

Good Practices to Incorporate Noise Considerations in Planning New Developments

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CIRCULAR TO PROFESSIONAL INSTITUTES

Who should know

Developers, Architects, Engineers, Contractors and Builders.

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Details

- 1. With rising population, urbanisation and the intensification of land use, residents in Singapore are increasingly exposed to various sources of noise such as construction noise, industrial noise, land and air traffic noise.
- 2. There has been increasing demand from the residents in Singapore for a quieter living environment. Given the land constraints, there is also a limit on setback distances and land buffers that could be provided in order to mitigate the impact of sources of noise on residential communities.
- 3. To ensure a conducive living environment for residents, a multipronged approach would need to be taken to mitigate the noise such as applying noise mitigation measures at the source, pathway and recipients' end to increase the effectiveness of noise control.
- 4. For a new development sited at location with high ambient noise, noise considerations should be factored in at planning stage to ensure that potential occupiers would have a conducive living environment. In addition, the new development should not pose noise nuisance to the surrounding developments, particularly residential and noise sensitive developments.
- 5. It is a good practice to factor in the nuisance sources and potential disamenities in the planning, design, layout, building and construction of the

new developments, and to take practical measures to minimise the nuisance impact at the early stage. For example, facilities and equipment that could pose noise nuisance such as mechanised carpark, generator sets, mechanical ventilations for carparks, kitchen exhausts, air-conditioning condensers, cooling towers, etc. should be sited away from any neighboring residential or noise sensitive developments. If this is not possible, noise mitigation measures shall be put in place.

- 6. Tools such as noise impact assessment could also help industry to address noise issue. Noise impact assessment is a process which identifies and evaluates the key noise impacts on a development, particularly residential and noise sensitive development, or from a development which generates noise such as expressways. The noise impacts should be taken into consideration in the planning and design stages of the development. The use of such tools should be encouraged.
- 7. Developments should also place importance in ensuring that noise generated during construction stage do not unduly affect nearby premises. Noise impact assessment should be carried out during upstream planning as it will be able to recommend suitable engineering measures to reduce the impact of construction noise, thereby reducing the risk of violating NEA's construction noise limits, incurring hefty fines, project delays and affecting nearby residents. The recommendations from the noise impact assessment can be incorporated into the builder's noise management plan for site implementation.
- 8. Companies are encouraged to tap into the Quieter Construction Fund which reimburses builders and suppliers in their investment of quieter construction equipment, noise control equipment and innovative solutions. For more information on the Quieter Construction Fund, visit our website at http://app2.nea.gov.sg/grants-awards/quieter-construction-fund
- 9. We would appreciate it if you could encourage the members of your organisation to incorporate noise considerations in planning new developments.
- 10. This circular is also available from our website at the following address: http://app2.nea.gov.sg/anti-pollution-radiation-protection/central-building-planning/circulars
- 11. If you have any queries concerning this guide, please call NEA at Tel: 1800-2255-632 or email: contact nea@nea.gov.sg.

Thank you.

CHARLES LEE For DIRECTOR

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