



Germanischer Lloyd

## MARPOL 73/78 Annex VI Air Pollution Prevention

### How to prepare for MARPOL 73/78 Annex VI Surveys

#### General Information on MARPOL 73/78 Annex VI

MARPOL 73/78 Annex VI enters into force on 19 May 2005. After entry into force, an IAPP-certificate (International Air Pollution Prevention Certificate) shall be issued for any ship of 400 gt or above engaged in voyages to ports or offshore terminals under the jurisdiction of other States than the ship's Flag State.

An IAPP certificate shall be issued for existing vessels latest at the occasion of the first scheduled dry-docking after 19 May 2005, but in no case later than 3 years after that date. For ships put in service for the first time on or after 19 May 2005, the IAPP shall be issued before the ship is put in service.

MARPOL 73/78 Annex VI sets the following regulations for the prevention of air pollution from ships:

- Regulation 12: Ozone depleting substances
- Regulation 13: Nitrogen Oxides from Diesel Engines
- Regulation 14: Sulphur Oxides
- Regulation 15: Volatile organic compounds (applies to tankers only, regulated by port authorities)
- Regulation 16: Shipboard incineration
- Regulation 18: Fuel Oil Quality

#### How to obtain an IAPP-certificate

The basic prerequisite to obtain an IAPP-certificate is that the ship complies with the requirements of the applicable regulations of MARPOL Annex VI, which has to be proven through an *Initial Survey*. The IAPP is valid usually for 5 years (if, for instance, no change of flag takes place)

Please contact the local GL-office as appropriate to apply for the *Initial Survey* after having made the necessary preparations.

The following checklist has been prepared as a means for ship operators and crew to verify whether the ship is in compliance with Annex VI prior to the survey and shall give assistance in obtaining the IAPP-certificate. If all applicable checkboxes can be ticked either yes or n.a., the vessel will most probably pass the Initial Survey. In case of questions, please contact Germanischer Lloyd Head Office, Dept. NPC.  
(n.a. = not applicable)

#### Periodical Surveys after an IAPP-certificate has been issued

Annual surveys and one intermediate survey (either after 2 or 3 years after issuance of the IAPP-certificate) must be performed in order to avoid the certificate cease to be valid.

Annual surveys must be performed within a time window of  $\pm 3$  months of the anniversary date of the IAPP-certificate, and the intermediate survey must be performed within a time window of  $\pm 6$  months of the anniversary date.



### Checklist

- For internal use on board only -  
(This checklist shouldn't be submitted to GL.)

### 1. Ship Data

<u>9237486</u>	<u>Norasia Alya</u>	
GL Reg.no. or IMO no.	Name of Ship	
<u>A8E13</u>	<u>Monrovia</u>	<u>35881</u>
Call Sign	Port of Registry	Gross tonnage

### 2. Document Check

	yes	n.a.
<b>Fuel oil:</b>		
Bunker delivery notes (signed by fuel oil supplier!) of fuel oil: Sulphur content is specified. *	<input checked="" type="checkbox"/>	
Bunker delivery notes will be kept on board at least 3 years. *	<input checked="" type="checkbox"/>	
Fuel oil samples will be kept on board of the last 12 months. * (sealed and signed by supplier and master or officer in charge)	<input checked="" type="checkbox"/>	
Fuel oil never exceeds 4.5 % sulphur content by mass.	<input checked="" type="checkbox"/>	
<b>Fuel oil SOx emission control areas:</b>		
Within SOx emission control areas, fuel oil with max. sulphur 1.5 % m/m is used. **	<input checked="" type="checkbox"/>	
The volume of low sulphur fuel oils (≤ 1.5% S) in each tank as well as date, time and position of the ship when <u>any</u> fuel-changeover operation is completed will be recorded. **	<input checked="" type="checkbox"/>	
<b>Diesel Engines with more than 130 kW, which have been installed on or after 1 January 2000:</b>		
EIAPP-certificates and approved Technical Files including On-Board Verification Procedure available. ***	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operating personal has made familiar with the engines Technical Files and the On-Board-Verification Procedure. ***	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Diesel engines general:</b>		
Repairs, installations of spare parts, modifications related to engine's settings or adjustments were recorded and can be traced from the records.	<input checked="" type="checkbox"/>	
<b>Incinerators, which have been installed on or after 1 January 2000:</b>		
Type approval certificate (MEPC76(40) and manufacturers operating manual available.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Ozone depleting substances</b>		
A list of all ozone depleting substances used on board is available.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

\* must be available latest on 19 May 2005  
 \*\* must be available latest on 19 May 2006 for operation in the Baltic Sea. North Sea is likely to become a SOx emission control area in 2007, others will probably follow later.  
 \*\*\* Diesel engines, which are used solely in case of emergency, are not required to be issued with an EIAPP-certificate, approved Technical File and On-Board Verification Procedure



### 3. Ozone Depleting Substances

	yes	n.a.
In new installations: No ozone depleting substances are used. (applies for Halons, CFC's, HCFC's as from 2020)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All systems, which contain ozone depleting substances are free from leakages and good maintained.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
In case of repairs, ozone depleting substances will be collected to adequate reception facilities and <u>not</u> deliberately released into the atmosphere.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 4. Diesel Engines (Nitrogen Oxides)

#### Diesel engines with 130 kW and above, which were installed on or after 1 January 2000:

The rated power and rated speed of the engines nameplates are equal to the rated power and rated speed stated on the engines EIAPP-certificate.

Diesel Engines were equipped according to the specification given in the Technical File (component specification, IMO-Id. nos.).

Engine settings or adjustments do not exceed the allowances as specified in the Technical File.

#### Diesel engines with 130 kW and above (independent from date of installation):

No changes in operations or technical parameters (e.g. camshafts, fuel injection systems, combustion air systems, combustion chamber configuration, timing calibration, other changes, which could increase the emission characteristics) have been conducted since 1 January 2000.

Rated power and rated speed (as of the name plate) have remained unchanged since 1 January 2000.

### 5. Ship Board Incineration

The incinerator is operated according to the manufacturers instructions.

Operating personnel is trained and capable implementing the guidance provided in the operating manual

Operating personnel is informed about restrictions on material to be burnt

### 6. Volatile Organic Compounds (applies to tankers only)

	no	yes	n.a.
An approved vapour collection system (gas pending system) is installed. (This is depending from and to be dealt with the terminals / ports authorities the tanker is loaded / unloaded at.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

At Sea 13.Feb.2006

Place, Date