China Regulatory Update

Requirements on Marine Engine NOx Emission Limit for Imported Ships Engaged in Chinese Domestic Trading and Chinese Flag International Vessels Engaged in Domestic Waterway Transportation

Advisory Services | Aug 30, 2018

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Background

ABS is aware that the recent announcement by the Chinese Ministry of Transport regarding the "Regulations on the Administration of Domestic Waterway Transport for Imported Ships" has raised a number of questions. One of the major concerns is how the regulation applies to ships built prior to 1 January 2011, i.e. ships with engines that have not been certified or have been certified to the IMO Tier I NOx limits under the original 1997 MARPOL Annex VI and NOx Technical Code (NTC).

The Announcement[1]

Announcement of the Ministry of Transport on Strengthening the Administration of Domestic Waterway Transportation for Imported Ships and Chinese Flag International Vessels Engaged in Domestic Waterway Transportation

In order to improve the quality of domestic ship transport capacity and promote the development of safety and environment-friendly of waterway transport, in accordance with the "Regulations on the Administration of Domestic Waterway Transport", "Regulations on the Administration of Old Transport Vessels" and other relevant requirements, the relevant matters are announced as follows:

- Starting from September 1, 2018, the imported ships engaged in domestic waterway transportation and Chinese flagged international sailing vessels applying for domestic water transportation shall have their NOx emissions from diesel engines in compliance with the **Tier II emission limit** requirements as specified in Annex VI of the International Maritime Organization's International Convention for the Prevention of Pollution from Ships, 1973, as amended by the Protocol of 1978 (MARPOL 73/78).
- The ship inspection agencies, maritime administrative authorities and waterway transportation management departments shall, in accordance with their duties, carefully control and supervise and manage the domestic waterway transportation of imported ships and Chinese Flag international vessels engaged in domestic waterway transportation.

This announcement is valid for 5 years.

Released by Ministry of Transport of the P.R.C. on June 28, 2018.

What's the Impact?

From the above announcement, we understand that from the 1 September 2018 engines on:

- any imported ship which intends to register in China and engage in domestic waterway transportation in China; and

[1] The announcement (in Chinese) can be found at http://zizhan.mot.gov.cn/zfxxgk/bnssj/syj/201807/t20180703_3042272.html

- any Chinese flagged internationally sailing vessels applying for domestic waterway transportation,

must meet the Tier II NOx limits specified in the 2008 revised IMO MARPOL Annex VI Regulation 13.

This requirement is not applicable to foreign flagged vessels navigating in Chinese domestic waters.

Chinese domestic waters are defined as all inland waterways and rivers including coastal territorial waters up to 12nm from the coast.

ABS understands, that engines on imported ships applying for Chinese domestic waterway transport, which were constructed before 1 January 2011, are acceptable, provided they are re-certified as compliant with the IMO Tier II NOx limit.

Further, ABS understands that such ships would require certification/recertification of all installed engines, in accordance with Regulation 13 of Annex VI, i.e. a Technical File approved in accordance with Annex VI and the NTC 2008 and associated Tier II EIAPP Certificate.

MARPOL Annex VI and the NTC underwent substantive amendment for the 2008 revisions, which included, among other things, changes to the emissions test procedures, analyzers and calculation methods. Recertifying a Tier I engine to the Tier II limits may therefore require engine adjustments and/or component changes, together with a recertification process that may require NOx emissions measurements to establish a new Engine Group. Alternatively, it may be possible to recertify the Tier I engine within an already established Tier II Engine Group.

However, ABS understands that the net changes of the 2008 Annex VI/NTC, including the test procedures, are consider to be considered ‘minor’, with respect to the NOx emission values and therefore the original measurement results (of a pre-2011 engine with NOx emissions below the Tier II limit) may be used in the recalculation for a new approved Technical File, for the purpose of establishing a new Engine Group to the IMO Tier II limit. This would need to be investigated and discussed on a case-by-case basis with the original certifying flag Administration.

The certification/recertification process would be applicable to all Tier I engines, regardless of whether the actual NOx emissions were above or below the Tier II limit. However this may be more challenging for those engines with emissions above the Tier II limit. In those cases it may be possible to upgrade the engine specification (adjustments and/or component changes) to meet the Tier II limit. This is effectively recertifying the engine as a member engine to another already established Tier II Engine Group, provided one exists for the applicable engine type, rating and specification. Or, with more difficulty, this may be achieved by establishing a new Engine Group based on further testbed or onboard emissions tests.

In those cases where the EIAPP Certificate has been issued by ABS based on the certificate issued by another Recognized Organization (RO) and the associated Technical File, the engine RO remains the engine RO throughout its service life. Any changes to an engine and associated Technical File/NOx certification, in the majority of cases, needs to be undertaken by the original engine RO since ABS does not hold the original supporting documentation on which the Engine Group has been established. There are however mechanisms for ABS to take over as engine RO if requested by the ship owner.

ABS Recommendation

ABS recommends that any proposed Tier I to Tier II NOx modification is discussed with the original Technical File compiler, typically the engine designer or licensee, to determine if they have any

established Tier II engine groups for that engine type/rating/specification and what the technical, statutory and cost implications be to upgrade the engine to the Tier II specification and recertify.

We would also recommend engaging in dialogue with the vessel's existing flag Administration, original engine certifying flag Administration (if different) and the Chinese Administration at the earliest opportunity to clarify the specific requirements for each vessel on a case-by-case basis. ABS Advisory Services and/or the ABS designated NOx technical offices (Busan, Hamburg, Houston, London and Yokohama) can support that process and advise regarding the specifics of any ABS approved NOx technical files.

Appendix

A-I: FAQ

Q1. *We note from the announcement that imported vessels intended for domestic waterway transportation are to meet the IMO Tier II NOx limits. We also note the announcement has the objective of improving the quality and safety of the domestic ship transport capacity. Can China confirm that ships built before 1 January 2011, i.e. IMO NOx Tier I ships, will be accepted under this policy if the NOx emissions are certified to be below the IMO Tier II limit, or is the intent that from 1 September 2018 only imported ships constructed after 1 January 2011 will be accepted for Chinese domestic duty?*

A1: ABS understands that ships constructed before 1 January 2011 will be accepted for import to China for domestic waterway transportation if engines installed on such ships are certified to be IMO NOx Tier II compliant. The demonstration of IMO NOx Tier II compliance requires engine certification to be issued according to the applicable NOx Technical Code.

Q.2 *MARPOL Annex VI and the NOx Technical Code (NTC) underwent substantive amendment for the 2008 revisions, which included, among other things, changes to the emissions test procedures, analyzers and calculation methods. Does compliance with the domestic waterway regulation require recertification of all installed engines, applicable in accordance with Regulation 13 of Annex VI, to the 2008 Annex VI/NTC*

A2: ABS understands that this will require an engine Technical File to be re-approved and updated Engine International Air Pollution Prevention (EIAPP) Certificate to be issued for each engine that falls within the scope of Annex VI Regulation 13. However, since the 2008 amendments may be considered minor in the context of emissions test and calculation procedures, it may be possible to use the original emissions measurements (of those pre-2011 engines that have NOx emissions below the Tier II limit) in that recertification process. Each engine needs to be assessed on a case-by-case basis.

Q.3 *Is it correct to understand that recertification can be undertaken by the original certifying entity, or Recognized Organization, under the authority of the applicable flag Administration?*

A3: The engine RO remains the engine RO throughout its service life. Any changes to an engine and associated Technical File/NOx certification, in the majority of cases, needs to be undertaken by the original RO since ABS does not hold the original supporting documentation on which the Engine Group has been established. There are however mechanisms for ABS to take over as engine RO if required.

Q.4 *Does the domestic waterway transportation announcement apply to non-Chinese Flagged vessels (non-imported) that will undertake voyages within Chinese domestic waterways and ports?*

A4: ABS understands that the domestic waterway transportation announcement does not apply to non-Chinese flag ships operating in Chinese domestic waterways and ports.

Q.5 *Do the engine builders offer upgrade kits, or engine adjustments to enable Tier I certified engines to meet the Tier II NOx limits?*

A5: ABS recommends that any proposed Tier I to Tier II NOx modification is discussed with the original Technical File compiler, typically the engine designer or licensee, to determine if they have any established Tier II engine groups for that engine type/rating/specification and what would the technical, regulatory and cost implications be to upgrade the engine to the Tier II specification and recertify. It may be possible to recertify an engine within an already established Tier II engine group. Each engine needs to be assessed on a case-by-case basis.

A-II: Screen shot of the press from MoT of P.R.C.

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返回部主站 | 首　页 | 公开指南 | 管理规定 | 申请公开 | 监督投诉 | 撤销申请

名　　称：交通运输部关于加强国（境）外进口船舶和中国籍国际航行船舶从事国内水路运输管理的公告

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交通运输部关于加强国（境）外进口船舶和中国籍国际航行船舶从事国内水路运输管理的公告

为提高国内船舶运力供给质量，促进水运安全绿色发展，根据《国内水路运输管理规定》《老旧运输船舶管理规定》等有关要求，现就加强国（境）外进口船舶（以下简称进口船舶）和中国籍国际航行船舶从事国内水路运输管理的有关事项公告如下：

一、自2018年9月1日起，申请从事国内水路运输的进口船舶和中国籍国际航行船舶，其柴油机氮氧化物排放量应满足国际海事组织《经1978年议定书修订的1973年国际防止船舶造成污染公约》（MARPOL73/78）附则Ⅵ规定的TierⅡ排放限值要求。

二、有关船舶检验机构、海事管理机构和水路运输管理部门要按照职责认真把关，加强对进口船舶和中国籍国际航行船舶从事国内水路运输的监督管理。

本公告有效期5年。

交通运输部

2018年6月28日