

Scrubber

Note 1: Information which detail was unknown from the reference documents is left blank.

Note 2: In order to improve the appearance, there are some differences in the expression of the regional regulations from the reference documents.

| Country | Area | Summary | Reference documents |
|-----------|---|---|--|
| Norway | Fjords (World Heritage) | Ban on the use of open-loop scrubbers. (Actual sentence in the reference documents: Approved closed loop exhaust gas cleaning system or hybrid exhaust gas cleaning system in closed loop mode shall use.) | 06 (Norway)Regulations.msg (Refer to the Section 14b) |
| USA | California | Discharge of exhaust gas scrubber washwater is prohibited. | Final 2013 VGP (Refer to the 6.4.1, 6.5.9) |
| | Connecticut | | |
| UAE | Port of Fujairah | Ban on the use of open-loop scrubbers. | ClassNK TEC1173 |
| China | Port area of the Coastal Control Area* | Discharge of exhaust gas scrubber washwater is prohibited. | ClassNK TEC1174 |
| | Inland River Control Area** | | |
| | Bohai Area | | |
| Germany | | Discharge of exhaust gas scrubber washwater is prohibited. | CDNI Convention (Refer to the PART C Article 9.01(1)) |
| Belgium | Ports or inland waters | Discharge of exhaust gas scrubber washwater is prohibited. | 2016 note on discharge of scrubber washwater (Refer to the BE column of PDF page 4) |
| Ireland | Port of Dublin | Discharge of exhaust gas scrubber washwater is prohibited. | Notice to mariners (Dublin Port Company) |
| | Port of Waterford | | Marine Notices (Port of Waterford Company) |
| | Port of Cork | | Notice to mariners (Port of Cork) |
| Singapore | | Discharge of exhaust gas scrubber washwater is prohibited. | A Guide For Ships Calling To Port Of Singapore |
| Panama | Panama Canal | Ban on the use of open-loop scrubbers. | ClassNK TEC1194 |
| Malaysia | Malaysian water (12 nautical miles from the nearest land) | Discharge of exhaust gas scrubber washwater is prohibited. (Any ship transiting through the Malaysian Waters without any intention of entering at any Malaysian Ports is exempted) | MSN072019 |
| | | | MSN082019 |
| Bermuda | Territorial waters | Discharge of exhaust gas scrubber washwater is prohibited. | environmental-policy-ships (Refer to the 3.) |

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| Egypt | Suez Canal | Discharge of exhaust gas scrubber washwater is prohibited. | 8-2019 |
| Saudi Arabia | Port | Discharge of exhaust gas scrubber washwater is prohibited. | Circular No.(55) 2020 |
| Oman | Ports or territorial waters | Discharge of exhaust gas scrubber washwater is prohibited. | Maritime Notice No.09/2020 |
| Türkiye | Territorial waters | Discharge of exhaust gas scrubber washwater is prohibited. | Circular No.391 |
| Canada | Port of Vancouver | Discharge of exhaust gas scrubber washwater is prohibited. | 2021-11-24-Notice-of-Amendment-Port-Information-Guide |
| New Zealand | Waters of the Canterbury region | Discharge of exhaust gas scrubber washwater is prohibited. Ban on the use of open-loop scrubbers while alongside a berth in port or while at anchor. | Guidance to ship operators and masters on vessel emissions, scrubbers and fuel use |
| Bahrain | Port of Bahrain including the anchorage area | Discharge of exhaust gas scrubber washwater is prohibited. | MARINE-NOTICE-PMA-03-2019 Exhaust Gas Cleaning System EGCS |
| Pakistan | Port | Discharge of exhaust gas scrubber washwater is prohibited. | Circular No.001/2020-CE&SS |
| Scotland | Port of Forth and Tay | Ban on the use of open-loop scrubbers. | NOTICE TO MARINERS FIRTH OF FORTH & TAY |

*Within 12 nautical miles of China coast

**Regulated waters of Yangtze River and Xijiang River

Low sulphur fuel oil

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| Country | Area | Summary | Reference documents |
|----------------|-----------------------------|---|---|
| EU | Union port | Ban on the use marine fuels with a sulphur content exceeding 0.10% by mass. (Ships at berth in Union ports, except the cases when ships are due to be at berth for less than two hours according to published time tables, or the cases when ships switch off all engines and use shore-side electricity while at berth in ports). | DIRECTIVE(EU)2016/802 (Refer to the Article 7) |
| United Kingdom | UK port | Ban on the use marine fuels with a sulphur content exceeding 0.10% by mass. (Ships at berth in UK ports, except the cases when ships are due to be at berth for less than two hours according to published time tables, or the cases when ships switch off all engines and use shore-side electricity while at berth in ports). | Additional guidance on themerchant shipping(prevention of air pollutionfrom ships) |
| Norway | | Ban on the use marine fuels with a sulphur content exceeding 0.10% by mass. | Environmental safety for ships and mobile offshore units (Refer to the Section 13) |
| USA | California | Ban on the use marine fuels with a sulphur content exceeding 0.10% by mass. | ClassNK TEC879 |
| China | DECAs*** | Ban on the use marine fuels with a sulphur content exceeding 0.50% by mass | ClassNK TEC1171 |
| | Inland River Control Area** | Ban on the use marine fuels with a sulphur content exceeding 0.10% by mass. (2020/1/1~) | |
| | Hainan Water Area | Ban on the use marine fuels with a sulphur content exceeding 0.10% by mass. (2022/1/1~) | |
| Hong Kong | Hong Kong waters | Ban on the use marine fuels with a sulphur content exceeding 0.50% by mass. | ClassNK TEC1167 |
| Taiwan | Port of Keelung | Ban on the use marine fuels with a sulphur content exceeding 0.50% by mass. | ClassNK TEC1163 |
| | Port of Taichung | | |
| | Port of Kaohsiung | | |
| | Port of Hualien | | |
| | Port of Taipei | | |
| | Port of Suao | | |

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| | Port of Anping | | |
| | Port of Mailiao | | Inspection requirement for ships in Mailiao |
| Türkiye | Ports and inland water | Ban on the use marine fuels with a sulphur content exceeding 0.10% by mass. (Quay of Türkiye ports and inland vessels) | ClassNK TEC882 |
| Australia | Sydney Harbour | Ban on the use marine fuels with a sulphur content exceeding 0.10% by mass. (Cruise vessels capable of accommodating more than 100 passengers) | AMSA Marine Notice 21/2016 |
| South Korea | Around the major domestic ports such as Busan Port, Incheon Port, Yeosu Port, Gwangyang Port, Ulsan Port, Pyeongtaek and Dangjin Port | Ban on the use marine fuels with a sulphur content exceeding 0.10% by mass. | Sox emission control in Korean ports |

***Control area which includes both Coastal Control Area and Inland River Control Area