

## Frequently Asked Questions About How to Obtain an Engine International Air Pollution Prevention (EIAPP) Certificate

On October 8, 2008, the United States ratified Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL Annex VI). Ratification triggers a requirement for U.S. vessels, and the diesel engine(s) installed on them, to be certified as meeting the Annex VI requirements. Engine certification is conducted with EPA and compliance is demonstrated by issuance of an Engine International Air Pollution Prevention (EIAPP) certificate. Vessel certification is conducted with the U.S. Coast Guard and compliance is demonstrated by issuance of an International Air Pollution Prevention (IAPP) certificate. To obtain an IAPP, a vessel owner will be required to have an EIAPP certificate issued by EPA for each diesel engine above 130 kilowatts (kW) installed on the vessel. This Fact Sheet explains how a vessel owner can obtain EIAPP certificates.

### Who should read this fact sheet?

You should read this fact sheet if you own a vessel flagged or registered in the United States that has one or more diesel engines rated above 130 kW, and you operate that vessel outside the United States or in a foreign port or waters. Only diesel engines require an EIAPP certificate. Gasoline, propane, natural gas and other spark ignition engines do not require this certificate.

Although only vessels above 400 gross tons are required to obtain an IAPP certificate under MARPOL Annex VI, owners of all vessels that operate outside the United States or in a foreign port or waters are required to have an EIAPP certificate for

each installed diesel engine above 130 kW. Although it is possible to enter the port or waters of a foreign state that has not ratified Annex VI without an EIAPP certificate, it is strongly recommended that all vessels expecting to operate in these locales obtain an EIAPP certificate.

## **What is an EIAPP certificate?**

An EIAPP certificate is the internationally-accepted documentation that a specific engine meets the international NOX emission limits for diesel engines set out in Regulation 13 of Annex VI. An EIAPP certificate for any engine installed on a U.S. vessel must be issued by EPA.

## **What is a Statement of Compliance?**

The effective date for the Annex VI NOX limits was January 1, 2000. However, the Annex had not yet entered into force internationally by that date. Engine manufacturers were encouraged to voluntarily certify diesel engines to the Annex VI limits to ensure that vessel owners would be in compliance when the Annex eventually entered into force. To facilitate this process, EPA created a program through which engine manufacturers could apply for a Statement of Compliance with Regulation 13 of Annex VI for their compliant engines.<sup>1</sup>

Annex VI went into force internationally in 2005. Although the U.S. had not yet ratified the Annex, owners of U.S. vessels could be required to demonstrate compliance when they visited foreign ports. To simplify this process, owners were encouraged to certify their vessels voluntarily, and Coast Guard began to issue Statements of Voluntary Compliance to compliant vessels. To receive a Statement of Voluntary Compliance for the vessel, the owner was required to have an EPA-issued Statement of Compliance for each diesel engine above 130 kW installed on the vessel.

Now that the Annex is entering into force for the United States, vessel owners will be required to obtain an IAPP certificate for their vessels. This will require an EPA-issued EIAPP certificate for each diesel engine above 130 kW installed on the vessel. Additionally, vessels not required to obtain an IAPP certificate will still be required to obtain an EIAPP certificate for each installed diesel engine above 130 kW.

## **What engines are required to have an EIAPP certificate?**

The following diesel engines are required to be certified to the Annex VI NOX limits, as evidenced by an EIAPP certificate:

- Any engine above 130 kW that is installed on a vessel constructed on or after January 1, 2000
- An engine above 130 kW installed on any vessel if the engine has undergone a major conversion on or after January 1, 2000. This means:
  - The engine has been replaced with a new engine built on or after January 1, 2000; this requirement is extended to include replacement with any existing (used) engine, beginning July 1, 2010

- The maximum continuous rating of the engine has been increased by more than 10%
- The engine has been significantly modified, which means it has been modified in such a way that would increase its NOX emissions (for example, the fuel injector nozzles have been changed, a turbocharger has been added, or the timing has been changed)

The following diesel engines are not required to have an EIAPP certificate:

- Engines which are used solely for emergency purposes in life boats or for any equipment intended to be used solely in case of emergency
- Engines installed on drilling rigs and platforms and that are solely dedicated to the exploration, exploitation and associated offshore processing of sea-bed mineral resources

### **I have an EPA-issued Statement of Compliance from my engine manufacturer; how can I get an EIAPP certificate for my engine?**

Consistent with our other engine certification programs, EPA will issue the EIAPP certificate to the engine manufacturer after a review of the Statement of Compliance and other relevant information. You should contact your engine manufacturer to find out how to obtain the EPA-issued EIAPP certificate for your engine.

Note that your engine must be in the configuration specified in the EIAPP certificate. If you have modified the engine, it will not be covered by the engine manufacturer's EIAPP certificate for that engine family. In this case, you will be required to return the engine to the certified configuration or re-certify the engine yourself.<sup>1</sup>

Also note that any modification of an engine covered by an EPA Certificate of Conformity to the 40 CFR Part 94 and Part 1042 emission standards may be tampering and subject to enforcement action.

### **I don't have an EPA-issued Statement of Compliance from my engine manufacturer; how can I get an EIAPP certificate for my engine?**

Even if you don't have a Statement of Compliance, you should contact your engine manufacturer about obtaining an EIAPP certificate. This is because the manufacturer may have certified the engine to the Annex VI standards and received an EIAPP certificate from EPA for your engine model and year.

If the engine manufacturer did obtain an EIAPP certificate from EPA for your engine, that certificate will be valid only if your engine is in the configuration specified in the EIAPP certificate. If you have modified your engine, it will not be covered by the engine manufacturer's EIAPP certificate for that engine family. In this case, you will be required to return the engine to the certified configuration or re-certify the engine yourself.<sup>1</sup>

Also note that any modification of an engine covered by an EPA Certificate of Conformity to the 40 CFR Part 94 and Part 1042 emission standards may be tampering and subject to enforcement action.

If the manufacturer has not obtained an EIAPP certificate from EPA for your engine model and year, you should contact EPA for further assistance.<sup>1</sup>

### **What if my engine manufacturer is no longer in business?**

If the original manufacturer of your engine is no longer in business, you should contact EPA.<sup>1</sup>

### **When will I be required to have EIAPP certificates for my engines?**

You will be required to have an EIAPP certificate for each diesel engine above 130 kW installed on your vessel when you certify your vessel to the Annex VI requirements and obtain a vessel IAPP certificate from the U.S. Coast Guard. An IAPP certificate is required for each vessel at or above 400 gross tons. Ship owners will be certified to Annex VI and receive an IAPP certificate at the first scheduled dry docking that occurs after January 8, 2009, but no later than January 9, 2012.

Diesel engines above 130 kW installed on vessels not required to obtain an IAPP certificate must also be covered by EIAPP certificates if you will operate your vessel outside the United States or in a foreign port or waters. You should plan to obtain an EIAPP certificate on a similar schedule as outlined above for obtaining an IAPP certificate.

### **Are there other MARPOL Annex VI requirements that apply to engines?**

There are two other requirements for compliance with Annex VI.

First, each engine must have a Technical File. This document is prepared by the engine manufacturer and contains information needed to inspect the engine to verify compliance. A paper copy of this document is required to be available onboard the vessel, although in the future an electronic copy may be sufficient.

Second, each engine must have a Record Book of Engine Parameters. This is a document for recording all parameter changes, including components and engine settings that may influence NOX emissions. This information is used during vessel surveys and inspections, to make sure the engine has been complying with the NOX limits. The vessel owner must make sure the Record Book is always accurate. If the settings on the engine do not match those in the record book, an engine survey may include a more time-consuming investigation and, potentially, onboard measurement of NOX emissions.

**Will I need to get a new EIAPP certificate for the Annex VI Tier II and Tier III standards?**

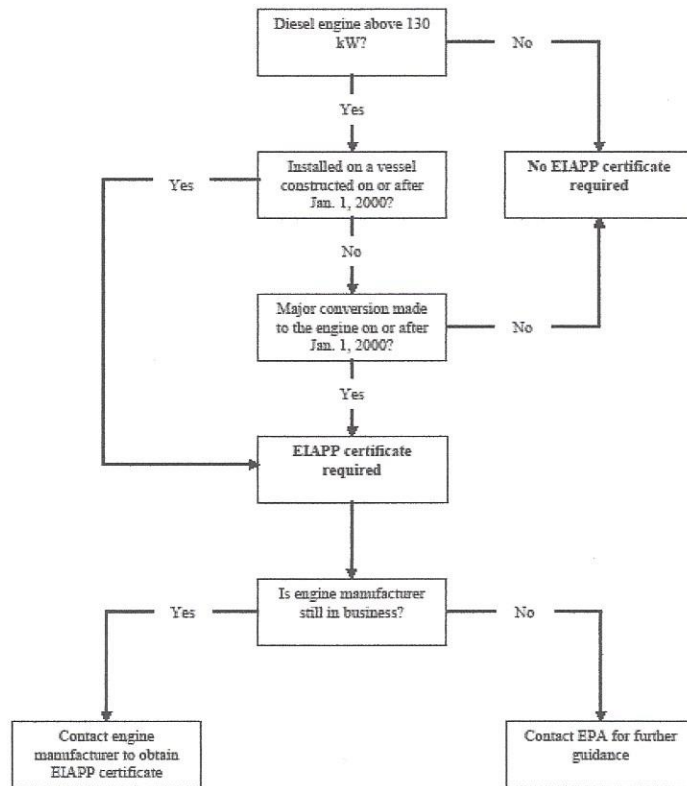
No. The new Annex VI Tier II and Tier III standards will apply only to engines installed on vessels constructed on or after January 1, 2011 (Tier II) and January 1, 2016 (Tier III), or engines that undergo a major conversion on or after those dates.

**Are there any pre-2000 engines that will be required to meet the Annex VI Tier I standards, and have an EIAPP certificate?**

Engines that undergo a major conversion on or after January 1, 2000, will need to be certified to the Annex VI standards effective at the time of the major conversion and have an EIAPP certificate. This is the case no matter when the engine or vessel was originally constructed.

Beginning March 2010 your engine may be required to meet the current (Tier I) Annex VI standards if it was installed on a vessel built between January 1, 1990 and December 31, 1999, has a displacement at or above 90 liters per cylinder, and has a power output of more than 5,000 kW. Such an engine will be required to meet the Tier I standards if a remanufacture system (called an "Approved Method") has been certified for it. Information on Approved Methods will be made available on EPA's certification web site ([www.epa.gov/otaq/certdata.htm](http://www.epa.gov/otaq/certdata.htm)), and EPA will provide additional information on our ocean-going vessel web site ([www.epa.gov/otaq/ocean-vessels.htm](http://www.epa.gov/otaq/ocean-vessels.htm)).

**Flowchart for Obtaining EIAPP Certificate**



## Where can I get more information?

Copies of MARPOL Annex VI and the NOX Technical Code are available on the Office of Transportation and Air Quality marine web sites at:

[www.epa.gov/otaq/marine.htm](http://www.epa.gov/otaq/marine.htm)  
[www.epa.gov/otaq/oceanvessels.htm](http://www.epa.gov/otaq/oceanvessels.htm)

Information on EPA's Tier 1 marine diesel engine standards is available at:

<http://www.epa.gov/otaq/regs/nonroad/marine/ci/f03001.pdf>

Guidance for Marine Engine and Vessel Manufacturers can be found at:

<http://www.epa.gov/otaq/regs/nonroad/marine/ci/imolettr.pdf>

You can contact EPA, regarding EIAPP certificates:

Justin G. Greuel  
E-mail address: [Greuel.Justin@epa.gov](mailto:Greuel.Justin@epa.gov)

You can contact U.S. Coast Guard, regarding IAPP certificates:

LCDR Scott W. Muller  
E-mail address: [Scott.W.Muller@uscg.mil](mailto:Scott.W.Muller@uscg.mil)

For general questions about EPA's marine programs, please contact:

U.S. Environmental Protection Agency  
Office of Transportation and Air Quality  
Assessment and Standards Division  
2000 Traverwood Dr.  
Ann Arbor, MI 48105  
E-mail: [otaq@epa.gov](mailto:otaq@epa.gov)

<sup>1</sup> You can find out more about the MARPOL Annex VI requirements and Statements of Compliance by visiting our website, [www.epa.gov/otaq/oceanvessels.htm](http://www.epa.gov/otaq/oceanvessels.htm). See particularly "MARPOL 73/78 Annex VI Marine Diesel Engine Requirements" EPA420-F-99-038, October 1999, at <http://www.epa.gov/otaq/regs/nonroad/marine/ci/f99038.pdf>