



## USCG Office of Commercial Vessel Compliance (CG-CVC) Mission Management System (MMS) Work Instruction



Category	MARPOL Annex VI				
Title	Exercise of Enforcement Discretion with regard to MARPOL Annex VI Regulation 13.5.1.2				
Serial	CVC-WI-014(1)	Orig. Date	17Oct18	Rev. Date	N/A
Disclaimer:	This Work Instruction (WI) does not change applicable substantive legal requirements. Nor is the WI itself a rule. It is not intended to, nor does it, impose legally-binding requirements on any party.				
References:	(a) MARPOL ANNEX VI Regulation 13.5.1.2				

- A. **Purpose.** This WI outlines how the U.S. Coast Guard (USCG) will enforce MARPOL Annex VI Regulation 13.5.1.2 due to the unavailability of engines needed to comply with this regulation. In lieu of meeting MARPOL Annex VI Tier III performance standards, engines<sup>1</sup> covered by this guidance may instead be certified by the U.S. Environmental Protection Agency (EPA) as meeting Clean Air Act Tier 3 requirements under 40 CFR part 1042. Engines certified to meet Clean Air Act Tier 3 requirements are available<sup>2</sup> and will be accepted in the short-term<sup>3</sup> until engines certified to meet Annex VI Tier III become available. Thus, EPA certification to Clean Air Act Tier 3 standards will be required to qualify under this WI for U.S.-flagged and foreign-flagged vessels.
- B. **Action.** Officers in Charge, Marine Inspection (OCMIs), affected Companies, and Recognized Organizations (ROs) that issue International Air Pollution Prevention (IAPP) certificates on behalf of the United States<sup>4</sup> are encouraged to apply this WI as it relates to the installation and certification of “qualifying engines” (defined below) that are required to meet IMO Tier III performance standards.
- C. **Background.** MARPOL Annex VI Regulation 13.5.1.2 generally prohibits the operation of any engine in the North American and U.S. Caribbean Sea NOx Emission Control Areas (collectively, “the ECA”) that does not comply with the MARPOL Annex VI Tier III requirements if the engine is installed on a ship that is constructed<sup>5</sup> in 2016 or later, or if the engine undergoes a major conversion<sup>6</sup> in 2016 or later. In some cases, no MARPOL compliant engines of the size required

<sup>1</sup> See paragraph D.8 for the categories of engines that will qualify under this WI.

<sup>2</sup> While the EPA Clean Air Act Tier 3 requirements are less stringent for NOx emissions than the MARPOL Tier III requirements, the Clean Air Act requirements address pollutants such as hydrocarbons, particulate matter, and carbon monoxide, which the MARPOL Tier III standard does not address.

<sup>3</sup> When IMO adopted the prohibition in regulation 13.5.1, it was anticipated that the prohibition would apply beginning in 2016 for vessels operating in an ECA designated at any time before or after January 1, 2016. Due to subsequent amendments, Annex VI now identifies the start date specific to each ECA, with the 2016 start date applying only for the North American and U.S. Caribbean Sea ECAs. This amendment diminished the demand for Tier III NOx compliant engines, but demand is expected to rise once the Baltic and North Sea NOx ECAs go into force 1 January 2021. The USCG anticipates that the added demand for engines to be operated in those ECA’s will prompt engine manufacturers to produce MARPOL-compliant engines in all needed sizes by 2021.

<sup>4</sup> See 46 CFR 8.320(b)(12).

<sup>5</sup> “Ships constructed” is defined in regulation 2.19 to mean ships the keels of which are laid or that are at a similar stage of construction

<sup>6</sup> Major conversion is addressed at regulation 13.2.

were available at the time of ship construction or no MARPOL compliant engines of the required size were available that also satisfied any and all applicable Clean Air Act requirements.

D. Instruction.

1. The USCG will defer enforcement on the operation of engines on select categories of individually-identified U.S.-flagged and foreign-flagged ships, described as “qualifying ships,” that are subject to the prohibition set out in the International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL) Annex VI<sup>7</sup> Regulation 13.5.1.2. This WI *only* applies to this Annex VI requirement and does *not* waive or otherwise affect the need to satisfy any and all applicable requirements of the U.S. Clean Air Act.
2. Qualifying ships constructed in 2016 or later will be allowed to operate engines within the ECA without the risk of USCG enforcement action even though the engines are not “MARPOL-compliant engines,” – that is, they do not meet the MARPOL Annex VI Regulation 13 Tier III NOx emission standard.<sup>8</sup>
3. Any engine installed on a new or existing U.S.-flagged or foreign-flagged ship constructed before the necessary MARPOL-compliant engine was available must be individually recognized as such by the USCG, as outlined below. When installed on a ship for which they were qualified, these “qualifying engines” will retain that status indefinitely; that is, they will be considered “qualifying engines” after MARPOL-compliant engines become available and continuing for the operating life of the engine, subject to the major conversion requirements of Annex VI.
4. To obtain recognition of “qualifying engine” status, the person responsible for making a U.S.-flagged ship’s initial application for inspection must submit a written request for a one-time authorization for all engines on a particular ship that need to be qualified when submitting form CG-3752, *Application for Inspection of U.S. Vessel*. In the case of requests for relief for any U.S.-flagged vessels built since January 1, 2016, which have already undergone their initial inspection, and all foreign-flagged vessels that may qualify for this enforcement discretion, ship owners must submit the written request as soon as possible to [CG-CVC@uscg.mil](mailto:CG-CVC@uscg.mil). The request must include the following information:
  - a. The ship’s name, official number and/or IMO number, and keel-laying date;
  - b. The maximum engine power, EPA-issued Clean Air Act tier certification, and EPA engine family name for each affected engine;
  - c. An explanation of how the applicant determined that no suitable engines which satisfy the MARPOL Tier III NOx standard were available;
  - d. A demonstration that the engines are properly certified to Clean Air Act Tier 3 emission standards (satisfied by having an EPA-issued Clean Air Act Tier 3 emission label affixed to each affected engine);
  - e. A demonstration that the engines are properly certified to MARPOL Tier II NOx standards (satisfied by having proper documentation, including Technical Files and a Record Book of Engine Parameters on board the ship).
5. Only the Office of Commercial Vessel Compliance (CG-CVC) may authorize the use of a “qualifying engine”; however, ROs and OCMIIs are encouraged to assist vessel owners and operators in submitting the appropriate information and provide a recommendation regarding the acceptance of the engine. If the USCG is satisfied that the ship and engines qualify for relief

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<sup>7</sup> The Act to Prevent Pollution from Ships implements MARPOL Annex VI under U.S. law. Regulation 13 generally applies to marine diesel engines with a power output of more than 130 kW installed on a ship, except as provided in Regulation 13.1.2.

<sup>8</sup> The standard and applicability requirements are set out at Annex VI Regulation 13.5.1 and exceptions to applicability are set out in Regulation 13.5.2.

under this WI, CG-CVC will provide documentation to include with the IAPP certificate<sup>9</sup> to show that the ship may operate the (MARPOL NOx Tier II) engines in the U.S. portion of the ECA even though the engines would otherwise need to meet the MARPOL NOx Tier III standard. An RO may issue the IAPP on behalf of the United States upon receipt of CG-CVC’s authorization to use the “qualifying engine”.

6. CG-CVC will add a Special Note within MISLE for the vessel and will upload the acceptance letter to the documents section.
7. In the case of new construction, ship manufacturers are advised to contact CG-CVC at [CG-CVC@uscg.mil](mailto:CG-CVC@uscg.mil) well before engine installation to allow sufficient time to determine if any MARPOL-compliant engines will be available at the time of installation. As engine manufacturers expand the range of MARPOL-compliant (and Clean Air Act certified, if applicable) engines available, CG-CVC expects to work with EPA to compile and maintain a list of compliant engines available for consideration by the shipbuilder.
8. Only the following categories of ships and engines will qualify under this WI:

Engine Size	Keel-laying date	Alternative standard
130 – 600 kW	On or after January 1, 2016	Clean Air Act Tier 3
600 – 1000 kW	On or after January 1, 2016, and before October 1, 2017	Clean Air Act Tier 3
1000-1400 kW	On or after January 1, 2016, and before January 1, 2017	Clean Air Act Tier 3

9. In addition to the engine size and build date applicability above, the following applies:
  - a. Diesel engines installed on U.S.-flagged ships are not excused from meeting Clean Air Act standards for marine diesel engines under 40 CFR part 1042.
  - b. Engines above 600 kW built after the Clean Air Act Tier 4 standards start to apply must be certified to the Clean Air Act Tier 4 standards if they will be installed on a U.S.-flagged ship.<sup>10</sup>
  - c. The provisions in 40 CFR 1042.650(d) exempting auxiliary engines on Category 3 ships from Clean Air Act standards are conditioned on meeting current standards under Annex VI; engines excused from meeting the MARPOL Tier III NOx standard under this WI may not also use the exemption provisions of 40 CFR 1042.650(d).
  - d. Diesel engines installed on foreign-flagged ships must be certified by EPA to the Clean Air Act Tier 3 standards as a condition of qualifying for the USCG’s enforcement discretion with respect to the MARPOL Tier III NOx standards.
  - e. Engines that fall within the scope of an exemption under Annex VI, for example, VI / 13.5.2, must avail themselves of that exemption before seeking to qualify under this WI.
  - f. “Qualified engines” undergoing modification<sup>11</sup> are subject to the major conversion requirements of Regulation 13.2.
  - g. “Qualified engines” are only within the scope of this WI while installed on the ship associated with the IAPP acknowledging their “qualified engine” status.

<sup>9</sup> The International Air Pollution Prevention Certificate is provided for in Annex VI Regulation 6.

<sup>10</sup> Consistent with the Clean Air Act, however, this WI does apply in the unusual circumstance where a Clean Air Act Category 1 or Category 2 engine with rated power above 600 kW is installed in a vessel with a keel-laying date on or after January 1, 2016, if the engine is properly certified to EPA’s Clean Air Act Tier 3 standards under EPA’s normal inventory provision.

<sup>11</sup> Major conversion, as defined by Regulation 13.2, includes replacing or performing substantial modifications to an existing engine.

E. Questions. Questions concerning this WI and guidance should be directed to the Office of Commercial Vessel Compliance (CG-CVC) at [CG-CVC@uscg.mil](mailto:CG-CVC@uscg.mil).

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By direction