

Ref: NEA-CMD-CIRCULAR-ECA-00001-2026

Date: 10-Feb-2026

Aerosol-generating System (Cooling Tower) Owners with Water-Cooled Chilled Water systems (WCCWS)

Dear Sir/Mdm

**Compliance with Minimum Energy Efficiency Standards (MEES) for Water-Cooled Chilled Water Systems (WCCWS)**

1 NEA would like to update you on the MEES requirements and compliance timeline for existing less energy intensive industrial facilities that are currently not regulated under the Energy Conservation Act (“ECA”).

Background

2 Following the announcement in 2019 that MEES for WCCWS would be implemented in industrial facilities, the regulatory requirements have come into effect for new industrial facilities<sup>1</sup> on 1 Dec 2020; and ECA Registered Corporations (ECA RC)<sup>2</sup> i.e. existing energy intensive industrial facilities on 1 Dec 2025.

3 The below facilities would need to comply with MEES for WCCWS:

- a) any facility that has a business activity attributable to any of the following industry sectors:
  - i. manufacturing and manufacturing-related services;
  - ii. supply of electricity, gas, steam, compressed air and chilled water for air-conditioning; and
  - iii. water supply and sewage and waste management; or
- b) any multi-user facility that is located within any land that is zoned as a Business 1 or Business 2 zone in the Master Plan under the Planning Act 1998.

4 Only electrically driven WCCWS with a total installed capacity, including both operating and standby chillers, of 1055kW (300RT) or more will be covered under the scope of MEES. WCCWS that are solely operated by brine, glycol and air-cooled chillers are exempted.

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<sup>1</sup> A New Industrial Facility (NIF) refers to a premises with a newly developed building that has a WCCWS, for which an application for Planning Permission (PP) clearance or its equivalent (i.e., Plan Lodgement) is submitted on or after 1 December 2020.

<sup>2</sup> A corporation must register as Registered Corporation (RC) under ECA if it has operational control of a business activity (described in Para 2a) consuming at least 54 terajoules (TJ) of energy annually for two out of the 3 preceding years and the business activity is carried out at a single site.

## Regulatory Requirements

5 The requirements include prescribed MEES level, measurement and verification, registration and reporting. **See Annex A** for further information on the requirements to be met.

6 Non-compliance with the regulatory requirements will be subject to penalties under the ECA. **See Annex B**.

## Compliance Timeline

7 The timelines for existing less energy intensive industrial facilities are below.

<b>Industrial facility with operational control of a chilled water business activity</b> <sup>Note1</sup> <sup>Note2</sup>			
<b>Type of Registrable Relevant Person (RRP)</b>	<b>Registration Deadline (Year A)</b>	<b>Assessment Submission Deadline (Year B)</b>	<b>Report Submission Deadline</b>
RRP has operational control of a chilled water business activity as at <b>1 December 25</b> that supplies chilled water solely to RC(s)	By 1 June 2026	By 30 June 2026	By 30 June of each year subsequent to Year B
RRP has operational control of a chilled water business activity as at <b>1 December 29</b> that supplies chilled water to: i) Persons who are not RC(s); or ii) Persons who are RC(s) <b>and</b> not RC(s)	By 1 June 2030	By 30 June 2030	
RRP has operational control of a chilled water business activity on or after <b>1 December 25</b> that commence supply of chilled water solely to RC(s)	Within 6 months from supply commencement	If registered between (a) 1 January and 30 May (both dates inclusive) of Year A —by 30 June of Year A; or (b) between 1 June and 31 December (both dates inclusive) of Year A — by 30 June of Year A + 1	
RRP has operational control of a chilled water business activity on or after <b>1 December 29</b> that commence supply of chilled water to: i) Persons who are not RC(s); or ii) Persons who are RC(s) <b>and</b> not RC(s)			
<b>Notes</b> Note1: The compliance timeline for the energy intensive industrial facilities to take precedence if the RRP is a ECA RC. Please refer to timeline in Table 1 of the circular sent to <a href="#">ECA RC</a> . Note2: "chilled water business activity" refers to the business activity of supplying chilled water for air-conditioning.			

<b>Industrial facility with operational control of other applicable business activity</b> <sup>Note1</sup> <b>(excluding chilled water) or with premises in Business 1 or Business 2 zone</b> <sup>Note2</sup>			
<b>Type of Registrable Relevant Person (RRP)</b>	<b>Registration Deadline (Year A)</b>	<b>Assessment Submission Deadline (Year B)</b>	<b>Report Submission Deadline</b>
RRP has operational control of: i) an applicable business activity that is not a chilled water business activity or ii) premises located within any land that is zoned as a Business 1 or Business 2 Zone  <b>as at 1 December 2029</b>	By 1 June 2030	By 30 June 2030	By 30 June of each year subsequent to Year B
<b>Notes</b> Note1: An applicable business activity refers to a business activity that is attributable to any of the following industry sectors: (i) manufacturing and manufacturing-related services; (ii) supply of electricity, gas, steam, compressed air and chilled water for air-conditioning; (iii) water supply and sewage and waste management. Note2: Exemptions apply to premises that are wholly occupied, or are to be occupied, by only one person not attributed to an applicable business activity. Please refer to the <a href="#">Energy Conservation (Exemptions – Section 23A and 26B) Order 2020</a> exemption criteria.			

## Grants

8 Before the mandatory requirements kick in, companies that must comply can apply for available grants such as the Resource Efficiency Grant for Emissions (REG(E)) or Energy Efficiency Grant (EEG) to retrofit their WCCWS and improve the energy performance to comply with MEES. Information on the grants is available at the links below.

- a) [Energy Efficiency Grant \(EEG\)](#)
- b) [Resource Efficiency Grant for Emissions \(REG\(E\)\)](#)

## Clarifications

9 Should you require any clarifications or if your facility does not have any WCCWS within the scope of MEES, please contact us at [nea\\_eepc@nea.gov.sg](mailto:nea_eepc@nea.gov.sg)

Yours faithfully  
(Transmitted via email)

Suresh K.  
Director  
Carbon Mitigation Division  
National Environment Agency

NB: This is a computer-generated letter; no signature is required

Table A-1. Prescribed MEES for different chilled water supply temperatures<sup>Note1</sup>

Chilled water supply temperature (°C)	3	4	5	6	7	8	9	≥10
MEES in kWe/kWc (kW/RT)	0.203 (0.71)	0.200 (0.70)	0.197 (0.69)	0.194 (0.68)	0.191 (0.67)	0.188 (0.66)	0.185 (0.65)	Energy performance to be improved from 0.185 kWe/kWc at 9°C by 0.003 kWe/kWc for every 1°C increase in chilled water supply temperature
<b>(With effect from 1 Apr 2026)</b> <b>Only for premises comprising a new building with water-cooled chilled water systems used solely for space cooling<sup>Note2</sup></b>								
MEES in kWe/kWc (kW/RT)	0.191 (0.67)	0.188 (0.66)	0.185 (0.65)	0.182 (0.64)			0.179 (0.63)	
<p><u>Notes</u></p> <p>Note1: The figures are only indicative. Please refer to Fifth Schedule of the Energy Conservation (Energy Management Practices) Regulations to determine the prescribed MEES.</p> <p>Note2: Applicable for premises that apply for planning permission (PP) or equivalent on or after 1 April 2026 onwards for a new building that use WCCWS dedicated for space cooling.</p>								

Table A-2. Details on the requirements to be met

Scope	Key Regulatory Requirements
<b>Registration</b>	<ul style="list-style-type: none"> <li>Industrial facilities with WCCWS under the scope of MEES installed in their facility must apply to be registered as a Registered Relevant Person (RRP) in the <u>EDMA system</u></li> </ul>
<b>Energy Performance</b>	<ul style="list-style-type: none"> <li>The energy performance of the WCCWS must conform to the prescribed MEES level</li> </ul>
<b>Measurement and Verification (M&amp;V)</b>	<ul style="list-style-type: none"> <li>The assessment and monitoring of the WCCWS energy efficiency must be carried out using permanent measuring instruments</li> <li>Technical details on the M&amp;V equipment can be found in the <u>M&amp;V requirement and guidelines</u></li> </ul>
<b>Reporting</b>	<ul style="list-style-type: none"> <li>RRP is required to submit an Assessment Report for first-time reporting and a Monitoring Report for subsequent reporting</li> <li>The reports should include 14 days continuous measurement data of the WCCWS key operating parameters and the system performance</li> <li>Both reports are to be submitted to NEA via the EDMA system in the following format : <ul style="list-style-type: none"> <li>- <u>Assessment Report</u></li> <li>- <u>Monitoring Report</u></li> </ul> </li> <li>The Assessment Report <u>must be</u> prepared and signed off by an Energy Efficiency Opportunities (EEO) Assessor with systems-specific experience in chilled water systems or a Professional Engineer (PE) in the branch of mechanical engineering, electrical engineering or chemical engineering and endorsed by the Chief Executive (or equivalent) and MEES representative of the company.</li> </ul>

- The Monitoring Report does not need to be prepared and endorsed by the EEO Assessor/PE but needs to be endorsed by the Chief Executive (or equivalent) and MEES representative of the company.

## Annex B

### Penalties under the ECA

Non-compliance	Penalties
<p><b>Registration</b> Failure to register with NEA as a registrable relevant person within the prescribed period</p>	<ul style="list-style-type: none"> <li>• A fine <b>not exceeding \$5,000</b></li> </ul>
<p><b>Measurement and Verification (M&amp;V)</b> Failure to assess and monitor the energy efficiency of the WCCWS based on the prescribed manner, measurement equipment and assessment or reporting period</p>	<ul style="list-style-type: none"> <li>• A fine not exceeding <b>\$20,000</b> and, in the case of a continuing offence, to a further fine not exceeding <b>\$500 for every day or part of a day</b> during which the offence continues after conviction</li> </ul>
<p><b>Reporting</b> Failure to submit a report to NEA on the assessment and monitoring of the WCCWS system for the prescribed period.</p>	<ul style="list-style-type: none"> <li>• A fine not exceeding <b>\$10,000</b> on the first conviction of that offence</li> <li>• A fine not exceeding <b>\$20,000</b> and, in the case of a continuing offence, to a further fine <b>not exceeding \$1,000 for every day or part of a day</b> during which the offence continues after that second or subsequent conviction</li> </ul>