

EcoSilencer® in conformity with MARPOL VI for Environment Protection, EcoSilencer® will be the main equipment of ships as long as we live.

At the time Shipping is in a serious dilemma about how to confront the added cost in ships' operation by the adoption of IMO MARPOL VI, involving the emission of SULPHUR by the exhaust gases of ships' engines and boilers, the American HEIDENREICH MARINE INC organized by its Bunker Trading Manager Mr. Gary W. Lawson, a Pool Bunker Meeting between its cooperating Greek and foreign shipping companies, 23 February 2006, in Athens, under the auspices TSAKOS SHIPPING.

The organizers and participants were welcome by Capt. Panos Tsakos and his competent Staff to their "Macedonia Building" where the meeting was held.

HEIDENREICH's initiative and the well-organized hospitality by TSAKOS SHIPPING are to be warmly congratulated.

The key organizations about ship safety and environment pollution prevention are:

1) The International Maritime Organization (IMO), which is the United Nations' responsible agency for improving safety by SOLAS, and preventing pollution from ships by MARPOL rules. IMO was established to adopt the legislation, and the Governments of member States have the responsibility for implementing it.

2) The European Union Environmental Directive, (Rules 2005/33/EC).

3) The U.S. Environmental Protection Agency (EPA).

The five distinguished speakers, Mr. Robert Thornton of World Fuels, Mr. Adrian Tolsen of Chemoil, Mr. George Kaminis of Kaminco Oceanic, Mr. Cor Nobel of SEAA, and Mr. Bill Stamatopoulos of DNVPS, presented correspondingly in a most professional and understandable way the following important topics:

- a) A very comprehensive review of MARPOL VI.
- b) A Fuel Supplier's Perspective in regard to MARPOL VI.
- c) EcoSilencer® in the service of Ship Owners for permanently complying to MARPOL VI rules in an economical and safe way, and solving their various problems in connection to the bunkers.
- d) Alternative solutions for adopting MARPOL VI.
- e) Quality Aspects in connection to MARPOL VI.

The meeting was very productive to the appreciation of almost a hundred Technical, Operation and Fleet Managers from distinguished Greek and foreign Shipping companies, which attended the meeting. The presentation of EcoSilencer® by Mr. George Kaminis was of particular interest, due to its very simple and marinated "sea water

scrubbing" principle of operation being familiar to mariners since seventies, when the inert gas systems were adopted on the tankers.

Mr. George Kaminis presented an example of economizing with the EcoSilencer® an amount of USD 14 million from a ship with a 27.000 KW engine, consuming 20.000 tons of 4,5% sulphur fuel within twenty years, instead of using 1,5% sulphur fuel, which is obligatory today in the SECA areas (Low Sulphur Control Areas).

Present SECA areas are: Baltic Sea as from May 19,2006, (IMO date). For all Passenger ships between European ports as from August 11,2007, (EU date). In North Sea and English Channel as from August 11,2007, (EU date). In North Sea and English Channel as from November 21,2007, (IMO date).

In North America the implementation of SECA is due for 2010.

The SECA Areas will be gradually extended whereas the world Sulphur Cap is under review to as low as 2.5% (from present of 4,5%), and 0,5% (from present 1,5%) for the SECA Areas.

Ship Owners have today the option to alternatively use:

- Only Diesel Oil
- Use 1,5% sulphur fuel
- Blend fuels prior to use
- Install EcoSilencer®

Mr. George Kaminis suggested that blending is not as simple as it looks. Already certain Ship Owners with experience are facing serious problems due to blending of fuels.

Today the average world premium for 1,5% sulphur fuel is 61,25 USD/ton, and Mr. George Kaminis suggested that this is just the start of a long unknown journey, the economical shortcut to which is the installation of the EcoSilencer®. According to his calculations, in the following ten years the international Shipping is heading to an about 150.000 metric tons daily deficit of 1,5% sulphur fuels.

To a question about the high cost of EcoSilencer®, Mr. George Kaminis suggested:

"Do not look what you pay but what it will cost to you by not having it. EcoSilencer is going to be the main equipment for all types of ships as long as we live"

George S. Kaminis
Marine Consultant Engineer



Mr. George Kaminis of Kaminco Oceanic



Mr. George Kaminis of Kaminco Oceanic S.A. presenting Mr. Gary W. Lawson, bunker trading manager of Heidenreich Marine who organized the Meeting.

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