香 港 特 別 行 政 區 政 府

The Government of the Hong Kong Special Administrative Region

政府總部發展局工務科 工務科香港添馬添美道2號 政府總部西翼



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<u>Development Bureau</u> <u>Technical Circular (Works) No. 1/2015</u>

Emissions Control of Non-road Mobile Machinery in Capital Works Contracts of Public Works

Scope

This Circular promulgates the requirements for the use of non-road mobile machinery ("NRMM") approved under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation ("the Regulation") in new capital works contracts of public works including design and build contracts, in addition to the statutory requirements of the Regulation.

2. For the purpose of this Circular, NRMM shall have the meaning given in the Regulation.

Effective Date

3. This Circular shall take immediate effect.

Background

4. To improve the air quality of Hong Kong, the Secretary for the

Environment has, after consultation with the Advisory Council on the Environment, made the Regulation under the Air Pollution Control Ordinance (Cap. 311) to mandate that NRMM (with the exception of exempted NRMM) to be sold or leased in Hong Kong or used in specified activities¹ (including the use of NRMM in construction sites) must meet a set of emission standards and must be NRMM approved by the Authority under the Regulation ("approved NRMM"). Approved NRMM must be affixed with an approval label for identification.

- 5. The Authority under the Regulation may, on application, exempt certain NRMM and existing NRMM² from the new emission-control requirements. Exempted NRMM must be affixed with an exemption label for identification.
- 6. The Regulation, with the exception of sections 4, 5 and 6 as highlighted below, will come into operation on 1 June 2015. The key dates of the Regulation are as follows:

Application for exemption of existing NRMM From 1 June 2015

to 30 November

2015

Provisions on control of sale and lease of NRMM :

(Section 4 of the Regulation)

Coming into operation on

1 September 2015

Provisions on the control of use of NRMM

(Sections 5 and 6 of the Regulation)

: Coming into operation on

1 December 2015

Policy

- 7. Approved NRMM are more environmentally friendly as compared to exempted NRMM. As such, notwithstanding the permitted use of exempted NRMM under the Regulation, we require the use of more approved NRMM in the execution of public works.
- 8. In this connection, **Appendix A** sets out an implementation plan to phase out the use of exempted NRMM for four types of NRMM, namely generators, air

¹ The specified activities include the use of NRMM at the airport, port facilities, construction sites, designated waste disposal facilities and in processes specified in the Air Pollution Control Ordinance.
² Refer to sections 9, 10, 11 and 12 of the Regulation for details of exemption of NRMM.

compressors, excavators and crawler cranes in new capital works contracts of public works including design and build contracts, with an estimated contract value exceeding \$200 million and tenders invited on or after **1 June 2015**.

Tender Documents

- 9. The following provisions shall be incorporated in tender documents for capital works contracts of public works including design and build contracts, with an estimated contract value exceeding \$200 million and with tenders to be invited on or after **1 June 2015**:
 - (A) Special Condition of Contract Use of non-road mobile machinery approved under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation in **Appendix B**.

(B) Note to Tenderer

Incorporate the following Note to Tenderer to draw the attention of tenderers to the Special Condition of Contract:

Tenderers should note Special Conditions of Contract Clause [insert as appropriate] on the use of non-road mobile machinery approved under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation.

Enquiries

10. Enquiries on this Circular should be directed to Assistant Secretary (Works Policies) 6 on 3509 8306.

(C S Wai)
Permanent Secretary for Development (Works)

Implementation plan for phasing out the use of exempted Non-road Mobile Machinery in new capital works contracts

Exempted non-road mobile machinery (NRMM) for four types of NRMM, namely generators, air compressors, excavators and crawler cranes, shall be phased out progressively in new capital works contracts of public works (including design and build contracts) with an estimated contract value exceeding \$200 million as follows:

	Phase I Tenders to be invited from 1 June 2015 to 31 May 2017	Phase II Tenders to be invited from 1 June 2017 to 31 May 2019	Phase III Tenders to be invited from 1 June 2019 onwards
Generators	No exempted NRMM is allowed		
Air Compressors	No exempted NRMM is allowed		
Excavators	Exempted NRMM shall not exceed 50% of all units on site	Exempted NRMM shall not exceed 20% of all units on site	No exempted NRMM is allowed
Crawler Cranes	Exempted NRMM shall not exceed 50% of all units on site	Exempted NRMM shall not exceed 20% of all units on site	No exempted NRMM is allowed

Note: Notwithstanding the above plan, exempted NRMM may still be permitted at the discretion of the Architect/Engineer if there is no feasible alternative.

<u>Special Condition of Contract – Use of non-road mobile machinery approved under the Air Pollution Control (Non-road Mobile Machinery) (Emission)</u> Regulation

- (1) In this Clause—
 - (a) "approved" has the meaning given by section 2 of the Air Pollution Control (Non-road Mobile Machinery)(Emission) Regulation;
 - (b) "exempted" has the meaning given by section 2 of the Air Pollution Control (Non-road Mobile Machinery)(Emission) Regulation;
 - (c) "kW" means kilowatt;
 - (d) "non-road mobile machinery" has the meaning given by section 2 of the Air Pollution Control (Non-road Mobile Machinery)(Emission) Regulation;
 - (e) "rated engine power output" means the maximum net power of an engine.
- (2) Subject to sub-clause (3), machinery of the types and quantities listed below must be approved non-road mobile machinery:
 - (a) all generators on the Site,
 - (b) all air compressors on the Site,
 - (c) at least 50% of the total quantity of/at least 80% of the total quantity of/all* excavators on the Site, and
 - (d) at least 50% of the total quantity of/at least 80% of the total quantity of/all* crawler cranes on the Site
 - which are powered by internal combustion engines and the rated engine power output of which is greater than 19 kW but not greater than 560 kW.
- (3) The Architect/Engineer* may permit the use of exempted non-road mobile machinery for any type of machinery listed above if he is satisfied that there is no feasible alternative. The Architect/Engineer's permission under this sub-clause may cover the whole or part of the quantity specified in sub-clause (2) above in respect of the type of machinery concerned.

(4) Nothing in this Clause shall derogate from or in any way affect the obligation of the Contractor to comply with the applicable law in Hong Kong, including the obligation of the Contractor to comply with the Air Pollution Control (Non-road Mobile Machinery)(Emission) Regulation (Cap. 311 sub. leg. [insert]) in respect of all non-road mobile machinery on the Site.

(*delete as appropriate)