**Section 9**
**Environmental Protection Act**
**R.S.O. 1990**

# SECONDARY NOISE SCREENING PROCESS FOR S.9 APPLICATIONS SUPPLEMENT TO APPLICATION FOR APPROVAL

**Version 4.0**
**October 13, 2010**



**CONTENTS OF THIS DOCUMENT ARE SUBJECT TO CHANGE WITHOUT NOTICE**

**PIBS 6888e**

*Protecting our environment.* Ontario

## Addendum:

This document is updated regularly by the Ministry of the Environment (ministry) to ensure that it provides accurate guidance relating to current policies, acts, regulations and application requirements. To obtain an updated copy of this document, please refer to the "Publications" section on the ministry Internet site at www.ene.gov.on.ca or contact the Environmental Assessment and Approvals Branch (EAAB) by telephone at 1-800-461-6290 (locally at 416-314-8001) or by e-mail at EAABGen@ontario.ca.

Version History:

| Version | Date | Comments |
|---|---|---|
| 1.0 | October 17, 2008 | Document Published |
| 2.0 | November 21, 2008 | Document figures & tables updated |
| 3.0 | November 2, 2009 | Document text, figures & tables updated |
| 4.0 | October 13, 2010 | Document text, figures & tables updated |

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# FOREWORD

The Ministry of the Environment (ministry) approvals program requires that all undertakings requiring approval under ministry legislation are carried out in accordance with the Acts and applicable Regulations and Guidelines administered by the ministry. These requirements are updated from time to time by the ministry, as environmental standards and environmental management approaches are modified. This document should be read in conjunction with the following ministry documents or their successors, as amended:

- Guide To Applying For Approval (Air & Noise) s.9 EPA (November 2005), PIBS 4174e;
- Basic Comprehensive Certificates of Approval (Air & Noise) - User Guide (April 2004), PIBS 4391e;
- Noise Red Flag Tables, Ministry of Environment, 1997;
- NPC-104, Sound Level Adjustments, August 1978, as amended;
- NPC-205 – Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban), October, 1995, PIBS 3406e, as amended; and
- NPC-232 – Sound Level Limits for Stationary Sources in Class 3 Areas (Rural), October, 1995, PIBS 3405e as amended.

As requirements are changed, the information needed to demonstrate compliance with them may also change. In recognition of this, the ministry will update this document to reflect the most current requirements. All web site addresses referred in this document were current at the time of release.

While every effort has been made to ensure the accuracy of the information contained in this document, it should not be construed as legal advice.

For any addenda or revisions to this document please visit the ministry website at:

http://www.ene.gov.on.ca/en/publications/index.php

or contact:

Environmental Assessment and Approvals Branch
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

Telephone: (416) 314-8001
or: 1-800-461-6290
Fax: (416) 314-8452

# INTRODUCTION

## *Purpose*

The purpose of the "Secondary Noise Screening Process for S.9 Applications" is to provide guidance for the preparation of a Secondary Noise Screening Report. The Secondary Noise Screening Process has been designed to be completed by a competent practitioner with a rudimentary knowledge of acoustics and basic understanding of applicable ministry noise guidelines, but who is not necessarily an acoustical consultant.

This document provides applicants with:

1. An outline of the of the Secondary Noise Screening Process;
2. Details regarding how to conduct the Secondary Noise Screening Process; and
3. The requirements of the Secondary Noise Screening Report.

For information regarding the *Environmental Protection Act* (EPA), Section 9 approvals process and the minimum information requirements that must be included with every application in order for the application to be considered complete, please refer to the "Guide To Applying For Approval (Air & Noise) s.9 EPA (November 2005)", PIBS 4174e.

**The Secondary Noise Screening Process does not apply to applications for Renewable Energy Approval (REA).**

**If significant impulsive and/or vibration sources, including, but not limited to, stamping presses or forging hammers, are present at the facility, then the Secondary Noise Screening Process can not be used and a detailed noise and/or vibration impact assessment is required.**

**The Secondary Noise Screening Process may only use data from the Noise Red Flag Tables and manufacturers' published noise data. Sound data obtained by measurements at site are not acceptable for use in the Secondary Noise Screening Process.**

**The Secondary Noise Screening Process may not be used to assess noise impacts from trucks that have refrigeration units or truck loading/unloading utilizing truck blowers or outdoor pumps on site.**

## *How to Use this Document*

This document is not intended as a stand-alone document. It is expected that in addition to this document, applicants will have read, as applicable: the "Guide To Applying For Approval (Air & Noise) s.9 EPA" (November 2005), PIBS 4174e; and the "Basic Comprehensive Certificates of Approval (Air & Noise) - User Guide" (April 2004), PIBS 4391e; prior to submitting a Secondary Noise Screening Report to EAAB.

In addition to this introduction section, this document has two main sections: a Secondary Noise Screening Process section and a Quality Control/Quality Assurance (QC/QA) Protocol section.

The Secondary Noise Screening Process section has 2 main sub-sections. The first one instructs applicants on how to complete the actual Secondary Noise Screening Process. The second subsection provides details relating to the information that must be included in the subsequent Secondary Noise Screening Report.

The QC/QA Protocol section provides information on the QC/QA protocols that must be followed and the additional statements that must be included with the Secondary Noise Screening Report.

If, after reading all of the guidance material, an applicant still has questions regarding the Secondary Noise Screening Process, questions should be directed to a Client Services Representative from the Environmental Assessment & Approvals Branch (EAAB) at Eaabgen@ontario.ca or 416-314-8001 or 1-800-461-6290.

General information on the CofA Program is available on the ministry web site at: http://www.ene.gov.on.ca/en/publications/index.php

# PART 1: SECONDARY NOISE SCREENING PROCESS

This section explains in detail how to complete the Secondary Noise Screening Process.

## 1.1 General Information and Instructions

Applicants are responsible for ensuring that they are working with the most recent versions of guidance documents, applications forms, templates, Noise Red Flag Tables, etc, including this guide.

To obtain application forms and supporting documentation, please refer to the Publications section on the ministry Internet site at www.ene.gov.on.ca or contact the Environmental Assessment and Approvals Branch by telephone at 1-800-461-6290 (locally at 416-314-8001) or by e-mail at EAABGen@ontario.ca.

Questions regarding completion and submission of this application should be directed to the Environmental Assessment and Approvals Branch of the ministry at the address below:

Environmental Assessment and Approvals Branch
2 St. Clair Ave. W. Floor 12A
Toronto, ON M4V 1L5
Phone: 416–314–8001
Toll Free: 1–800–461–6290
Email: EAABGen@ontario.ca

## 1.2 Completing the Secondary Noise Screening Process

There are 6 basic steps required to complete the Secondary Noise Screening Process:

1. Identify the facility noise sources;
2. Identify the most affected Points of Reception;
3. Assess the applicable Sound Level limits;
4. Complete the secondary noise screening assessment calculations;
5. Prepare a summary of the Sound Levels; and,
6. Assemble and submit a Secondary Noise Screening Report.

These steps are detailed below.

## Step 1: Identify the Facility Noise Sources

In this section, the applicant must identify and describe all noise sources that are present at the facility. The equipment descriptions must include all of the information that is relevant to calculating the noise emissions.

In general all sources of noise must be considered in the assessment. **Noise sources are considered insignificant only if they do not contribute to the Sound Levels at the Points of Reception**. Impacts from noise sources must be calculated at the time and location when the Sound Level produced by the source is at a maximum in relation to the background Sound Level, referred to as the "Predictable Worst Case" impact. Noise sources that typically need to be considered include, but are not limited to, the following:

- Asphalt Plants
- Boilers
- Burners
- Chillers
- Compressors
- Condensers
- Concrete Manufacturing/Processing Equipment
- Cooling Towers
- Crushers
- Dryers
- Dust Collectors (Cyclones, Bag Houses)
- Electric Motors
- Electrical Power Generators (Diesel/Natural Gas, Continuous & Standby)
- Engines (Diesel/Natural Gas)
- Fans and Blowers
- Flares
- Furnaces
- Garbage Compactors
- HVAC Units (Air Make-up Units, Air Conditioners, etc.)
- Incinerators
- Inverters
- Openings (windows, louvres, vents)
- Paint Spray Booths
- Pumps (used outdoors)
- Sandblasting Equipment
- Screeners
- Scrubbers
- Shredders
- Transformers
- Trucks – on-site idling, loading and unloading
- Trucks – forklifts or other mobile material handling equipment
- Tub Grinders/ Wood Chippers/ Debarking Drums
- Turbines
- Valves/Jets/Nozzles
- Welding Equipment
- Woodworking Equipment

The information regarding the location of each of the facility's significant noise sources must be included on the Scaled Area Location Plan.

## Step 2: Identify the Most Affected Points of Reception

In this step, the applicant must identify the following:

- The most affected Points of Reception;
- The MOE acoustic classification and appropriate exclusionary Sound Level limits for the Points of Reception (Class 1, 2 or 3);
    - Refer to MOE Publications NPC-205 and NPC-232, as amended for more information ;
- The relative location of the Points of Reception to any 400 series and/or provincial highways and any regional roads. **The distance is generally measured from the**

**edge of pavement of the roadway to the property line of the Point of Reception as shown in Figure 1 below;**

and

- Any barriers or structures that break the line of sight between the source(s) and Points of Reception.

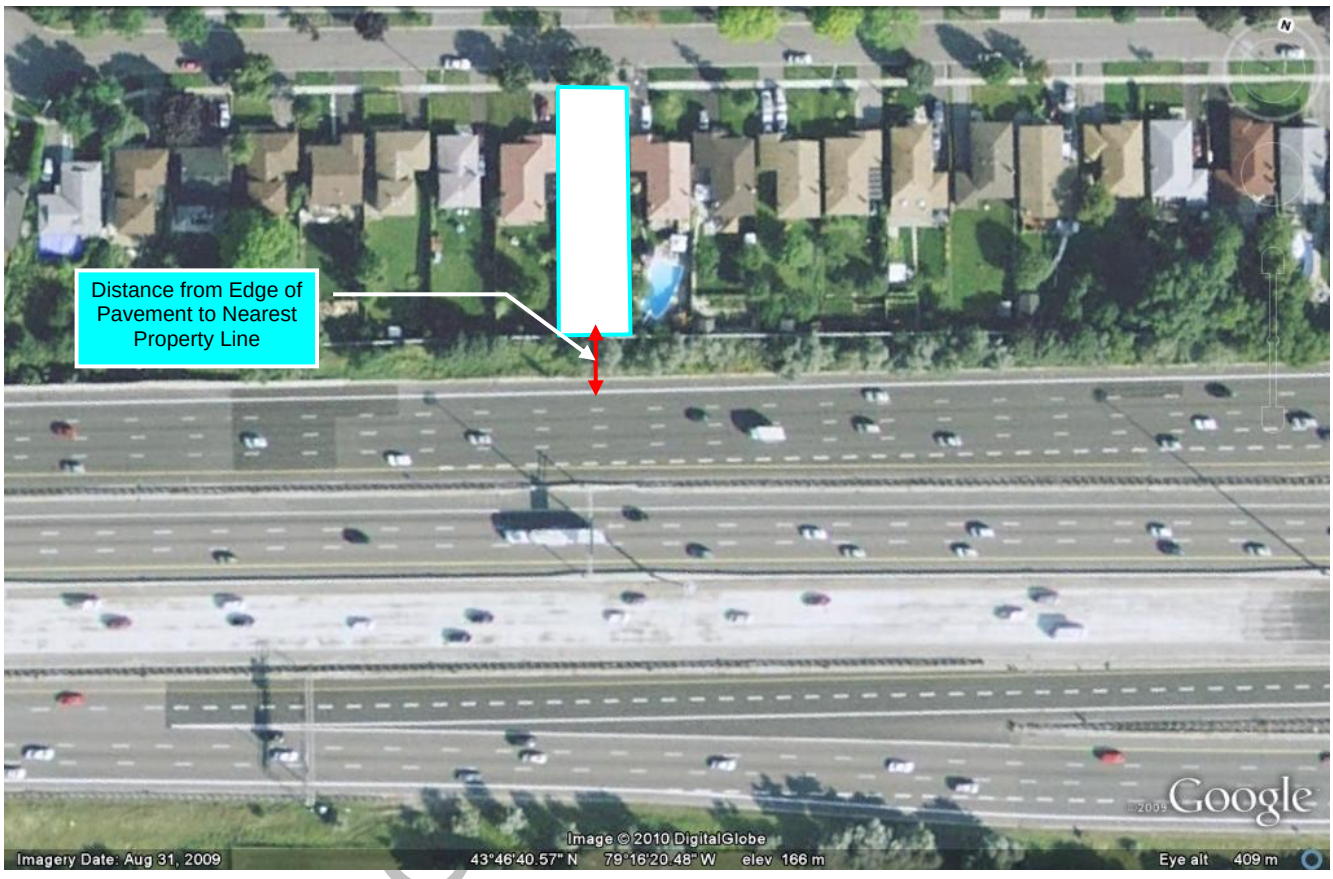


**Figure 1**

This information must be included on the Land Use Zoning Designation Plan (an up-to-date land use zoning designation plan of the surrounding area, complete with legend and scale) and/or the Scaled Area Location Plan (a plan indicating the topography and nature of the neighbourhood surrounding the facility, including the location of adjacent buildings and structures, and the nearest Point(s) of Reception, complete with a scale) that will accompany the Secondary Noise Screening Report.

## Step 3: Assess the Applicable Sound Level Limits

In this step, the applicant must identify the applicable Sound Level limits at each of the identified Points of Reception. Utilizing MOE Publication NPC-205 or NPC-232, as amended and the defined exclusionary limits from Tables 205-1 or 232-1, determine MOE Sound Level limits for each Point of Reception, taking into account that **the Sound Level limits are increased by 5 dBA for Points of Reception within 100 metres of the edge**

**of the pavement of a 400 series highway or 30 metres of the edge of the pavement of a provincial highway or regional road**.

## Step 4: Complete the Secondary Noise Screening Assessment

The principle of the Secondary Noise Screening Assessment is to perform simplified calculations to determine the Sound Level in dBA produced by each significant noise source at each Point of Reception.

The Sound Level must be calculated at the actual separation distance to each Point of Reception using one of the appropriate simplified noise propagation equations provided below.

**The actual separation distance is generally measured from the noise source to the closest property line of the Point of Reception as shown in Figure 2 below:**

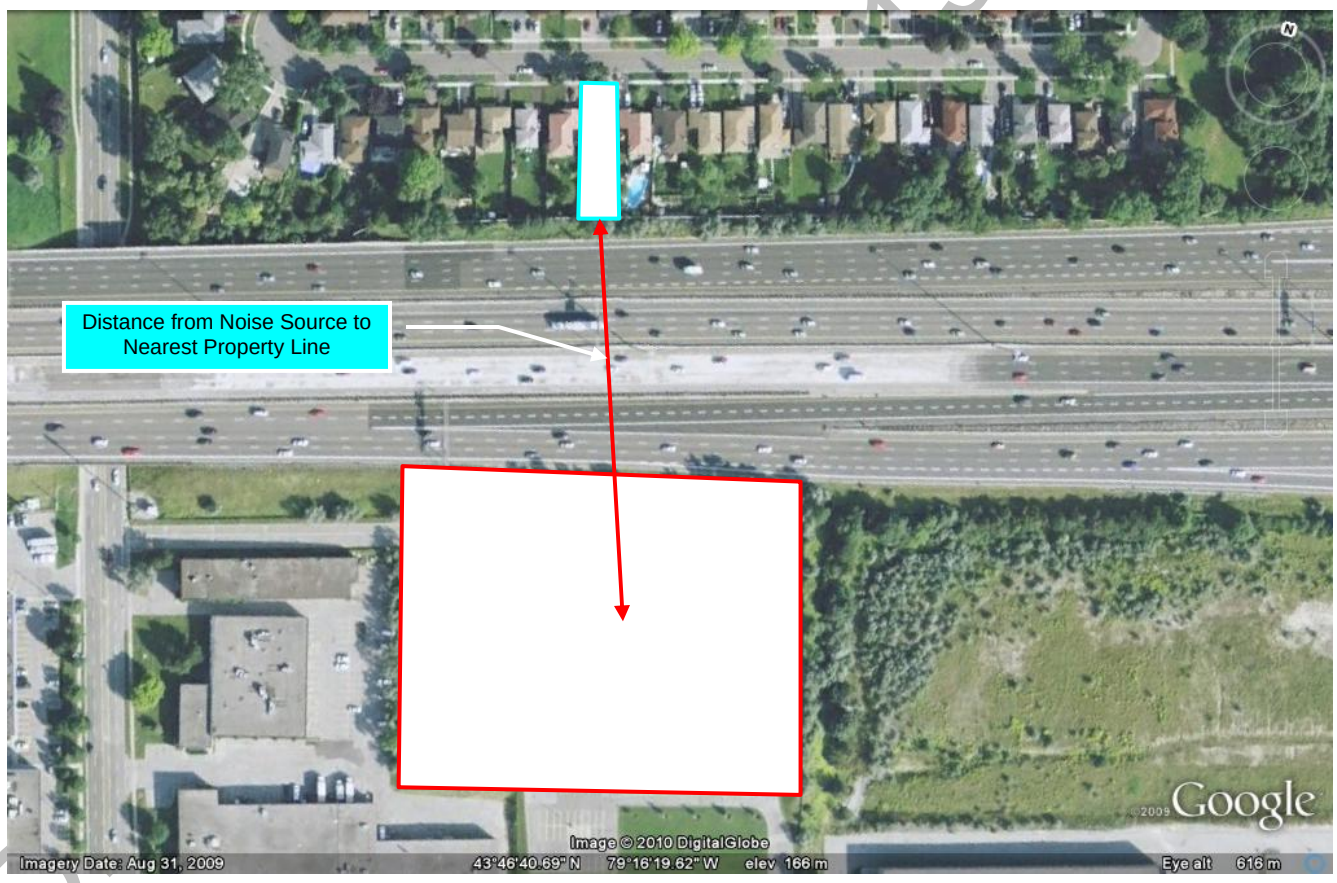


**Figure 2**

The following describes three equations that may be used to determine the Sound Level from a noise source. The choice of the equation depends on the origin of noise data. An additional equation is used for determining the Sound Level for truck traffic. Finally, an equation describes how to combine the individual Sound Levels into a total Sound Level at a Point of Reception.

*Note:*
The following calculations refer to the both the Sound Level (SL) and the sound power level (PWL). Sound Level means the Sound Level in dBA at the Point of Reception. Sound power level means the sound power level in dBA of the noise source, typically provided in the manufacturer's specification.

*EQUATION 1 – Noise Red Flag Tables*

If the Noise Red Flag Tables are the source data, the following equation may be used to determine the Sound Level at a Point of Reception:

$$SL = 50 - 20 \times Log_{10}\left(\frac{D_A}{D_{50}}\right) - Barrier\ Adjustment + Tonality\ Adjustment$$

$D_A$ = Actual separation distance from the noise source to the closest property line of the Point of Reception (metres)

$D_{50}$ = Noise Red Flag Table distance corresponding to the 50 dBA criteria column (metres)

Barrier Adjustment = 5 dBA if a barrier is present (i.e., breaks the line of sight between the source and the Point of Reception. A barrier is a continuous structure (wall, building, berm, etc.) without gaps that has a minimum surface density of 20 kilograms per square metre).

Barrier Adjustment = 0 dBA if no barrier exists.

Tonality Adjustment = 5 dBA if the noise is tonal, in accordance with the MOE Publication NPC-104, as amended.

Tonality Adjustment = 0 dBA if the noise is not tonal.

*EQUATION 2 – Manufacturer's Specifications of Sound Power Levels*

If a manufacturer's specification providing a sound power level (PWL) is the source data, then the following calculation may be used:

$$SL = PWL - 10 \times Log_{10}\left(2\pi D_A{}^2\right) - Barrier\ Adjustment + Tonality\ Adjustment$$

PWL = Sound power level in dBA

$D_A$ = Actual separation distance from the noise source to the closest property line of the Point of Reception (metres)

Barrier Adjustment = 5 dBA if a barrier is present (i.e., breaks the line of sight between the source and the Point of Reception. A barrier is a continuous structure (wall, building, berm, etc.) without gaps that has a minimum surface density of 20 kilograms per square metre).

Barrier Adjustment = 0 dBA if no barrier exists.

Tonality Adjustment = 5 dBA if the noise is tonal, in accordance with the MOE Publication NPC-104, as amended.
Tonality Adjustment = 0 dBA if the noise is not tonal.

**Acceptable forms of manufacturer's data are restricted to published data.**

*EQUATION 3 – Manufacturer's Specifications of Sound Level at a Distance*

If the source data is the manufacturer's specification of the SL at a distance, then the following calculation may be used:

$$SL = SL_{ref} - 20 \times Log_{10}\left(\frac{D_A}{D_{ref}}\right) + K_{size} - Barrier\ Adjustment + Tonality\ Adjustment$$

Where:
$SL_{ref}$ = Sound Level provided by the manufacture at a $D_{ref}$ distance (metres)
$D_A$ = Actual separation distance from the noise source to the closest property line of the Point of Reception (metres)
$D_{ref}$ = reference distance described by the manufacturer (metres)

If $D_{ref}$ is greater than each of the length, width and height dimensions of the source, then:

$K_{size}$ = 0.

If any one of the source dimensions is greater than $D_{ref}$, then:

$$K_{size} = 10 \times Log_{10}\left(\frac{S_{ref}}{2\pi D^2_{ref}}\right)$$

Where, $S_{ref}$ is the surface area enveloping the source excluding ground surface, at the reference distance of $D_{ref}$ from the surface of the source. For a rectangular source with dimensions of L, W and H, the enveloping surface area is:

$$S_{ref} = 2 \times (H + D_{ref}) \times (L + W + 4D_{ref}) + (L + 2D_{ref}) \times (W + 2D_{ref})$$

For a non-rectangular source, perform the calculations using a rectangular source with dimensions of L, W and H that envelops the source. Figure 3 below shows a graphic illustration of such an approximation:

**Figure 3 (TO BE INSERTED)**

| | |
|---|---|
| Barrier Adjustment = 5 dBA | if a barrier is present (i.e., breaks the line of sight between the source and the Point of Reception. A barrier is a continuous structure (wall, building, berm, etc.) without gaps that has a minimum surface density of 20 kilograms per square metre). |
| Barrier Adjustment = 0 dBA | if no barrier exists. |
| Tonality Adjustment = 5 dBA | if the noise is tonal, in accordance with the MOE Publication NPC-104, as amended. |
| Tonality Adjustment = 0 dBA | if the noise is not tonal. |

**Acceptable forms of manufacturer's data are restricted to published data.**

*EQUATION 4 – On-site Trucks*

If there is truck traffic on the site, then the following equation may be used:

$$SL = PWL - 10\log_{10}\left(2\pi D_A^{\,2}\right) + 10\log_{10}(N) - Barrier\ Adjustment$$

Where:

| | |
|---|---|
| PWL = | 96 dBA; the sound power level of each truck |
| $D_A$ = | Actual separation distance from the noise source to the closest property line of the Point of Reception (metres) |
| N = | the maximum number of trucks on-site within 1 hour |
| Barrier Adjustment = 5 dBA | if a barrier is present (i.e., breaks the line of sight between the source and the Point of Reception. A barrier is a continuous structure (wall, building, berm, etc.) without gaps that has a minimum surface density of 20 kilograms per square metre). |
| Barrier Adjustment = 0 dBA | if no barrier exists. |



## Step 5: Prepare a Summary of the Predicted Sound Levels

Using the tables provided in the appendix of this document, determine the combined noise impacts for each identified Point of Reception.

*EQUATION 5 – Cumulative Impact/Combined Sound Levels*

The total Sound Level produced by N noise sources is calculated using the following equation:

$$SL_{Total} = 10Log_{10}\left[\left(10^{\left(SL_1/10\right)}\right)+\left(10^{\left(SL_2/10\right)}\right)+...+\left(10^{\left(SL_N/10\right)}\right)\right]$$

$SL_1$ – Sound Level for first source,
$SL_2$ – Sound Level for second source,
$SL_N$ – Sound Level for final $N^{th}$ source

MOE Publications NPC-205 or NPC-232, as amended are utilized to determine whether or not the combined noise impacts for each identified Point of Reception meet the MOE Sound Level limit, taking into account that **the Sound Level limits are increased by 5 dBA for Points of Reception within 100 metres of the edge of the pavement of a 400 series highway or 30 metres of the edge of the pavement of a provincial highway or regional road.**

## Step 6: Prepare and Submit a Secondary Noise Screening Report

Following the guidance provided below, prepare a Secondary Noise Screening Report.

Append 2 copies of the report to the application and indicate on the cover letter that the Secondary Noise Screening Report has been included in the application package.

## 1.3 Secondary Noise Screening Report

The Secondary Noise Screening Report must include the following:

1. A completed Secondary Noise Screening Checklist (see Appendix E)

2. An Executive Summary section that provides:

   a. A description of the facility, the noise sources and the Points of Reception
   b. An explanation of the acoustical environment of the study area and how the noise impacts were calculated
   c. The conclusion of the Secondary Noise Screening Process (facility screens out, by showing compliance with the MOE sound level limits, i.e. no further noise assessment is required)

3. A description of the facility and the operations at the facility that, as a minimum, provides the following information:

a. Location of the facility
b. Operation (e.g. auto parts manufacturing)
c. Specific operating hours for facility/equipment
d. Scaled Area Location Plan
e. Site Plan
f. Land Use Zoning Designation Plan of the facility and the surrounding area
g. Amount of truck traffic
h. Description of the surrounding area, including transportation corridors and other relevant factors

4. A summary of the methodology that was used for the Secondary Noise Screening Process. Specifically the report must include a section that provides details on the information that was used to complete the Secondary Noise Screening Process and how that information was collected, generated and/or obtained.

5. A summary of the noise sources at the facility. The summary must identify all significant and insignificant noise sources. The location of significant noise sources must be included on the Scaled Area Location Plan.

6. A summary of the Points of Reception that includes a description of the zoning and the structures (e.g. two-storey single family dwellings), the actual separation distances and the direction relative to the facility (e.g. north-west).

7. The applicable Sound Level limits based on the MOE NPC documents. Include exclusionary limits and road information as applicable.

8. A summary of any historical noise issues (i.e. public complaints).

9. Sound Level calculations, including an explanation of all of the assumptions that have been made and a description of all the data used.

10. A completed Summary of Sound Level Predictions for each Point of Reception (see Appendix A).

11. A written summary of the results of the Secondary Noise Screening Assessment.

12. Tables and/or figures that include all supporting information referenced or relied upon in the preparation of the Secondary Noise Screening Report, including:

a. Scaled Area Location Plan
b. Site Plan
c. Land Use Zoning Designation Plan
d. Summary of Noise Red Flag Table Data used, if applicable
e. Manufacturer's Noise Data, if applicable

13. QC/QA requirements

a. Tables, Figures & Calculation Verification
b. Project Team Qualifications

c. Applicant Statement
d. Preparer Statement

# PART 2: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA) PROTOCOL

This section provides information on the QC/QA protocol that must be included within the Secondary Noise Screening Report.

In addition to the requirements outlined in the “Guide To Applying For Approval (Air & Noise) s.9 EPA” (November 2005), PIBS 4174e, the Secondary Noise Screening Report requires:

1. Tables, Figures & Calculation Verification
2. Project Team Qualifications
3. Applicant Statement
4. Preparer Statement

## 2.1 Tables, Figures & Calculation Verification

All tables, figures and calculations presented in the Secondary Noise Screening Report must show both the initials of the person who prepared the table, figure or calculation (Done By), and the initials of the person who verified that the information in the table, figure or calculation is correct (Checked By).

**Please note that the preparer and the verifier can not be the same person.**

## 2.2 Project Team Qualifications

The QC/QA protocol requires that a statement of qualifications for the Project Team be appended to the Secondary Noise Screening Report. The statement of qualifications must:

1. Be brief;
2. Identify all of the members of the project team; and
3. Most importantly, demonstrate why the project team members are qualified to prepare and/or verify the Secondary Noise Screening Report.

## 2.3 Applicant Statement

Using the ministry templates provided in the appendix of this document, the Signing Authority for the facility/operation must initial all of the statements.

The ‘Applicant Secondary Noise Screening Statement’ must be signed and dated by the Signing Authority.

## 2.4 Preparer Statement

Using the ministry templates provided in the appendix of this document, the preparer must initial all of the statements.

The ‘Preparer Secondary Noise Screening Statement’ must be signed and dated by the preparer.

# Appendix A: Summary of Sound Level Predictions

Point of Reception Identification:
Applicable NPC Acoustical Class:
Operating Times:
POR within 100 metres of the edge of pavement of a 400 series highway, or within 30 metres of the edge of pavement of a Provincial Highway or a Regional Road?
Exclusionary Sound Level Limit (dBA):
Sound Level Limit (dBA):

| Source Label (from ESDM where applicable) | Source Description | Assessment Method | Number of Sources | $D_{50}$ (metres) | $D_A$ (metres) | Sound Power Level (dBA) | Reference Sound Level (dBA) | Reference Distance (metres) | Number of Sources/Tonality Correction (dBA) | Shielded from POR by Permanent Barrier? | Predicted SL at POR (dBA) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| **Total** | | | | | | | | | | | |
| **Compliance with MOE Limits** | | | | | | | | | | | |
| **Acoustic Assessment Report Required** | | | | | | | | | | | |

**Example**:

Point of Reception Identification: POR-1
Applicable NPC Acoustical Class: Class 2
Operating Times: 0700 – 1900 (Daytime)
POR within 100 metres of the edge of pavement of a 400 series highway, or within 30 metres of the edge of pavement of a Provincial Highway or a Regional Road? No
Exclusionary Sound Level Limit (dBA): 50
Sound Level Limit (dBA): 50

| Source Label (from ESDM where applicable) | Source Description | Assessment Method | Number of Sources | $D_{50}$ (metres) | $D_A$ (metres) | Sound Power Level (dBA) | Reference Sound Level (dBA) | Reference Distance (metres) | Number of Sources/Tonality Correction (dBA) | Shielded from POR by Permanent Barrier? | Predicted SL at POR-1 (dBA) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Exhaust Fan | Fan Case 3 ($Q*P^2$= 114,561) | Noise Red Flag Tables, Equation 1 | 1 | 115 | 219 | - | - | - | - | Yes | 39 |
| Intake Fan | Fan Case 3 ($Q*P^2$= 114,561) | Noise Red Flag Tables, Equation 1 | 1 | 115 | 237 | - | - | - | - | Yes | 39 |
| MAU | Make-up Air Unit | Reference Sound Level, Equation 3 | 1 | - | 227 | - | 47 | 10 | - | Yes | 15 |
| Trucks | Trucks | Truck Sound Power Level, Equation 4 | 2 | - | 230 | 96 | - | - | 3 | Yes | 39 |
| Cooling Tower | Cooling Tower | Reference Sound Power Level, Equation 2 | 1 | - | 238 | 84 | - | - | - | Yes | 23 |
| **Total** | | | | | | | | | | | **44** |
| **Compliance with MOE Limits** | | | | | | | | | | | **Yes** |
| **Acoustic Assessment Report Required** | | | | | | | | | | | **No** |

# Appendix B: Applicant Statement

## Secondary Noise Screening Applicant Statement

| Applicant Initials | Statement |
|---|---|
| | 1. I am representative of _____*(Facility name)* and I am authorized and have the knowledge to make the following statements. |
| | 2. I have retained / directed the person responsible for preparing this Secondary Noise Screening Report (the Preparer) in accordance with the Secondary Noise Screening Process. |
| | 3. I have / a member of my staff has provided information to the Preparer in order to complete the Secondary Noise Screening Report that accurately represents the Facility's design and operation. |
| | 4. I have not knowingly withheld any information necessary for the Preparer to complete the Secondary Noise Screening Report. |
| | 5. To my knowledge, the statements made in this Secondary Noise Screening Report are true and representative of the Facility. |

**Applicant Signature:**

**Date:**

**Applicant Name:**

**Applicant Title:**

# Appendix C: Preparer Statement

## Secondary Noise Screening Preparer Statement

| Preparer Initials | Statement |
|---|---|
| | 1. I am _____ (Preparer's name) and I am responsible for the preparation of this Secondary Noise Screening Report. |
| | 2. I have followed the requirements listed in the Secondary Noise Screening Process. |
| | 3. I have not withheld any information provided by the Applicant necessary to accurately complete this Secondary Noise Screening Report. |
| | 4. To my knowledge, the statements made in the Secondary Noise Screening Report are true and representative of the facility. |

**Preparer Signature:**

**Date:**

**Preparer Name:**

**Preparer Title:**

# Appendix D: Definitions

A-weighted Sound Pressure Level
The "A-weighted sound pressure level" is the sound pressure level modified by application of the A-weighting. It is measured in decibels, A-weighted, and denoted dBA.

Class 1 Area
"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
"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 background 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; and
- no clearly audible sound from stationary sources other than from those under impact assessment.

Class 3 Area
"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.

Exclusionary Limits

“Exclusionary Limits” for Class 1 and 2 Areas are Sound Level limits of 50 dBA, 47 dBA or 45 dBA, depending on the time period, specified in Table 205-1 of MOE Publication NPC-205 – Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban), October, 1995, as amended.

“Exclusionary Limits” for Class 3 Areas are Sound Level limits of 40 dBA or 45 dBA, depending on the time period, specified in Table 232-1 of MOE Publication NPC-232 – Sound Level Limits for Stationary Sources in Class 3 Areas (Rural), October, 1995, as amended.

Noise
"Noise" means unwanted sound;

Point of Reception

(1) “Point of Reception”, Class 1 and Class 2 Areas, means any point on the premises of a person where sound or vibration originating from other than those premises is received;

(2) “Point of Reception”, Class 3 Areas, means any point on the premises of a person within 30 m of a dwelling or a camping area, where sound or vibration originating from other than those premises is received;

(3) For the purpose of approval of new sources, including verifying compliance with Section 9 of the Environmental Protection Act, the Point of Reception may be located on any of the following existing or zoned for future use premises:

(i) permanent or seasonal residences,
(ii) hotels/motels,
(iii) nursing/retirement homes,
(iv) rental residences,
(v) hospitals,
(vi) camp grounds,
(vii) noise sensitive buildings such as schools and places of worship.

(4) For equipment/facilities proposed on premises such as nursing/retirement homes, rental residences, hospitals, and schools, the Point of Reception may be located on the same premises;

Sound Level
"Sound Level" is the A-weighted sound pressure level

Tonality
A "tone" or a "tonal sound" is any sound which can be distinctly identified through the sensation of pitch.

# Appendix E: Secondary Noise Screening Process Checklist

| Included | Content/Attachment |
|---|---|
| | Executive Summary |
| | Description of the facility and the operations |
| | Summary of the noise sources at the facility |
| | Summary of the Points of Reception that includes a description of the zoning and the structures |
| | The applicable Sound Level Limits based on the MOE NPC documents |
| | Summary of any historical noise issues (i.e. public complaints) |
| | Sound Level calculations performed |
| | Summary of Sound Level Predictions for each Point of Reception |
| | Summary of the conclusions of the Secondary Noise Screening Process |
| | Scaled Area Location Plan |
| | Site Plan |
| | Land Use Zoning Designation Plan |
| | Summary of Noise Red Flag Table Data used, if applicable |
| | Manufacturer's Published Noise Data, if applicable |
| | Project Team Qualifications |
| | Completed & Signed Applicant Statement |
| | Completed & Signed Preparer Statement |