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(g) Your application, including the Technical File and onboard NO_x verification procedures, is subject to amendment as described in 40 CFR 1042.225.

(h) Perform emission tests as follows:

(1) Select an emission-data engine from each engine family for testing. For engines at or above 560 kW, you may use a development engine that is equivalent in design to the engine being certified. For Category 3 engines, you may use a single-cylinder version of the engine. Using good engineering judgment, select the engine configuration most likely to exceed an applicable emission standard, considering all exhaust emission constituents and the range of installation options available to vessel manufacturers.

(2) Test your emission-data engines using the procedures and equipment specified in 40 CFR part 1042, subpart F, or in the NO_x Technical Code (incorporated by reference in §1043.100). We may require that your test be witnessed by an EPA official.

(3) We may measure emissions from any of your test engines or other engines from the engine family, as follows:

(i) We may decide to do the testing at your plant or any other facility. You must deliver the test engine to any test facility we designate. The test engine you provide must include appropriate manifolds, aftertreatment devices, electronic control units, and other emission-related components not normally attached directly to the engine block. If we do the testing at your plant, you must schedule it as soon as possible and make available the instruments, personnel, and equipment we need.

(ii) If we measure emissions from one of your test engines, the results of that testing become the official emission results for the engine. Unless we later invalidate these data, we may decide not to consider your data in determining if your engine family meets applicable requirements.

(iii) Before we test one of your engines, we may set its adjustable parameters to any point within the specified adjustable ranges (see 40 CFR 1042.115(d)).

(iv) Before we test one of your engines, we may calibrate it within normal production tolerances for anything we do not consider an adjustable parameter.

(4) We may require you to test a second engine of the same or different configuration in addition to the engine tested under paragraph (b) of this section.

(5) If you use an alternate test procedure under 40 CFR 1065.10 and later testing shows that such testing does not produce results that are equivalent to the procedures otherwise required by this part, we may reject data you generated using the alternate procedure.

(i) Collect emission data using measurements to one more decimal place than the applicable standard, then round the value to the same number of decimal places as the emission standard. Compare the rounded emission levels to the emission standard for each emission-data engine.

(j) Your engine family is considered in compliance with the emission standards in Regulation 13 of Annex VI if all emission-data engines representing that family have test results showing emission levels at or below these standards. Your engine family is deemed not to comply if any emission-data engine representing that family has test results showing an emission level above an applicable emission standard for any pollutant.

(k) If we determine your application is complete and shows that the engines meet all the requirements of this part, we will issue an EIAPP certificate for your engines. We may make the approval subject to additional conditions.

§ 1043.50 Approval of methods to meet Tier 1 retrofit NO_x standards.

Regulation 13 of Annex VI provides for certification of Approved Methods, which are retrofit procedures that enable Pre-Tier 1 engines to meet the Tier 1 NO_x standard of regulation 13 of Annex VI. Any person may request approval of such a method by submitting an application for certification of an Approve Method to the Designated Certification Officer. If we determine that your application conforms to the requirements of Regulation 13 of Annex

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VI, we will issue a certificate and notify IMO that your Approved Method has been certified.

§ 1043.55 Applying equivalent controls instead of complying with fuel requirements.

Regulation 4 of Annex VI allows Administrations to approve the use of fuels not meeting the requirements of Regulation 14 of the Annex, provided the vessel applies a method that results in equivalent emission reductions. This section describes provisions related to applying this allowance.

(a) Any person may request approval of such equivalent methods for controlling emissions on U.S.-flagged vessels by submitting an application for certification of an equivalent control method to the Designated Certification Officer. If we determine that your control method achieves emission levels equivalent to those achieved by the use of fuels meeting the requirements of Regulation 14 of Annex VI, we will issue a certificate and notify IMO that your method has been certified.

(b) The provisions of this paragraph (b) apply for vessels equipped with controls certified by the Administration of

a foreign flag vessel to achieve emission levels equivalent to those achieved by the use of fuels meeting the applicable fuel sulfur limits of Regulation 14 of Annex VI. Fuels not meeting the applicable fuel sulfur limits of Regulation 14 of Annex VI may be used on such vessels consistent with the provisions of the IAPP certificate, APPS and Annex VI.

(c) Compliance with the requirements of this section does not affect the applicability of requirements or prohibitions specified by other statutes or regulations with respect to water pollution.

§ 1043.60 Operating requirements for engines and vessels subject to this part.

This section specifies the operating requirements of this part. Note that it does not limit the operating requirements of APPS or Annex VI that are applicable to U.S.-flagged vessels outside of U.S. domestic waters.

(a) Except as specified otherwise in this part, NO_x emission limits apply to all vessels subject to this part as specified in the following table:

TABLE 1 TO § 1043.60 ANNEX VI NO_x EMISSION STANDARDS (G/KW-HR)

Tier	Area of applicability	Model year	Maximum in-use engine speed		
			Less than 130 RPM	130–2000 RPM ^a	Over 2000 RPM
Tier 1	All U.S. navigable waters and EEZ	2004–2010	17.0	45.0·n ^(-0.20)	9.8
Tier 2	All U.S. navigable waters and EEZ	2011–2015	14.4	44.0·n ^(-0.23)	7.7
Tier 2	All U.S. navigable waters and EEZ, excluding ECA and ECA associated areas.	2016 and later	14.4	44.0·n ^(-0.23)	7.7
Tier 3	ECA and ECA associated areas	2016 and later	3.4	9.0·n ^(-0.20)	2.0

^a Applicable standards are calculated from n (maximum in-use engine speed, in RPM, as specified in § 1042.140). Round the standards to one decimal place.

(b) Except as specified otherwise in this part, fuel sulfur limits apply to all vessels subject to this part as specified in the following table:

TABLE 2 TO § 1043.60 ANNEX VI FUEL SULFUR LIMITS [wt %]

Calendar years	Sulfur limit in all U.S. navigable waters and EEZ (percent)	Sulfur limit in ECA and ECA associated areas (percent)
2010–2011	4.50	1.00
2012–2015	3.50	1.00
2016–2019	3.50	0.10
2020 and later	0.50	0.10