

Survey Performance Requirements (SPRs) for Annex VI Endorsement

Ships 400 GT or more on domestic voyages



Pursuant to Maritime Rule 44.25(3), and having met the relevant obligations of Maritime Rule 44.25(5).
I, Kenneth Crawford, hereby impose the following requirements as to the performance of surveys (survey performance requirements):

Signed at Wellington

This 17th day of January 2023

A handwritten signature in blue ink that reads "K. W. Crawford". The signature is written in a cursive style with a clear, legible font.

Kenneth Crawford

Deputy Chief Executive Technical Advice and Support

Maritime New Zealand

Acting under Delegated Authority

Survey performance requirements for Annex VI Endorsement (ships 400 GT or more on domestic voyages)

Last updated: 17 January 2023

This document is uncontrolled if printed. Please refer to the Maritime New Zealand website for the latest version.

In this guide

1.	Basis in maritime and marine protection rules	2
2.	Application	4
3.	Part 199 survey requirements for Annex VI Endorsement	5
4.	Guidance when completing survey report	12
5.	Where to find more information	15

1. Basis in maritime and marine protection rules

Survey performance requirements (SPRs) complement maritime rules and marine protection rules that require a surveyor to exercise judgement. In the event of any conflict between an SPR and a maritime rule or marine protection rule, the rule prevails.

This SPR sets out the requirements for the survey of ships 400 gross tonnage (GT) or more, engaged on a domestic voyage, for compliance with the Marine Protection Rules Part 199 Prevention of Air Pollution from Ships (Part 199) in order to issue an Annex VI Endorsement.

This SPR has its basis in the following rules.

Maritime Rules Part 44.25

Rule 44.25(3) states that “*the Director may impose requirements as to the performance of a survey*” and rule 44.25(4) states that “*when undertaking any survey, the surveyor must comply with any requirements imposed by the Director as to the performance of a survey*”.

Marine Protection Rules Part 199.385

Rule 199.385(1) states that “*the Director may set out as a requirement as to the performance of a survey under rule 44.25 (3) those factors that may be taken into account to demonstrate that an engine complies with rule 199.384*”.

Marine Protection Rules Part 199

Part 199 gives effect to the provisions of Annex VI of the International Convention for the Prevention of Pollution from Ships 1973 (MARPOL), as modified from time to time.

Requirement for Annex VI Endorsement

Ships 400 GT or more on a domestic voyage must have:

- their valid Certificate of Survey, New Zealand Barge Safety Certificate or Certificate of Fitness under Part 40G endorsed by a recognised surveyor (this is an Annex VI Endorsement) verifying that the relevant requirements of Part 199 are complied with (Reference rule 199.341(1)(b)), **or**
- a valid International Air Pollution Prevention Certificate (IAPP certificate) and an International Energy Efficiency Certificate (IEE certificate), **or**
- a valid IAPP Exemption certificate (Reference rule 199.341(1)(a)).

1. Basis in maritime and marine protection rules (continued)

Surveys for compliance with Part 199

A surveyor who undertakes a survey in relation to an Annex VI Endorsement under Part 199 must conduct the survey in accordance with rule 199.342 for domestic voyaging ships 400 GT or more.

The survey for Annex VI Endorsement must be conducted by:

- a recognised surveyor with recognition category as a surveyor for MARPOL Annex VI (Part 199) for ships 400 GT or more on domestic voyages (under rule 199.680), or
- a surveyor employed by a Maritime NZ Recognised Organisation delegated for Part 199 (RO).

The person making (actually issuing) an Annex VI Endorsement is required to hold a Certificate of Surveyor Recognition issued under rule 44.22.

Surveyors must apply relevant IMO guidelines and provide a survey report (Reference Part 199 Subpart G - Surveyors).

The operator may choose to have the international certificates instead of an Annex VI Endorsement. The survey for the IAPP and IEE certificates must be completed by an RO surveyor and the certificates issued by the Director or an RO.

Unmanned Non-self-propelled (UNSP) barges may instead have an IAPP Exemption certificate under Subpart F of Part 199¹. The survey must be conducted by a recognised surveyor for MARPOL Annex VI for ships 400 GT or more on domestic voyages, or an RO surveyor. The certificate must be issued by the Director or an RO.

The IAPP Exemption certificate is a marine protection document and not an exemption issued under section 395 of the Maritime Transport Act.

Initial survey

A ship that becomes a New Zealand ship² on or after 26 August 2022 must have compliance with Part 199 checked at the ship's initial survey. From then on for ships 400 GT or more, surveys for compliance with Part 199 must be conducted annually (Reference Regulation 5.1 of MARPOL Annex VI) and must be added to the ship's survey plan.

Ships that were a New Zealand ship before 26 August 2022

For ships 400 GT or more, that were a New Zealand ship before 26 August 2022, the surveys to verify compliance with Part 199 must be conducted within the existing schedule of surveys for each ship. This will start at the next intermediate or renewal survey for the International Oil Pollution Prevention (IOPP) certificate after 1 April 2023 as per the ship's survey plan under rule 19.43, but in no case later than 1 April 2025 (Reference Schedule 1.2.9). From then on, surveys for compliance with Part 199 must be conducted annually (Reference Regulation 5.1 of Annex VI) and must be added to the ship's survey plan.

If the operator chooses the international certificates, the Part 199 surveys start from the first periodic survey after 1 January 2023.

¹ Refer to MEPC.1/Circ.892 - Guidelines for exemption of unmanned non-self-propelled (UNSP) barges from certain survey and certification requirements under the MARPOL Convention.

² NZ ship means a ship that is registered under the Ship Registration Act 1992; and includes a ship that is not registered under that Act but is required or entitled to be registered under that Act.

2. Application

These SPRs apply to the survey of ships 400 GT or more, that voyage domestically, for compliance with Part 199 and issue of an Annex VI Endorsement. Surveyors must comply with these SPRs when undertaking such a survey and completing the associated survey report.

Part 199 does not apply to warships and any other ships of the New Zealand Defence Force (Reference rule 199.1(3)), or to ships that only operate in inland waters, such as lakes or rivers (Reference rule 199.1(7)).

Part 199 applies to jet boats that are regulated under the Part 40: Design, Construction and Equipment Rules that have a Certificate of Survey. Part 199 does not apply to jet boats regulated under Maritime Rules Part 82: Commercial Jet Boat Operations - River.

All commercial ships that Part 199 applies to, require certification to demonstrate compliance with Part 199 progressively from 26 August 2022. An Annex VI Endorsement or international certificates (as applicable) are required even if the ship has no equipment, systems, fittings, arrangements and material or processes that require survey under Part 199.

There are two terms for different types of voyages used in this SPR. These determine which rules apply. The definition of New Zealand jurisdiction also has a bearing on which engine emission rules apply.

1. **International voyage** means a journey by water:
 - a) from a port in New Zealand to a port or offshore terminal outside of New Zealand or vice versa; or
 - b) for a New Zealand ship, a port or offshore terminal outside New Zealand to another port or offshore terminal outside New Zealand.
2. **Domestic voyage** means a voyage by a ship that is not an international voyage
3. For the purpose of 'beyond New Zealand's jurisdiction':
New Zealand jurisdiction means:
 - (a) the internal waters of New Zealand; and
 - (b) the territorial sea of New Zealand; and
 - (c) the exclusive economic zone of New Zealand; and
 - (d) those waters under or about any ship or offshore installation constructed, erected, placed or used in, on, or above the continental shelf of New Zealand but beyond the outer limits of the exclusive economic zone of New Zealand in connection with the exploration of the continental shelf or the exploitation of its natural resources.

3. Part 199 survey requirements for Annex VI Endorsement ships 400 GT or more

A surveyor must ensure that each ship surveyed complies with the relevant requirements in Part 199. The survey shall ensure that the equipment, systems, fittings, arrangements and material or processes on the ship comply with the applicable requirements of Part 199.

The ship must comply with Part 199 and all other relevant rules before the Certificate of Survey, New Zealand Barge Safety Certificate or Certificate of Fitness can be issued along with the Annex VI Endorsement.

If the initial survey for compliance with Part 199 is at the intermediate survey for an IOPP, a standalone Annex VI Endorsement may be issued in the form provided on the 'surveyors resources and tools page' on the Maritime NZ website.

The Certificate of Survey, New Zealand Barge Safety Certificate or Certificate of Fitness must be issued with the Annex VI Endorsement (as incorporated into the template) when issuing a new certificate following the successful completion of an initial or renewal survey of the ship.

Part 199 includes provisions where New Zealand (NZ) has applied discretion as provided for by MARPOL Annex VI. Information on the discretions applied are included in this section. This includes the application of Nitrogen Oxides (NO_x) requirements for domestic voyaging ships, as set out below.

Where the survey requirements are the same as those in Annex VI they are not included in this document.

Engine certification and survey requirements for NO_x emission limits

Key information is provided here on the nitrogen oxides (NO_x) emission requirements due to the complexity of the requirements and as several requirements are set by the Director. More detail is in the [Guide for Marine Protection Rules Part 199](#).

Part 199 requires many installed engines, over 130 kW output power, other than those solely used for emergency purposes, to be designed and operated under maximum limits of NO_x emissions. The specific tier of emission levels that an engine must comply with is generally based on date of engine installation or major conversion, or when it became a New Zealand ship. In the case of an engine replacement (non-identical engine or additional engine), it is the date that the engine was installed (Reference Regulation 13.2.2 of MARPOL Annex VI). If repowering with an identical engine, the replacement engine is not subject to the Part 199 engine rules unless the engine it replaced would have been subject to those rules³. Specific documentation is required to prove an engine meets the requirements.

For an explanation of the emission tiers and how they apply, refer to the [Guide for Marine Protection Rules Part 199](#):

- Section 4: Nitrogen oxides emission limits for international voyaging ships, and
- Section 5: Nitrogen oxides emission limits for domestic voyaging commercial ships.

The survey takes place to ensure the installed engines comply with the NO_x emission limits. Any modifications and/or adjustments since the engine certification was issued are to be considered in the survey.

³ See the [New environmental rules for domestic commercial ships under 400 GT](#) booklet for more information.

3. Part 199 survey requirements ship 400 GT or more (continued)

From 1 January 2023, the rules on NO_x (section C3) will apply to engines over 130 kW output power installed on domestic voyaging ships that:

- were or are installed on an existing⁴ domestic voyaging vessel on or after 19 May 2005 (or on or after 1 January 2000 if the vessel voyages outside of NZ jurisdiction), or
- the engine had a major conversion after that date (or on or after 1 January 2000 if the vessel voyages outside of NZ jurisdiction) (note that a major conversion includes the installation of a new engine), or
- became a NZ ship on or after 1 January 2023 regardless of the ship's date of construction (Reference rule 199.381(3)(c) and 188.387(2).

When to include the NO_x engine emission requirements in surveys of domestic voyaging ships

For ships that become NZ ships from 1 January 2023, the rules on domestic NO_x (section C3) will apply and must be included in the initial survey of the ship.

For ships that were New Zealand ships before 1 January 2023, the engines must be surveyed as follows:

- For an **existing engine** – one that was installed before 1 January 2023, the engine must be surveyed at the ship's first intermediate or renewal survey **on or after 1 January 2029**, but in no case later than 30 June 2032.
 - If a vessel voyages into waters outside of NZ jurisdiction (without visiting overseas ports), compliance will need to be shown for those engines at the vessel's next intermediate or renewal survey **after 1 April 2023**.
- For a **new engine** – one that was installed, or had a major modification **on or after 1 January 2023**, the engine must be surveyed at the ship's next survey **after 1 April 2023**.

At survey, each engine the rules apply to must have the correct evidence of compliance:

- Option 1: **a Technical File with an EIAPP certificate**, or
- Option 2: **a manufacturer's declaration/certificate of conformity** to a standard listed in Transport Instrument MPTI-199-1.

Option 1 – A Technical File and EIAPP Certificate

The **Technical File** can be either for the specific, individual engine **or** for the parent engine of an engine family or group if the engine is a 'member engine' of that family or group.

The Technical File must be approved by Maritime NZ or an RO, and the EIAPP issued by Maritime NZ or an RO.

If an engine is installed on a NZ flagged ship and has a Technical File and EIAPP that have been approved by, and issued by or on behalf of an overseas maritime administration, the Technical File will need to be reapproved and the EIAPP reissued by Maritime NZ (or by an RO on behalf of Maritime NZ).

⁴ An 'existing' New Zealand ship is a one that was a New Zealand ship on 31 December 2022.

The survey of an engine under Option 1 must include checks that the engine has been installed and engine maintenance has been conducted in line with the manufacturer's manual and the components, settings and operating values remain within the specifications in the Technical File, to reasonably assume that NO_x emissions are not likely to have increased above the Annex VI limits due to changes made during or after installation or poor engine maintenance.

3. Part 199 survey requirements ship 400 GT or more (continued)

Option 2 – A manufacturer's declaration/certificate of conformity to an acceptable standard

Option 2 is **only** available for the specific types of engine listed below, on ships that do not leave waters under New Zealand's jurisdiction⁵.

Spark-Ignition Engines

For spark-ignition (petrol) engines a manufacturer's declaration/certificate of conformity to one of the following standards:

- Directive 2013/53/EU of the European Parliament and of the Council on recreational craft and personal watercraft or
- USA EPA Air Pollution Controls 40 CFR Part 1045 – Control of emissions from spark-ignition propulsion marine engines and ships or
- Australian Product Emissions Standards Rules 2017.

These spark-ignition standards all meet or better the NO_x emissions limits of Tier II.

For the survey of ships engaged in domestic voyage for an Annex VI Endorsement, rule 199.385 allows the Director to set out as a requirement for the performance of a survey under rule 44.25(3) those factors that may be taken into account to demonstrate that an engine complies with rule 199.384. The Director's requirements for spark-ignition engines are set out below.

Ships that were a NZ ship before 1 January 2023, with spark-ignition engines that were installed prior to 1 January 2011 (that would need to meet the Tier I standard) are not required to hold documentation for those engines.

If a ship that became a NZ ship on or after 1 January 2023, has a spark-ignition engine that was installed prior to 1 January 2011 the following evidence that was required to be assessed and accepted at the initial survey should be checked at each periodic survey:

- evidence that the engine meets an appropriate emissions standard for spark-ignition engines acceptable to the Director, which meets or exceeds the equivalent Tier I NO_x emissions limits; or
- evidence of the actual NO_x emissions of the engine, which meet or exceed the Tier 1 NO_x emissions limits.

If there are any concerns, contact Maritime NZ's surveyor support by emailing surveyors@maritimenz.govt.nz.

⁵ See definitions on page 3

3. Part 199 survey requirements for ships 400 GT or more (continued)

Stationary/auxiliary engines not used for propulsion

For stationary/auxiliary engines not used for propulsion (e.g. engines used for power generation or to power machinery such as cranes or winches), a manufacturer's declaration/certificate of conformity to one of the following standards:

For Tier II:

- USA EPA non-road diesel engine emission standards Tier 2 (or higher); or
- Euro non-road emissions standards Stage II or higher – Directive 97/68EC of the European Parliament and of the Council on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery.

For Tier I:

- USA EPA Nonroad Compression-Ignition Engines: Exhaust Emission Standards Tier 1 (or higher); or
- European non-road emissions standards Stage I – Directive 97/68EC of the European Parliament and of the Council on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery.

The survey of an engine under Option 2 (above) must include checks that the engine has been installed and/or engine maintenance has been conducted in line with the manufacturer's manual, to reasonably assume that NO_x emissions are not likely to have increased above the Annex VI limits due to changes made during installation or due to poor engine maintenance.

Discretion that can be applied when surveying more than one engine from an Engine Group or Engine Family with an EIAPP and Technical File

Surveyors may apply the following discretions (as per section 2.3.10 of the NO_x Technical Code (NTC)):

1. Only one cylinder and/or one engine is required to be surveyed if there is more than one engine installed on the ship from an engine group/family and the other cylinders and/or engines are expected to perform in the same manner as the surveyed engine and/or cylinder.
2. As an alternative to examination of fitted components, examination can be made of the spare parts carried on board provided they are representative of the components fitted.

3. Part 199 survey requirements for ships 400 GT or more (continued)

Verification of carbon intensity reduction requirements by ROs

In relation to passenger ships, or carbon intensity ships, that are NZ ships, an RO (acting under delegated authority) will be required to verify the following as applicable. As part of the survey, the recognised surveyor must confirm that the applicable verifications have been made.

- *Attained Energy Efficiency Design Index (EEDI)* under regulations 22⁶ and 24 of Annex VI and rules 199.184(3) and 199.484(3)
- *Attained Energy Efficiency Existing Ship Index (EEXI)* under regulation 23 of Annex VI and rules 199.186(3) and 199.486(3)
- *Attained Annual Operational Carbon Intensity Indicator (CII)* under regulation 6.6 of Annex VI and rules 199.188(2) and 199.488(2)
- *Operational carbon intensity rating* under regulation 28.6 of Annex VI and rules 199.189(1) and 199.489(1)
- *Ship Energy Efficiency Management Plan* under regulation 5.4.5 and 5.4.6 of Annex VI and rules 199.201(4) and 199.501(4) and (4A)
- *Consumption and identification data* under regulation 27 of Annex VI and rules 199.223(b) and 199.523(b).

Application of the ‘to the satisfaction of the Administration’

Where Annex VI and/or mandatory codes under Annex VI, provides for matters to be resolved ‘to the satisfaction of the Administration’, or where Marine Protection Rules Part 199 provides for matters to be resolved ‘to the satisfaction of the Director’, the Director requires recognised surveyors to propose and document solutions. Solutions should consider and apply any relevant international standards, class rules, or accepted good practice, as appropriate. The recognised surveyor must advise the Director of, and supply any documentation relating to, the proposed solution. The Director will then indicate that the proposed solution is satisfactory to them prior to its adoption or implementation by the recognised surveyor.

⁶ Regulations and paragraphs cited in this list are aligned to the renumbering in the 2021 Revised MARPOL Annex VI.

3. Part 199 survey requirements for ships 400 GT or more (continued)

Part 199 provisions where NZ has applied discretion

Bunker Delivery Notes (BDNs) for domestic voyaging ships

For domestic voyaging ships, BDNs may be received from the supplier of the fuel or kept in digital form. Digital copies of BDNs, such as a pdf, should clearly show the date of supply and stamp of the supplier and be able to be verified as an alternate to the original hard copy (Reference rule 199.463 (3) and regulation 18.11 of Annex VI).

Approval of Incinerators

An incinerator that is approved under regulation 16 of Annex VI by another Party State is deemed to be an approval made by the Director under 199.445(1).

If the survey of the incinerator or review of the IMO Type Approval Certificate raises doubts as to the authenticity of the certificate and/or the incinerator's compliance with regulation 16 of Annex VI, the incinerator must be surveyed to the satisfaction of an RO surveyor. The incinerator will require an appropriate IMO Type Approval Certificate before being put back into service. If the recognised surveyor or operator chooses not to involve an RO the incinerator must not be used. The recognised surveyor must inform Maritime NZ who may cancel the deemed approval and require a condition to be placed on the Certificate of Survey.

Attained Energy Efficiency Existing Ship Index (EEXI)

For ships that are a NZ ship on 1 January 2023, the attained EEXI must be calculated at the first intermediate or renewal survey after 1 January 2023 (Reference rule 199.486(1)(a)(i)).

A ship that becomes a NZ ship after 1 January 2023, must have the attained EEXI calculated before entering service.

3. Part 199 survey requirements for ships 400 GT or more (continued)

Closing out critical deficiencies

The following items under Part 199 are considered to be of such a serious nature as to be categorised as critical deficiencies. These items should be rectified before the Certificate of Survey can be issued and/or departure of the ship. The recognised surveyor should be guided by the principle that the requirements contained in Annex VI, with respect to the construction, equipment and operation of the ship, are essential for the protection of the marine environment, navigational safety or human health and that departure from these requirements could constitute an unreasonable threat of harm under the scope of the Annex.

1. Absence of appropriate engine certification, if required and applicable.
2. Absence of a valid EEXI or EEDI Technical File, or SEEMP, if applicable.
3. Absence of a valid Statement of Compliance – Fuel Oil Consumption Reporting covering the year 2024 and onwards from 1 June of each following year, if applicable.
4. A compression-ignition engine required to be certificated, which does not conform to its Technical File or where the required records have not been maintained as necessary.
5. A non-propulsion stationary/auxiliary engine or spark-ignition engine required to be certificated, that has not been maintained in line with the manufacturer's manual.
6. A compression-ignition engine, with a power output of more than 5,000 kW and a per cylinder displacement at or above 90 litres, which is installed on board a ship constructed on or after 1 January 1990 but prior to 1 January 2000, and an approved method for that engine has been certified by an Administration and was commercially available, for which an approved method is not installed after the first renewal survey specified in regulation VI/13.7.2.
7. The sulphur content of any fuel oil used on board ships⁷ exceeds the limit of 0.5% m/m.
8. An incinerator installed on board the ship on or after 1 January 2000 or on a ship constructed on or after 1 January 2000, does not comply with requirements contained in Appendix IV to Annex VI, or the standard specifications for shipboard incinerators developed by the Organization (resolution MEPC.244(66)).
9. Ship's personnel are not familiar with essential procedures regarding the operation of air pollution prevention equipment.

Details to be recorded during survey

There are details that must be recorded during the survey and provided on the survey report. You can find the survey report for Part 199 ships 400 GT or more, under the 'all surveyor resources and tools' page on the Maritime NZ website:

www.maritimenz.govt.nz/surveyor

The requirements in these SPRs complement the standards and requirements specified in the rules. The SPRs do not replace or reduce any responsibility the surveyor has under the rules.

⁷ Without an approved equivalent means of SO_x compliance.

4. Guidance when completing survey report

Ships 400 GT or more

Elements for NO_x to check at survey of ships 400 GT or more, engaged in a domestic voyage for compliance with Part 199⁸.

Nitrogen Oxides (NO_x) as from 1 January 2023

NO _x requirements items for survey	Element verification
Compression Ignition engines used for propulsion ⁹ required to meet NO _x emission levels	
Option 1: Technical file and EIAPP certificate	
1 Each compression-ignition engine installed over 130 kW must have a Technical File with an EIAPP certificate. The EIAPP must be issued by Maritime NZ or an RO. The Technical File must be approved by Maritime NZ or an RO. <i>Not applicable to engines used solely for emergency purposes, or solely to power any device or equipment intended to be used solely for emergencies on the ship on which it is installed.</i>	<ul style="list-style-type: none">• Is the original Technical File held on board for each applicable engine and does it match the engine as installed?• Does each applicable engine have a valid EIAPP certificate (original on board)?• Does the serial number and engine type on the engine match the serial number and engine type on the EIAPP certificate?• Is the engine in 'as approved' condition, installed as per manufacturer's instructions and compliant with duty, rating and restrictions?
2 Onboard NO _x verification procedure shows each applicable engine to be compliant (as per section 2.3 of the NO _x Technical Code).	Confirm the engine's compliance using the onboard NO _x verification procedure stated in the Technical File: <ul style="list-style-type: none">• Does the Engine Parameter Check method verify that the engine's component, setting and operating values remain within the limits specified in the engine's Technical File?, or• Does the Simplified measurement method confirm the engine's compliance? Note: a suitably qualified third party will be required to perform these measurements and tests. Has a functional check of the engine demonstrated that it is in operational condition?

⁸ NO_x requirements for survey are included in this section as NZ has applied discretion as provided for by MARPOL Annex VI for domestic voyaging ships.

⁹ For ships that were New Zealand ships before 1 January 2023, an engine installed before 1 January 2023 must be surveyed at the ship's first intermediate or renewal survey on or after 1 January 2029, but in no case later than 30 June 2032. If the ship voyages into waters outside of NZ jurisdiction, the engine must be surveyed at the first survey on or after 1 April 2023.

4. Guidance when completing survey report (continued)

NO _x requirements items for survey	Element verification
<p>3 Record book of engine parameters has been maintained (if applicable).</p>	<p>Has the inspection of the Record book of engine parameters and an actual inspection of engine components and adjustable features confirmed that:</p> <ul style="list-style-type: none"> • all changes have been recorded including like for like replacements, and • adjustments to the engine's components and settings are within the approved range specified in the engine's Technical File?
<p>4 Emission limits meet the applicable NO_x Tier, dependant on the date of engine installation or major conversion, and when the ship it is installed on became a NZ ship</p>	<p>Does the engine meet the Annex VI Tier I, II emission levels as required?</p>

Next items acceptable as an alternative to Option 1 for some engine types on **domestic voyaging ships** that solely voyage within New Zealand's jurisdiction ¹⁰ required to meet NO_x emission levels

Option 2: A manufacturer's declaration or certificate of conformity to an acceptable standard

<p>1a Each non-propulsion stationary/auxiliary engine (over 130 kW) installed on or after 1 January 2011 must meet one of the following standards:</p> <ul style="list-style-type: none"> • USA EPA non-road diesel engine emission standards Tier 2 (or higher) • Euro non-road emissions standards Stage II (or higher) – Directive 97/68EC of the European Parliament and of the Council on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery. 	<ul style="list-style-type: none"> • Is there a manufacturer's declaration or certificate of conformity to the applicable standard held for each applicable engine? • Does the documentation match the installed engine? • Has the engine been installed and/or any maintenance carried out as per manufacturer's manual? • Has a functional check of the engine demonstrated that it is in operational condition?
--	--

¹⁰ New Zealand ships that go beyond New Zealand's jurisdiction can only use Option 1 evidence.

4. Guidance when completing survey report (continued)

NO _x requirements items for survey	Element verification
<p>1b Each non-propulsion stationary/auxiliary engine (over 130 kW) installed on or before 31 December 2010 must meet one of the following standards:</p> <ul style="list-style-type: none"> • USA EPA Nonroad Compression-Ignition Engines: Exhaust Emission Standards Tier 1 (or higher) • European non-road emissions standards Stage I (or higher) – Directive 97/68EC of the European Parliament and of the Council on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery. 	<ul style="list-style-type: none"> • Is there a manufacturer's declaration or certificate of conformity to the applicable standard held for each applicable engine? • Does the documentation match the installed engine? • Has the engine been installed and/or any maintenance carried out as per manufacturer's manual? • Has a functional check of the engine demonstrated that it is in operational condition?
<p>2a Each spark-ignition engine (over 130 kW) installed on or after 1 January 2011 must meet one of the following standards:</p> <ul style="list-style-type: none"> • Directive 2013/53/EU of the European Parliament and of the Council on recreational craft and personal watercraft • USA EPA Air Pollution Controls 40 CFR Part 1045 – Control of emissions from spark-ignition propulsion marine engines and vessels • Australian Product Emissions Standards Rules 2017. 	<ul style="list-style-type: none"> • Is there a manufacturer's declaration or certificate of conformity to the applicable standard held for each applicable engine? • Does the documentation match the installed engine? • Has the engine been installed and/or any maintenance carried out as per the manufacturer's manual? • Has a functional check of the engine demonstrated that it is in operational condition?
<p>2b On a ship, that was a NZ ship before 1 January 2023:</p> <ul style="list-style-type: none"> • spark-ignition engines over 130 kW installed on or before 31 December 2010 are not required to hold evidence that the engine meets the NO_x emission Tier. 	<ul style="list-style-type: none"> • Has the engine been installed and/or any maintenance carried out as per the manufacturer's manual? • Has a functional check of the engine demonstrated that it is in operational condition?
<p>2c On a ship that became a NZ ship after 1 January 2023:</p> <ul style="list-style-type: none"> • Each spark-ignition engine over 130 kW installed on or after 1 January 2011 must meet one of the standards in 2a (above). • Each spark-ignition engine over 130 kW, installed on or before 31 December 2010 must meet one of the standards in 2a (above) or hold one of the following types of evidence to confirm that it meets or betters the IMO Tier I NO_x emissions limits: <ul style="list-style-type: none"> i. evidence that the engine meets an appropriate standard for spark-ignition engines acceptable to the Director, or ii. evidence of the actual NO_x emissions of the engine. 	<ul style="list-style-type: none"> • Does the documentation match the installed engine? • Has an inspection of the documentation which contains information on the level of NO_x emissions from the engine, determined whether the engine is likely to meet or better the IMO Tier I emission levels?. • Has the engine been installed and/or any maintenance carried out as per the manufacturer's manual? • Has a functional check of the engine demonstrated that it is in operational condition?

5. Where to find more information

Key documents

The International Maritime Organization (IMO) Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI. The text of the convention is available to read on the [Incorporation by reference](#) webpage.

The [Marine Protection Rules Part 199: Prevention of Air Pollution from Ships](#) (Part 199) give effect to the aspects of MARPOL Annex VI that apply to ship operators.

The [Guide for Marine Protection Rules Part 199: Prevention of air pollution from ships](#) (Part 199 Guide).

The IMO Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines, [NO_x Technical Code](#).

To learn more about the requirements, here's a list of references.

Nitrogen oxides (NO_x)

Part 199 Guide:

- Section 4: Nitrogen oxides emission limits for international voyaging ships.
- Section 5: Nitrogen oxides emission limits for domestic voyaging commercial ships.

Part 199, Sections B3 and C3: Nitrogen oxides, and

[NO_x Technical Code 2008](#). In particular, Section 6.2 Engine Parameter Check Method of Chapter 6, Procedures for demonstrating compliance with NO_x emission limits on board

MARPOL Annex VI, Regulation 13 Nitrogen Oxides (NO_x).

Prohibited ODS

Part 199 Guide, Section 6: Control of other air pollutants.

Part 199, Sections B2 and C2 Ozone depleting substances.

SO_x and fuel quality

Part 199 Guide, Section 3: Fuel requirements.

Part 199:

- Sections B4 and C4 Sulphur oxides and particulate matter.
- Sections B7 and C7 Fuel oil availability and quality.

MARPOL Annex VI, Regulation 18 Fuel Oil Availability and Quality.

Shipboard Incineration

Part 199 Guide, Section 6: Control of other air pollutants.

Part 199, Sections B6 and C6 Shipboard Incineration.

5. Where to find more information (continued)

Carbon intensity of domestic shipping

Part 199 Guide, Section 7: Carbon intensity reduction requirements for ships 400 GT or more.

Part 199, Sections C8 Carbon intensity of domestic shipping and C9 Ship energy efficiency management plan.

Contact us for help

If you need more information about the surveyor performance requirements, send us an email. Tell us what you need help with and remember to include your preferred contact details (email address and phone numbers).

surveyors@maritimenz.govt.nz

Or you can phone us toll free.

0508 22 55 22