

**FIFTH TECHNICAL MEMORANDUM
FOR ALLOCATION OF EMISSION ALLOWANCES
IN RESPECT OF SPECIFIED LICENCES**

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This Technical Memorandum is published under Section 37B(1) of the Air Pollution Control Ordinance (Cap. 311) and shall commence to have effect in accordance with Section 37C of that Ordinance.

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1. PRELIMINARY

1.1 Citation and Commencement

This Technical Memorandum is the fifth technical memorandum issued pursuant to Section 26G of the Ordinance and may be cited as the "Fifth Technical Memorandum for Allocation of Emission Allowances in Respect of Specified Licences". This Technical Memorandum shall come into operation in accordance with Section 37C of the Ordinance.

1.2 Application and Scope

This Technical Memorandum sets out the quantity of emission allowances for each type of specified pollutant allocated in respect of each specified licence and the allocation principles and determination method of the quantity of emission allowances to be allocated for each and every emission year from 1 January 2020. The allocation of emission allowances set out or determined under the Fourth Technical Memorandum for each and every emission year from 1 January 2020 is superseded by this Technical Memorandum.

1.3 Interpretation

In this Technical Memorandum, unless the context otherwise requires, the following definitions apply –

"Authority" (監督) has the same meaning as in the Ordinance.

"Electricity generation for local consumption" (供本港使用電力) means the gross electricity generation of the Electricity Works concerned minus the electricity sales for export outside the Hong Kong Special Administrative Region irrespective of whether the export sales are directly conducted by the subject specified licence holder or indirectly dealt with by other dealers.

"Electricity Works" (電力工程) means the process of Electricity Works specified in item 7 of Schedule 1 to the Ordinance.

"emission allowance" (排放限額) has the same meaning as in the Ordinance.

"emission year" (排放年度) has the same meaning as in the Ordinance.

"Existing Electricity Works" (現有電力工程) means the Electricity Works conducted in any of the following power stations in respect of which a valid specified licence is in force on the commencement date of this Technical Memorandum –

- (a) Lamma Power Station and Lamma Power Station Extension at Lot 1934 and Lot 2200, DD 3, Po Lo Tsui, Lamma Island;
- (b) Black Point Power Station at Yung Long Road, Lung Kwu Tan, Tuen Mun, New Territories;
- (c) Castle Peak Power Station at Lung Yiu Street, Tuen Mun, New Territories; and
- (d) Penny's Bay Gas Turbine Power Station at Lot 23, DD 256, Penny's Bay, Lantau Island, New Territories.

"Fourth Technical Memorandum"(第四份技術備忘錄) means the "Fourth Technical Memorandum for Allocation of Emission Allowances in Respect of Specified Licences" published in the Gazette under Section 37B(1) of the Ordinance on 17 October 2014 which came into operation in accordance with Section 37C of the Ordinance.

"New Electricity Works" (新電力工程) means any Electricity Works, other than the Existing Electricity Works, which comes into existence after the commencement of this Technical Memorandum.

"Ordinance" (條例) means the Air Pollution Control Ordinance (Cap. 311).

"Renewable Energy System" (可再生能源系統) means an electricity generation system employing solar, wind, biomass, hydro, tidal, wave, geothermal or energy from waste (including landfill gas or sewage gas) that provides electricity to the grid.

"Secretary" (局長) has the same meaning as in the Ordinance.

"specified licence" (指明牌照) has the same meaning as in the Ordinance.

"specified licence holder" (指明牌照持有人) has the same meaning as in the Ordinance.

"specified pollutant" (指明污染物) has the same meaning as in the Ordinance.

2. ALLOCATION OF EMISSION ALLOWANCES

2.1 The quantity of emission allowances for each type of specified pollutant allocated to each specified licence of Existing Electricity Works for each and every emission year from 1 January 2020 shall be determined by the formulae in the respective tables as follows –

(a) Lamma Power Station and Lamma Power Station Extension

	2020 and thereafter
Sulphur dioxide	$3\,130 + (2 - A) \times 0.563$
Nitrogen oxides ⁽ⁱ⁾	$6\,350 + (2 - A) \times 0.928$
Respirable suspended particulates	$145 + (2 - A) \times 0.019$

(b) Black Point Power Station

	2020 and thereafter
Sulphur dioxide	279
Nitrogen oxides ⁽ⁱ⁾	4 074
Respirable suspended particulates	108

(c) Castle Peak Power Station

	2020 and thereafter
Sulphur dioxide	$4\,259 + (32 - B) \times 0.422$
Nitrogen oxides ⁽ⁱ⁾	$10\,844 + (32 - B) \times 1.073$
Respirable suspended particulates	$331 + (32 - B) \times 0.033$

(d) Penny's Bay Gas Turbine Power Station

	2020 and thereafter
Sulphur dioxide	2
Nitrogen oxides ⁽ⁱ⁾	2
Respirable suspended particulates	1

⁽ⁱ⁾ Expressed as nitrogen dioxide

where –

- A is the aggregate of total net sent-out electricity output (in GWh) from the Renewable Energy Systems to the electricity grid of Lamma Power Station and Lamma Power Station Extension in the emission year; and
- B is the aggregate of total net sent-out electricity output (in GWh) from the Renewable Energy Systems to the electricity grid of Castle Peak Power Station in the emission year.

2.2 The quantity of emission allowances for each type of specified pollutant allocated to each specified licence of New Electricity Works for each and every emission year from 1 January 2020 shall be determined by the formulae as follows-

	2020 and thereafter
Sulphur dioxide	$36 \times (C/300) \times (D/12) - E \times 0.018$
Nitrogen oxides ⁽ⁱⁱ⁾	$55 \times (C/300) \times (D/12) - E \times 0.028$
Respirable suspended particulates	$14 \times (C/300) \times (D/12) - E \times 0.007$

⁽ⁱⁱ⁾ Expressed as nitrogen dioxide

where –

- C is the total installed capacity (in MW) of the New Electricity Works; or 300, whichever is smaller;
- D is the total number of months in the emission year after the commencement of operation of the New Electricity Works and part of a month is taken as a full month in the determination; and
- E is the aggregate of total net sent-out electricity output (in GWh) from the Renewable Energy Systems to the electricity grid of the New Electricity Works in the emission year.

2.3 The Authority shall make the allocation of emission allowances for each type of specified pollutant in relation to each specified licence in respect of electricity generation for local consumption.

2.4 For the purposes of determination of the quantity of emission allowances referred in Sections 2.1 and 2.2, the aggregate of the total net sent-out electricity output from the Renewable Energy Systems in the emission year is to be rounded up to the next whole number.

2.5 The quantity of emission allowances determined in this Technical Memorandum for allocation to a specified licence shall be rounded up to the next whole number.

2.6 Unless otherwise provided or required in the Ordinance or its subsidiary legislation, the Authority shall allocate to each specified licence the respective quantity of emission allowances set out or determined in accordance with this Technical Memorandum for each and every emission year from 1 January 2020.

2.7 The Secretary shall review in 2016 the quantity of emission allowances for each type of specified pollutant for each specified licence set out or determined in accordance with this Technical Memorandum after the commencement of this Technical Memorandum.