities* under the *Planning Act*, including municipalities, planning boards, and the Province in circumstances where it is the planning authority. It should also be considered by the Local Planning Appeal Tribunal when determining appeals of decisions made by a planning authority under the *Planning Act*. *Proponents* of proposed development (e.g. developers of *sensitive land uses*, *major facility* owners/operators) are another key audience to understand the expectations of the planning authority. This Guideline is also intended for planning consultants and consultants preparing *compatibility studies*.

Proponents for new *sensitive land uses* and/or new *major facilities* should consult the Guideline prior to applying for approvals under the *Planning Act* and environmental permissions, to better coordinate requirements for all processes.

The Guideline may also be used by stakeholders and the public for educational purposes and increased awareness of considerations in land use planning decisions regarding land use compatibility in their communities.

1.5.2 Applicability to Major Facilities

The Guideline supports implementation of the PPS to address impacts to and from a range of major facilities. This includes but is not limited to major facilities listed as examples in the definition of *major facility* and listed in **Table 1**, such as manufacturing facilities, sewage treatment plants, composting facilities and anaerobic landfills.

This Guideline is intended to apply to land use planning proposals related to any *major facility* unless otherwise specified or more specific provincial direction exists in relation to a specific *major facility* type. In respect of some *major facilities* for which other Guidelines or direction are provided, this Guideline may apply to encroachment of *sensitive land uses* on these facilities. This Guideline also does not address specific land uses that are not *major facilities* as defined by the PPS, but which may also have compatibility requirements. For example, this guideline does not apply to agricultural operations to which the Ontario Ministry of Agriculture, Food and Rural Affairs' (OMAFRA's) Minimum Separation Distance guidelines apply. See **Appendix K** for information and guidance related to some specific types of *major facilities* and other land uses. Guidance on landfills is located in **Appendix E**.

With respect to federally-regulated facilities, such as airports, rail facilities, marine facilities, and oil and gas pipelines, this Guideline does not apply to locating these *major facilities*. Similarly, this Guideline does not apply to development on federal crown lands that are not subject to the *Planning Act*. However, *planning authorities* are required to apply this Guideline in relation to *sensitive land uses* proposed near these facilities that are subject to the *Planning Act*.

1.5.3 Application Under the Planning Act

The Guideline is to be applied to achieve and maintain land use compatibility between *major facilities* and *sensitive land uses* when an approval under the *Planning Act* is needed in relation to:

- a new or expanding *sensitive land use* is proposed near an existing or planned *major facility*; or
- a new or expanding *major facility* is proposed near an existing or planned *sensitive land use*.

“Planned” *major facilities* or *sensitive land uses* means that the land use is already designated in the local official plan (OP) and zoned in the local zoning by-law.

Planning Act approvals this Guideline would apply to include:

- OP and OP amendments (OPAs);
- Secondary plans;
- Community planning permit systems;
- Zoning by-laws and zoning by-law amendments;
- Plans of subdivision or condominium;
- Consents;
- Minor variances; and
- Site plan control and other planning approvals.

The Guideline also applies in situations where the use of the land is not changing, but the nature and/or intensity of the land use is, and an application under the *Planning Act* is required. For example, a six-storey residential building being replaced by a twenty-storey residential building within the same parcel can trigger this Guideline, if an approval under the *Planning Act* is required. It also applies in situations where there is a new use proposed for an existing building and an application under the *Planning Act* is required. For example, a new residential use may be proposed for a building that is currently used for commercial purposes, which would lead to a situation of potential incompatibility if the building is located within an industrial and commercial *employment area*.

Unless referenced under other applicable legislation, this Guideline does not apply when there are existing incompatible land uses (e.g. existing *sensitive land uses* too close to existing *major facilities*) and no *Planning Act* approval is being triggered.

1.5.4 Application Under Other Legislation

Planning authorities and *proponents* need to be aware of and consider environmental legislation, regulations, programs and permissions, and other relevant provincial legislation, when making decisions in relation to land use compatibility. *Proponents* for *major facilities* that require other permissions (such as an *Environmental Compliance Approval* (ECA)) should consider undertaking land use planning approvals and environmental permissions, and the studies that inform them, in a coordinated fashion to the extent possible. The Guideline may also be used to inform some *Environmental Assessments* (EA). For example, this Guideline can be considered in the EA process for waste management projects that may be subject to the EAA. Information and *compatibility study* requirements developed through planning approvals and EAs may inform requirements for ECAs.

This Guideline does not provide guidance on applying for an ECA, a Renewable Energy Approval, or registering on the Environmental Activity and Sector (EASR). Please refer to **Appendix J** for other documents that provide guidance and direction on these matters.

1.5.5 Territory without Municipal Organization

Despite generally having lower population and development density, land use compatibility issues exist in Northern Ontario, including in territories without municipal organization. In these areas, the Province or other planning authority should request that studies be completed to ensure that compatibility issues are adequately addressed prior to planning approvals being granted.

Planning authorities in Northern Ontario in territories without municipal organization are the following:

- Planning boards, which coordinate overall future growth and land use planning activities. They can prepare OPs and can pass zoning by-laws in areas without municipal organization within their jurisdiction.
- The Minister of Municipal Affairs and Housing defines planning areas of planning boards and may also initiate zoning controls in some territories without municipal organization. The Minister has the authority to approve development applications (plans of subdivision and consent applications) except in those areas where approval is given to other approval authorities, such as planning boards.

- The Ministry of Natural Resources and Forestry (MNRF), which manages Crown land on behalf of the public.

1.6 Roles and Responsibilities

1.6.1 Planning Authorities

“*Planning authorities*” refers to entities or bodies with land use planning approval authority under the *Planning Act*, including the council of a municipality, a planning board and the Ministry of Municipal Affairs and Housing (MMAH).

Subsections 3(5) and 3(6) of the *Planning Act* provide that planning decisions and comments, submissions or advice affecting a planning matter by a council of a municipality, a local board, a planning board, a minister of the Crown and a ministry, board, commission or agency of the government shall be consistent with the PPS and shall conform or not conflict with any provincial plans in effect at that time. As such, under the *Planning Act* and the PPS, *planning authorities* are responsible for ensuring that *major facilities* and *sensitive land uses* are planned and developed to avoid, or if avoidance is not possible, minimize and mitigate *adverse effects*. They are also responsible for protecting the long-term viability of existing or planned industrial, manufacturing or other employment uses. *Planning authorities* must not approve development proposals where there are irreconcilable incompatibilities (i.e. *adverse effects* with no feasible required mitigation measures). Land use planning decisions that result in incompatibility may create ongoing issues for all parties, including municipalities, to address noise and odour complaints and other impacts.

Planning authorities should encourage pre-consultation with *proponents* to identify potential land use compatibility constraints (e.g. closed landfill, existing *major facilities* and/or *sensitive land uses*). *Planning authorities* will need to be satisfied that the classification of a *major facility* or AOI used are appropriate. *Planning authorities* are responsible for reviewing *Planning Act* applications (including required *compatibility studies*) for potential adverse impacts to existing facilities and/or existing *sensitive land uses*, and only approving planning applications that have demonstrated that such impacts do not exist or that impacts have been addressed and any necessary mitigation will be implemented. Municipalities that do not have in-house expertise to assist with this task are encouraged to hire third party experts for review of land use *compatibility studies*. Where feasible, *planning authorities* should encourage or accept electronic submissions of land use *compatibility studies* that may be required in this Guideline with planning applications.

Planning authorities also undertake planning exercises which must address land use compatibility, such as comprehensive reviews of OPs, development of secondary plans and reviews of zoning by-laws. To address land use compatibility, OP policies and land use designations, requirements for supporting documentation for development

applications, and zoning by-laws must be up to date and in accordance with the Guideline. See **Table 4** for more details and instruction on how planning documents can incorporate the Guideline.

1.6.2 Proponents of Major Facilities and Sensitive Land Uses

This section applies to *proponents* of new or expanding *major facilities* that would capture existing or planned *sensitive land uses* within their AOI, and new or expanding *sensitive land uses* that would be captured within the AOI of an existing *major facility*.

Proponents are responsible for ensuring that they have the proper land use planning approvals in place prior to development, and that their applications for planning and development demonstrate that the proposed new land uses will avoid, or if avoidance is not possible, minimize and mitigate any potential *adverse effects*.

Pre-consultation with *planning authorities* is highly encouraged when planning for a new development, to identify potential constraints with respect to potential impacts to *major facilities* and *sensitive land uses*, explore alternative locations if necessary, and ensure all necessary studies are completed to inform planning decisions. *Proponents* can request pre-consultation and municipalities are required to agree to pre-consultation upon request under the *Planning Act*.

Engagement between parties will allow for awareness of concerns, potential access to facility-specific information to complete *compatibility studies*, discussion on recommendations for mitigation, identification of any barriers to mitigation and, if necessary, discussion on agreements for any potential mitigation to address *adverse effects* and/or potential impacts to the *major facility*. Where a new *sensitive land use* is proposed, engaging existing *major facilities* early is highly recommended to better understand their operations and the mitigation measures that may already be in place. If *major facility* operators are the *proponent* of a new or expanded facility, early engagement of nearby *sensitive land uses* is highly recommended. More information on engagement and consultation is in **Appendix C**.

Proponents are responsible for retaining qualified individuals to undertake appropriate studies, locating and designing their proposal to avoid, minimize and mitigate *adverse effects* and/or potential impacts to *major facilities*, and for installing and monitoring any required mitigation measures, as well as ensuring any necessary permissions (including ECAs, EAs and EASR registrations as applicable) under the EPA, the EAA or the *Ontario Water Resources Act* (OWRA), or other relevant legislation, are in place (see **Appendix B** for more on qualified individuals). *Proponents of major facilities* are encouraged to undertake studies supporting land use planning approvals and environmental permissions in a coordinated manner, where possible.

1.6.3 Existing Sensitive Land Uses and Major Facility Owners/Operators

Owners of existing *sensitive land uses* are encouraged to engage with *proponents* and *planning authorities* when *major facilities* are proposed, and the *sensitive land use* is captured within their AOI.

Conversely, existing *major facility* owners and operators are encouraged to respond to and engage with *proponents* and *planning authorities* when *sensitive land uses* are proposed within the AOIs of the *major facility*.

Major facilities are encouraged to share information that may lead to the completion of land use *compatibility studies* and other reports that may be needed, provided appropriate privacy considerations are met. Ensuring *compatibility studies* are based on the best and current information will help to ensure potential compatibility issues are avoided in the future.

1.6.4 Ministry of the Environment, Conservation and Parks (the Ministry)

The Ministry is responsible for providing land use planning and technical guidance on land use compatibility matters related to certain types of *major facilities*, and other matters that fall within its mandate and programs.

As a partner ministry, the Ministry also supports MMAH in the review of provincial planning policies and *Planning Act* applications where MMAH is the approval authority. The Ministry will conduct technical reviews where MMAH is the planning authority. In limited cases where MMAH is not the planning authority, municipalities may engage with the Ministry directly through the Municipal Plan Review process if they require specific technical input relating to *compatibility studies*. The Ministry does not have a role in reviewing and approving technical studies supporting planning applications under the municipal review process; its role is limited to providing specific technical information or guidance under its mandate and legislation.

The Ministry is not a decision-maker on *Planning Act* applications. As part of its broader mandate to protect Ontario's air, land and water, the Ministry issues permissions required by its key legislation including the EPA, the EAA, OWRA and their regulations for some activities at *major facilities*. Environmental permissions, which include ECAs, EAs and EASRs, do not replace the need for land use planning approvals to address compatibility.

1.7 Planning Legislation and Policy Context

The following sections provide context and background on the main provincial legislation and policies related to land use compatibility. A more comprehensive listing of relevant policies is found in **Appendix A**.

1.7.1 *Planning Act*

This Guideline supports implementation of key provincial land use planning policies. This includes relevant policies of the PPS, which is issued under the authority of the *Planning Act*.

This Guideline also supports fulfillment of provincial interests under section 2 the *Planning Act* that *planning authorities* shall “have regard to”. These include building strong healthy communities, the protection of public health and safety, and the appropriate location of growth and development.

Subsections 3(5) and 3(6) of the *Planning Act* require that decisions and comments, submissions or advice affecting a planning matter as made by *planning authorities*, and decisions made by the Local Planning Appeal Tribunal when making a determination on appeal “shall be consistent with” the PPS policies and “shall conform with” or “shall not conflict with” provincial plans.

1.7.2 *The Provincial Policy Statement (PPS)*

The PPS sets out the Province’s long-term vision for building strong, healthy communities through land use planning decisions which support the long-term prosperity, environmental health and social well-being of Ontario.

Relevant policies are referenced below, but it should be noted that the policies of the PPS represent minimum standards. Within the framework of the provincial policy-led planning system, *planning authorities* may go beyond these minimum standards to address matters of importance to a specific community, unless doing so would conflict with any policy of the PPS.

PPS policies 1.2.6.1 and 1.2.6.2 provide direction to *planning authorities* to ensure that *major facilities* and *sensitive land uses* are appropriately planned and developed to avoid, or if avoidance is not possible, minimize and mitigate *adverse effects* (e.g. from odour, noise and other *contaminants*) and ensure the long-term viability of *major facilities*. As such, planning proposals need to demonstrate how land use compatibility has been assessed and addressed.

Planning authorities also need to ensure that long-term viability and functions of *employment areas* are protected from encroachment within and surrounding these areas, as per PPS policies 1.3.2.2 and 1.3.2.3. *Employment area* conversion is also an important issue, as per PPS policies 1.3.2.4 and 1.3.2.5.

1.7.3 Place to Grow: Growth Plan for the Greater Golden Horseshoe (A Place to Grow)

A Place to Grow is issued under the authority of section 4 of the *Places to Grow Act, 2005*. A Place to Grow is the Ontario government's initiative to plan for growth and development in the Greater Golden Horseshoe. The area subject to A Place to Grow is set out in O. Reg. 416/05: Growth Plan Areas, made under the *Places to Grow Act, 2005*. Key policies relevant to the Guideline include 2.2.5.6 to 2.2.5.10.

A Place to Grow policies 2.2.5.6 and 2.2.5.7 provide direction to municipalities to designate *employment areas* and protect them for employment use over the long-term by doing such things as prohibiting residential uses, prohibiting or limiting other sensitive land uses, and providing an appropriate interface between *employment areas* and adjacent non-*employment areas* to maintain land use compatibility. To support this, policy 2.2.5.9 and 2.2.5.10 address employment land conversion.

A Place to Grow policy 2.2.5.8 stipulates that the development of *sensitive land uses*, major retail uses or major office uses will, in accordance with provincial guidelines, avoid, or where avoidance is not possible, minimize and mitigate adverse impacts on industrial, manufacturing or other uses that are particularly vulnerable to encroachment.

1.8 Environmental Legislation and Permissions

The following sections provide background on other provincial legislation and permissions related to land use compatibility. More information on environmental permissions can be found on the Ministry's website at <https://www.ontario.ca/page/environmental-permissions>

1.8.1 Environmental Protection Act (EPA)

A key part of the legislative basis for the Guideline is subsection 14(1) of the EPA, which provides:

Subject to subsection (2) but despite any other provision of this Act or the regulations, a person shall not discharge a contaminant or cause or permit the discharge of a contaminant into the natural environment, if the discharge causes or may cause an adverse effect.

1.8.2 Environmental Assessment (EA)

Ontario's EA program promotes good environmental planning by determining the benefits and potential effects of projects, as well as evaluating alternatives, before projects are implemented. Projects that involve new or expanding *major facilities* may be subject to the EAA. The Minister may also designate a project as subject to the EAA.

EA studies may involve evaluating alternative locations for siting a proposed *major facility* and must consider the proposed project's potential impacts to the environment, including impacts to the natural, social, economic, built, and cultural environments. This must include consideration of impacts to surrounding land uses. Appropriate measures must be proposed and implemented to address any impacts, such as noise and odour. Accordingly, the compatibility between a proposed *major facility* and its surrounding land use is often directly assessed and considered during an EA planning process.

EA documents may be a resource for information related to land use compatibility when considering *sensitive land use* development near *major facilities* or vice versa.

1.8.3 Environmental Compliance Approvals (ECAs)

ECAs are environmental permissions that are required by the EPA and the OWRA for certain activities which release *contaminants* into the air (including noise, vibration, odour and dust), land or water, such as industrial activities, waste management activities, sewage works, water works, and stormwater management systems.

Existing ECAs may be able to be used as a source of information for conducting land use *compatibility studies* in a range of situations. The ECA and supporting studies include information about the assessment of noise, dust and odour emissions from a *major facility*, conditions on the timing of operations, setbacks or infrastructure and technology systems for mitigating emissions. However, there may be limitations on the ability to obtain reports used to inform an ECA. *Major facilities* are encouraged to provide reports and information when it will be used for such purposes as developing land use *compatibility studies* for proposed development.

Terms and conditions set out in an ECA are included to help ensure the proper operation and maintenance of equipment and processes to minimize the impact to the environment and to prevent an *adverse effect* resulting from the operations. Depending on the type of facility, the ECA may include specific requirements to control dust, odour, noise, vibration, and other *contaminants* that can be released via air, water or land, to the environment.

It should be noted that while ECAs can address various matters that relate to land use compatibility, such as the use of noise-attenuating technology, there are a range of issues related to the layout and operation of the site that are addressed through land use planning and not ECAs.

It should be further noted that it cannot be assumed by a planning authority that a *major facility* with an ECA will implement additional mitigation measures to facilitate a *sensitive land use* proposed to be established nearby.

1.8.4 Environmental Activity and Sector Registry (EASR)

An EASR is an online self-registration process for subject facilities instead of seeking a ministry approval through an application and review process.

If a facility is required to register under the Air Emissions EASR, the *proponent* of that facility is required to have reports prepared that assess air, noise, *fugitive dust* and odour emissions prior to registration. *Major facilities* are encouraged to provide reports and information when it will be used for such purposes as developing land use *compatibility studies* for proposed development. Additionally, some summary information (i.e. Summary Table from Emissions Summary and Dispersion Modelling Report and the Acoustic Summary Table from the Noise Report) is available from the Ministry website through the [Access Environment](#) portal tools function.

Part B: Assessing Land Use Compatibility

2. TOOLS TO ASSESS LAND USE COMPATIBILITY

2.1 Area of Influence (AOI) and Minimum Separation Distance (MSD)

AOIs and MSDs specific to certain sectors or types of *major facilities* have been provided in this Guideline (**Table 1**). AOIs and MSDs have also been assigned to *major facility* class based on their anticipated local impact (**Table 2**). Where available, the facility-specific AOI/MSD in **Table 1** shall be used. Where there is no facility-specific AOI/MSD in **Table 1**, or if *planning authorities* are determining an AOI for an area which may include a variety of facilities, **Table 2** and **Table 3** can be used to determine the appropriate Class-related AOI. See **Figure 2** below for a visual representation of these areas, and **Section 2.1.1**, **Section 2.1.2**, and **Section 2.1.3**.

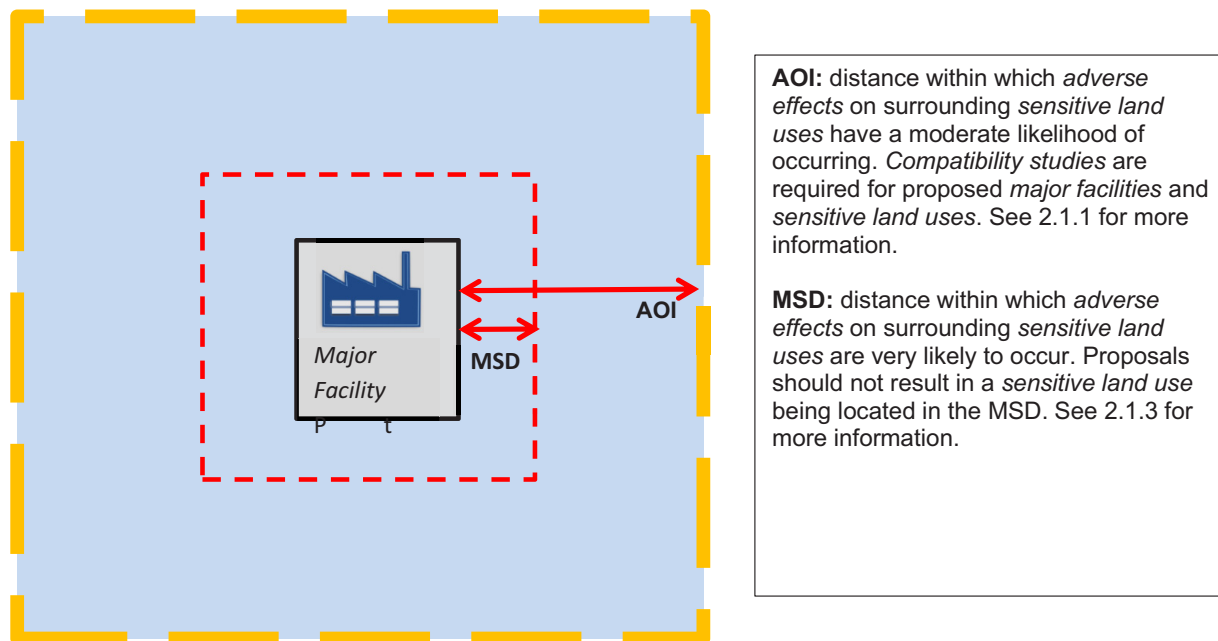


Figure 2 – Area of influence and minimum separation distance.

AOIs and MSDs provided in this Guideline are based on analysis of the Ministry's complaint data (specific to noise, dust and odour) from a ten-year period, its experience dealing with issues associated with land use compatibility and considering other ministry guidelines and regulations. While the AOIs and MSDs were mainly based on *adverse effects* related to noise, dust and odour, the *major facilities* listed in **Table 1** and **Table 2** may have other *adverse effects*, such as groundwater and surface water contamination or methane leakage.

2.1.1 Area of Influence (AOI)

An AOI is defined in this Guideline as an area surrounding the property boundary of an existing or planned major facility where adverse effects on *surrounding sensitive land uses* have a moderate likelihood of occurring. If a land use proposal would place a new or expanding *sensitive land use* within a *major facility's* AOI or a new or expanding *major facility* would capture *sensitive land uses* within its AOI, a *compatibility study* will be required (see **Figure 3**). *Compatibility studies* assess potential impacts associated with a planning proposal, determine a recommended *separation distance* for the proposed use, and if required, identify necessary mitigation measures to prevent impacts and demonstrate the need for a *sensitive land use* in a specific location (see **Section 2.6**).

If a land use proposal would place a proposed *sensitive land use* outside of a *major facility's* AOI, or when a new *major facility* is proposed in a location that does not capture existing or planned *sensitive land uses* within a *major facility's* AOI, this Guideline does not require *compatibility studies*.

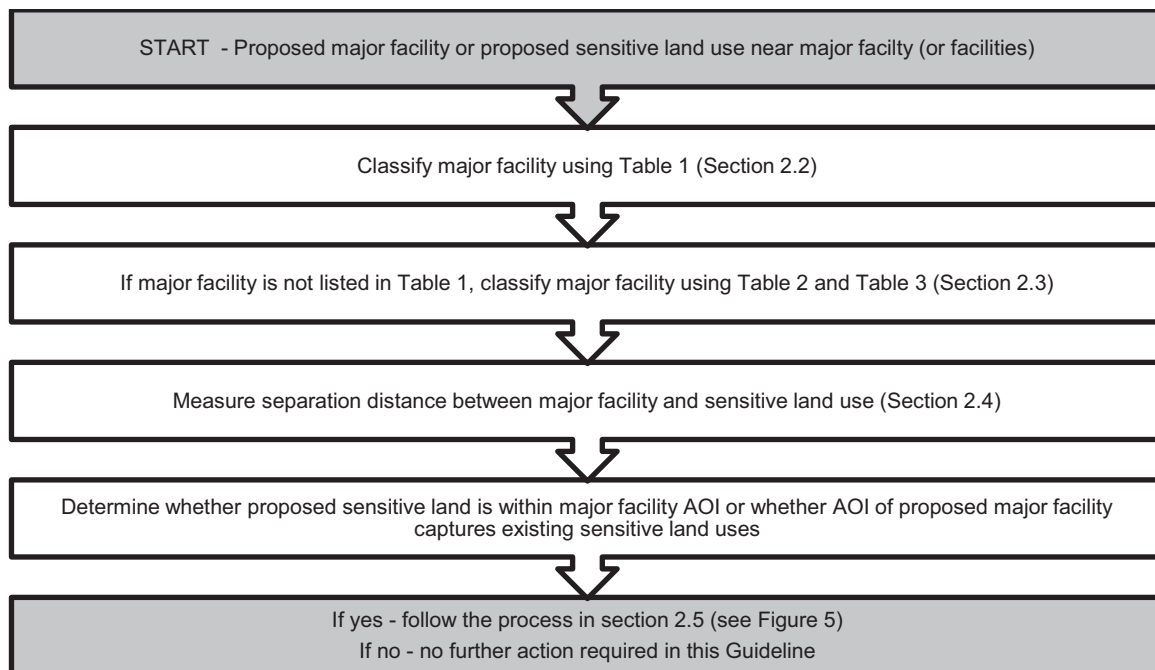


Figure 3 – Steps to determine if land use compatibility study is required.

AOIs are intended to be used as the study area as well as the default *separation distance* from a *major facility* unless *compatibility studies* recommend a different *separation distance*. The *separation distance* used should be sufficient to permit the functioning of the two potentially incompatible land uses without an *adverse effect* to the *sensitive land use* or potential impacts to *major facilities*. Separation of incompatible

land uses under this Guideline does not result in 'freezing' or denying usage of the intervening land. Other compatible, transitional uses may be able to be developed in the intervening land.

2.1.2 Planning Authority-Determined Alternate AOIs

The AOI distances noted in **Table 1** and **Table 2** of this Guideline must be used as the AOI in most situations. In relation to specific areas or sites, *planning authorities* may determine an alternate AOI, which may be smaller or larger than the AOI outlined in this Guideline, if supporting studies are completed to justify this alternate AOI. An alternate AOI may be smaller, for example in locations with a planning objective of increasing *intensification* as well as avoiding conflicts. An alternate AOI may also be larger if the planning authority has determined that *adverse effects* may occur outside of the Guideline's AOI, for example in consideration of other area or facility specific emissions. In either case, the planning authority may choose to implement policies that restrict uses and/or require *compatibility studies* based on their studies.

The development of an alternate AOI is a voluntary activity undertaken by the planning authority that is intended to support its broader land use planning framework. As such, studies to justify an alternate AOI should be developed by the planning authority (supported by consultants as necessary), and should take place during a broader planning process (such as review of Official Plans, Secondary Plans and/or zoning by-laws) so that the alternate AOI can inform the overall community structure of a particular area surrounding a *major facility* or *employment area*, and inform policies setting the study requirements for future development applications in the area.

Alternate AOIs should only be developed for a specific *major facility* or specific *employment area*, and not for a sector of *major facilities*. For example, work completed to justify an alternate AOI at steel mill A, does not mean that all steel mills can have the same alternate AOI; the *planning authority* would undertake separate studies for each steel mill (in each location) to develop an alternate AOI appropriate for that specific steel mill.

Planning authorities may only consider using an alternate AOI if it can be justified through the results of a technical and scientific process similar to that of a *compatibility study*. The study should include qualitative and quantitative assessments of the magnitude, significance, frequency and extent of the expected impacts to the *major facility* or to *sensitive land uses*. The assessments would need to demonstrate that impacts are expected within a smaller area than the AOI specified in this Guideline. **The alternate AOI must never be smaller than the MSD in the Guideline (see Section 2.1.3).**

2.1.3 Minimum Separation Distances (MSDs)

MSDs are defined in this Guideline as recommended minimum *separation distances*. They are smaller than the AOI and are the distance within which *adverse effects* and compatibility issues are highly likely to occur. Proposals should not result in *sensitive land uses* being located in MSDs, as *adverse effects* are highly likely to occur. Such proposals should only be considered where there is a *demonstrated need* for the proposed use in that location and no other location is feasible, and mitigation to prevent *adverse effects* is possible and will be implemented. Avoiding *sensitive land uses* being located in the MSD should be feasible in areas of new development such as areas of settlement expansion and new built-up areas, and in *employment areas* intended for industrial or manufacturing uses in the long-term. If a new or expanding *sensitive land use* is proposed within a *major facility's* MSD or a new or expanding *major facility* would result in *sensitive land uses* within its MSD, *compatibility studies* and mitigation measures to address potential *adverse effects* on *sensitive land uses* and potential impacts to *major facilities* will be required. A *demonstration of need* will also be required if the proposed land use is a *sensitive land use* within the MSD of an existing or planned *major facility*.

2.2 How to Classify a Major Facility with an Assigned AOI and MSD

Certain types of *major facilities* have been assigned specific AOIs and MSDs. The *proponent* and planning authority should first determine whether a given *major facility* type has been assigned an AOI and MSD in **Table 1**. Where available, the facility-specific AOIs and MSDs in **Table 1** should be used instead of class-related AOIs and MSDs in **Table 2**.

Due to the differing exact characteristics of emissions of different activities, some types of *major facilities* have a larger MSD relative to their AOI compared to some other *major facility* types.

Where other types of *major facilities* are being considered (i.e. facilities that are not listed in this table), the approach outlined in **Section 2.3** to determine an appropriate class-related AOI and MSD should be used and **Table 2** and **Table 3** should be referenced.

Table 1 – Area of influence and minimum separation distance for select major facilities.

Select Major Facility	Description of Major Facility	AOI & Class	Minimum Separation Distance
Aggregate Operations	Aggregate extraction, Resource extraction, Other mineral quarries	1,000m Class 3*	500m*
Asphalt Manufacturing	Asphalt mixture and block manufacturing, Asphalt shingle and coating manufacturing	1,000m Class 3	300m
Cannabis production and processing facilities	Indoor cannabis production facilities that are located in a <i>settlement area</i> on lands that are zoned for industrial uses; and all cannabis processing facilities	2,000m Class 5	500m
Cement Manufacturing	Cement manufacturing and distribution	2,000m Class 5	500m
Chemical Product Manufacturing	Inorganic chemical manufacturing, Household cleaning and miscellaneous product manufacturing	2,000m Class 5	500m
Composting Facilities	Composting facilities	1,500m Class 4	500m
Concrete (Ready-mix)	Ready-mix and concrete product manufacturing facilities	250m Class 1	100m
Industrial Anaerobic Digesters	Anaerobic digesters that are not agricultural uses	1000 m Class 3	500m
Food Manufacturing	General industrial manufacturing of food products	500m Class 1	200m
Industrial Food Mills (non-agricultural)	Wet corn or flour mill	750m Class 2	300m
Landfills and Dumps (see Section 7.2 of Appendix E)	Operating and non-operating sites	case-by-case Class 5	500m

Meat and Meat Product Processes	Slaughterhouses and rendering facilities, Meat by-product processing, Production of foods using fats or oils, Cooking oil production	1,500m Class 4	500m
Metal and Glass Parts Manufacturing	Manufacturing steel parts, Foundries, Metal stamping, Manufacturing glass or fiber glass auto parts	600m Class 2	300m
Oil Refinery	Refinery for oil and oil products	2,000m Class 5	500m
Painting/Coating	Application of paint, solvent, lacquer or other coating/ Includes paint spray booths, electroplating, tanneries	400m Class 1	100m
Paper Manufacturing	Paper, newsprint and paperboard mills	1,000m Class 3	400m
Plastics Manufacturing	Manufacturing plastic or rubber products	500m Class 1	100m
Recycling Facilities – General	The sorting, processing, storage and transfer of recycled material (except auto parts)	900m Class 3	200m
Recycling Facilities – End-of-Life Vehicles	The sorting, processing, storage and transfer of motor vehicles	2,000m Class 5	300m
Scrap Yards	Scrap metal recyclers, auto recyclers, auto wreckers	1,500m Class 4	300m
Steel Mills	Iron and steel manufacturing	2,000m Class 5	500m
Waste Transfer Stations	The sorting, processing and transfer of waste	400m Class 1	100m
Sewage Lagoons	Sewage treatment lagoons	500m Class 1	200m

Municipal and private communal wastewater facilities (small)	Facilities with a rated capacity less than 25,000 cubic metres per day	300m Class 1	100m
Municipal and private communal wastewater facilities (large)	Facilities with a rated capacity more than 25,000 cubic metres per day	1,250m Class 4	500m

* AOI and MSD only applies to new or expanding *sensitive land use* proposals near *major facility* aggregate operations.

2.3 How to Classify a Major Facility with No Facility-Specific AOI and MSD

This section provides an overview of how to determine the AOI and MSD based on a class of facilities, where the specific *major facility* type is not listed in **Table 1**.

1. Identify the type of the major facility

Table 2 of this Guideline provides a description and examples of *major facility* classes to serve as a guide for determining an AOI and MSD. There are 5 classes of *major facilities*.

The first step in the process of classifying is to identify the type of *major facility* and seek information to better understand its operation and potential *adverse effects*. If a *major facility* is being proposed, the facility type should be known. If a *sensitive land use* is being proposed or planned, particularly relative to a planned *employment area*, the planning authority should be consulted to advise on specific types of uses permitted under local zoning-by-laws and future development plans. Where *major facility* development plans are unknown or where the planning authority is determining an AOI for an area which contains multiple *major facilities*, the AOI for the largest scale *major facility* that could be permitted by the existing planning framework should be assumed ("worst case" scenario), unless, in collaboration with the planning authority, it is determined that certain uses are impractical in a specific area.

2. Consider the scale and characteristics the operations

Identify the *adverse effects* commonly associated with the type of existing or proposed *major facility* (see **Table 3**) and its operations, including:

- impacts related to the timing of operations (e.g. day-time, shift or 24-hour operations);
- fugitive emissions and vehicular emissions related to the operation;

- traffic related to the operation;
- noise, vibration and *fugitive dust* from indoor and outdoor operations (e.g. wood cutting, outdoor welding, moving stored materials);
- *adverse effects* that may result from ancillary operations (e.g. delivery of raw materials via rail cars or marine facilities, facility lighting);
- odours from indoor and outdoor operations (e.g. organic waste handling, outdoor storage for composting facilities, wastewater treatment lagoons);
- any history of complaints in the area about adverse effects.

Where available, use approval information in the existing ECA or EASR for the *major facility* (e.g. existing ECAs and EASRs) as a source of information, as they may include conditions on the timing of operations, setbacks or systems for mitigating impacts for facilities in the area. ECAs and EASR information can be accessed at the Ministry's [Access Environment](#) site and may be useful.

Note, the level of *adverse effects* anticipated should only be assessed from day-to-day operations, not from emergency situations or spills.

3. Select the appropriate class

Based on available information and professional expertise, a facility class and associated AOI and MSD is then selected for a *major facility*.

The planning authority will need to be satisfied that the classification is appropriate. *Proponents* are encouraged to consult with the planning authority before proceeding further to verify that the information they are gathering will be satisfactory to them.

Table 2 – Area of influence and minimum separation distance for classes of major facilities.

Class	Description of Major Facility	AOI	Examples of Major Facility (see Table 1 for more examples)	Minimum Separation Distance
Class 1	Operations with known smaller <i>adverse effects</i> .	500m	Food Manufacturing Sewage Lagoons Various EASR activities	200m
Class 2	Operations with moderate <i>adverse effects</i> . May include some outdoor operations.	750m	Manufacturing Metal and Glass Parts	300m

			Examples of Major Facility (see Table 1 for more examples)	Minimum Separation Distance
Class 3	Operations with moderate to significant <i>adverse effects</i> that may be difficult to mitigate. May include larger outdoor operations.	1,000m	Aggregate Operations (in relation to <i>sensitive land use</i> proposals)	500m
Class 4	Operations with significant <i>adverse effects</i> that may be difficult to mitigate. May include larger outdoor operations.	1,500m	Meat and meat product processes (slaughterhouses and rendering facilities)	500m
Class 5	Operations with the most significant <i>adverse effects</i> , that may be difficult to mitigate. May include larger outdoor operations.	2,000m	Chemical product manufacturing	500m

Most criteria should fall into one given category in order to classify a facility into that class. *Planning authorities* may wish to use **Table 3** to create their own set of criteria that is specific to their circumstances.

Table 3 – Characteristics for classifying major facilities.

	CLASS 1 → CLASS 2 → CLASS 3 → CLASS 4 → CLASS 5		
	IMPACTS		
Noise	Sound is not audible off property	Sound occasionally audible off property	Sound frequently audible off property
Vibration	No ground borne vibration on plant property	Possible ground-borne vibration, but cannot be perceived off property	Ground-borne vibration can frequently be perceived off property
Dust (Point Source)	Infrequent and not intense	Frequent and occasionally intense	Persistent and/or intense

CLASS 1 → CLASS 2 → CLASS 3 → CLASS 4 → CLASS 5

Dust (Fugitive Emissions)	Low probability of fugitive emissions	Moderate probability of fugitive emissions	High probability of fugitive emissions
Odour	Infrequent and not offensive	Frequent and occasionally offensive	Persistent and/or usually offensive

SCALE OF OPERATION

Scale of Production	Small scale plant	Medium level of production allowed	Large production levels
Outside Storage	Minimal storage	Outside storage permitted	Outside storage of raw and finished products
Process	Self-contained plant or building	Outdoor storage of low to moderate amounts of wastes or materials	Outdoor storage of large amounts of wastes or materials
Process Outputs	Produces/stores a packaged product	Periodic outputs of minor annoyance	Frequent outputs of major annoyances
Hours of Operation	Daytime operations only	Shift operations permitted at times	Daily or 24 hour shift operations permitted
On-site Movement	Infrequent movement of products and/or heavy trucks	Frequent movement of products and/or heavy trucks with the majority of movements during daytime hours	Continuous movement of products by heavy trucks and rail cars including at night

2.4 How to Measure Separation Distances, AOIs and MSDs

A *separation distance*, AOI or MSD is typically measured as the actual distance between the property line of a *sensitive land use* and the property line of a *major facility*.

To determine whether the proposal would result in an existing or planned *sensitive land use* within the AOI or MSD for a particular facility, the *proponent* should do the following:

- measure the current *separation distance* between the property boundary of a proposed *sensitive land use* or *major facility* to the property boundary of the existing *sensitive land use* or *major facility*; and
- determine whether the *separation distance* falls within the AOI or MSD.

Measuring the *separation distance*, AOI and MSD from the *major facility's* property boundary, instead of from the *major facility* building or source of emission, is recommended, as it will account for any future expansions that may be contemplated or new *major facilities* that may be developed within the property boundary.

However, the planning authority may allow measurement of the *separation distance*, AOI and MSD from the *major facility's* building or equipment that is the actual source of *adverse effects* as opposed to the property line. This approach could be used, for example, if the *major facility* has a *buffer area* on the property which was included in order to shield impacts of the *major facility* from adjacent uses. However, this method does not take into account any future expansions or future outdoor works such as vehicular traffic, or onsite storage and maintenance. It should only be used if the planning authority and *major facility* is agreeable and if future expansions of the *major facility* are not expected.

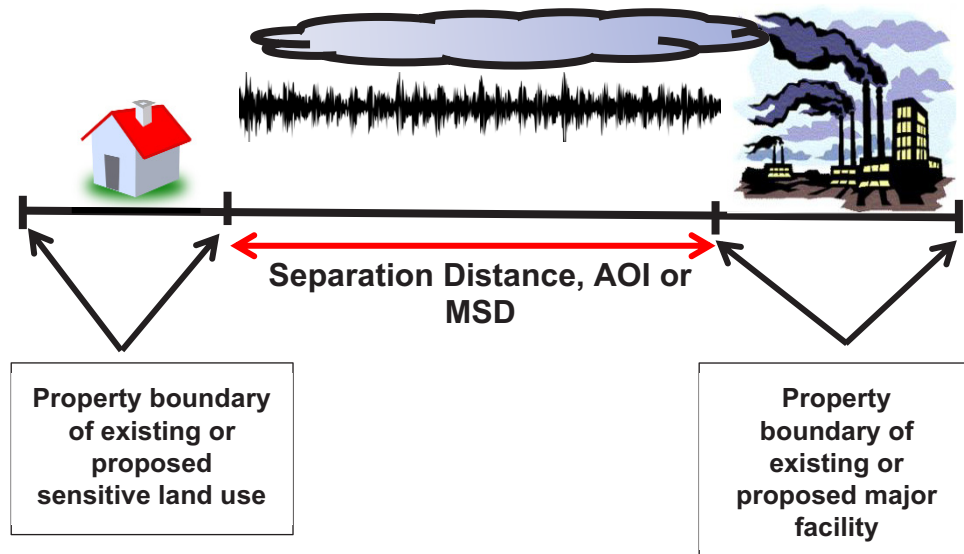


Figure 4 – Measuring area of influence and minimum separation distance.

2.5 What to do if Development is Proposed within an AOI or MSD

When a new or expanding *sensitive land use* is proposed within a *major facility's* AOI or MSD, or when a proposed or expanding *major facility's* AOI or MSD captures existing or planned *sensitive land uses*, the steps below apply and are the responsibility of the proponent of the planning application. See **Figure 4** and **Figure 5**.

- 1) Carry out *compatibility studies* (see **Section 2.6**).
- 2) Determine through the *compatibility studies* whether *adverse effects* to *sensitive land uses* from an existing or planned *major facility* or impacts to *major facilities* are expected. The determination must include consideration of relevant ministry standards or technical guidelines and assessments. Then:
 - a) If a *compatibility study* shows that no *adverse effects* to *sensitive land uses* or impacts to *major facilities* is expected at the proposed *separation distance* (or a revised *separation distance* based on the study), without mitigation, then no further action is required (unless the proposal is for a new *sensitive land use* located within the MSD, see c) below).
 - b) If a *compatibility study* shows that *adverse effects* to *sensitive land uses* or impacts to *major facilities* are expected at a proposed *separation distance*, mitigation measures must be identified (see **Section 3**). Implementation of identified mitigation measures must be required as part of the planning approval process, and they must be maintained over time.
 - c) If a proposed new *sensitive land use* is located within the AOI of a *major facility* and mitigation measures are identified or if a proposed new *sensitive land use* is located in the MSD of a *major facility*, a *demonstration of need* is required (see **Section 2.8**).

The *planning authority* is responsible for reviewing the documents (e.g. *compatibility studies*) prepared by the *proponent* and must be in agreement with the conclusions of the documents, before *Planning Act* approval is provided. When *adverse effects* from *major facilities* cannot be minimized and mitigated such that no *adverse effects* are expected, the *planning authority* must not permit the new development.

2.6 Compatibility Studies

Compatibility studies assess potential *adverse effects* to *sensitive land uses* and impacts to *major facilities* and recommend *separation distances* and mitigation measures to prevent *adverse effects* or impacts to surrounding land uses.

Compatibility studies are required when:

- a new or expanding *sensitive land use* is proposed within a *major facility's* AOI (including MSD); or
- a new or expanding *major facility* is proposed to locate where there are existing or planned *sensitive land uses* within the AOI (including MSD) of the proposed *major facility*.

Compatibility studies should be prepared for the *proponent* by qualified individuals with experience in preparing technical assessments. The *planning authority* is responsible for reviewing the *compatibility studies* submitted by the *proponent*, and must be in agreement with the conclusions of the documents, prior to moving forward through the planning approvals process. If in-house expertise is not available, the *planning authority* should consider having a peer review of studies at the expense of the *proponent*.

Technical guidance on preparing *compatibility studies* addressing noise, dust and odour is provided in **Appendix B**. Although this Guideline focuses on noise, dust and odour, the *planning authority* can and should require the *proponent* to avoid, minimize and mitigate any other relevant *adverse effects* that may exist (e.g. other air *contaminants*, toxins, traffic). The *planning authority* can also, at their discretion, undertake or require broader studies outside of a site-specific study, such as regional or cumulative impact modeling. This could be appropriate if there are multiple existing *major facilities* or multiple proposals for potentially incompatible development in a regional area, and the planning authority may want to assess impacts on an area-wide scale.

Section 2.7 provides a list of the documentation that is required to be included as part of *compatibility studies*. Some of the information required for completing *compatibility studies* may not be accessible to the *proponent* due to its proprietary nature or if a *major facility* or *sensitive land use* is not able or willing to share the information. In such cases, the *compatibility study* should note the deficiencies in information, and make conservative estimates for the *separation distance* and mitigation measures to minimize and mitigate potential *adverse effects to sensitive land uses* or impacts to *major facilities*. The *planning authority* should use its discretion to ensure that the information provided is sufficient to justify the conclusions of the *compatibility study* and if not, require revision to address any noted deficiencies or if unsatisfactory, be rejected.

Proponents should also carry out pre-consultation with the planning authority to discuss the application and *compatibility study* requirements, including potential impacts to be considered and potential information sources. *Proponents* must also share information and contact *major facilities* or *sensitive land uses* (depending on the proposal) based on the AOI to inform the *compatibility study*. Information sharing, engagement and consultation is discussed in **Appendix C**.

2.7 General Documentation in Compatibility Studies

In addition to the required technical components of *compatibility studies* (**Appendix B**), the following general documentation should be provided as part of required *compatibility studies*. The information may be integrated as part of technical *compatibility studies* done specifically for noise, dust, odour or other *contaminants* or kept as a stand-alone “general documentation” piece. For *proponents* of *major facilities*, the study area would be the AOI. For *proponents* of *sensitive land uses*, the study area should be large enough to include all the *major facilities* that capture the proposed sensitive land use in their AOIs.

- i. A general site description of the study area, including the nature of any land uses within the area (e.g. numbers of units, size, type).
- ii. Detailed mapping and descriptions showing the following:
 - For proposed *sensitive land uses*:
 - the nature of the proposed sensitive land use;
 - all existing and planned *major facilities* in the study area; and
 - the *separation distance* between the proposed sensitive land use and existing and planned *major facilities*, including whether the proposed sensitive land use is captured within any AOIs and MSDs.
 - For proposed *major facilities*:
 - the nature of the proposed *major facility*;
 - all existing and planned *sensitive land uses* in the study area; and
 - the *separation distance* between the proposed *major facility* and existing and planned *sensitive land uses*, including whether any *sensitive land uses* are captured within the MSD.
- iii. Relevant excerpts from the OP and/or zoning by-law for properties in the study area, including vacant property designations or zoning, to indicate the full range of permitted uses and enable a complete assessment of potential impacts.
- iv. Classification of the *major facilities* within the study area according to the procedure described in **Section 2.2** and **Section 2.3**.
- v. Description of the engagement completed with residents or *major facility* owners within the study area, including who was contacted, how they were contacted, what opportunities were provided to provide input into the proposal and how the input was incorporated into the *compatibility study*.
- vi. The assessment(s) of the *adverse effects* being generated by each *major facility* and for proposed *sensitive land uses*, potential impacts to *major facilities*, including:

- how the potential *adverse effects* may impact *sensitive land uses* within its AOI informed by required technical assessments (**Appendix B** provides specific guidance to assess noise, dust and odour impacts); and
 - possible operational impacts (e.g. ability to expand) on existing or planned *major facilities*, where applicable.
- vii. For each *major facility* within the study area, provide information that informed the assessment(s) of *adverse effects*, such as:
- the duration, timing and types of operational activities, shipping, receiving and other transport activities, and outputs/*contaminants* associated with *major facilities*;
 - the hours of operation/normal use periods for *sensitive land uses*
 - design details and number, type and location of windows and doors in sensitive land use buildings;
 - wind patterns (predominant winds, wind roses), topography and natural and man-made barriers/*buffers* (e.g. elevation, vegetation, walls, berms, ground and surface water) in the study area;
 - any existing complaint history (where available) associated with the operation of the *major facility* (or *major facilities*) which would impact *sensitive land uses*, and any actions undertaken to address the concerns.
- viii. Description of proposed mitigation measures to address potential adverse effects or impacts, if required (see **Section 3**), when they will be implemented, and ongoing maintenance requirements. This should include a description of the extent to which a proposed development and associated mitigation may require future permissions or other authorizations from the Ministry or other ministries, such as an ECA or an EASR.
- ix. Conclusions, including the following:
- Whether the proposed *sensitive land use* is expected to experience *adverse effects* from the nearby *major facilities*, the proposed *major facility* is expected to have *adverse effects* on the nearby *sensitive land uses*, or the proposed *sensitive land use* is expected to have impacts on nearby *major facilities*.
 - A recommendation of whether the proposed development should move forward based on the analysis completed in general documentation and technical studies.
 - A proposed *separation distance* from the proposed use to the *major facilities* or *sensitive land uses* within the study area, whichever is applicable, and within which *adverse effects* or impacts would not be expected. This should be provided both without mitigation measures and, if any are necessary, with proposed mitigation measures implemented.

2.8 Demonstration of Need

A *demonstration of need* is an assessment that determines whether there is an identified need for the proposed use in the proposed location and evaluates alternative locations for the proposed use if avoidance is not possible. This assessment is only required for *proponents of sensitive land uses*.

A *demonstration of need* is required to be carried out by a *proponent* of a *sensitive land use* when:

- a *new sensitive land use* is proposed within a *major facility's* AOI and mitigation measures would be needed to ensure no *adverse effects* or potential impacts; or
- a *new sensitive land use* is proposed within a *major facility's* MSD (regardless of whether mitigation measures are assessed to be needed or not).

The information required to be reported in a *demonstration of need* must accompany the *compatibility study* and can be included as part of existing municipal planning documents such as planning justification reports.

The *planning authority* must review the *demonstration of need* provided by the *proponent* and must be satisfied that the report is complete and with the analyses and conclusions presented. In respect of the *demonstration of need*, and in addition to the other compatibility tests associated with approving a proposal, the *planning authority* must only permit the proposal if they are satisfied that there is an identified need and sound planning rationale for the proposed use in that location, and that alternative locations or areas for the proposed use have been evaluated and there are no reasonable alternative locations or areas.

The *demonstration of need* should include the following:

1. Demonstrate that there is a need for the proposed use in that particular location. This includes answering the following questions:
 - a. Do policies and objectives in the planning authority's applicable planning documents (such as OPs) and relevant provincial policies and plans (e.g. PPS, A Place to Grow) support locating the use in the proposed location? For example, consider policies/objectives related to complete communities, housing diversification, and community amenities.
 - b. Are there demographic considerations, such as expected land supply, housing strategy, and forecasted growth or growth targets in population or employment, that would support the use in the proposed location?
 - c. How will the proposed use, in its proposed location, support the community or other existing uses in the area? For example, does it provide necessities for daily living, including an appropriate mix of jobs,

local stores, and services, a full range of housing and transportation options and public service facilities?

- d. Are there community amenities and infrastructure (i.e. transportation, servicing) available to support the use?
 - e. Is the proposed use to be located within a designated strategic growth area which by nature should include multiple types of uses, such as an MTSA (within the Greater Golden Horseshoe growth plan area) or nodes and corridors generally?
2. Identify other locations in the municipality that have been designated and zoned specifically for this use and explain why they have not been chosen for the proposed use.
 3. Provide a list of at least two alternative locations that have been considered outside of the *major facility's* AOI and for each, discuss whether they would be appropriate for this use as compared to the preferred location. This discussion should address the same questions presented in #1a-e.
 4. Identify other potential uses for this particular site that would not be considered incompatible and explain why they have not been chosen for the proposed location.
 5. The conclusion of the demonstration of the need should discuss why the proposed use in the proposed location is the best option, having considered the answers to the questions presented in #1a-e.

Note: unless the proposal relates to an expansion of an existing use, current ownership of property is not a factor that should be considered within the *demonstration of need*.

2.9 Decision Tree for Land Use Compatibility

The following figure is a visual representation of the process outlined in **Section 2.5**.

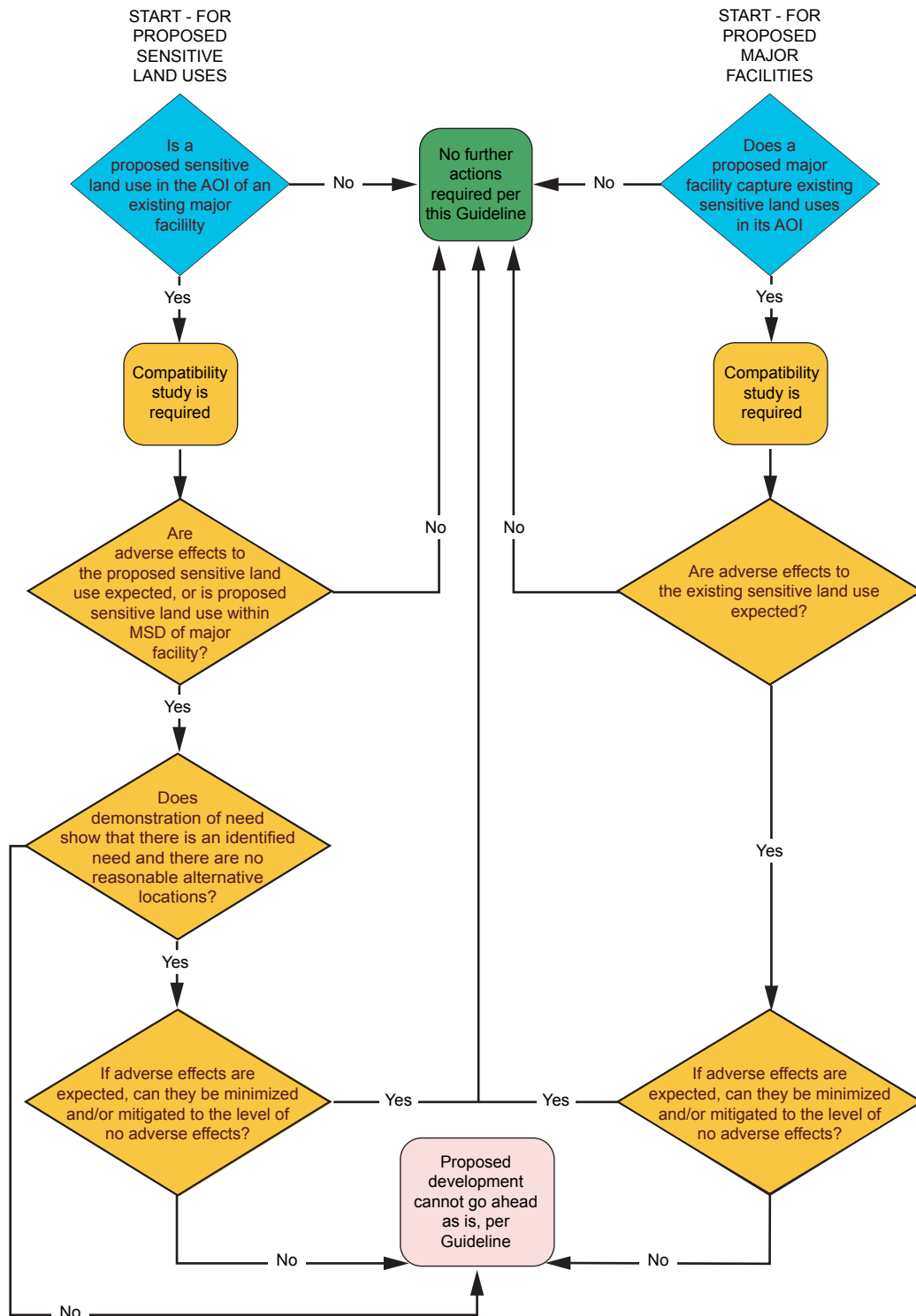


Figure 5 – Decision tree for land use compatibility.

3. MITIGATION

Avoidance, through separation of land uses, is the preferred approach to prevent land use compatibility issues and must be used wherever possible to avoid land use compatibility impacts. In many situations, including most greenfield development and outside *settlement area* situations, it is expected that separation can be achieved. As per policy 1.2.6.1 of the PPS, where avoidance is not possible, and potential impacts are minimized as much as possible through separation, mitigation measures for *adverse effects* will be needed in order for a proposed development to go forward. Mitigation measures are methods that can be used to prevent *adverse effects* arising from a *major facility* after separation has been maximized.

The type of mitigation required will depend on the type and severity of potential *adverse effect(s)* as well as operating requirements of the facility. This section provides information on the types of mitigation that could be used to address compatibility issues between land uses.

Mitigation measures will likely require discussions and negotiations between the *proponent* of a *sensitive land use* and the *major facility*. *Planning authorities* can facilitate discussions between the *proponents* of development (*sensitive land uses* or *major facilities*) and existing property owners/operators. The discussions should focus on:

- Can the *sensitive land use* be introduced subject to mitigation?
- What type(s) of mitigation should be put in place?
- Who has responsibility for ongoing inspection and upkeep of mitigation measures as needed?
- Who will pay for the mitigation measures?
- How will implementation of mitigation measures form part of planning approvals or other legal agreement?

It is the *proponent's* responsibility to demonstrate the effectiveness of any proposed mitigation measure to the satisfaction of the planning authority. *Planning authorities* should also ensure that any mitigation measures put in place are in compliance with provincial requirements.

An assessment of the different types of recommended mitigation measures (if needed) to minimize and mitigate *adverse effects* to *sensitive land uses* from *major facilities* must form part of a *compatibility study*. Where appropriate, *proponents* should begin discussing possible mitigation measures with affected landowners, *planning authorities* and relevant provincial staff early in the planning process. Part of this assessment could include a scan of mitigation measures being used at similar *major facilities* and which have been determined to be effective.

The below sections provide discussion on mitigation, and examples of it, but technical documents including [NPC-300](#), Environmental Noise Guideline–Stationary and Transportation Sources–Approval and Planning, and the draft Odour Guideline provide additional considerations and examples.

3.1 At-Source Mitigation

Mitigation at-source is mitigation that is used at a *major facility* to decrease *adverse effects* from its operations. Mitigation at-source is typically more effective than mitigation at-receptor.

Examples of at-source mitigation can include:

- installation and maintenance of emission mitigation equipment such as:
 - filters on exhausts to reduce air emissions;
 - air scrubbers to reduce air emissions; and
 - silencers to reduce noise;
- process or chemical changes for manufacturing facilities;
- enclosures for outdoor operations to reduce off-site noise, dust and odour;
- orientation of new buildings to reduce noise and mitigate bright lighting;
- physical placement of outdoor operations away from *sensitive land uses* to reduce *adverse effects*;
- installation of vibration pads to reduce vibration from stamping presses and forging hammers; and
- installation and maintenance of emission mitigation equipment such as filters on exhausts to reduce air emissions.

3.2 Operational Mitigation

Operational mitigation is a type of at-source mitigation which includes changes made to a *major facility's* existing operations to reduce adverse effects.

Examples of operational mitigation can include:

- wheel washing stations to reduce *fugitive dust*;
- limiting noisy operations to day-time hours;
- use of alternate truck routes;
- outdoor storage of waste materials in closed containers; and
- broad band reverse warning alarm systems for trucks reversing.

3.3 At-Receptor Mitigation

At-receptor mitigation refers to mitigation that would minimize and mitigate *adverse effects* at the receptor and is located at the *sensitive land use* (e.g. an acoustic barrier on residential lands, triple-glazed windows, etc.). This type of mitigation is dependent on long-term maintenance by individual owners or operators of a *sensitive land use*. Where at-receptor mitigation is proposed, long-term maintenance should be ensured.

It should be recognized that these individuals may not have been part of planning decisions and may not be aware of the importance of this mitigation to minimize *adverse effects*. For this reason, where at-receptor mitigation is used, it is recommended that *warning clauses* or notices on title be registered to inform future buyers of the potential for *adverse effects* and the need to maintain the mitigation (for more information on *warning clauses*, see **Section 4.3.2** of this Guideline).

At-receptor mitigation may be implemented on the property of the receptor or directly on a building.

Examples of at-receptor mitigation include:

- building orientation to direct exposed areas away from source;
- laying out the site such as that receptor is furthest away from source;
- at-property berm/acoustic barrier;
- enclosed areas that act as noise *buffer*;
- acoustic barriers on building;
- fixed/inoperable windows;
- restriction to rooftop gardens/terraces;
- protection of indoor air quality through centralized heating/air conditioning systems with air intake appropriately located away from odour sources;
- individual heating/air conditioning systems associated with each residential unit equipped with carbon filters; and
- locating air intakes well above grade.

At-receptor mitigation is not recognized by the Ministry to mitigate odour and dust impacts. However, at-receptor mitigation is recognized by the Ministry as mitigation for noise only in the ECA application review process if the area is designated as "Class 4" under [NPC-300](#).

3.4 Buffers

Buffers are a mitigation measure which involves a barrier used to prevent or minimize the *adverse effects* of incompatible land uses. Note that *buffers* which may be satisfactory for the control of noise may not be adequate for dust, odours, or gaseous air *contaminants*. A berm or wall may have little or no effect on these, and distance is often the only effective *buffer*.

It should be noted also that narrow strips of plantings, trees or shrubs, and privacy fences may have little or no actual effect with regard to the reduction of noise or air pollution. These *buffers* may provide limited benefit, however, through screening the source from view and lessening the perceived impact.

Examples of *buffers* include:

- fences and walls;
- berms;
- vegetation/landscaping/treed areas;
- parking lots; and
- a land use that is different from the two conflicting ones but compatible with each of them.

3.5 Phasing

In some cases, phasing or sequencing of development may be able to mitigate *adverse effects* between users. If a *major facility* will be changing to operations with fewer and/or less impactful effects or relocating, development may be approved sequentially. If possible, development approvals could be timed so that *sensitive land uses* closest to a *major facility* are not developed until after the operation has changed or moved.

3.6 Effectiveness and Limitations of Mitigation Measures

Mitigation measures are specific to the current *major facility* and *sensitive land use*, and are to be based on the facility's scale and design, and the duration, frequency and the type of *discharges/impacts*.

To be effective, the mitigation measure should be appropriately designed, constructed and maintained, bearing in mind the overall intended purpose. The measure should permit the normal functioning of the two incompatible land uses without conflict.

3.7 Requirements for Mitigation

When mitigation is required to meet the land use compatibility requirements of the PPS and A Place to Grow, legal requirements to have mitigation implemented, and then maintained as necessary, should be in place. The legal requirements must apply to the person responsible for implementation and any costs (if applicable), and if necessary, ensure maintenance for any required mitigation measures in the long-term. Typically, legal requirements would be addressed through agreements and conditions applied directly on a given land use planning approval.

For a range of planning approvals, conditions with respect to mitigation can be applied as pre-approval conditions. Further, in many cases, a legal agreement can be used to apply conditions that would be fulfilled following approval, including maintenance of mitigation measures. A range of legal agreements are possible under the *Planning Act*, including agreements entered into as part of a condition on the approval of plans of subdivision, plans of condominium, consents/severances, site plan control, and the issuance of a permit under the Community Permit Planning System (CPPS). *Planning authorities* are responsible for ensuring available approvals and agreements can ensure implementation and maintenance of mitigation measures. See **Table 4** for more general discussion on the use of planning approvals in land use compatibility.

It is possible that not all of the mitigation measures that will ultimately be needed will be confirmed or implemented at the planning approval stage. In these situations, when the planning authority is reviewing the proposed development, if any necessary mitigation measures are not confirmed on the basis of a planning approval, the planning authority should still be satisfied that the mitigation is feasible and will be addressed through a later approval (e.g. ECA if applicable). Note that the use of a subsequent ECA as a mechanism for mitigation would only apply in relation to a proposal for a *major facility* and to require at-source mitigation implemented by a *major facility* subject to an ECA. A new or amended ECA cannot be assumed in relation to a planning approval for a new *sensitive land use*.

Where mitigation measures are proposed to be implemented by a party other than the *proponent* of a proposal to enable that proposal to proceed, implementation of those measures should be complete as a condition of approval, and if necessary, agreements should be in place to ensure operation measures are implemented and to ensure all measures are maintained. It is a best practice to consider three party agreements (*major facility*, *sensitive land use*, and planning authority) where appropriate.

In some cases, agreements must be able to bind subsequent landowners (be registered on title) to ensure ongoing implementation of measures. Agreements may also be used to achieve the placing of warning clauses on title where, for example, ongoing nuisance effects may be expected at a property (see Warning Causes in **Section 4.3.2**).

Agreement(s) must be legally enforceable, signed by key parties, and should:

- Outline the short-term and long-term responsibilities of each party (e.g. developer, *major facility*, planning authority etc.), including but not limited to financial and operational responsibilities.
- Only assign responsibilities for fulfilling conditions to parties that are signatories to the agreement.
- Outline responsibilities for obtaining planning approvals and ECAs (and other environmental permissions) that may be needed.
- Outline who is responsible for undertaking the studies and associated costs for the approval applications, studies (including hiring qualified individuals), mitigation measures, monitoring, etc.
- Provide for registration on title, as necessary, to bind subsequent property owners, and to provide for *warning clause* to be placed on title as necessary.
- Outline responsibilities and expectations for consultations between parties and with the public.
- Safeguard any confidential information from the facility that may be required.
- Provide confirmation in writing that any required mitigation measures are implemented and maintained, and a description of how mitigation measures will be implemented and maintained.
- Be adaptable to future change, such as in situations where business operations at a *major facility* change and there is a need for new mitigation measures.

3.8 Compliance

Planning authorities and the Ministry have roles in ensuring compliance with conditions of planning approvals and environmental permissions, respectively. The EPA gives the Ministry the authority to respond to concerns about impacts from land use compatibility issues (i.e. potential *adverse effects*) as appropriate. A risk-based approach* is used by the Ministry to address known and potential violations of the law and risks to the environment or human health. Per its compliance framework, the Ministry may refer incidents related to compatibility issues that stem from planning decisions to a more appropriate level of government or agency (e.g. municipality).

It is important to note that after a *major facility* has obtained its necessary planning approvals to be located in an area that may be close to a *sensitive land use* (e.g. a residential development), or vice versa where a *sensitive land use* was approved close to an existing facility, the tools available to the Ministry to deal with *discharges* of *contaminants* from that facility, as well as technical solutions may be limited. For example, when responding to a complaint from residents situated close to such a facility, the Ministry may only require the facility to take compliance actions to reduce

the *discharge* of a *contaminant* where it is reasonably believed action is required to bring the facility into compliance with the EPA. If the Ministry determines that a *major facility* is in compliance with all ministry requirements and standards under the EPA and the *major facility* is using available technology to mitigate potential impacts, additional compliance actions may not be possible or required. This may result in a situation where the *sensitive land use* has to co-exist with minor impacts from the *major facility* over the long-term and subsequent complaints about *adverse effects* (e.g. noise, dust and odour) may be directed to the municipality.

In relation to existing *major facilities* that may be receiving complaints, a key responsibility of *major facilities* is effective responses to complaints. For all *major facilities*, when there are complaints, the *major facility* should respond in a way to help prevent potential need to revise an environmental permission (if applicable) or be subject to compliance from either the Ministry or municipality.

* For more information on the Ministry's approach to compliance and enforcement see [Compliance Policy: Applying Abatement and Enforcement Tools](#).

Part C: Incorporating Land Use Compatibility into Planning Tools

4. IMPLEMENTATION AND PLANNING TOOLS

Planning authorities must implement the policies related to land use compatibility and *employment areas* of the PPS and similar policies in A Place to Grow (see **Appendix A**). This section provides information on how to incorporate land use compatibility policies and approaches into various existing tools and approvals under the *Planning Act* and other legislation, including through OP policies and designations, secondary plans, zoning by-laws and other planning approvals. *Planning authorities* will need to integrate land use compatibility, protection of *employment areas* (which are recognized as having value for employment), and development and *intensification* in implementing these policies.

4.1 Planning Tools

Table 4 describes how key tools under the *Planning Act* can be used to enable land use compatibility. The purpose of **Table 4** is not to provide foundational information on how land use planning approvals work. For guidance on this, see the [Citizen's Guides to Land Use Planning](#) and other materials developed by MMAH.

To the fullest extent possible, land use compatibility issues should be reconciled at the OP and zoning stage. It is expected, generally, that there is opportunity to avoid incompatible uses when planning for future industrial *employment areas* and surrounding non-employment uses. While conditions related to land use compatibility and mitigation can be integrated as part of the approval process for site-specific planning tools (such as plans of subdivision), decisions on these types of applications are usually one of the last steps of the planning process, before a building permit may be given. Accordingly, zoning which is done earlier in the land use planning process, should be used as much as possible to ensure potential *adverse effects* are avoided and minimized.

Table 4 – Addressing land use compatibility in key planning tools

Planning Tool, Purpose and Information	Addressing Compatibility
<p><u>Official Plan (OP)</u></p> <p>The OP is the most important tool for implementation of the PPS, achieving comprehensive, integrated and long-term planning, and for expressing the community's land use vision for growth and development.</p> <p>The OP should be the first mechanism used to implement compatibility policies.</p>	<ul style="list-style-type: none"> • To meet PPS and provincial plan policies, OPs need to include clear policies that address land use compatibility and should provide direction using the guiding hierarchy (Figure 1). <p><i>General Policies</i></p> <ul style="list-style-type: none"> ◦ Addressing and making explicit reference to policies of the PPS and A Place to Grow related to land use compatibility and the conversion of land in <i>employment areas</i> as appropriate (see Appendix A). ◦ Including clear definitions of <i>sensitive land uses</i>, <i>major facilities</i>, and <i>adverse effects</i> and other key terms (e.g. AOIs and MSDs), which are consistent with this Guideline and provincial policies. ◦ Incorporating the AOIs and MSDs provided in this Guideline as appropriate, and policies related to both AOIs and MSDs (Note: if an OP identifies an AOI, it can be the AOI recommended by the Ministry, or an alternate AOI for a specific location that is determined through studies during the OP review or amendment process). ◦ Making explicit reference to provincial guidelines, standards and procedures for land use compatibility, including this Guideline and successor documents. <p><i>Policies to avoid/separate incompatible land uses</i></p> <ul style="list-style-type: none"> ◦ Identifying the need to protect <i>major facilities</i> and avoid land use compatibility issues between them and <i>sensitive land uses</i>. ◦ Providing clear and distinct land use designations in appropriate locations which separate incompatible land uses (e.g. place <i>sensitive land uses</i> outside AOIs).

Official Plan (OP) (continued)

- Prohibiting *sensitive land uses* adjacent to existing *major facilities* if *adverse effects* from these *major facilities* cannot be mitigated.
- Designate adjacent land uses that will serve as a transition area between *major facilities* and *sensitive land uses* and that are compatible with both uses.
- Strongly discouraging proposals for incompatible land uses within an MSD.

Policies to assess impacts

- Establishing requirements for pre-consultation with the planning authority (may also include pre-consultation with relevant owners of *major facilities/sensitive land uses*).
- Including *compatibility studies* as part of complete application requirements when development is proposed within an AOI.
- Specifically requiring a *demonstration of need* as part of a proposal for a *sensitive land use* when: 1) development is proposed in the AOI and mitigation measures would be needed; and 2) when development is proposed in the MSD
- Evaluating, through a comprehensive review under the PPS or *municipal comprehensive review* under ATPG, where applicable, applications to convert *employment areas* to other uses.

Policies that mitigate impacts

- Stipulating clearly when mitigation may be required per the results of a *compatibility study*.
- Providing examples of mitigation measures as outlined in **Section 3** of this Guideline.
- Providing direction to ensure that mitigation is implemented, maintained and monitored.

Official Plan (OP) (continued)

- In two-tier municipalities (upper-tier and lower-tier) both levels need to have policies supporting early consideration of land use compatibility.
- OPs should identify or designate areas with existing or planned *major facilities* and identify associated AOIs (or alternate AOIs) and MSDs for these facilities to identify where impact assessment studies will be triggered. Can be shown on a land use schedule, possibly as an overlay.
- OP reviews should examine current and future industrial and residential land use designations, needs and compatibility issues

Official Plan Amendments (OPAs) and Secondary Plans

OPAs are used for policy changes, site-specific changes to land use designations and any site-specific policies that will apply.

Secondary Plans address a smaller geography, in greater detail than municipality-wide OPs.

- The guidance provided for OPs also generally applies to any OPA or Secondary Plan that will have the effect of introducing *sensitive land uses* in close proximity or adjacent to industrially-designated areas or *employment areas* where there are existing or planned *major facilities*.
- *Sensitive land use* that may limit the type of permitted uses in industrial/*employment areas* should not be considered.
- Provide specific references to assessing land use compatibility in accordance with this Guideline in OPAs and Secondary Plans.
- Consider timing of redevelopment (including potential for phasing) for cases where *major facilities* are located in areas for redevelopment, including brownfields redevelopment.

For secondary plans, locate uses with greater potential for compatibility issues with existing or planned uses at the edges of a proposed development area, if possible.

Zoning By-Laws and Zoning By-Law Amendments

Identify permitted uses, setback requirements, etc., that achieve intended outcomes of OP designations and policies. Regulate the types of *major facilities* and *sensitive land uses*, as well as standards such as setbacks from property lines. Must conform to the OP/ Secondary Plan designation for that property.

Note – This Guideline can apply to minor variance decisions made by committees of adjustment under the *Planning Act*.

- Keep zoning by-laws up-to-date to avoid conflicts with OP policy direction.
- Impose property-specific zoning to require on-site *buffers* (or other mitigation measures) identified by a *compatibility study* (e.g. through zoning by-law setback requirements, but the provision of very deep lots would likely be necessary).
- Where an AOI has been identified based on existing industrial land uses restrict, through zoning and any other available means, the types of future industrial uses that can occur, so that they are compatible with the AOI used.
- Including on-site *buffers* in the measurement of the *separation distance* is generally discouraged due to potential future expansions of the existing development.
- Use zoning by-law amendments as an opportunity to confirm land use compatibility with proposed, existing and planned land uses in the area.
- Zoning by-law amendment application that would introduce a potentially incompatible use must require a *compatibility study* as part of the complete application.
- Note that traditional zoning cannot be applied with conditions, and so other mechanisms to ensure compatibility may be required.

Holding By-laws and Interim Use By-laws

(Section 36 and 38 of the *Planning Act* respectively)

Enables a municipality to place a hold on development until certain conditions are met or can restrict the nature of land use until certain conditions are met.

The OP must include policy to allow the use of holding by-laws or interim control by-laws.

Site Plan Control

(Section 41 of the *Planning Act*)

Gives planning authorities the ability to control various aspects of how a particular property is developed and to regulate various features on a specific site.

To use site plan control, the OP must include policies defining the site plan control area, which can be all or part of a municipality, and then a site plan control by-law must be developed under the *Planning Act*.

Most often used for non-residential properties or for single residential properties containing more than a handful of units.

- Use Holding By-Laws to place a hold on development until *compatibility studies* and mitigation (as may be needed) are completed.
- Use Interim Use By-Laws to put a temporary hold on development while *compatibility studies* are completed, mitigation measures are confirmed and agreements in place to ensure implementation.
- Site plan control offers the ability to control certain external building, site and boulevard design matters, and requires drawings to be completed that includes the location, design and shape (massing) of buildings, the layout of parking and service areas, public access areas, landscaping, paving materials and street furniture – these aspects should consider compatibility.
- Use conditions of approval to require mitigation measures (e.g. noise attenuation walls, enhanced fencing for *amenity areas*, berms, enhanced landscaping and triple-glazed windows). These can include conditions to protect adjoining lands.
- Use conditions of approval to require agreements to ensure that the conditions described above are implemented, and which may be registered on title.

Plans of Subdivision/ Condominium

Plans of subdivision are used to divide a defined area of land into lots or blocks. Condominium plans are similar in that they are a way of dividing property.

Approval of plans of subdivision under the *Planning Act* (and plans of condominium under the *Condominium Act*) have two steps of approval: draft plan approval, which gives the proposal approval in principle subject to a number of specific conditions being fulfilled (e.g. berm creation to attenuate noise); and final approval. When all conditions of the draft approval have been met, final approval is given, and the plan of subdivision may be registered. The developer may then go ahead with the sale of lots in the subdivision.

Of specific relevance to land use compatibility, plans of condominium can also be used to apply conditions.

- Consider forms of residential development in which noise, dust and odour impacts can be better controlled at the *sensitive land use* (e.g. condominium buildings where balconies are oriented away from sources of impacts).
- Require the completion of a *compatibility study* (when needed in accordance with this Guideline) as part of complete application.
- Use conditions of approval to require mitigation measures, if needed.
- Use agreements to implement and maintain required mitigation measures beyond plan approval.
- Plans of subdivision can be used to lay out land uses in a way to avoid incompatibility and provide *buffers* between *sensitive land uses* and any existing or permitted *major facilities* (i.e. locating non-*sensitive land uses* within AOIs, while locating *sensitive land uses* beyond AOIs).
- Draft approvals can require *warning clauses* to be registered on title to advise that proximity to certain facilities may impair full enjoyment and use.
- The formal registration of either plan (with Ontario's land registration system) can contain additional binding requirements on subsequent owners of any parcel or on the condominium corporation by registration of them on the title of the land. Certain conditions may be specified as needing to be satisfied before a building permit for a particular building is issued.

**Plans of Subdivision/
Condominium** (continued)

- In cases where an applicant applies for site plan approval of a development which will later be subject to a plan of condominium and in which compatibility issues may exist which were not addressed at the zoning by-law stage, the planning authority may require the developer to also apply for plan of condominium approval at the same time since the plan of condominium process provides greater opportunity for attaching binding requirements related to compatibility.
- In unorganized territories, the subdivision/condominium process may be the first point that land use compatibility is assessed, and so *compatibility studies* may need to be completed before draft approval is given.

Consents/Severances

(Section 53 of *Planning Act*)

Authorized separation of a piece of land to form a new lot or a new parcel of land.

- Use conditions of approval to require mitigation that can be registered on title.
- Before granting a consent, ensure any condition requirements are met within the application stage; hence any required studies (like *compatibility studies*) would be submitted up-front instead of when the application is received for formal approval and provisional consent has already been given.
- In territories without municipal organization, the consent process may be the first point at which land use compatibility is addressed, therefore it is important that these applications be assessed for noise, dust, odour and other issues that may lead to *adverse effects* through *compatibility studies*, before possibly moving forward, if needed.

Community Planning Permit System (CPPS)

The CPPS is a discretionary land use planning tool that municipalities can apply to their entire municipality or to certain neighbourhoods or areas.

Municipalities can also tailor the CPPS to meet their local needs as long as they meet legislative and regulatory requirements.

It is a streamlined process: the CPPS combines zoning, site plan and minor variance processes into one application and approval process with shorter approval timelines.

To use the CPPS, a municipality must adopt an OPA for the CPPS area, pass a community planning permit by-law (developed at same time or after the OPA), and issue community planning permits once the system is in place.

- The community planning permit by-law contains a list of permitted uses and development standards, but could also contain other elements not found in a traditional zoning by-law such as: land uses that are allowed subject to certain criteria, classes of development, or uses of land exempt from requiring a permit.
- Where the application would result in the introduction of a potentially incompatible land use, require *compatibility studies* as part of complete application requirements for a community planning permit.
- Use conditions of approval to require mitigation measures and/or monitoring to ensure mitigation measures are maintained over time (conditions can be placed on development, both pre-approval and post-approval).
- Use discretionary uses that are permitted subject to specified criteria being met. For example, an industrial use could be permitted if:
 - Criteria are met including that the *Planning Act* application meets land use compatibility guidelines; accordingly, to meet this Guideline, a *compatibility study* would be needed.
 - Conditions are met prior to issuing a permit: for example, the proposal addresses recommendations of the *compatibility study* (e.g. adequate buffering/landscaping to mitigate noise)
 - Conditions attached to a permit: For example, ongoing presence of landscaping used for noise mitigation or monitoring and upkeep of onsite mitigation measures to meet performance standards.

4.2 Overarching Mechanisms and Considerations

4.2.1 Complete Planning Application Requirements

In addition to the minimum planning application requirements set out under regulations under the *Planning Act*, municipalities and planning boards can establish their own list of additional information or material required for land use planning applications, including OPAs, zoning by-law amendments and subdivision, condominium and consent applications. When a municipality/planning board requires additional information as part of a complete application, this must be identified in OP policies.

Planning authorities must identify *compatibility studies* (and a *demonstration of need*, where applicable, required in relation to a proposed *sensitive land use*, see section 2.8) to be submitted as part of a complete land use application for the development of new *sensitive land uses* or new/expanding *major facilities* within an AOI. Within the MSD, studies are even more important, and mitigation would be expected in many cases.

Proponents should review this Guideline and consult with *planning authorities* and other relevant agencies when considering a *Planning Act* approval involving new *sensitive land uses* or new *major facilities*. Part of this early consultation should include a discussion of what may be required to evaluate the compatibility of the proposal with existing and planned uses in the AOI. Mapping, for example, that includes existing and former land uses with potential compatibility issues (e.g. active and closed landfill sites) would be a key tool to avoid locating *major facilities* or *sensitive land uses* where compatibility may be an issue.

Planning authorities typically provide and often publish online pre-application checklists for *proponents* to ensure that their application has considered legislative and regulatory requirements. This would be an appropriate place to list *compatibility studies*.

4.2.2 Transitional Land Uses

Transitional land uses are land uses that are compatible with *major facilities* and *sensitive land uses* and can be located between the potentially incompatible uses and *buffer* any impacts between them.

Planning for transitional land uses is required by PPS policy 1.3.2.3, which indicates that *employment areas* planned for industrial or manufacturing uses should include an appropriate transition to adjacent non-*employment areas*.

Accordingly, transitional land uses should be planned for where needed as part of developing or amending an OP, secondary plan or zoning by-law. The designation

and zoning of appropriate transitional land uses should be considered irrespective of whether an on-site *buffer* area is used as part of the *separation distance*.

To the fullest extent possible, existing or proposed heavier industrial uses should be buffered from existing or proposed *sensitive land uses* by lighter industrial uses, rights of way, and other land uses that may not be sensitive in that context (e.g. warehousing, various commercial uses that relate to types of industries or the neighbouring lands, and roads). Buffering should allow for *sensitive land uses* to be located outside of the AOI to the fullest extent possible. If there is intention to use commercial or office uses as a transitional land use, a qualified individual should be hired to determine if such uses can be considered a transitional land use.

4.2.3 Considerations for Infill and Intensification Scenarios

It is recognized that locating *sensitive land uses* outside AOIs and MSDs may be more complicated to achieve in areas undergoing infill and *intensification*, including areas planned for mixed-use development, such as MTSA as defined in A Place to Grow. In these scenarios, compatibility still needs to be addressed and it is important that the key direction and recommendations of this Guideline are followed (e.g. use of mitigation as needed), including the following:

- Ensuring that OP policies and zoning by-laws are up-to date, clearly factor compatibility into designations and permitted uses, and require compatibility to be addressed.
- An area-based approach to planning, including the use tools such as secondary plans, is encouraged to resolve potential compatibility issues through broader planning processes, instead of individual planning applications.
- The zoning is use-specific (i.e. only the existing or proposed industrial or *sensitive land use* is permitted), or planning considerations are based on the “worst case scenario” based on permitted uses in the industrial zoning by-law.
- Within *employment areas*, keep *major facilities* separated from other employment uses, and any *sensitive land uses* should only be permitted mixed with low-impact employment uses and where compatibility can be achieved. Note that per PPS policy 1.3.2.3, within employment areas planned for industrial or manufacturing uses, planning authorities shall prohibit residential use and prohibit or limit new *sensitive land uses* that are not ancillary to the primary employment uses. Any sensitive land uses in these areas continue to be subject to compatibility policies requiring *adverse effects* to be avoided or minimized and mitigated, and impacts on *major facilities* to be avoided.

- Holding by-laws and interim control by-laws are used, if needed. These can be relevant in areas of *intensification* and infill because they can hold development until *compatibility studies* are completed and/or mitigation (as needed) is undertaken.
- When industry is being phased out as part of a large-scale plan (e.g. a secondary plan to transition from historical industrial areas to other uses), redevelopment and/or *infilling* should be staged to coincide with the closure of those industries which create a significant impact on the proposed *sensitive land use(s)*.
- Planning is done for transitional land uses per PPS policy 1.3.2.3. Lighter industrial uses would ideally be in proximity to heavy industrial uses, instead of *sensitive land uses*.
- The cumulative effects of development are considered. For example, considering the potential implications of approving an additional industrial use near existing *sensitive land uses* may have a cumulative impact on the existing *sensitive land uses*.
- Long-term monitoring and maintenance/replacement requirements for required mitigation measures should be in place. In infill and mixed-use areas, land use compatibility may only be possible through coordinated, implemented and maintained mitigation. Compatibility will be lost if mitigation is not maintained.
- Use of municipal by-laws (e.g. noise by-laws) as an effective means of addressing unplanned nuisance impacts.

Information sharing and engagement are particularly important in infill and *intensification* areas. See **Appendix C** for more about information sharing and consultation.

A Place to Grow provides some flexibility in considering *employment area* conversion when located in a MTSA. Policy 2.2.5.10 indicates that notwithstanding policy 2.2.5.9, which requires proposed *employment area* conversion to be assessed as part of *municipal comprehensive review*, areas may be converted to non-employment uses, even if they are in a provincially significant employment zone, if part of the *employment area* is located within a MTSA as delineated in accordance with subsection 2.2.4 of A Place to Grow. Note that only those portions of an *employment area* within an MTSA would be subject to this flexibility.

In spite of this increased flexibility, other *employment area* conversion policies of A Place to Grow, including policy 2.2.5.9d (which then triggers 2.2.5.8, which relates to land use compatibility) still apply. Accordingly, policy tests to ensure land use compatibility still need to be met.

4.3 Additional Mechanisms to Support Compatibility

The following mechanisms are not implemented under the *Planning Act* but can also be used to foster land use compatibility.

4.3.1 *Municipal By-laws*

By-laws under the *Municipal Act* are an important part of a municipality's toolkit to respond to land use compatibility issues. Section 129 provides authority to municipalities to develop by-laws in response to noise, vibration, odour, dust and outdoor illumination. Municipalities are encouraged to develop and update by-laws as necessary. The onus is on the municipality to enforce by-laws that would prevent and respond to land use compatibility issues.

In various by-laws, restrictions such as noise limits may be lower in industrial areas and other areas designated for employment. For these reasons, in communities where *major facilities* and *sensitive land uses* may have land use conflicts, including in areas undergoing infill and *intensification*, by-laws should be used in addition to the other mechanisms noted above.

While municipalities bear primary responsibility for their by-laws, [NPC-300](#) provides guidance that may help with creation of noise by-laws.

In relation to odour, MECP's draft Guideline to Address Odour Mixtures in Ontario may be helpful.

Regarding dust, municipalities are encouraged to consider the elements of the Ministry's [Technical Bulletin: Management Approaches For Industrial Fugitive Dust Sources](#) when developing relevant by-laws.

4.3.2 *Warning Clauses*

Warning clauses should be used where there are effects expected post-mitigation that may cause nuisance to receptors within the AOI. When new development is expected to generate compatibility issues with existing *major facilities*, in addition to addressing this through the other means described in this document (e.g. *compatibility studies*, separation and mitigation if necessary), the Ministry recommends that a warning of anticipated nuisance effects be included in any offers of purchase and sale. The planning authority would need to require this as a condition of approval of a plan of subdivision or a condominium declaration; and once the parcels of land are sold individually, conditions should be included in agreements of purchase and sale and possibly lease/rental agreements.

Direction on the use of *warning clauses* should be included in agreements (such as subdivision agreements) that are registered on title to the lands in question; it is appropriate to do this as part of the subdivision and condominium approval processes. After that, title searches done by lawyers should reveal *warning clauses*. This will notify potential future purchasers of property of the presence of a *major facility* in the area and the possibility of *adverse effects* as a result. Additional information on registering *warning clauses* on title can be found in the document: [2009-04 Environmental Warnings and Restrictions](#).

[NPC-300](#) gives additional guidance regarding *warning clauses* for noise and should be followed for the development of these clauses for noise. For example, when a Class 4 designation is used, [NPC-300](#) gives additional guidance and wording. See [NPC-300](#), section C8, for further discussion on *warning clauses* and sample language. For example, *Warning Clause* Type E is applicable to a *sensitive land use* when it is located within the AOI of a *major facility*. *Warning Clause* Type F is applicable to a proposed *sensitive land use* when it is located in a Class 4 Area.

Warning clauses are useful but should not be used in replacement of other mechanisms described above, as they have drawbacks. The Ministry would also not consider *warning clauses* to be a mitigation measure, since they do not minimize or mitigate impacts, but communicate the possibility of impacts. There have been situations where *warning clauses* are disregarded or not properly communicated to property owners (the first property owner and successive property owners) over time. Additionally, *warning clauses* generally are used only for the first purchaser of a property after a development is built but should be included in every agreement of purchase and sale on a property where concerns persist over time. *Compatibility studies* should describe the use of proposed *warning clauses* if they may be needed.

For stationary sources of noise, [NPC-300](#) indicates that it is not acceptable to use *warning clauses* in place of physical noise control measures to identify an excess over the Ministry's sound level limits; *warning clauses* may still be used and have value, but it is not to be used as justification for exceeding standards.

4.3.3 Inventories

The Ministry recommends that municipalities and planning boards maintain inventories of the location of all existing, committed and former *major facilities* within their respective jurisdictions. This information should be provided on some form of scaled map (e.g. OP schedules), and accessible to inform studies, decisions and engagement. The inventory should be used to support the review of planning applications.

To support constraint mapping and land use planning generally, *planning authorities* and *proponents* are encouraged to look at existing ministry resources, including [Access Environment](#) and the [Source Protection Information Atlas](#). Using these map-based tools, *planning authorities* and *proponents* can search for information on various permissions, including registrations on the EASR, Renewable Energy Approvals and ECAs issued by the Ministry from December 1999 onward or identify if properties are within drinking water source protection vulnerable areas that may have other restrictions. This would be useful to *planning authorities* in developing OPs, zoning by-laws and more site-specific mechanisms. As well, information on sites where a record of site condition has been filed can be found through Ontario's [Environmental Site Registry](#).