

**ENVIRONMENTAL PROTECTION DEPARTMENT  
PRACTICE NOTE FOR PROFESSIONAL PERSONS**

**Streamlined Approach for the  
Planning of Residential Developments  
Against Road Traffic Noise**

**Preamble**

The purpose of this Practice Note (PN) is to assist Authorized Persons (AP) and related professionals in making applications relating to residential developments having regards to the road traffic noise limit of the Hong Kong Planning Standards and Guidelines (HKPSG).

2. This PN spells out the pragmatic compliance requirements which the Director of Environmental Protection will consider as acceptable when vetting residential proposals. This PN also promulgates a set of streamlined self-assessment procedures for APs to facilitate planning approvals.

**Noise Mitigating Designs**

3. It is government policy to continue to apply stringent requirements to new highway schemes, through established Environmental Impact Assessment procedures, so that direct noise abatement measures are incorporated in the highway design wherever practicable.

4. Where a proposed residential development or redevelopment may be affected by traffic noise, the impact may be satisfactorily dealt with by adopting noise mitigating building layout or design at the early planning and design stage. Noise mitigation measures such as screening by non-noise sensitive blocks, podium structures or purpose-built barriers, orientation, or disposition and internal layout of buildings should be explored and implemented wherever practicable to minimize road traffic noise impacts on the residential development. Where there are residential units still exposed to road traffic noise exceeding the HKPSG standard after the adoption of these noise mitigating designs, acoustic insulation (windows with good noise-reduction and air-conditioning) should be provided. These noise mitigation measures have been described in greater details in ProPECC PN 4/93 *Planning and Designing Noise Sensitive Developments*.

5. Notwithstanding the above, the scarcity of developable land and the need for urban renewal very often limit the application of many of these noise mitigating designs. For example, while a self-protecting building design having non-noise sensitive rooms such as bathrooms and kitchens facing the noise source (single aspect building) may be a satisfactory solution in some cases, demanding such single aspect building designs will not be reasonable or practicable if the building orientation means that future residents will not be able to enjoy a pleasant vista.

### **Acceptable Noise Performance**

6. Experience so far indicates that for residential developments on smaller sites, there are fewer opportunities for incorporating practicable noise mitigating designs in the development and acoustical insulation becomes the only viable last resort. On the other hand, there are more opportunities to employ a better design to meet the standard when the site area is larger. On this basis, the Road Traffic Noise Exposure Compliance Zone graph (Annex 1) is formulated.

7. Therefore, **for sites larger than 2 hectares**, a proposed residential development is considered as acceptable if the AP can demonstrate that its road traffic noise exposure compliance falls in Zone I and those non-complying units are provided with acoustic insulation.

8. For **sites equal to or smaller than 2 hectares**, there is no requirement to design the developments to fall within Zone I. The AP is still encouraged to consider and incorporate noise mitigation measures wherever practicable and should provide acoustic insulation to any remaining affected residential units.

9. Under very special circumstances, e.g. such as in the case of urban renewal, a proposal within Zone II can still be considered if the AP can provide sufficient justifications for the proposal, demonstrate that all practicable noise mitigation measures have been implemented wherever possible, and provide acoustic insulation to those units exposed to noise levels exceeding the standard. The procedures for considering Zone II developments are further described in paragraph 10(c).

## Streamlined Procedures

10. To facilitate project planning and the consideration by relevant authorities, the following streamlined procedures will be adopted :

- (a) For sites equal to or smaller than 2 hectares (ha.), the AP should complete the self-assessment form (Annex 2) and send a copy for information to the address shown in para. 12. There is no need to submit it to the Environmental Protection Department for formal approval;
- (b) For sites larger than 2 ha. and in Zone I, the AP should complete the self-assessment form and send a copy for information to the address shown in para. 12. There will normally be no need to submit it formally to the Environmental Protection Department except when a Comprehensive Development Area Master Layout Plan, Town Planning Ordinance Section 16 application or rezoning request is anticipated. In such cases, the submission of the completed self-assessment form will assist the Town Planning Board or relevant departments in the review of the application. **The Environmental Protection Department will not object on noise grounds to any applications that are within the Traffic Noise Exposure Compliance Zone I;** and
- (c) For sites larger than 2 ha. and in Zone II, if the AP feels that there are sufficient justifications for special considerations, the AP should submit the completed self-assessment form directly to the Assistant Director (Environmental Assessment and Noise) of the Environmental Protection Department who will, in consultation with relevant departments and bureaux, consider the validity of the justifications. In considering the case, the AP may be invited to attend meetings and to produce alternative proposals. If at the conclusion of these deliberations, there are sufficient justifications for a special case to be endorsed, the Assistant Director (Environmental Assessment and Noise) will advise the AP and other authorities of his decision.

11. Under this streamlined approach, the Environmental Protection Department acknowledges the professional integrity of the AP and accepts the AP's self-assessment form to be correct to the best of his knowledge. If questionable practices are revealed, however, the Environmental Protection Department may present its observations to other relevant authorities and institutions.

## Advice from the Environmental Protection Department

12. For further information and guidance, professionals are welcome to contact the Principal Environmental Protection Officer (Noise Management and Policy) [Tel: 2594-6565, Fax: 2802-4511] at 46/F Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong.

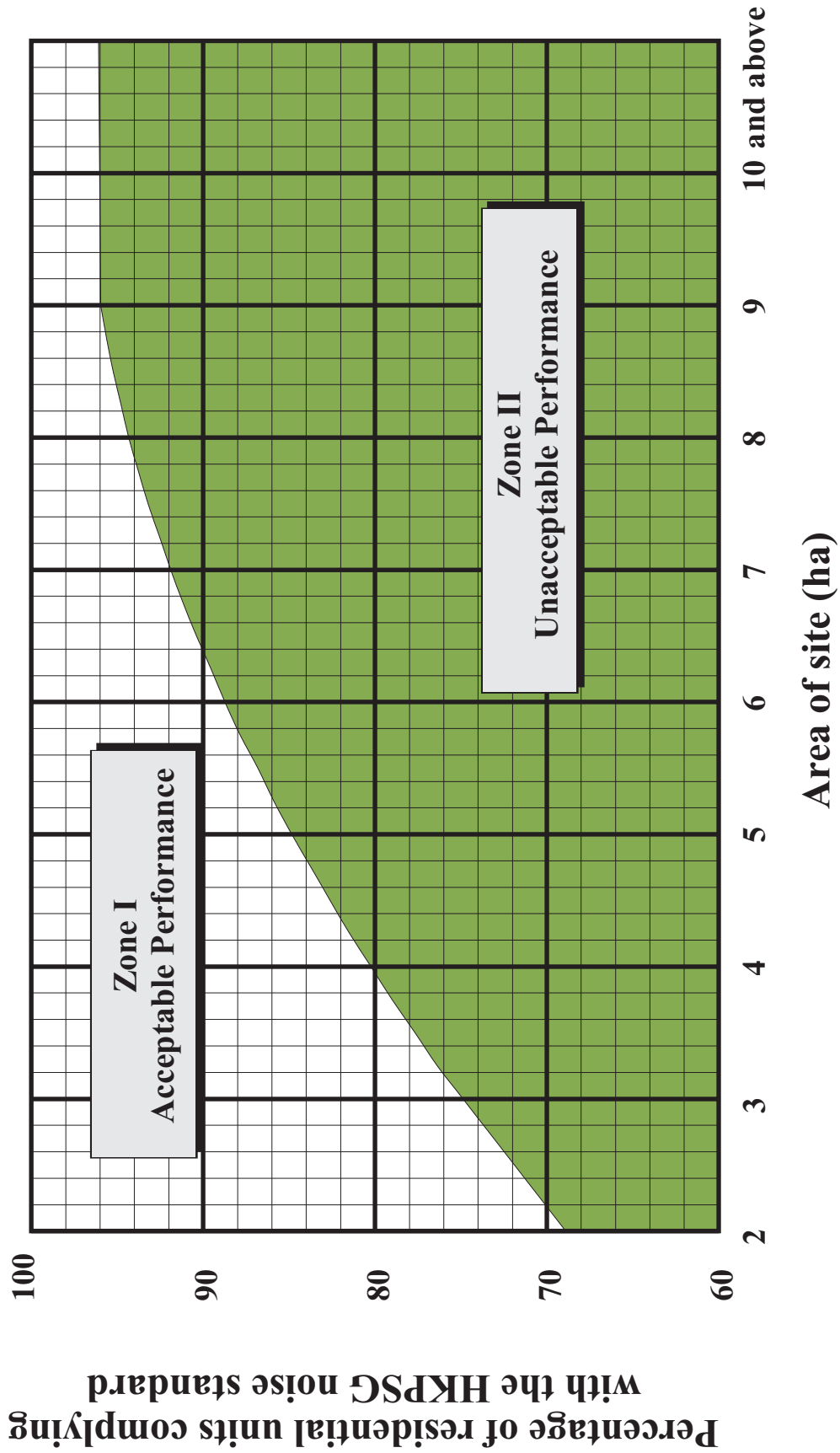
(Robert J.S. Law)  
Director of Environmental Protection

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*Note: All ProPECC Practice Notes can be downloaded from EPD's homepage at <http://www.info.gov.hk/epd/propecc.htm>.*

# Road Traffic Noise Exposure Compliance Zone



**Proposed Residential Development  
Self-Assessment Form**

I. General Information

- (a) Applicant (Authorized Person)  
(All correspondence shall be sent to Applicant)

Name .....

Address .....

Telephone ..... Fax ..... E-mail .....

- (b) Owner(s) of Site

Name .....

Address .....

Telephone .....

Owner's consent has been obtained, documentary proof is attached herewith for reference.

- (c) Full Address or Location of Site

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## II. Scale of Development and the Traffic Noise Exposure Compliance

Item No.	Descriptor	
1.	Area of site <sup>(1)</sup> , [ha]	
2.	The zoning indicated on the Statutory Outline Zoning Plan (indicate Plan No.)	
3.	Total number of residential units in the proposed development	
4.	The number of residential units with habitable rooms which would exceed the HKPSG noise standard but would be provided with acoustic insulation <sup>(2)</sup>	
5.	Percentage of compliance [= (Item 3-Item 4)/ Item 3 x 100%]	
6.	Noise Exposure Compliance Zone (refer to ProPECC PN 1/97 Annex 1)	Zone I / II *

\* *Delete as appropriate*

- (1) *For sites larger than 2 ha, a layout plan of the development and road traffic noise calculation endorsed by a corporate member of the Hong Kong Institute of Acoustics shall be attached to this form.*
- (2) *Please refer to the Hong Kong Planning Standards and Guidelines, Chapter 9, Appendix 4.4, for suitable window types for noise insulation.*

III. (a) I have thoroughly considered the potential road traffic noise impact on the development and have indicated below, where appropriate, noise mitigating measures incorporated in the design of the development, having regards to the architectural and various constraints of the site.

Adequate separations between buildings and roads.....	Yes/No
Integrated building and road design (eg. deck over).....	Yes/No
Purpose-built barriers, earth berms and building podia.....	Yes/No
Orientation of buildings in minimizing road exposure.....	Yes/No
Application of noise-tolerant buildings (eg. commercial, car park) as noise screen.....	Yes/No
Self-protecting building design.....	Yes/No
Others.....	Yes/No

(b) Any other remarks or further justifications:



IV. Self Attestation

I hereby attest that the above information and that contained in the supplementary document and plans submitted in connection with this form are true and accurate. In case this proposed development be approved, all identified noise mitigating measures and acoustic insulation (if any) shall be fully implemented.

Signed by the Applicant

..... Date .....

on behalf of .....