



ENGINE INTERNATIONAL AIR POLLUTION PREVENTION CERTIFICATE

No RJN0/LTA/20160630172111

Issued under the provisions of the Protocol of 1997, as amended by resolution MEPC.177(58) in 2008, to amend International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 relating thereto (hereinafter referred to as "the Convention")
under the authority of the Government of

Engine manufacturer	Model number		Test cycle(s)	Rated power (kW) and Speed (rpm)	Engine approval number
Wartsila Qiyao Diesel Co. Ltd	1050W6L20		D2	1100 kW 900 rpm	44509-12 HH

THIS IS TO CERTIFY :

1. That the above-mentioned marine diesel engine has been surveyed for pre-certification in accordance with the requirements of the Revised Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines (2008) made mandatory by Annex VI of the Convention; and
2. That the pre-certification survey shows that the engine, its components, adjustable features, and technical file, prior to the engine's installation and/or service on board a ship, fully comply with the applicable regulation 13 of Annex VI of the Convention.

This Certificate is valid for the life of the engine, subject to surveys in accordance with regulation 5 of Annex VI of the Convention, installed in ships under the authority of this Government.

Issued : on the 11 July 2016

Reference of the initial EIAPP Certificate or SoC: 44509-12 HH



**BUREAU
VERITAS**

BUREAU VERITAS

L. Tanaka
By Order of the Secretary

**SUPPLEMENT TO ENGINE INTERNATIONAL
AIR POLLUTION PREVENTION CERTIFICATE**

(EIAPP CERTIFICATE)

RECORD OF CONSTRUCTION, TECHNICAL FILE
AND MEANS OF VERIFICATION

Notes :

1. This Record and its attachments shall be permanently attached to the EIAPP Certificate. The EIAPP Certificate shall accompany the engine throughout its life and shall be available on board the ship at all times.
2. The Record shall be at least in English, French or Spanish. If an official language of the issuing country is also used, this shall prevail in case of a dispute or discrepancy.
3. Unless otherwise stated, regulations mentioned in this Record refer to regulations of Annex VI of the Convention and the requirements for an engine's technical file and means of verifications refer to mandatory requirements from the revised NOx Technical Code (2008).

1. PARTICULARS OF THE ENGINE

- 1.1. Name and address of manufacturer : **Wartsila Qiyao Diesel Co. Ltd**
2988 Jiang Shan Road Lingang New Industrial Area Shanghai China
- 1.2 Place of engine build :
- 1.3 Date of engine build : 2011
- 1.4 Place of pre-certification survey :
- 1.5 Date of pre-certification survey : 2011
- 1.6 Engine type and model number : 1050W6L20
- 1.7 Engine serial number :



SUPPLEMENT TO EIAPP CERTIFICATE No : RJN0/LTA/20160630172425

1. PARTICULARS OF THE ENGINE (ctd)

1.8 If applicable, the engine :

- ☐ is a parent engine
☐ is a member engine of the following engine family
☒ is a member engine of the following engine group
Wartsila 20-ER2 G1_PAAE166530

1.9 Individual engine or engine family / engine group details:

- 1.9.1 Approval reference: 44509-12 HH
1.9.2 Rated power (kW) and speed (rpm) values or ranges: 1100 kW at 900 rpm
1.9.3 Test cycles: D2
1.9.4 Parent engine(s) test fuel oil specification(s): ISO-F-DMA
1.9.5 Applicable NOx emission limit (g/kW h) (regulation 13.4) : 9.0
1.9.6 Parent engine(s) emission value (g/kW h) : 8.8

2. PARTICULARS OF THE TECHNICAL FILE

The technical file, as required by chapter 2 of the NOx Technical Code, is an essential part of the EIAPP Certificate and must always accompany an engine throughout its life and always be available on board a ship.

- 2.1 Technical file identification/approval number : 44509-12 HH
2.2 Technical file approval date : 20 April 2012

3. SPECIFICATIONS FOR THE ON-BOARD NOx VERIFICATION PROCEDURES

The specifications for the on-board NOx verification procedures, as required by chapter 6 of the NOx Technical Code, are an essential part of the EIAPP Certificate and must always accompany an engine through its life and always be available on board a ship.

- 3.1 Engine parameter check method:
3.1.1 Identification/approval number 44509-12 HH
3.1.2 Approval date: 20 April 2012

3.2 Direct Measurement and monitoring method: -
3.2.1 Identification/approval number -
3.2.2 Approval date: -

Alternatively the simplified measurement method in accordance with 6.3 of the NOx Technical Code may be utilized.

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