



PLANNING & DEVELOPMENT EXECUTIVE COMMITTEE AGENDA

May 16, 2022 8:30 AM
MEETING - Civic Centre

Microsoft Teams meeting

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Page

1. Roll call - Session no. 23 called to order @

2. Disclosure of pecuniary interest and the general nature thereof

3. Approval of Previous Committee Minutes

2 3.1 Session no 21 - 18 April 2022 (Amended)

3 - 4 3.2 Session no 22 - 02 May 2022

4. Items Referred from Council - none

5. New Business

5 - 7 5.1 B2-2022 Planning Report - PDEC - May 16, 2022

6. Outstanding Items

8 - 63 6.1 B2-2022 Zoning By-law Amendment - 1229 Cornwall Avenue (Lagoon Property)

7. Information

64 - 65 7.1 PDEC April report (Addenda)

8. In-Camera - none

9. Adjourn / Next Meeting Date - 06 June 2022



TOWN OF FORT FRANCES

MINUTES

SESSION NO. #21

April 18, 2022

The meeting of Planning & Development Executive Committee of the Town of Fort Frances was held virtually and in the Civic Centre on April 18, 2022 from 8:30 a.m. to 8:36 a.m.

PRESENT: Chairperson, W. Brunetta, Councilor A. Hallikas

ALSO PRESENT: F. Anwar, CAO, C. Vangel, CBO/Planner, P. Briere, By-law Enforcement Officer, K. Haney, Deputy Clerk

REGRETS: Councilor J. McTaggart, Mayor, J. Caul (ex-officio)

1. **Call to Order - Session no. 21/Roll Call**
2. **Disclosure of pecuniary interest and the general nature thereof**
3. **Approval of Previous Committee Minutes**
 - 3.1 Session no 20 - 21 March 2022 - Accepted as presented
4. **Items Referred from Council - none**
5. **New Business**
 - 5.1 SPC02-2020 Planning Report - PDEC 2022 - C. Vangel to move item forward to Council meeting of April 25, 2022.
6. **Outstanding Items - none**
7. **Information**
 - 7.1 PDEC Report - March By-Law Stats - Accepted as presented
8. **In-Camera - none**
9. **Adjourn @ 0836 hrs / Next Meeting Date - 02 May 2022**

Executive Committee Chair

Secretary, Planning & Development Executive Committee

MINUTES

May 2, 2022

The meeting of Planning & Development Executive Committee of the Town of Fort Frances was held virtually and in the Civic Centre on May 2, 2022 from 8:30 a.m.to 9:14 a.m.

PRESENT: J. McTaggart - Chairperson, W. Brunetta - Councillor Hallikas, Councillor, Mayor J. Caul (ex-officio)

ALSO PRESENT: C. Vangel, CBO/Planner, P. Briere, By-law Enforcement Officer, K. Haney, Deputy Clerk and BMI representatives, M. LePage and R. Coulbeck

REGRETS: F. Anwar, CAO

1. **Session # 22 - called to order @ 8:30 a.m./Roll Call**
2. **Disclosure of pecuniary interest and the general nature thereof**
3. **Approval of Previous Committee Minutes**
 - 3.1 Session no 21 - 18 April 2022 - Amendment needed. Corrected version will be brought forward to next meeting.
4. **Items Referred from Council**
 - 4.1 B2-2022 Zoning By-law amendment - 1229 Cornwall Avenue (Lagoon Property). Discussion held. BMI representatives M. LePage and R. Coulbeck were in attendance virtually to answer further queries from the Committee. Committee members in support of solar project. Noise mitigation study recommended prior to any decision being made. Awaiting receipt of further information, item to be brought back to a future PDEC meeting.
5. **New Business - none**
6. **Outstanding Items - none**
7. **Information - none**
8. **In-Camera - none**
9. **Adjournment: 9:14 a.m./ Next Meeting Date 16 May 2022**

Executive Committee Chair

Secretary, Planning & Development Executive Committee

**Town of Fort Frances
Administrative Report**

TO: Planning and Development Executive Committee
FROM: Cody Vangel, Chief Building Official & Municipal Planner
SUBJECT: **Award Recommendation for RFP 22-PD-07 – New Official Plan and Comprehensive Zoning By-law**
DATE: May 16, 2022

Issue:

Consideration to recommend award of RFP 22-PD-07 for the development of a new Official Plan and Comprehensive Zoning By-law for the Town of Fort Frances.

Strategic Impact:

1. Attracting new industry and attracting investment for local business development.
2. Promotion of Tourism / Destination Tourism
3. Develop a plan for the Shevlin Woodyard
5. Improve relationships with neighbouring communities.
6. Establish Partnerships with nearby First Nation communities
11. Undertake residential development
16. Mitigate risks of climate change
23. Work with community partners to more effectively address social issues such as homelessness, substance abuse, and mental health issues.

Options/Alternatives:

1. Recommend award of RFP 22-PD-07; or.
2. Recommend re-issuing RFP 22-PD-07.

Administrative Recommendation:

RECOMMENDED THAT Council of the Town of Fort Frances award RFP 22-PD-07 for the development of a new Official Plan and Comprehensive Zoning By-law for the Town of Fort Frances to WSP Canada Inc. for the cost of \$136,435.00 plus the municipal portion of HST;

AND THAT the Mayor and Clerk be authorized to execute the agreement on behalf of the corporation;

AND FURTHER THAT the budget shortfall be captured in the 2023 capital budget.

History:

The Town of Fort Frances adopted the existing Official Plan – 2011 on November 14, 2011, through by-law 63/11, with ministerial approval coming December 3, 2012.

The Planning Act states the following with respect to Official Plan reviews/updates:

26(1.1) The council shall revise the plan no less frequently than,

- (a) 10 years after it comes into effect as a new official plan; and*
- (b) every five years thereafter, unless the plan has been replaced by another new official plan.*

Given that the Town did not conduct a five-year review, the Town will require a new Official Plan, beginning the process in 2022.

The Town of Fort Frances adopted the existing parent Zoning By-law – 03/14 on January 27, 2014, through by-law 03/14.

The Planning Act states the following for the review/renewal of zoning by-laws:

26(9) No later than three years after a revision under subsection (1) or (8) comes into effect, the council of the municipality shall amend all zoning by-laws that are in effect in the municipality to ensure that they conform with the official plan

To maintain conformity, fluency, and report/document presentation, it is advisable to complete both projects at the same time with one consultant, to mitigate the “3-year lag” of one document over the other as significant changes are anticipated with these renewed documents.

Analysis:

The Town of Fort Frances began advertising the Request for Proposals (RFP) on Thursday April 7, 2022 with a closing date of Tuesday May 3, 2022. The RFP was advertised in the local newspaper, the Town’s website, and it was also sent to both the Thunder Bay and Winnipeg construction associations requesting advertisement, as well as on municipalworld.com. It should be noted that the Winnipeg construction association did not advertise the RFP.

On May 3, 2022 at 2:00pm local time, proposals were opened publicly through a virtual manner at the Town of Fort Frances Civic Centre in the Committee Room. The following three proposals were received:

Building Design Firm	Project Cost (HST not included)
Superior Consulting Team	\$138,205.00 plus \$13,246.15 misc.
WSP Canada Inc.	\$136,435.00
Stantec Consulting Ltd.	\$115,842.00

The proposals were evaluated and scored by an internal review team made up of the Chief Administrative Officer, Chief Building Official/Municipal Planner, and Manager of Operations and Facilities. Through this review process WSP Canada Inc. (WSP) scored highest amongst the group. WSP stood out when scoring with their “close to home” experience with similar project in various northwestern Ontario communities, their attention to detail, comprehensive community engagement plan, their methodical and detailed strategy for completion of the project along with a team showing significant Ontario experience to complete the project.

The Town of Fort Frances 2022 Capital Budget set aside \$100,000.00 for the completion of this project. For reference, in 2010 the tender value for the update of the Official Plan and Zoning By-law was around \$74,000.00 plus applicable taxes. Given that the proposal cost of \$136,435.00 plus the municipal portion

of taxes is greater than the budgeted \$100,000.00, it would be recommended that the budget shortfall be captured in the 2023 capital budget.

Consultation:

- Chief Administrative Officer
- Manager of Operations and Facilities

**Town of Fort Frances
Administrative Report**

TO: Planning and Development Executive Committee
FROM: Cody Vangel, Chief Building Official & Municipal Planner
SUBJECT: **B2-2022: Zoning By-law Amendment – 1229 Cornwall Avenue (Lagoon Property)**
DATE: May 2, 2022

Issue:

Consideration of zoning by-law amendment B2-2022 submitted by 2670568 Ontario Limited seeking to add the following multiple site-specific permitted uses at 1229 Cornwall Avenue (locally known “Lagoon Property”):

- 1) To add a site-specific permitted use for Industrial Scale Computing;
- 2) To utilize sea-cans or containers converted to Buildings and/or a constructed structure to house the Industrial Scale Computing equipment;
- 3) To add a site-specific permitted use for the establishment of a 150 MW Solar Farm to produce solar energy and/or feed into the electrical grid;
- 4) To add a site-specific permitted use for Transmission of electricity, including infrastructure (towers and lines);
- 5) To add a site-specific permitted use for Electric substations; and
- 6) To add a site-specific permitted use for Battery Energy Storage System (BESS)

The site-specific permitted uses would all be subject to the specific provisions of the Waste Disposal industrial (M3) zone.

Strategic Impact:

1. Attracting new industry and attracting investment for local business development.
16. Mitigate risks of climate change
25. Preserve Power Agreement and support Fort Frances Power Corporation

Options/Alternatives:

1. Recommend approval of application;
2. Recommend amendment to application; or
3. Recommend rejection of application.

Administrative Recommendation:

THAT the 150MW Solar Farm including the transmission of electricity, electric substation, and battery energy storage system site-specific uses be approved; and

THAT the property be designated as a Site Plan Control Area which will require a site plan agreement prior to any further development taking place on the property; and

Should the Planning and Development Executive Committee recommend approving the Industrial-Scale computing use and associated components, the following conditions and criteria are recommended:

- that a noise mitigation study and noise mitigation plan among other potential studies for the development be required as part of the site plan agreement; and
- that the sea-cans, if approved, not be allowed to stack on top each other; and

- the structures and operation associated with the industrial-scale computing be located not closer than 300m to any surrounding residential use or residential zoned properties, and further that this be located not closer than 850m to McIrvine Road and Eighth Street West; and
- that the proponent provide documentation from the MOECP stating whether an Environmental Compliance Approval will be necessary for this project aspect

History:

The previous report that went to the Planning and Development Executive Committee (PDEC) on May 2, 2022, has been attached with this report.

At the May 2, 2022 PDEC meeting, some members of the Committee requested additional information on the noise levels, more specifically requesting a noise level decibel target at sensitive receptors (i.e. residential uses) for further consideration on the industrial scale computing aspect of the application.

During the May 2, 2022 PDEC meeting the committee was generally supportive of the solar and associated components aspect of the application. However, this did not go on to Council as the application was submitted as one, as such the decision will need to be made on the application as a whole, including approving/rejecting various parts, at the Council level. This reasoning pertains around appeal rights, decision notification, approval timelines, etc.

Analysis:

Guideline [D-6 Compatibility between Industrial Facilities](#) (D-6) is an Ontario Ministry document that can be used in the land use planning process to assist to prevent or minimize land use issues between industrial uses and sensitive land uses.

The proposed Industrial Scale Computing use for the sake of this report is considered as Class III in [D-6-1 Industrial Categorization Criteria](#) due to the anticipated noise output frequently audible off property.

A Class III Industrial Facility is defined as follows: *A place of business for large scale manufacturing or processing, characterized by: large physical size, outside storage of raw and finished products, large production volumes and continuous movement of products and employees during daily shift operations. It has frequent outputs of major annoyance and there is high probability of fugitive emissions.*

Per [D-6-3 Separation Distances](#), Class III Industrial refers to a potential influence area of 1000m, and a recommended 300m minimum separation distance from incompatible development.

Subsection 4.5.1 of D-6 summarizes to say that when a development occurs within a potential influence area, evidence should be provided to substantiate the absence of problems between the two land uses. This could summarize to mean that studies may be required to show there will not be an issue. Given that this proposal for industrial scale computing (Class III Industrial) is likely to fall within the potential influence area of 1000m to a residential use, studies may be required to substantiate the use.

Subsection 4.6.1 of D-6 states that noise (studies) shall be addressed through [Ministry Publication LU-131](#).

Ministry Publication LU-131 is titled "Noise Assessment Criteria in Land Use Planning". Stated in the Purpose of this document is the following *"This guideline outlines the position of the Ministry of the*

Environment (MOE) on noise criteria for planning of sensitive land uses, in support of the Provincial Policy Statement under the Planning Act and in accordance with the Ministry of the Environment Guideline D-1 "Land Use Compatibility". It is intended for use in planning of noise sensitive land uses adjacent to facilities such as but not limited to airports, road and rail transportation corridors, industrial facilities, aggregate facilities, major commercial facilities, sewage treatment facilities, and waste sites."

Section 4 of Ministry Publication LU-131 refers to Noise Impact Assessment, Stationary Sources. This would pertain to the Industrial Scale Computing as a stationary industrial use.

Subsection 4.1 of Ministry Publication LU-131 furthers to state the following *"The sound levels anticipated on the site of a proposed noise sensitive land use shall be established in accordance with References [8], [9], [10] and [11], including all the appropriate adjustments. The assessment of noise impact shall reflect the "predictable worst case" situation, i.e. the largest difference between source sound levels and the applicable criterion"*. This would refer to procedures on modeling and assessing noise.

Per section 2 definitions in Ministry Publication LU-131 the surrounding area would be classified as a Class 2 Area based on the following definition *means an area with an acoustical environment that has qualities representative of both Class 1 and Class 3 Areas, and in which a low ambient sound level, normally occurring only between 23:00 and 07:00 hours in Class 1 Areas, will typically be realized as early as 19:00 hours. Other characteristics which may indicate the presence of a Class 2 Area include:*

- *absence of urban hum between 19:00 and 23:00 hours;*
- *evening background sound level defined by natural environment and infrequent human activity;*
- *no clearly audible sound from stationary sources other than from those under impact assessment.*

Section 4.4 of Ministry Publication LU-131 sets out recommendations for outdoor sound level criteria. For a Class 2 Area the following sound level criteria for an outdoor point of reception from a stationary source is recommended:

- 50dBa from 07:00 – 19:00
- 45dBa from 19:00 – 23:00

Section 4.5 of Ministry Publication LU-131 sets out recommendations for sound level criteria in the plane of a window. For a Class 2 Area the following sound level criteria in the place of a window from a stationary source is recommended:

- Day-time
 - 50dBa from 07:00 – 19:00
 - 45dBa from 19:00 – 23:00
- Night-time
 - 45dBa from 23:00 – 07:00

With the above information being presented to PDEC, the Committee may consider assigning the noise limitations and schedules to the by-law. Administration advises caution to the Committee such to not become too prescriptive with assigning noise level targets in the by-law, as these would ultimately be set and followed through the applicant's noise mitigation study and plan in conjunction with all applicable Ministry guidelines, consultation and regulations.

Attachments:

- D-6-3 Separation Distances
- D-6-1 Industrial Categorization Criteria
- D-6 Compatibility between Industrial Facilities
- Ontario Ministry of the Environment-LU-131
- May 2, 2022 PDEC Report

D-6-3 Separation Distances

A guide for land use planning authorities on how to measure recommended distances between industrial areas and sensitive land uses to protect people and the environment.

Class I industrial

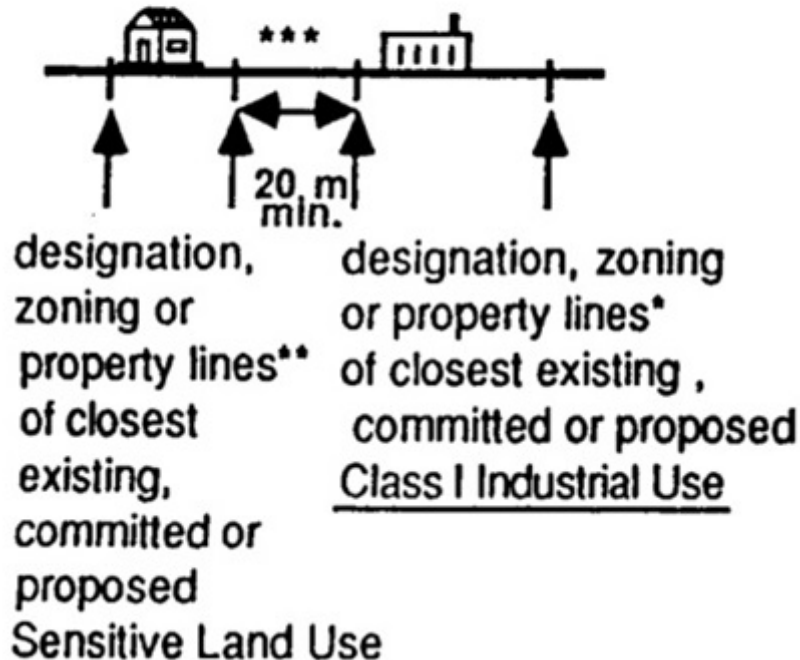
- 70 metre potential influence area
- 20 metre recommended minimum in which incompatible development should not normally take place

Section view

This diagram shows the designation, zoning or property lines of an existing, committed or proposed sensitive land use in relation to the designation, zoning or property lines of the closest existing, committed or proposed Class I industrial use.

CLASS I INDUSTRIAL:

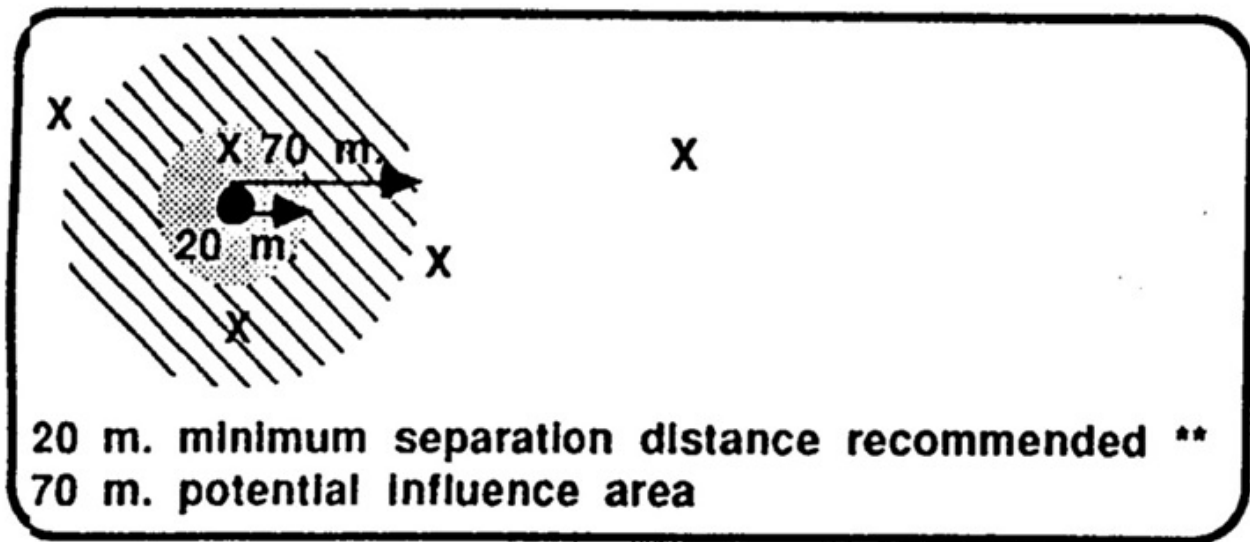
70 m. potential influence area



Plan view

This diagram shows an overhead view of the recommended minimum separation distance (20 metres), potential or actual influence area distance (70 metres), and acceptable range (greater than 70 metres) between sensitive land use and Class I industrial use.

The solid black dot indicates an existing land use, and the Xs indicate a proposed land use.

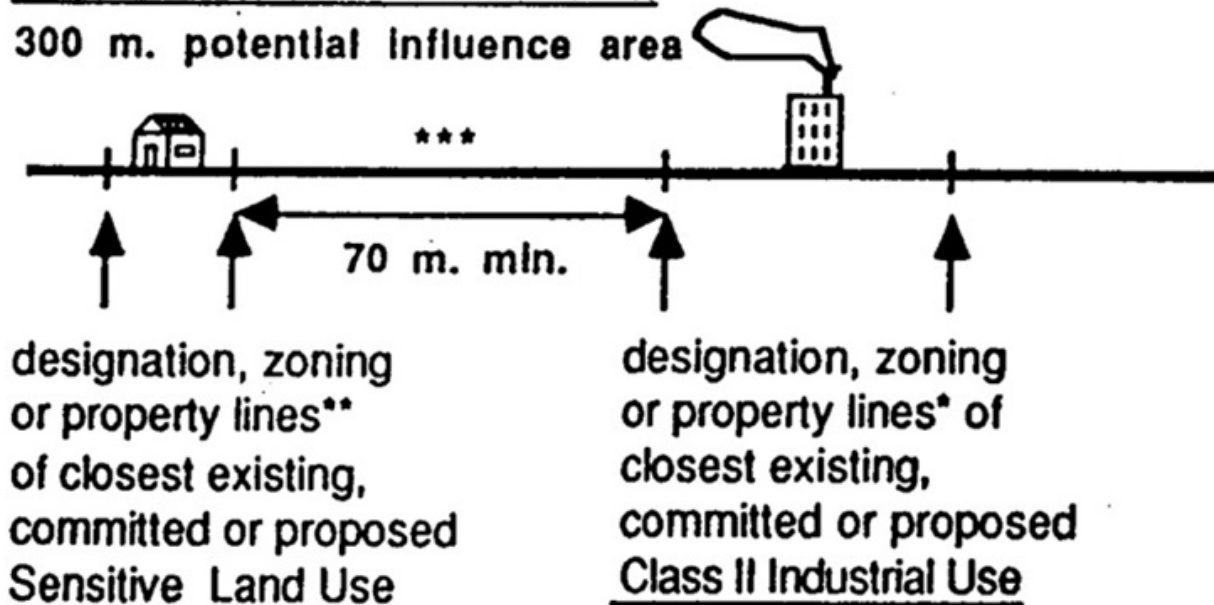


Class II industrial

- 300 metre potential influence area
- 70 metre recommended minimum in which incompatible development should not normally take place

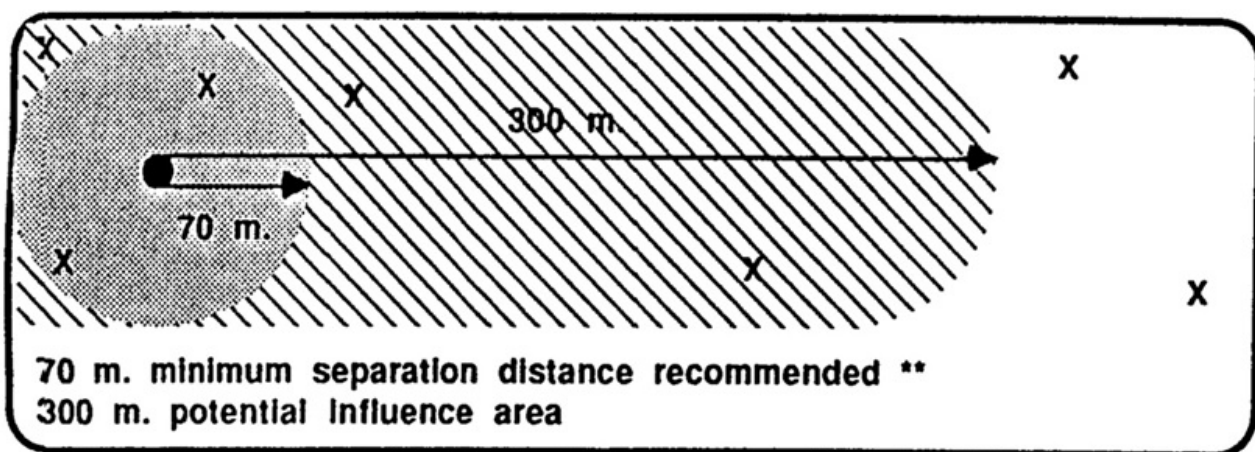
Section view

This diagram shows the designation, zoning or property lines of an existing, committed or proposed sensitive land use in relation to the designation, zoning or property lines of the closest existing, committed or proposed Class II Industrial Use.

CLASS II INDUSTRIAL:**300 m. potential influence area****Plan view**

This diagram shows an overhead view of the recommended minimum separation distance (70 metres), potential or actual influence area (300 metres), and acceptable range (greater than 300 metres) between sensitive land use and Class II industrial use.

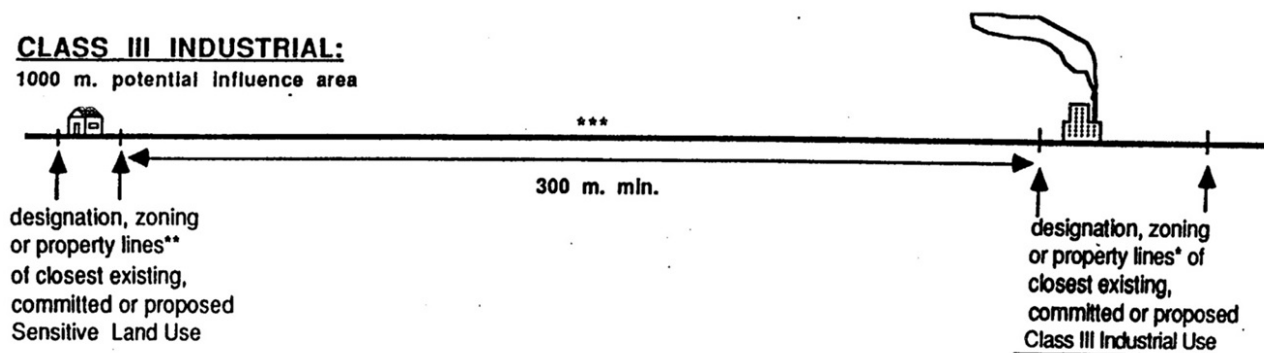
The solid black dot indicates an existing land use, and the Xs indicate a proposed land use.

**Class III industrial**

- 1000 metre potential influence area
- 300 metre recommended minimum in which incompatible development should not normally take place

Section view

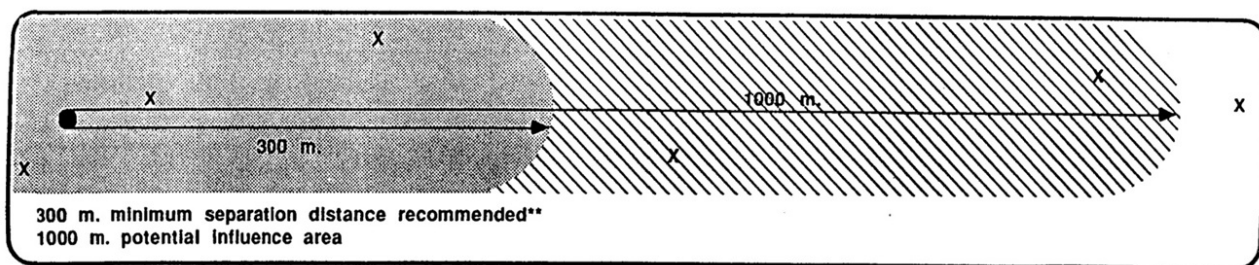
This diagram shows the designation, zoning or property lines of an existing, committed or proposed Sensitive Land Use in relation to the designation, zoning or property lines of the closest existing, committed or proposed Class III Industrial Use.



Plan view

This diagram shows an overhead view of the recommended minimum separation distance (300 metres), potential or actual influence area (1000 metres), and acceptable range (greater than 1000 metres) between sensitive land use and Class III industrial use.

The solid black dot indicates an existing land use, and the Xs indicate a proposed land use.



References

Recommended minimum separation distance

Incompatible development should not normally be permitted within the recommended minimum.

See the following Sections:

- Section 4.3 Recommended Minimum
- Section 4.10 Redevelopment, Infilling and Mixed Use Areas
- Section 4.2.5 Off-Site Separation Distances

Recommended potential area of influence or actual area of influence

“Adverse effects” need to be identified, mitigation proposed and an assessment made on the acceptability of the proposal. See “Section 4.1 Influence of Area Concept”.

Acceptable range

Beyond the potential area of influence, therefore normally development in this range should not pose a compatibility problem. See “Section 4.5.2 Separation Distances Greater than the Potential Area of Influence” for exceptions.

Measuring separation distance

See Section 4.4 Measuring Separation Distances.

The set backs established in zoning by-law can be included in the separation distance measurement if the by-law or site plan control precludes the use of the set back for activities that could create an adverse effect. See “Section 4.4.3, Zoning/Site Plan Control (Industrial Land Uses)”.

Where the established use on-site and ancillary lands associated with a sensitive land use are not of a sensitive nature (e.g., parking lot or roadway), measurement may be taken to where the sensitive activities actually begin.

See the following Sections:

- Section 4.4.2 Site Specific Plans
- Section 4.4.4 Ancillary use (Sensitive Land Use)

This approach may be particularly appropriate for redevelopment/infill proposals.
“See Section 4.10 Redevelopment, Infilling and Mixed Use Areas.”

If the existing land use is industrial, then the proposed land use is sensitive, and vice versa.

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D-6-1 Industrial Categorization Criteria

A guide for land use planning authorities on the appropriate distances between industrial areas and sensitive land uses like people’s homes and workplaces.

Industrial categorization criteria *

Category	Outputs	Scale	Process	Operation /Intensity	Possible examples **
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Category	Outputs	Scale	Process	Operation /Intensity	Possible examples **
Class I	<ul style="list-style-type: none"> Noise: Sound not audible off property Dust and/or Odour: Infrequent and not intense Vibration: No ground borne vibration on plant property 	<ul style="list-style-type: none"> No outside storage Small scale plant or scale is irrelevant in relation to all other criteria for this Class 	<ul style="list-style-type: none"> Self contained plant or building which produces/stores a packaged product. Low probability of fugitive emissions 	<ul style="list-style-type: none"> Daytime operations only Infrequent movement of products and/or heavy trucks 	<ul style="list-style-type: none"> Electronics manufacturing and repair Furniture repair and refinishing Beverages bottling Auto parts supply Packaging and crafting services Distribution of dairy products Laundry and linen supply

Category	Outputs	Scale	Process	Operation /Intensity	Possible examples **
Class II	<ul style="list-style-type: none"> Noise: Sound occasionally audible off property Dust and/or Odour: Frequent and occasionally intense Vibration: Possible groundborne vibration, but cannot be perceived off property 	<ul style="list-style-type: none"> Outside storage permitted Medium level of production allowed 	<ul style="list-style-type: none"> Open process Periodic outputs of minor annoyance Low probability of fugitive emissions 	<ul style="list-style-type: none"> Shift operations permitted Frequent movement of products and/or heavy trucks with the majority of movements during daytime hours 	<ul style="list-style-type: none"> Magazine printing Paint spray booths Metal command Electrical production manufacturing Manufacturing of dairy products Dry cleaning services Feed packing plant

Category	Outputs	Scale	Process	Operation /Intensity	Possible examples **
Class III	<ul style="list-style-type: none"> Noise: sound frequently audible off property Dust and/or Odour: Persistent and/or intense Vibration: Ground-borne vibration can frequently be perceived off property 	<ul style="list-style-type: none"> Outside storage of raw and finished products Large production levels 	<ul style="list-style-type: none"> Open process Frequent outputs of major annoyances High probability of fugitive emissions 	<ul style="list-style-type: none"> Continuous movement of products and employees Daily shift operations permitted 	<ul style="list-style-type: none"> Manufacturing of paint and varnish Organic chemicals manufacturing Breweries Solvent recovery plants Soaps and detergent manufacturing Manufacturing of resins and costing Metal manufacturing

Note: Emissions may be point source or fugitive.

* Note: This Table should not be considered a comprehensive list but is to be used to provide examples of industrial categories.

** Note: The following examples are not limited to the Class indicated on the Table. The categorization of a particular industry will vary with the specifics of the case.

Source: The criteria for categorizing industries into Class I, II or III are derived from Ministry experience and the investigation of complaints related to industrial facilities.

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D-6 Compatibility between Industrial Facilities

A guide for land use planning authorities on how to decide what types of land uses are appropriate near industrial areas.

Legislative Authority:

Environmental Protection Act, RSO 1990, Section 14

Environmental Assessment Act, RSO 1990, Section 5(3)

Planning Act, RSO 1990, Sections 2 (a) (b) (c) (f) (g) (h), 17(9), 22(3), 41(4) and 51(3)

Condominium Act, RSO 1990, Section 50(3)

Niagara Escarpment Planning & Development Act, RSO 1990, Section 9

Responsible Director:

Director, Environmental Planning & Analysis Branch

Last revision date:

July 1995

Synopsis

This guideline is intended to be applied in the land use planning process to prevent or minimize future land use problems due to the encroachment of sensitive land uses and industrial land uses on one another. The guideline is a direct application of Ministry Guideline D-1, "Land Use Compatibility" (<https://www.ontario.ca/page/d-1-land-use-and-compatibility>) (formerly Policy 07-03).

This guideline encourages informed decision-making for Ministry staff as well as land use approval authorities and consultants, and assists in determining compatible mixed land uses and compatible intensification of land uses. The guideline is intended to apply when a change in land use is proposed, and the range of situations are set

out in Section 2.0 "Application" of Guideline D-1 (<https://www.ontario.ca/page/d-1-land-use-and-compatibility#section-2>) . Responsibilities and various implementation techniques are discussed in Procedure D-1-1, "Land Use Compatibility: Implementation" (<https://www.ontario.ca/page/d-1-1-land-use-compatibility-procedure-implementation>) .

Adequate buffering of incompatible land uses is intended to supplement, not replace, controls which are required by legislation for both point source and fugitive emissions at the facility source. These emissions, which are difficult to control on-site, under all circumstances, all of the time, are associated with normal operating procedures. Appendix B contains information on the Ministry's legislative requirements (e.g. ***** Certificates of Approval) which may apply to industrial facilities.

The Ministry shall not be held liable for municipal planning decisions that disregard Ministry policies and guidelines. When there is a contravention of Ministry legislation, Ministry staff shall enforce compliance.

Nothing in this guideline is intended to alter or modify the definition of "adverse effect" in the *Environmental Protection Act*.

Introduction (1.0)

Objective (1.1)

The objective of this guideline is to prevent or minimize the encroachment of sensitive land use upon industrial land use and vice versa, as these two types of land uses are normally incompatible, due to possible adverse effects on sensitive land use created by industrial operations.

To assist planning authorities in achieving the objective,

Appendix A of this guideline (<https://www.ontario.ca/page/d-6-1-industrial-categorization-criteria>) categorizes industrial facilities into three Classes according to the objectionable nature of their emissions, their physical size/scale, production volumes and/or the intensity and scheduling of operations. One or more of these factors may cause an adverse effect.

Scope (1.2)

Sensitive land uses (1.2.1)

For the purposes of this guideline, (i.e. where industry is concerned) sensitive land use may include:

- recreational uses which are deemed by the municipality or provincial agency to be sensitive; and/or
- any building or associated amenity area (i.e. may be indoor or outdoor space) which is not directly associated with the industrial use, where humans or the natural environment may be adversely affected by emissions generated by the operation of a nearby industrial facility. For example, the building or amenity area may be associated with residences, senior citizen homes, schools, day care facilities, hospitals, churches and other similar institutional uses, or campgrounds.

See also Section 4.4.4, "Ancillary Land Uses (Sensitive Land Use)" for more information on the types of uses, the land areas and the related activities affected by this guideline.

Note: Residential land use shall be considered sensitive 24 hours/day.

Industrial land uses (1.2.2)

The guideline applies to all types of proposed, committed and/or existing industrial land uses which have the potential to produce point source and/or fugitive air emissions such as noise, vibration, odour, dust and others, either through normal operations, procedures, maintenance or storage activities, and/or from associated traffic/transportation.

This guideline also considers ground borne vibration, but does not deal with other emissions into the soil or ground and surface water. These other matters are addressed through the *Environmental Protection Act* (EP Act), in particular *Regulation 346* and *Regulation 347*, the *Ontario Water Resources Act* (OWR Act) in general, and the *Municipal Industrial Strategy for Abatement* (MISA).

Non-stationary industrial facilities (1.2.3)

This guideline is not intended to apply to non-stationary industrial facilities such as a portable asphalt plant.

Other facilities (1.2.4)

This guideline does not apply to the following provincial, municipal or private facilities, land uses or related activities, nor to any on-site industrial-type facilities associated with them, except as noted below:

- sewage treatment facilities
- landfills or dumps, transfer stations and other waste management facilities and waste processing facilities that require a Waste Certificate of Approval (e.g. facilities for waste oil refining, waste wood chipping and materials recovery facilities [MRFs])
- agricultural operations
- roadways (except for ancillary transportation facilities and transportation-related activities for an industrial land use including shipping and receiving)
- airports
- railways (but it does apply to railway yards and other ancillary rail facilities)
- pits and quarries (However, in the absence of site specific studies, this guideline should be utilized when sensitive land use encroaches on an existing pit and/or quarry. In these situations the appropriate criteria are the potential influence area and recommended minimum separation distance for a Class III industrial facility as set out in Sections 4.1.1 and 4.3 of this guideline.)

A list of publications which deal with land use compatibility for some of these land uses is provided in Procedure D-1-2, "Land Use Compatibility: Specific Applications" (<https://www.ontario.ca/page/d-1-2-land-use-compatibility-specific-applications>) .

Land uses compatible with industrial facilities (1.3)

The land uses listed in Section 1.2.4 above are normally compatible with industrial facilities.

Approach (1.4)

The general approach in Section 3.0 of Guideline D-1: "Land Use Compatibility" (<https://www.ontario.ca/page/d-1-land-use-and-compatibility#section-3>) shall be followed to protect incompatible land uses from each other.

Definitions (2.0)

Note: Definitions in addition to those below are provided in Procedure D-1-3, "Land Use Compatibility: Definitions" (<https://www.ontario.ca/page/d-1-3-land-use-compatibility-definitions>) .

Amenity Area

An outdoor space or facility that is used for the enjoyment of persons residing in or utilizing any building(s) on the premises.

Class I Industrial Facility

A place of business for a small scale, self contained plant or building which produces/stores a product which is contained in a package and has low probability of fugitive emissions. Outputs are infrequent, and could be point source or fugitive emissions for any of the following: noise, odour, dust and/or vibration. There are daytime operations only, with infrequent movement of products and/or heavy trucks and no outside storage. See Appendix A of this guideline (<https://www.ontario.ca/page/d-6-1-industrial-categorization-criteria>) for classification criteria and examples to categorize a specific industry.

Class II Industrial Facility

A place of business for medium scale processing and manufacturing with outdoor storage of wastes or materials (i.e. it has an open process) and/or there are periodic outputs of minor annoyance. There are occasional outputs of either point source or fugitive emissions for any of the following: noise, odour, dust and/or vibration, and low probability of fugitive emissions. Shift operations are permitted and there is frequent movement of products and/or heavy trucks during daytime hours. See Appendix A of this guideline (<https://www.ontario.ca/page/d-6-1-industrial-categorization-criteria>) for classification criteria and examples to categorize a specific industry.

Class III Industrial Facility

A place of business for large scale manufacturing or processing, characterized by: large physical size, outside storage of raw and finished products, large production volumes and continuous movement of products and employees during daily shift operations. It has frequent outputs of major annoyance and there is high probability of fugitive emissions. See Appendix A of this guideline (<https://www.ontario.ca/page/d-6-1-industrial-categorization-criteria>) for classification criteria and examples to categorize a specific industry.

Fugitive Emissions

Reasonably expected/predictable contaminant occurrences associated with normal operational practices and procedures (e.g. materials handling or outdoor storage) of industrial facilities, which are generally difficult to practically control at the source or on-site. These emissions are not point sources (i.e. not from stacks or vents). Fugitive emissions are from all sources. These emissions may include odour, noise, vibration and particulate such as dust. Emissions from a breakdown are also not considered 'fugitive'. Breakdown emissions would be covered under a Certificate of Approval contingency plan, or are considered to be a 'spill'.

Industry, Industrial Land Use or Industrial Facility

A facility or activity relating to: the assemblage and/or storage of substances/goods/raw materials; their processing and/or manufacturing; and/or the packaging and shipping of finished products. Industrial facilities are further refined through categorization into 3 Classes in this guideline (see Appendix A of this guideline (<https://www.ontario.ca/page/d-6-1-industrial-categorization-criteria>)).

Infilling

Development on a vacant lot or an underdeveloped lot within a built-up area; not redevelopment/re-use.

Redevelopment

Where existing land uses are being phased out and replaced by another type of designated land use as part of a land use plan or proposal which has been substantiated by studies and is in accordance with a municipal official plan policy or other formally approved plan.

Application (3.0)

The information set out Section 2.0 of Guideline D-1, "Land Use Compatibility" (<https://www.ontario.ca/page/d-1-land-use-and-compatibility#section-2>) shall apply for this guideline also.

Implementation (4.0)

Areas of Responsibility for Ministry Staff or the Delegated Authority, Municipalities and Other Planning Authorities and Proponents are identified in Procedure D-1-1, Sections 1, 2 and 3 respectively.

See Procedure D-1-1, "Land Use Compatibility: Implementation"

(<https://www.ontario.ca/page/d-1-1-land-use-compatibility-procedure-implementation>) also for

general information on legislative and administrative tools.

Influence area concept (4.1)

Potential influence areas for industrial land uses (4.1.1)

The Ministry has identified, through case studies and past experience, the following potential influence areas (i.e. areas within which adverse effects may be experienced) for industrial land uses (illustrated in Appendix C (<https://www.ontario.ca/page/d-6-3-separation-distances>))):

Class I—70 metres

Class II—300 metres

Class III—1000 metres

(See Section 4.4, "Measuring Separation Distance" also)

Actual influence areas for industrial land uses (4.1.2)

The actual influence area (overall range within which an adverse effect would be or is experienced) for a particular facility is site-specific, and may be defined within, or in exceptional circumstances (see Section 4.5.2, Separation Distance Greater than the Potential Influence Area"), beyond the potential influence area either before, or where applicable, after buffers have been used to reduce, eliminate or otherwise intercept adverse effects.

In the absence of specific substantiating information (normally obtained through technical studies—see Section 4.6, "Studies") which identifies an actual influence area, the potential influence areas set out in Section 4.1.1 of this guideline shall be used.

Influence area reduced through industrial controls (4.1.3)

Mitigation at the industrial source, if it affects the criteria considered in Appendix A (<https://www.ontario.ca/page/d-6-1-industrial-categorization-criteria>), may enable an industry to be categorized as a lesser Class (e.g. from a Class II to a Class I), thereby reducing the minimum separation distance requirements set out in Section 4.3, "Recommended Minimum Separation Distances". For example, a rendering plant can be an extremely noxious use, but an enzyme digester can make it "cleaner".

In cases where the separation distance is reduced through other buffering techniques, where feasible the Ministry recommends some site-specific notification (e.g. spot zoning or requirement for re-zoning by the municipality) to deal with future changes in use which would not normally require re-zoning.

Land use planning (4.2)

Purpose of general land use plans (4.2.1)

Impacts from industrial sources relate to operating and maintenance procedures rather than general land use. Land use documents normally do not control the operation of a land use, as the operational details are not normally known when lands are designated for industrial use, and most operational aspects cannot be controlled by municipalities through the land use planning process.

As well, municipal official plans (O.P.s) give general policy direction. Official plans and associated policies have no power of enforcement. There is no allowance for "performance" zoning. Therefore, it is difficult to calculate actual influence areas at the time the O.P. is contemplated. Uses within a given designation or zoning could have totally different influence areas.

Determining permitted uses within industrial land use designations (4.2.2)

Permitted uses should be based on operational aspects (e.g. plant emissions, hours of operation, traffic movement) and mitigation employed. Zoning by-laws, however, do not normally use such factors in the definition of permitted uses. Therefore, it shall be necessary to consult Appendix A of this guideline (<https://www.ontario.ca/page/d-6-1-industrial-categorization-criteria>), to determine permitted uses within a general land use designation.

Existing and committed industrial land use (4.2.3)

When there are existing and committed industrial uses, the Ministry recommends that the category designation of "Class I", "Class II" or "Class III", according to Appendix A of this policy (<https://www.ontario.ca/page/d-6-1-industrial-categorization-criteria>), be indicated in the land use plans by the approval authority.

Plan approval agencies are encouraged to delineate all potential influence areas or, where known, the actual influence areas, around existing and committed industrial land uses within their jurisdiction, to be used as a 'flag' when a change in land use is proposed within them.

This should be done on a scaled land use plan or map, and included in an easily accessible document, such as an official plan schedule.

Note: It would be advisable to include locations of former industrial facilities as well, since decommissioning and soil clean up may be required for site re-use. See Section 4.10.8, "Site Clean Up and Decommissioning" also.

On-site separation distance (4.2.4)

There is merit in providing a required separation distance on the facility site. However, there may be a change in industrial land use that does not require a change in zoning, but which nevertheless produces a different influence area not covered off by the existing on-site buffer area.

Therefore, when separation distance is provided partially or entirely on-site, the Ministry recommends that where feasible, some site-specific notification (e.g. spot zoning or requirement for re-zoning by the municipality) is put in place to ensure future changes in use which would not normally require re-zoning will comply with this guideline. The same problem could occur when a buffer area is provided on the sensitive site.

Off-site separation distance (4.2.5)

When the separation distance extends beyond the facility/sensitive site boundary or the industrial/sensitive zoned or designated lands, the intervening lands may be of a use or activity compatible with both the facility and the sensitive land use.

For example, depending upon the amount of intervening space, uses could include: warehousing, various commercial uses that relate to types of industries or the neighbouring lands, open/green space, road allowance or, for Class III and Class II industrial uses, Class I industrial uses. If a lower Class of industrial use is used, there must still be adequate separation and/or buffering as established in this guideline to avoid or eliminate adverse effects on any sensitive land uses in the vicinity.

Recommended minimum separation distances (4.3)

No incompatible development other than that identified in Section 4.10, "Redevelopment, Infilling and Mixed Use Areas" should occur in the areas identified below and illustrated in Appendix C (<https://www.ontario.ca/page/d-6-3-separation-distances>), even if additional mitigation for adverse effects, as discussed in Section 4.2 of Procedure D-1-1, "Types of Buffers" (<https://www.ontario.ca/page/d-1-1-land-use-compatibility-procedure-implementation#section-3>), is provided:

Class I—20 metres minimum separation distance

Class II—70 metres minimum separation distance

Class III—300 metres minimum separation distance

(See Section 4.4, "Measuring Separation Distance" also).

These minimums are based on Ministry studies and historical complaint data. They also make allowance for the fact that conventional zoning classifications usually permit a broad range of uses with varying potential to create land use conflicts.

Measuring separation distance (4.4)

Depending upon the situation, separation distances may be measured from different points:

General land use plans (4.4.1)

Measurement shall be from the area(s) designated for industrial use to the area(s) designated for sensitive land use. This would apply for such matters as municipal official plans and Ministry of Natural Resources District Land Guidelines.

Site specific plans (4.4.2)

Measurement shall normally be from the closest existing, committed or proposed property/lot line of the industrial land use to the property/lot line of the closest existing, committed or proposed sensitive land use. This approach provides for the full use and enjoyment of both the sensitive land use and the industrial properties. See Sections 4.4.3 and 4.4.4 for exceptional situations.

Zoning/site plan control (industrial lands) (4.4.3)

Where site-specific zoning or site plan control precludes the use of the setback for any activity associated with the industrial use that could create an adverse effect such as shipping and receiving or outside storage/stockpiling of materials (e.g. front yard must be landscaped, and functions as a buffer), then the setback can be included as part of the measurement, rather than measuring from the industrial property line.

Note: This approach could restrict future expansion of existing land uses.

On-site buffers could be required by a municipality through zoning by-law setback requirements in industrial subdivisions, but this may not be practical, as the provision of very deep lots would be necessary. See Section 4.2.4, "On-Site Separation Distance" also. The use of other forms of mitigation may have to wait until a specific industry and/or sensitive land use has been identified/established.

Ancillary land uses (sensitive land use) (4.4.4)

For sensitive land uses, where the established use of on-site lands are not of a sensitive nature, such as a parking lot servicing a hospital, the land area comprising the parking lot may be included within the separation distance (i.e. measure from where the actual sensitive activities occur).

Note: This approach could restrict future expansion of existing land uses. See Section 4.2.4, "On-Site Separation Distance" also.

Vacant industrial land (4.4.5)

Where there is no existing industrial facility within the area designated/zoned for industrial land use, determination of the potential influence area shall be based upon a hypothetical "worst case scenario" for which the zoned area is committed. Therefore, Ministry staff or the delegated authority shall use the outside range of the potential influence area to determine an appropriate separation distance. See Section 4.2.2, "Determining Permitted Uses Within Industrial Land Use Designations" also.

Changing industrial uses (4.4.6)

Where an influence area has been established based upon existing industrial land uses, it will be the responsibility of the local municipality to restrict, through zoning or any other available means, the types of future industrial uses that can occur, so that they are compatible with the influence area used.

Note: Zoning by-laws cannot control the level of emissions produced (related to specific products) or technology used, hours of operation or traffic movements. It is difficult to correlate zoning by-laws with the industrial classifications set out in Appendix A (<https://www.ontario.ca/page/d-6-1-industrial-categorization-criteria>), and therefore site-specific/spot zoning or a requirement for re-zoning by the municipality may be necessary to ensure that the establishment of new industrial uses comply with this guideline. See Section 4.2.2, "Determining Permitted Uses Within Industrial Land Use Designations" also.

Commenting on land use proposals (4.5)

Considerations when a change in land use is proposed within an influence area or potential influence area (4.5.1)

The potential influence areas, or where known, the actual influence areas (see Section 4.1 of this guideline) should act as a "flag", and no sensitive land uses shall be permitted within the actual or potential influence areas of Class I, II or III industrial land uses, without evidence to substantiate the absence of a problem. When studies are needed to identify problems and mitigative measures, see Section 4.6, "Studies".

When a land use proposal places sensitive land use beyond a facility's potential influence area, or where known, actual influence area, the Ministry shall not normally object to the change in land use on the basis of land use compatibility. For exceptional situations, see Section 4.5.2 "Separation Distance Greater than the Potential Influence Area".

Separation distance greater than the potential influence area (4.5.2)

In exceptional circumstances the Ministry shall recommend separation distances greater than the outer limit of the potential influence areas identified in Section 4.1.1 of this guideline. In such cases, the Ministry shall demonstrate the need for greater distance, such as historical data for similar facilities. Studies (see Section 4.6) may be required even if a separation distance beyond the potential influence area is proposed.

Irreconcilable incompatibilities (4.5.3)

When impacts from industrial activities cannot be mitigated or prevented to the level of a trivial impact (i.e. no adverse effects), new development, whether it be an industrial facility or a sensitive land use, shall not be permitted.

There may be situations where development or redevelopment can be phased until such time that an adverse effect would no longer exist (e.g. the facility ceases to operate or the problem is rectified by new technology).

Studies (4.6)

Air quality studies for noise, dust and odour should be provided by the proponent to the approving authority.

Note: Studies shall be provided prior to Ministry staff commenting on draft approval, to see if draft approval can be supported (in principle).

Noise (4.6.1)

Noise shall be addressed through Ministry Publication LU-131 for all situations applicable to this guideline.

Dust (4.6.2)

Contaminant emission sources can be classified as point sources or fugitive sources. Most facilities will produce both point source and fugitive emissions, and it is difficult to allocate emissions to one or the other source.

Regulation 346 sets out standards for contaminants, including suspended particulate matter and dust fall. The document entitled "General Information: Certificates of Approval (Air)" that is referenced in Appendix B provides information on the approval requirements and procedures. Details for assessing emissions from point sources such as stacks and vents, and standards and interim standards are also provided.

Even if *Regulation 346* standards are met at the property line of the industrial site, there may still be complaints from neighbouring land uses because:

- dispersion modelling is not 100% accurate and it cannot be guaranteed that point source emissions will be controlled 100% of the time

- the standards, which are based upon acceptable risk with regard to health, odour and vegetation, are based on 1/2 hour averages, and at some point within a 1/2 hour there may be a high level of emissions

Emissions from fugitive sources such as dust from traffic and storage piles are more difficult to quantify, and a plan in itself to minimize fugitive emissions also may not be 100% effective. The Ministry is preparing an interim guideline that addresses areas such as measuring and minimizing fugitive emissions. Therefore, separation of incompatible land uses will help to minimize potential adverse effects from fugitive emissions.

Odour (4.6.3)

Odorous contaminants are particularly difficult to control on-site. Although the contaminants emitted may meet the Ministry's standards and interim standards, experience indicates that complaints may still be received from residents living in proximity to the industry, for the reasons set out in Section 4.6.2. Emissions of odorous contaminants may result in off-site odour problems which could constitute an "adverse effect". An "adverse effect" is a violation of Section 14 of the *Environmental Protection Act*. Stack testing under a worst case scenario, odour panel tests and odour control equipment may be required to minimize odour concerns.

Mitigation (4.7)

Additional mitigation measures (see Procedure D-1-1, "Land Use Compatibility: Implementation", Section 4.2, "Types of Buffers" (<https://www.ontario.ca/page/d-1-1-land-use-compatibility-procedure-implementation#section-3>)) may need to be incorporated on either the development lands or the surrounding properties, at the expense of the developer, where the industrial facility is operating in compliance with legislated Ministry requirements.

Legal agreements (4.8)

When mitigative controls are to be installed on surrounding properties, the local municipality or other approving authority should require an agreement between the developer and the affected property owners, to ensure mitigation of adverse effects to the greatest degree possible.

The legal agreement between the developer and other affected parties to ensure adequate mitigation should be reviewed and endorsed by Ministry staff and/or the delegated authority prior to development approval.

Financial assurance (4.9)

The Ministry recommends that bonds be required by the approving authority to ensure that mitigation will be carried out.

Redevelopment, infilling & mixed use areas (4.10)

It may not be possible to achieve the recommended minimum separation distances set out in Section 4.3 of this guideline in areas where infilling, urban redevelopment and/or a transition to mixed use is taking place.

The following requirements shall apply if this Ministry or a delegated authority is to consider proposals for urban redevelopment, infilling and/or a transition to mixed use within less than the Ministry's recommended separation distances set out in Section 4.3 of this guideline:

Official status (4.10.1)

Such proposals must be in accordance with official plan policy or a formal planning approval process, with the boundaries of the redevelopment, infilling or mixed use area clearly defined by the planning authority.

Zoning (4.10.2)

The Ministry or delegated authority shall only consider redevelopment, infill and mixed use proposals which put industrial and sensitive land uses together within less than the recommended minimum separation distances (see Section 4.3), if the zoning is use specific (i.e. only the existing or proposed industrial or sensitive use is permitted by the municipality or other approving authority), or if planning considerations are based on the "worst case scenario" based on permitted uses in the industrial zoning by-law.

Feasibility analysis (4.10.3)

When a change in land use is proposed for either industrial or sensitive land use, less than the minimum separation distance set out in Section 4.3 may be acceptable subject to either the municipality or the proponent providing a justifying impact assessment (i.e. a use specific evaluation of the industrial processes and the potential for off-site impacts on existing and proposed sensitive land uses). Mitigation is the key to dealing with less than the minimum to the greatest extent possible.

The overall feasibility of the proposal, from a land use compatibility perspective, should be based on the anticipated adverse effects from each specific industry, and the effectiveness of proposed mitigative measures to lessen impacts on sensitive land uses within the context of planning for the area.

The Ministry or delegated authority shall require the following in order to make an assessment for allowing less than the recommended minimum separation distance:

- Detailed mapping showing the area subject to the proposed development and all industrial facilities and any other sources of adverse effects (e.g. rail lines).
- Mapping shall also indicate all vacant properties currently zoned and/or designated for industrial use along with relevant excerpts from the official plan and/or zoning by-law to indicate the full range of permitted uses. Attempts shall also be made to predict the types and levels of adverse impact that would result in a "worst case scenario" should an industrial use be developed upon any of the vacant parcels.
- Assessment of the types and levels of contaminant discharges being generated by current industrial facilities, including those associated with transportation facilities which serve the industries.
- Based upon actual and anticipated impacts, necessary mitigative measures should be identified based upon technical assessments. Noise and other technical studies shall be submitted to appropriate Ministry staff for review. See Sections 4.6 "Studies" and 4.7, "Mitigation" for more details.
- An indication shall be given as to the methods by which the mitigative measures (approved by the land use authority) will be implemented, i.e. the types of agreements that must be entered into. See Section 4.8, "Legal Agreements" also.
- Where mitigative measures are to be applied off-site to an existing industrial facility, the proponent shall demonstrate that the industrial facility has no objection to the proposed use or to the addition of the necessary mitigative

measures. Implementation of approved mitigation measures shall be required as a condition of draft approval.

- Proponents should demonstrate to the approving authority that no objections to the proposed use have been raised by area residents, industries, etc. See Section 4.10.5, "Public Consultation".

New use of existing buildings (4.10.4)

The requirement for a feasibility analysis identified in Section 4.10.3 above shall apply as well where a new use is proposed for an existing building.

Public consultation (4.10.5)

When development is proposed at less than the recommended minimum distances identified in Section 4.3, the approving authority is encouraged to require public consultation with all land owners within the influence area or potential influence area of the industrial facility/facilities.

Environmental warnings for sensitive land uses (4.10.6)

When the new development is sensitive, the Ministry recommends that a warning of anticipated nuisance effects be included in any offers of purchase and sale. A means of notifying ensuing purchasers should be determined by the local municipality. A warning may be included in a document which can be registered on title according to the Ministry of Consumer and Commercial Relations Bulletin No. 91003, "Environmental Warnings/Restrictions" (Appendix D) (<https://www.ontario.ca/page/d-6-4-mccr-bulletin-no-91003>) .

Phased/sequential development (4.10.7)

When industry is being phased out as part of a large-scale plan, consideration may be given to staging redevelopment and/or infilling to coincide with the closure of those industries which create a significant impact on the proposed sensitive land use(s).

Site clean up & decommissioning (4.10.8)

Guideline C-15 (former Ministry Policy 14-17), "Guidelines for the Clean Up of Contaminated Sites in Ontario" may applying conjunction with re-use of industrial

properties. In such instances, the approving authority should ensure that the level of clean up is appropriate for both the re-use of the site and the protection of sensitive land use receptors.

Note: Municipal O.P.s should establish a policy to indicate when site rehabilitation (especially for mixed use, redevelopment and infilling) is required. A policy should also require that there be a qualified individual on-site to oversee the rehabilitation. It is recommended that this requirement be incorporated in a development agreement between the developer and the municipality.

Accessory residential uses (4.11)

Some municipalities may permit "accessory residential uses" in industrial official plan designations or zoning by-laws (i.e. the owner's residence is on the same property as the business/industry). When the residence will no longer be occupied by the on-site business/industry owner, any re-use of the residence shall be subject to the requirements set out in Section 4.10, "Redevelopment, Infilling & Mixed Use", particularly Section 4.10.4, "New Use of Existing Buildings" and Section 4.10.8, "Site Clean Up & Decommissioning".

Where there are provisions for "accessory residential uses", it may be appropriate for municipalities to prohibit such residential uses where none exist, through an official plan amendment or a site-specific zoning-by-law (see Section 4.10.2, "Zoning").

Reference documents

- (a) Guideline C-15, "Guidelines for the Clean Up of Contaminated Sites in Ontario"
- (b) Guideline D-1, "Land Use Compatibility" (<https://www.ontario.ca/page/d-1-land-use-and-compatibility>)
- (c) Procedure D-1-1, "Land Use Compatibility: Implementation" (<https://www.ontario.ca/page/d-1-1-land-use-compatibility-procedure-implementation>)
- (d) Procedure D-1-2, "Land Use Compatibility: Specific Applications" (<https://www.ontario.ca/page/d-1-2-land-use-compatibility-specific-applications>)
- (e) Procedure D-1-3, "Land Use Compatibility: Definitions" (<https://www.ontario.ca/page/d-1-3-land-use-compatibility-definitions>)

(f) Publication LU-131, "Noise Assessment Criteria in Land Use Planning"

Related

Environmental land use planning guides (D-series)

(<https://www.ontario.ca/page/environmental-land-use-planning-guides>)

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Noise Assessment Criteria in Land Use Planning

Publication LU-131

October 1997

This document replaces Publication NPC-131 "Guidelines for Noise Control in Land Use Planning", of the "Model Municipal Noise Control By-Law, Final Report, August 1978".

PURPOSE

This guideline outlines the position of the Ministry of the Environment (MOE) on noise criteria for planning of sensitive land uses, in support of the Provincial Policy Statement under the *Planning Act* and in accordance with the Ministry of the Environment Guideline D-1 "Land Use Compatibility". It is intended for use in planning of noise sensitive land uses adjacent to facilities such as but not limited to airports, road and rail transportation corridors, industrial facilities, aggregate facilities, major commercial facilities, sewage treatment facilities, and waste sites.

In order to achieve effective and economical planning, the principles described in this document should be implemented early in the planning process. The purpose is to avoid problems in a proactive manner through input into the land use planning process. This guideline pertains to the mandate and the responsibilities of the MOE under its existing legislation, namely the Environmental Protection Act (EPA) and the Environmental Assessment Act (EAA). Other agencies, such as the federal government and municipalities, may have requirements over and above those of this MOE guideline.

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1. GENERAL**1.1 SCOPE**

This Publication defines criteria for noise impact assessment of proposed residential or other noise sensitive land uses located in Class 1 and Class 2 Areas (Urban). The Publication also specifies procedures for the establishment of sound levels on the site of proposed noise sensitive land uses due to transportation sources (road, rail and air traffic) as well as stationary sources (such as industrial and commercial activities). Acceptable noise control measures are enumerated.

Responsibilities for achieving the sound level criteria that ensure a comfortable living environment are assigned. Guidance in the form of good planning criteria and procedures is provided for development of noise sensitive land uses adjacent to industrial or commercial activities.

The guidelines in this Publication are intended to assist this Ministry, and provide direction to municipalities, planning boards and consultants on the requirements of the MOE in land use planning where noise is a factor. The Publication includes an Annex, which provides additional details, definitions and rationale for the assessment criteria in the context of general planning goals and principles. Furthermore, the Annex contains supplementary noise criteria which are presented as guidance for information purposes.

1.2 IMPLEMENTATION**1.2.1 Implementation by MOE**

The MOE will implement the guidelines in this document by providing comments to relevant agencies on development applications and planning documents that are circulated to the MOE under the Planning Act, as specified in Reference [15].

1.2.2 Municipal Implementation

This Publication is intended to assist municipalities in the preparation of official plans, official plan amendments, comprehensive zoning by-laws, rezonings, plans of subdivisions, plans of condominiums, and other applications under the Planning Act.

1.2.3 Technical Procedures

More specific information on the technical implementation procedures, including details of noise impact assessment methods and control measures are contained in Reference [1] and in other publications listed in Section 1.4. Reference [16] provides information regarding the use of warning clauses.

1.3 RESPONSIBILITY

It is the developer's responsibility to ensure that the applicable sound level criteria are met. These responsibilities include the following:

- (a) determining feasibility of the project including constraints applicable before any project action is taken or construction commitment is made;
- (b) assessing outdoor and indoor acoustical environments;
- (c) ensuring that the required control measures are incorporated in the development.

The required control measures should be specified in an agreement with the municipality.

If the noise impact results from a stationary source, it is the developer's responsibility to investigate feasible means of impact mitigation. The preferred mitigation option is a reduction of noise emissions at the stationary source by modifying the design or the operation of the source, or by implementing noise control measures directly at the sources. In that case, a cooperative effort on the part of the developer and the stationary source owner is desirable.

The control measures that are required as a result of mitigation at the site of a stationary source should be specified in a separate agreement between the developer and the owner of the stationary source.

1.4 REFERENCES

Reference is made to the following publications:

- [1] Noise Assessment Criteria in Land Use Planning: Requirements, Procedures and Implementation, Ontario Ministry of the Environment, May 1997.
- [2] Manual for Noise Assessment in Land Use Planning, Ontario Ministry of the Environment, 1997.
- [3] ORNAMENT, Ontario Road Noise Analysis Method for Environment and Transportation, Technical Document, Ontario Ministry of the Environment, ISBN 0-7729-6376, 1989.
- [4] STEAM, Sound from Trains Environmental Analysis Method, Ontario Ministry of the Environment, ISBN 0-7729-6376-2, 1990.
- [5] Planning Act, Government of Ontario.
- [6] Environmental Protection Act, Government of Ontario.
- [7] NPC-101 - Technical Definitions, part of Reference [12].
- [8] NPC-102 - Instrumentation, part of Reference [12].
- [9] NPC-103 - Procedures, part of Reference [12].
- [10] NPC-104 - Sound Level Adjustments, part of Reference [12].
- [11] NPC-205 - Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban).
- [12] Model Municipal Noise Control By-Law, Final Report, August 1978, Ontario Ministry of the Environment.
- [13] Provincial Policy Statement, Ontario Ministry of Municipal Affairs and Housing, ISBN 0-7778-6020-1, February 1, 1997.
- [14] Guideline D-6, Compatibility between Industrial Facilities and Sensitive Land Uses, Ontario Ministry of the Environment, July 1995.
- [15] Guideline D-1, Land Use Compatibility, Ontario Ministry of the Environment, July 1995.
- [16] Bulletin No. 91003, Environmental Warnings/Restrictions, Ontario Ministry of Consumer and Commercial Relations, July 25, 1991.

2. DEFINITIONS**"Adverse effect"**

means one or more of the following effects of sound and vibration, selected from the relevant definitions in the Environmental Protection Act, Reference [6]:

- impairment of the quality of the natural environment for any use that can be made of it;
- harm or material discomfort to any person;
- an adverse effect on the health of any person, and
- loss of enjoyment of normal use of property.

"Ambient sound level"

means Background sound level;

"Background sound level"

is the sound level that is present in the environment, produced by noise sources other than the source under impact assessment. Highly intrusive short duration noise caused by a source such as an aircraft fly-over or a train pass-by is excluded from the determination of the background sound level;

"Class 1 Area"

means an area with an acoustical environment typical of a major population centre, where the background sound level is dominated by the urban hum.

"Class 2 Area"

means an area with an acoustical environment that has qualities representative of both Class 1 and Class 3 Areas, and in which a low ambient sound level, normally occurring only between 23:00 and 07:00 hours in Class 1 Areas, will typically be realized as early as 19:00 hours.

Other characteristics which may indicate the presence of a Class 2 Area include:

- absence of urban hum between 19:00 and 23:00 hours;
- evening background sound level defined by natural environment and infrequent human activity;
- no clearly audible sound from stationary sources other than from those under impact assessment.

"Class 3 Area"

means a rural area with an acoustical environment that is dominated by natural sounds having little or no road traffic, such as the following:

- a small community with less than 1000 population;
- agricultural area;
- a rural recreational area such as a cottage or a resort area; or
- a wilderness area.

"Construction", "Conveyance"

refer to the Annex.

"Control measure"

refers to action which can be taken to achieve compatibility for the specific land use or activity. The control measure should be permanent in nature and not be readily removable or alterable by the future occupants. Control measures may include, but are not limited to, the following:

- Acoustical Barriers - berms, walls, favourable topographical features, other intervening structures;
- Architectural Design - room and corridor arrangement, blank walls, placement of windows, balconies, and courtyards, building height;

- Building Construction - acoustical treatment of walls, ceilings, selection of acoustical materials and other control devices. Provision for air conditioning;
- Mitigation at Source - noise control applied directly to the noise source;
- Site Planning - orientation of buildings and Outdoor Living Areas with respect to noise sources, spatial separation such as the insertion of noise insensitive land uses between source and receiver, appropriate setbacks, and the use of intervening service roads;
- Windows/Doors - acoustically designed windows or doors that provide the required noise reduction. In order to allow for the windows and doors to remain closed, air conditioning, i.e. mechanical ventilation and climatic control system, is necessary.

Refer to References [1] and [2] for further description of control measures and their application.

"dBA"

means the A-weighted sound pressure level.

"dBAI"

means the A-weighted sound pressure level of an impulsive sound measured with a sound level meter set to "impulse" response.

"Indoor sound level"

is an estimated sound level in the central part of a room.

" $L_{eq}(T)$: $L_{eq}(16)$, $L_{eq}(8)$, $L_{eq}(1)$ "

means the A-weighted level of a steady sound carrying the same total energy in the time period T as the observed fluctuating sound. The time period T is given in hours.

"Ministry"

means the Ontario Ministry of the Environment.

"NEF/NEP"

means Noise Exposure Forecast/Noise Exposure Projection contours for major Ontario airports.

"Noise"

means unwanted sound.

"Noise sensitive land uses"

mean the following sensitive land uses:

- residential developments;
- seasonal residential developments;
- hospitals, nursing/retirement homes, schools, day-care centres, etc.

Sensitive land use means a land use that is sensitive in accordance with the definition of Reference [15], and that must be planned and/or designed using appropriate land use compatibility principles.

"Outdoor Living Area"

is the part of an outdoor area easily accessible from the building and designed for the quiet enjoyment of the outdoor environment. Outdoor Living Areas include, but are not limited to, the following:

- Backyards or front yards or gardens or terraces or patios;
- Balconies, provided they are the only Outdoor Living Areas for the occupant and meet the following conditions:

- (a) minimum depth of 4 m;
 - (b) outside the exterior building facade;
 - (c) unenclosed;
- Common Outdoor Living Areas associated with multi-storey apartment buildings or condominiums;
 - Passive recreational areas such as parks if identified by the municipality.

"Point of Reception"

means any point on the premises of a person where sound or vibration originating from other than those premises is received, see Reference [12].

"Stationary Source"

means a source of sound which does not normally move from place to place and includes the premises of a person as one stationary source, unless the dominant source of sound on those premises is construction or a conveyance, see Reference [12]. Section A.2.1.1 provides further explanation.

"Time Periods"

"Day-time"

is the 16-hour period between 07:00 and 23:00 hours.

"Evening"

is the 4-hour period between 19:00 and 23:00 hours.

"Night-time"

is the 8-hour period between 23:00 and 07:00 hours.

"Urban Hum"

means aggregate sound of many unidentifiable, mostly road traffic related sound sources.

"Warning Clause" (or "Environmental Warning/Restriction")

means a notification of or obligation to notify a potential purchaser of some environmental concern; in this case the concern is potential annoyance due a source of noise.

3. NOISE IMPACT ASSESSMENT, TRANSPORTATION SOURCES

This section deals with noise impact from transportation corridors (i.e., road, rail and air traffic). In case of multiple transportation noise sources:

- (a) the outdoor noise impact due to air traffic shall be established separately from the impact due to road and/or rail traffic;
- (b) the outdoor noise impact due to road and rail traffic shall be combined;
- (c) the indoor noise impact shall be assessed separately for road, rail and aircraft noise. The required indoor noise control measures for the multiple source impact are then defined by a combined acoustical insulation parameter (descriptor) that is evaluated by combining the acoustical insulation parameters determined for each of the sources.

In all cases, consideration should be given to future sound levels. For road and rail noise, a minimum ten year prediction should be made and for aircraft noise, the current NEF/NEP contours shall apply.

3.1 ROAD AND RAIL TRAFFIC

3.1.1 Sound Levels

The sound levels from road and/or rail transportation at the site of a proposed noise sensitive land use shall be established using methods included in References [3] and [4]. Further details are in Section A.2 of the Annex.

3.1.2 Day-time Outdoor Sound Level Criterion

Table 1 gives the equivalent sound level (L_{eq}) criterion in the selected Outdoor Living Area. The criterion applies to the entire day-time period from 07:00 to 23:00. Section A.3.2.1 of the Annex describes the application of the criteria and the use of warning clauses.

TABLE 1
Sound Level Criterion for Outdoor Living Areas
Road and Rail

Time Period	L_{eq} (16) (dBA)
16 hr, 07:00 - 23:00	55

3.1.3 Indoor Sound Level Criteria

Table 2 gives the equivalent sound level (L_{eq}) criteria and the applicable time periods for the indicated types of indoor space. The specified sound level criteria are minimum requirements and apply to the indicated indoor spaces with the windows and doors closed.

TABLE 2
Indoor Sound Level Criteria
Road and Rail

Type of Space	L_{eq} (Time Period) (dBA)	
	Road	Rail
Living/dining areas of residences, hospitals, schools, nursing/retirement homes, day-care centres, etc. (Time period: 16 hr, 07:00 - 23:00)	45	40
Sleeping quarters (Time period: 8 hr, 23:00 - 07:00)	40	35

3.2 AIR TRAFFIC

3.2.1 Noise Impact

Policy 1.1.3 g) of Reference [13] establishes the applicable criterion. The noise impact on the proposed noise sensitive land use is determined based on the location of the noise sensitive land use with respect to the official Noise Exposure Forecast/Noise Exposure Projection (NEF/NEP) contours. These NEF/NEP contours are specified on a list of current contour maps available from the Ministry of Municipal Affairs and Housing. The more restrictive of the NEF and NEP contours apply. Further details are in Annex Section A.2.4 and Section A.3.2.1.

3.2.2 Outdoor Criterion

Table 3 gives the aircraft noise criterion in terms of an NEF/NEP value in any outdoor area, including the Outdoor Living Area. The criterion applies to the entire 24-hour period. The distance separation from the airport and, consequently, the location of the noise sensitive land use with respect to the NEF/NEP contours, is the only measure that controls the outdoor noise impact. Section A.3.2.1 of the Annex describes the application of the criterion and the use of warning clauses.

TABLE 3
Outdoor Aircraft Noise Criterion

Time Period	NEF/NEP
24 hours	30 *

* Certain conditions apply above NEF/NEP value of 25, see Section A.3.2.1. The criterion may not apply to redevelopment and infilling, see Reference [13] and Section A.3.2.1.

3.2.3 Indoor Criteria

Table 4 gives the indoor aircraft noise criteria in terms of NEF/NEP values for the indicated type of indoor space. These criteria apply to the entire 24-hour period. The specified criteria are minimum requirements and apply to the indicated indoor spaces with the windows and doors closed.

TABLE 4
Indoor Aircraft Noise Criteria *
(Applicable over 24-hour period)

Type of Space	Indoor NEF/NEP
Living/dining areas of residences, hospitals, schools, nursing/retirement homes, day-care centres, etc.	5
Sleeping Quarters	0

* The Indoor NEF/NEP values listed in Table 4 are not obtained from NEF/NEP contour maps. The values are representative of the indoor sound levels and are used as assessment criteria for the evaluation of acoustical insulation requirements, see Reference [1].

4. **NOISE IMPACT ASSESSMENT, STATIONARY SOURCES** **(Industrial and Commercial Activities)**

In comparison to noise from transportation sources, noise from stationary sources such as industrial or commercial activities is generally controlled more effectively at the source. If control measures are required to reduce the noise impact then these measures should be designed in accordance with the following principles:

- Noise from stationary sources is generally controllable at lower cost at the source than at the point of reception and, consequently, source mitigation is the preferred option;
- Cooperation between the developer and the owner of the stationary sources is highly desirable and often essential in order to achieve the required mitigation;

- (c) Installation of noise control measures at the source will typically require a Certificate of Approval (Air), as specified in Section 9 of the Environmental Protection Act, Reference [6];
- (d) Noise control measures aimed at the indoor environment, such as air conditioning, are usually immaterial because the criteria for stationary source sound levels apply to the plane of windows; the sound levels are estimated in the absence of the building. The use of central air conditioning may be acceptable under special circumstances, in certain types of developments, when the central air conditioning system forms an essential part of the overall building design - details are described in Section A.2.1.4;
- (e) Assessment of noise impact produced by stationary sources typically involves calculation of sound emissions from the source, transmission and propagation of sound and the effect of intervening obstacles such as barriers. The calculation should account for the frequency characteristics of the noise source.

4.1 ESTABLISHMENT OF SOUND LEVELS

The sound levels anticipated on the site of a proposed noise sensitive land use shall be established in accordance with References [8], [9], [10] and [11], including all the appropriate adjustments. The assessment of noise impact shall reflect the "predictable worst case" situation, i.e. the largest difference between source sound levels and the applicable criterion.

4.2 FEASIBILITY ASSESSMENT

Initial assessment in the planning stage of the project is required in order to determine feasibility of development. An assessment of the hourly equivalent sound level, L_{eq} (1), produced by the stationary source should be made at the property line of the proposed or committed noise sensitive land use, closest to the stationary source. The proponent of the development should demonstrate the feasibility of meeting the sound level criteria contained in Sections 4.4, 4.5 and 4.7 and, if necessary, specify the necessary noise control measures. References [1], [13] and [14] provide further information regarding feasibility studies.

Committed land use means a land use that has been approved by the regulatory authority but is not yet existing. The selected location should define the closest approach of the noise sensitive land use to the stationary source, and the location of highest noise impact.

4.3 CLASS 2 AREA

Aside from development in a typically Class 1 Area (urban) setting, new residential land uses may be proposed within an environment that has qualities representative of both Class 1 and Class 3 Areas. For the purposes of this document, an area having characteristics of both urban and rural environments is referred to as a Class 2 Area.

In a Class 1 Area, such as a major population centre, the background sound level is dominated by the sound of road traffic, referred to as "urban hum". In a Class 3 Area, the acoustical environment is generally made up of natural sounds typical of agricultural or wilderness areas with little or no road traffic. A Class 2 Area can be characterised by an environment generally dominated by natural sounds during the evening and night-time periods and with man made sounds during a shortened day-time period (07:00 - 19:00).

A low level "urban hum" may be audible in a Class 2 Area during the shortened day-time period (07:00 to 19:00), but would typically be absent during the evening and at night. In order to prevent adverse effects during a quieter evening background, the stationary source sound level criteria for a Class 2 Area are 5 dB more restrictive within the hours of 19:00 to 23:00.

4.4 OUTDOOR SOUND LEVEL CRITERIA

Table 5 gives the sound level criteria in terms of the hourly equivalent sound level, $L_{eq}(1)$, for an outdoor point of reception in any area amenable for use. The criteria should not be exceeded in any day-time hour.

TABLE 5
Sound Level Criteria for an Outdoor Point of Reception
Stationary Sources

Area	Time of Day	Hourly $L_{eq}(1)$ (dBA)
Class 1	07:00 - 23:00	50*
Class 2	07:00 - 19:00	50*
	19:00 - 23:00	45*

* or the minimum hourly background sound level $L_{eq}(1)$, whichever is higher.

4.5 SOUND LEVEL CRITERIA IN THE PLANE OF A WINDOW

4.5.1 Day-time

Table 6 gives the day-time hourly equivalent sound level, $L_{eq}(1)$, criteria in the plane of a window. These criteria apply to the living spaces specified in Table 2. Section A.3.1.1 of the Annex describes their application.

TABLE 6
Sound Level Criteria in the Plane of a Window
Stationary Sources

Area	Time of Day	Hourly $L_{eq}(1)$ (dBA)
Class 1	07:00 - 23:00	50*
Class 2	07:00 - 19:00	50*
	19:00 - 23:00	45*

* or the minimum hourly background sound level $L_{eq}(1)$, whichever is higher.

4.5.2 Night-time

Table 7 gives the night-time hourly equivalent sound level, $L_{eq}(1)$, criterion in the plane of a bedroom window. Section A.3.1.1 of the Annex describes the application of the criteria.

TABLE 7
Sound Level Criterion in the Plane of a Bedroom Window
Stationary Sources

Time of Day	Hourly $L_{eq}(1)$ (dBA)
23:00 - 07:00	45*

* or the minimum hourly background sound level $L_{eq}(1)$, whichever is higher.

4.6 INDOOR SOUND LEVEL CRITERIA

No criteria have been established for indoor sound levels because compliance with the plane of the window criteria, Tables 6 and 7, will, in the majority of cases, ensure that the indoor sound levels are acceptable. Nevertheless, special care must be taken when assessing the impact of sound with a special characteristic such as a dominant low frequency component.

4.7 SPECIAL SOURCES

4.7.1 Specific Impulsive Sources

For impulsive sound produced by a stationary source which is a metal working operation or a gun club, or for impulses which are infrequent, the applicable sound level criteria are specified in Section 9 of Reference [11]. Sections 12 and 13 of Reference [11] also apply. Applicable times and locations are given in Tables 5, 6 and 7.

Where Reference [11] specifies two date specific criteria, depending on when the operation of the stationary source commenced, such as the 50 dBAI or 60 dBAI criteria for metal working operations, the more stringent of the criteria, i.e. 50 dBAI in the example, is applicable.

4.7.2 Pest Control Devices

For sound from pest control devices, the applicable sound level criteria are specified in Section 10 of Reference [11]. Sections 11, 12 and 13 of Reference [11] also apply. The applicable times and locations are given in Tables 5, 6 and 7.

4.7.3 Blasting

The applicable Peak Pressure Level criterion for concussion resulting from blasting operations in a mine or a quarry is 120 dB, measured in accordance with Reference [9]. The applicable Peak Particle Velocity criterion for vibration resulting from blasting operations in a mine or a quarry is 1.00 cm/s, measured in accordance with Reference [9].

4.7.4 Additional Guidelines

Other guidelines have been drafted or are being developed for specific stationary sources such as land fill sites, snow making equipment, and other installation/equipment.

5. NOISE IMPACT ASSESSMENT, MULTIPLE SOURCES

The assessment of noise impact produced by a combination of transportation noise sources is described at the beginning of Section 3.

Where a proposed noise sensitive land use is impacted by a combination of transportation and stationary sources, the noise impact from the sources should be assessed separately using the procedures in Sections 3 and 4.

The required control measures should be evaluated individually for surface transportation, aircraft and stationary sources, for day-time and night-time periods, using procedures outlined in Sections 3 and 4. The final selection of control measures should ensure the compliance with the applicable sound level criteria of this document.

**Town of Fort Frances
Administrative Report**

TO: Planning and Development Executive Committee
FROM: Cody Vangel, Chief Building Official & Municipal Planner
SUBJECT: **B2-2022: Zoning By-law Amendment – 1229 Cornwall Avenue (Lagoon Property)**
DATE: May 2, 2022

Issue:

Consideration of zoning by-law amendment B2-2022 submitted by 2670568 Ontario Limited seeking to add the following multiple site-specific permitted uses at 1229 Cornwall Avenue (locally known “Lagoon Property”):

- 1) To add a site-specific permitted use for Industrial Scale Computing;
- 2) To utilize sea-cans or containers converted to Buildings and/or a constructed structure to house the Industrial Scale Computing equipment;
- 3) To add a site-specific permitted use for the establishment of a 150 MW Solar Farm to produce solar energy and/or feed into the electrical grid;
- 4) To add a site-specific permitted use for Transmission of electricity, including infrastructure (towers and lines);
- 5) To add a site-specific permitted use for Electric substations; and
- 6) To add a site-specific permitted use for Battery Energy Storage System (BESS)

The site-specific permitted uses would all be subject to the specific provisions of the Waste Disposal industrial (M3) zone.

Strategic Impact:

1. Attracting new industry and attracting investment for local business development.
16. Mitigate risks of climate change
25. Preserve Power Agreement and support Fort Frances Power Corporation

Options/Alternatives:

1. Recommend approval of application;
2. Recommend amendment to application; or
3. Recommend rejection of application.

Administrative Recommendation:

THAT the 150MW Solar Farm including the transmission of electricity, electric substation, and battery energy storage system site-specific uses be approved; and

THAT the property be designated as a Site Plan Control Area which will require a site plan agreement prior to any further development taking place on the property; and

Should the Planning and Development Executive Committee recommend approving the Industrial-Scale computing use and associated components, the following conditions and criteria are recommended:

- that a noise mitigation study and noise mitigation plan among other potential studies for the development be required as part of the site plan agreement; and
- that the sea-cans, if approved, not be allowed to stack on top each other; and

- the structures and operation associated with the industrial-scale computing be located not closer than 300m to any surrounding residential use or residential zoned properties, and further that this be located not closer than 850m to McIrvine Road and Eighth Street West; and
- that the proponent provide documentation from the MOECP stating whether an Environmental Compliance Approval will be necessary for this project aspect

History:

It is understood that the subject property has been historically used as a wastewater lagoon site which received effluent wastewater from the former Kraft and Paper mill as part of the mills treatment facility requirements.

Information contained on file for this property indicates the following respective building permits being issued:

- 92-205: Construct a 16' by 40' motor control centre building (McIrvine Road)
- 92-206: Construct a 20' by 35' pumphouse building (Cornwall Avenue)
- 95-107: Construct a 20' by 20' addition to existing ASB pumphouse
- 2010-058: Construct a 20' by 20' pumphouse addition to existing blower building for effluent control
- 2010-059: Construct a new 42' by 62' nutrient building for pollution/effluent control

Analysis:

- The project component related to the solar farm proposal generally complies with the Town's Official Plan (OP) and the Provincial Policy Statement 2020 (PPS). The development of green energy is critical in a changing climate and is further supported by the Town's and Provincial policy documents
 - o The proposed location is generally ideal for potential locations within the municipality
- Adding the proposed uses would not neglect the ongoing use as a "Lagoon". The property owner's commitment to the MOECP for future remediation has been stated during the public meeting. Though all operations could be on the same property, the applicant has regulatory commitments to the province in regard to the Lagoon.
- There are residential zoned properties and residential uses located near the southeast corner and in close proximity to the subject property. Additionally, there are some, but limited, residential uses located northwest of the subject property.
- Proponents stated during the public meeting that the industrial scale computing and the solar farm are not directly linked nor reliant on each other. One could essentially proceed without the other.
- Industrial scale computing is a relatively new industry that is known for its significant energy consumption and often significant noise outputs. This project aspect generally complies with some provisions of the OP and PPS from an economic development aspect and promotion of new industry. However, this project component does not generally comply with the provisions regarding energy conservation.
 - o The Town would be considered limited in viable locations for noise generating industry to locate due to size and accessible locations, if this such location were not considered. Locating this operation in the northeast corner of the property would situate the use approximately 550m to the nearest residential use.

Official Plan:

The Official plan designation for the subject property is “Employment”. Employment areas promote the development of a wide range of commercial and industrial uses. The proposed application generally complies with multiple provisions of the Official Plan in relation to industrial uses, employment opportunities, as well as green-energy:

2.2.2.ii. Fort Frances will promote social inclusion, improved access to housing, commerce, job opportunities and social services.

2.3.2.vi. Fort Frances will consider the potential impacts of climate change and encourage citizens, businesses and organizations to take measures to adapt to climate change.

3.1.7.(a) Energy Conservation: Fort Frances shall encourage and support energy conservation, district heating and combined heat and power, and alternative and renewable energy sources developed in accordance with Provincial and Federal legislation, policies and regulations. Fort Frances will also encourage the application of energy conservation measures in the design and construction of new buildings and in the rehabilitation and upgrading of existing buildings and structures.

3.1.7.(b) Flexibility in Development Approvals Process: Increased flexibility in zoning and site planning may be considered in order to accommodate variances in building orientation, landscaping designs, lot coverage and other site or building characteristics to provide for increased energy efficiency.

3.4.1. Planning Objectives

- The Town will ensure there is a sufficient amount of land designated to accommodate infrastructure and utilities.
- The Town will ensure issues related to land use compatibility are addressed.
- The Town will work with appropriate providers to ensure the safe and efficient provision of power, cable and telecommunications in an environmentally acceptable manner.
- In the provision of infrastructure and utilities, the Town will encourage the use of innovative techniques and new technology.

3.4.2.(b) Permitted Uses: Uses include public and/or privately owned facilities, including water and sanitary sewage facilities, Stormwater Management Facilities, pumping stations, hydro corridors, communications/telecommunications infrastructure and facilities and transmission towers. These facilities are permitted in all land use designations, subject to the Policies of the Plan.

An excerpt of the Town’s Official Plan, particularly Sections 3.4.5. to 3.4.8. referring to utility infrastructure green energy and energy conservation, has been included with this report to further demonstrate general compliance of this request as it relates to the Town’s Official Plan.

Additionally, an excerpt of Section 4.2 Employment Areas has further been included for reference to demonstrate how this proposal generally complies with the Official Plan.

The Town’s Official Plan outlines a number of studies that may be requested for a wide range of development. Upon review of the application and consideration of the potential noise that may be output by the industrial-scale computing, it would be recommended to require a noise mitigation study as a condition of approval of the industrial-scale computing use, or upon general approval through a required site plan control agreement.

Zoning:

The request submitted is to include the following as a site-specific permitted uses for the property, subject to the specific provisions of the Waste Disposal Industrial (M3) zone:

- 1) To add a site-specific permitted use for Industrial Scale Computing;
- 2) To utilize sea-cans or containers converted to Buildings and/or a constructed structure to house the Industrial Scale Computing equipment;
- 3) To add a site-specific permitted use for the establishment of a 150 MW Solar Farm to produce solar energy and/or feed into the electrical grid;
- 4) To add a site-specific permitted use for Transmission of electricity, including infrastructure (towers and lines);
- 5) To add a site-specific permitted use for Electric substations; and
- 6) To add a site-specific permitted use for Battery Energy Storage System (BESS)

The proponent offers the following definitions for the requested uses:

Industrial Scale Computing: The use of premises for the purpose of housing computer systems that collect, maintain, store, and/or process data for profit. Typical uses include but are not limited to blockchain/cryptocurrency mining and data centres.

Solar Farm: 150MW of Photo Voltaic Solar Generation utilizing either a fixed mounting or a variable tracking system.

Transmission of electricity, including infrastructure (towers and lines): Transmission is an interconnected group of lines and associated equipment for the movement or transfer of electric energy between points of supply and points at which it is transformed for delivery to customers or is delivered to other electric systems.

Electric substations: A facility for switching electrical elements, transforming voltage, regulating power, or metering.

Battery Energy Storage System (BESS): A Battery Energy Storage System (BESS) is a type of energy storage that uses a group of batteries to store electrical energy.

The following specific provisions apply to the Waste Disposal Industrial zone:

4.14 WASTE DISPOSAL INDUSTRIAL (M3) ZONE

No person shall within a Waste Disposal Industrial (M3) Zone, use any land or erect, alter or use any building or structure except in accordance with the following:

4.14.1 Permitted Uses

- a) recycling facility
- b) salvage or wrecking yard
- c) sewage lagoon
- d) solid waste disposal or management facility

4.14.2 Regulations for Permitted Uses

- a) Minimum Lot Area 10,000 m²
- b) Minimum Lot Frontage 60 m

- c) Minimum Yard Requirements
 - Front Yard 30 m
 - Interior Side Yard 20 m
 - Exterior Side Yard 30 m
 - Rear Yard 20 m
- d) Maximum Lot Coverage 80%
- e) Minimum Landscaped Open Space 20%
- f) Maximum Height of Building 10 m

As it currently sits, the subject lands appear to generally comply with the specific provisions of the M3 zone.

Provincial Policy Statements:

The Planning Act requires that zoning by-law amendments be consistent with provincial policy statements as identified in the 2020 Provincial Policy Statements (PPS). The proposed site-specific permitted uses appear to be consistent with the 2020 PPS as follows:

- 1.1.1. Healthy, liveable and safe communities are sustained by:
 - g) ensuring that necessary infrastructure and public service facilities are or will be available to meet current and projected needs;
 - i) preparing for the regional and local impacts of a changing climate.
- 1.3.1 Planning authorities shall promote economic development and competitiveness by:
 - a) providing for an appropriate mix and range of employment, institutional, and broader mixed uses to meet long-term needs;
 - b) providing opportunities for a diversified economic base, including maintaining a range and choice of suitable sites for employment uses which support a wide range of economic activities and ancillary uses, and take into account the needs of existing and future businesses;
 - c) facilitating the conditions for economic investment by identifying strategic sites for investment, monitoring the availability and suitability of employment sites, including market-ready sites, and seeking to address potential barriers to investment;
 - d) encouraging compact, mixed-use development that incorporates compatible employment uses to support liveable and resilient communities, with consideration of housing policy 1.4; and
 - e) ensuring the necessary infrastructure is provided to support current and projected needs

1.6.1 Infrastructure and public service facilities shall be provided in an efficient manner that prepares for the impacts of a changing climate while accommodating projected needs. Planning for infrastructure and public service facilities shall be coordinated and integrated with land use planning and growth management so that they are:

- a) financially viable over their life cycle, which may be demonstrated through asset management planning; and
- b) available to meet current and projected needs.

1.6.2 Planning authorities should promote green infrastructure to complement infrastructure.

1.6.11.1 Planning authorities should provide opportunities for the development of energy supply including electricity generation facilities and transmission and distribution systems, district energy, and renewable energy systems and alternative energy systems, to accommodate current and projected needs

1.7.1 Long-term economic prosperity should be supported by:

- a) promoting opportunities for economic development and community investment-readiness;
- j) promoting energy conservation and providing opportunities for increased energy supply;

1.8.1 Planning authorities shall support energy conservation and efficiency, improved air quality, reduced greenhouse gas emissions, and preparing for the impacts of a changing climate through land use and development patterns which:

- a) promote compact form and a structure of nodes and corridors;
- b) promote the use of active transportation and transit in and between residential, employment (including commercial and industrial) and institutional uses and other areas;
- c) focus major employment, commercial and other travel-intensive land uses on sites which are well served by transit where this exists or is to be developed, or designing these to facilitate the establishment of transit in the future;
- d) focus freight-intensive land uses to areas well served by major highways, airports, rail facilities and marine facilities;
- e) encourage transit-supportive development and intensification to improve the mix of employment and housing uses to shorten commute journeys and decrease transportation congestion;
- f) promote design and orientation which maximizes energy efficiency and conservation, and considers the mitigating effects of vegetation and green infrastructure; and
- g) maximize vegetation within settlement areas, where feasible.

Northern Ontario Growth Plan:

The proposal appears to generally comply with the Northern Ontario Growth Plan based on the following:

2.3.9 Renewable Energy and Services

Efforts by the Province, industry and, where appropriate, other partners, to grow and diversify the *renewable energy* sector should include:

- a. facilitating the entry of new participants and entrepreneurs, including Aboriginal communities, co-operatives and commercial developers, in the development of *renewable energy* generation and sustainable energy solutions
- b. attracting investment by enabling municipalities and local distribution companies to invest in community-based *renewable energy* projects
- c. identifying and promoting manufacturing and service industries related to *renewable energy* generation
- d. undertaking an approach to energy planning that supports regional needs by applying staged, flexible options that effectively address the unique needs and priorities of all

communities, including those not connected to the grid, as well as the industrial sector in the North

- e. promoting Northern Ontario as a location for *renewable energy* investment, research and commercialization.

5.6 Energy

5.6.1 The Province, working with the Ontario Power Authority and licensed transmission and distribution companies, will identify investment opportunities in Northern Ontario's transmission and distribution systems to maintain reliability, meet new and growing demands, and accommodate *renewable energy* generation.

5.6.2 The Province will work with Hydro One, the Ontario Power Authority, remote off-grid communities and the federal government to identify opportunities and assess the feasibility of long-term alternatives to diesel-generated power.

5.6.3 The Province will work with the Ontario Power Authority and local distribution companies to seek opportunities to increase the efficiency of energy use in Northern Ontario communities.

Consultation:

- Operations and Facilities
 - o Looking to understand if environmental impact assessment is necessary for solar aspect
 - o Looking to understand if solar aspect has any impact on airport flight path
- By-law Enforcement
 - o No issues or concerns
- Fort Frances Fire Rescue
 - o Fire department access and water supply may be necessary
 - o A fire safety plan may be necessary depending on hazard classification and occupancy determination
- Chief Building Official
 - o Site plan control agreement should be required
 - o Noise mitigation study to form part of Site Plan Control Agreement
- Fort Frances Power Corporation
 - o Letter of support issued
- Committee of Adjustment
 - o The Committee of Adjustment considered this matter at their March 16, 2022 session and recommended the following:
 - Approval of:
 - To add a site-specific permitted use for the establishment of a 150 MW Solar Farm to produce solar energy and/or feed into the electrical grid;
 - To add a site-specific permitted use for Transmission of electricity, including infrastructure (towers and lines);
 - To add a site-specific permitted use for Electric substations; and
 - To add a site-specific permitted use for Battery Energy Storage System (BESS)
 - Approval of the following with the inclusion of a noise mitigation study:
 - To add a site-specific permitted use for Industrial Scale Computing;

- To utilize sea-cans or containers converted to Buildings and/or a constructed structure to house the Industrial Scale Computing equipment;

Public Meeting

An open public meeting was hosted on Monday April 11, 2022 with notice of the meeting being provided by way of newspaper on March 10, 2022. A copy of the meeting minutes have been attached with this report. During the public meeting, two members of the public spoke in opposition to the application:

- Pam Munn
 - Requested to be informed of decision and updates
 - Attached letter of objection
 - Expressed extreme concerns over the potential noise output
 - Expressed concerns over the possible decrease in property value due to the noise
 - Concerned that the lagoon size was not illustrated appropriately
 - Concerns over the discharge location of cooling water
- Jim Strachan
 - Requested to be informed of decision and updates
 - Attached letter of objection
 - Concerns over the lagoon being developed prior to any sort of remediation
 - Concerns over waters within the lagoon leaching to nearby properties
 - General concerns over the development

In addition to the objection provided during the public meeting, these two members provided written objections to the application, as did several other citizens. Each of the letters of objection have been included with this report and summarize the following concerns:

- Concerns over water flow from the lagoon site leaching throughout Town
- Concerns that the lagoons should be cleaned up prior to development
- Curiosity as to how the lagoon may service or not serve new business in Town
- Concerns that the solar farm components will be placed within the lagoon ponds
- Concerns on the general configuration of the sea-cans
- Concerns that this project is to avoid dealing with the remediation of the lagoons
- Concerns that the Town claimed that once the lagoons were no longer used the property would be returned to its original state (farm and forest land)
- Concerns over reduced property value due to further development on the lands
- Significant concerns expressed regarding output of noise from cooling fans
- Concerns that this project will affect the bird habitat
- Most concerns lay around objection to the industrial-scale computing, however, written objections do indicate objection to the solar as well
- Concerns over health impacts related to noise output
- Concerns over conditions of the sanitary sewer and its ability to receive waste cooling water
- Concerns over cooling water contamination of nearby properties and water sources
- Concerns over health impacts as a results of high voltage lines for solar component
- Concerns over disposal of solar panels at end of life
- Concerns over noise by-law noncompliance
- Concerns over increased hydro usage and rates

In addition to the letters of objection, two letters of support were provided which have been attached.

Supporting Document / Financial Documents:

- B2-2022 Zoning Amendment Application – Final – Signed
- Official Plan – Section 3.4.5. to 3.4.8.
- Official Plan – Section 4.2
- GIS Imagery
- Letters of Objection
- Letters of Support
- Public Meeting Minutes

Date: May 1st, 2022

Report To: Planning & Development Executive Committee.

From: Patrick Briere, By-Law Enforcement Officer

RE: April Activities for By-Law Enforcement Department.

Please see the below information for the month of April activities for this department.

Operational Constraints

- Only 1 Officer.

April 2022

Animal Pound Statistics

Impounded Dogs	0
Impounded Cats	0
After Hours Visits	0
Total Shelter Visits for Month	0

Monthly Parking Statistics

Tickets for Month	1
Tickets by OPP	0
Monthly Total	1
Yearly Total Issued	0

Daily Activities completed by By-Law Officers.

- Animal Pound Activities.
- Pawn Shop Visits.
- Checking Parking Equipment (Repairs/Maintenance to Meter Equipment).
- Garbage Collection Issues.

Other Duties Completed by By-Law Officers

- Month End Office Reports.
- OPP Monthly Parking Stats.
- Rainy River Cross Border Group.
- Amethyst Sector (Emergency Management) CEMC Monthly Calls.
- Emergency Management 2022 Program Review.
- JHSC Activities & Monthly Inspections.
- Monthly Activities Reporting to PDEC.
- Maintain/Attend Town Vehicle's in Parking Lot (Civic Centre).
- Annual By-Law OPP Memorandum Review.
- Taxi Licensing Renewal Process Ongoing.
- Business Licensing Ongoing.
- Smoking Enforcement at Sports Centre during events.
- Assisting Tax Dept with service of a letter.
- Assist arena with issue.
- Emergency Declaration Critical Infrastructure Failure.

Occurrence Type (Complaints & Information)	Calls for Complaints/ Information
Nuisance (Includes Inquiries)	5
Traffic By-Law (Includes Inquiries)	7
Animals (Includes Inquiries)	14
Business Licensing (Includes Inquiries)	13
Property Standards (Includes Landlord/Tenant & Grass Cutting)	33
Taxi (Includes Inquiries)	5
Off-Road Vehicles By-Law (Includes Inquiries)	1
Moving Permits (Includes Inquiries)	1
Smoking By-Law & Cannabis (Includes Inquiries)	3
Heavy Trucks (Includes Inquiries)	5
Waste Management (Includes Asselin Forms)	20
Fences (Includes Inquiries & Pools)	5
Other Agency Call Outs/Questions	5
Building Code/Zoning Issues (Includes Tents, Trailers, etc).	1
Noise Issues (Includes Inquiries)	6
Fireworks (Includes Inquiries)	1
Retail Holidays Act (Includes Inquiries)	6
Sign By-Law (Includes Inquiries)	4
Single Use Plastics (Includes Inquiries)	0
Snow (Issues & Inquiries)	3
Open Air Burning (Issues & Inquiries)	2
Deer Feeding (Includes Inquiries)	3
TOTAL CALLS FOR SERVICE	143

Respectfully submitted,

Original Signed By

Patrick Briere, CMM III, Property Standards Professional
MLEO/Alternate CEMC/Public Information Officer, Planning & Development Division
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