INTERNATIONAL MARITIME ORGANIZATION

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PREVENTION OF AIR POLLUTION FROM SHIPS

Sulphur monitoring for 2006

Note by the Secretariat

SUMMARY

Executive summary:	This document presents the results of sulphur monitoring for 2006
Action to be taken:	Paragraph 11
Related documents:	MEPC 55/4/1; MEPC 55/INF.6; MEPC 53/24, paragraph 4.2; MEPC 52/24; C 93/D, paragraph 13.3(iii); MEPC 43/10 and resolution MEPC.82(43), paragraphs 4.14 to 4.18 and 4.50

General

1 In accordance with the Guidelines for monitoring the worldwide average sulphur content of residual fuel oils supplied for use onboard ships adopted by resolution MEPC.82(43), the results of sulphur monitoring is presented to the Organization every year.

2 The Committee will recall that the project on monitoring the worldwide average of sulphur content of residual fuel oils has been implemented on a trial basis since MEPC 45 under the leadership and partial funding of the Netherlands and a number of other Member States (Denmark, Finland, Norway, Sweden and the United Kingdom). MEPC 52 agreed to approach the Council in order to establish a permanent funding under the budget of IMO. The ninety-third session of the Council considered the issue and agreed to allocate the necessary funding for the Secretariat to continue the monitoring project after 1 January 2006. This is consequently the first time the compilation and presentation of the sulphur data are undertaken by the Secretariat.

Average sulphur content

3 For the purpose of the Guidelines, calculation of one worldwide figure for the average sulphur content for a given year is based on the data made available by the providers of sampling and testing services as mentioned in paragraph 7 of the Guidelines. The method of calculation is described in paragraph 4.2 of the Guidelines.

4 As shown in the annex to this document, the average sulphur content of the tested fuel oil has decreased since 2005 by 0.11 percentage points from 2.70% to 2.59%. The explanation is mainly the entering into force of the Baltic SECA (Sulphur Emission Control Area). The average sulphur content is calculated on the basis of the number of samples tested and not the actual quantity of fuel oil bunkered. As the bunkered quantity per bunkering has also decreased, the explanation may be that ships take on board smaller quantities of low sulphur fuel for consumption within the SECA, leading to an increased number of low sulphur samples, and not that the global average has decreased. The Secretariat has also received, from one of the three data suppliers, the average sulphur content based on actual quantity; this figure is 2.79% and shows a higher value than that calculated on the basis of the number of samples which is 2.59%.

Distribution of samples

5 A graphical representation of the distribution, as mentioned in paragraph 4.2 of the Guidelines, requires a breakdown of the data provided per increment of 0.5% of sulphur. The number of samples within the increment is made available by each provider and subsequently added up. A graphical representation is shown at annex.

6 The distribution of samples shows that 13.4% of the samples are below 1.5% sulphur content, in contrast to earlier years when this figure has been between 7 and 9%. The distribution also shows that 44% of the samples are below 2.5%.

7 Just 30 out of the 86,117 samples (0.03%) exceed 4.5% m/m sulphur. It should also be noted that none of the data providers report samples containing more than 5% sulphur.

Calculation of rolling average

8 The Guidelines provide for calculation of a rolling average of the sulphur content for a three-year period. The sulphur content of residual fuel being measured for 2004, 2005 and 2006 now presents the sixth consecutive rolling average. The first rolling average was based on sulphur data for 1999, 2000 and 2001 and is also the reference value.

9 The rolling average, as mentioned in paragraph 4 of the Guidelines, is calculated on the basis of the average sulphur contents calculated for 2004 (MEPC 53/4), 2005 (MEPC 55/4/1) and 2006 (MEPC 56/4). These values were 2.7, 2.7 and 2.59% respectively.

Therefore the three year rolling average for 2004 to 2006 is now 2.66%. The previous three-year rolling average for 2003 to 2005 was 2.70% (MEPC 55/4/1). The reference value mentioned in paragraph 5 of the Guidelines is 2.70%.

10 As stipulated in paragraph 6 of the Guidelines, if in any given year the three-year rolling average exceeds the reference value by 0.2%, the MEPC should consider the need for further measures to reduce SO_x emissions from ships. This has not happened over 2006. The Guidelines also stipulate that MEPC should continually review this excess value (now 0.2%) once the reference value has been set.

Action requested of the Committee

11 The Committee is invited to note the outcome of the monitoring of the worldwide average sulphur content of residual fuel oils supplied for use onboard ships through 2006, and take action as appropriate.

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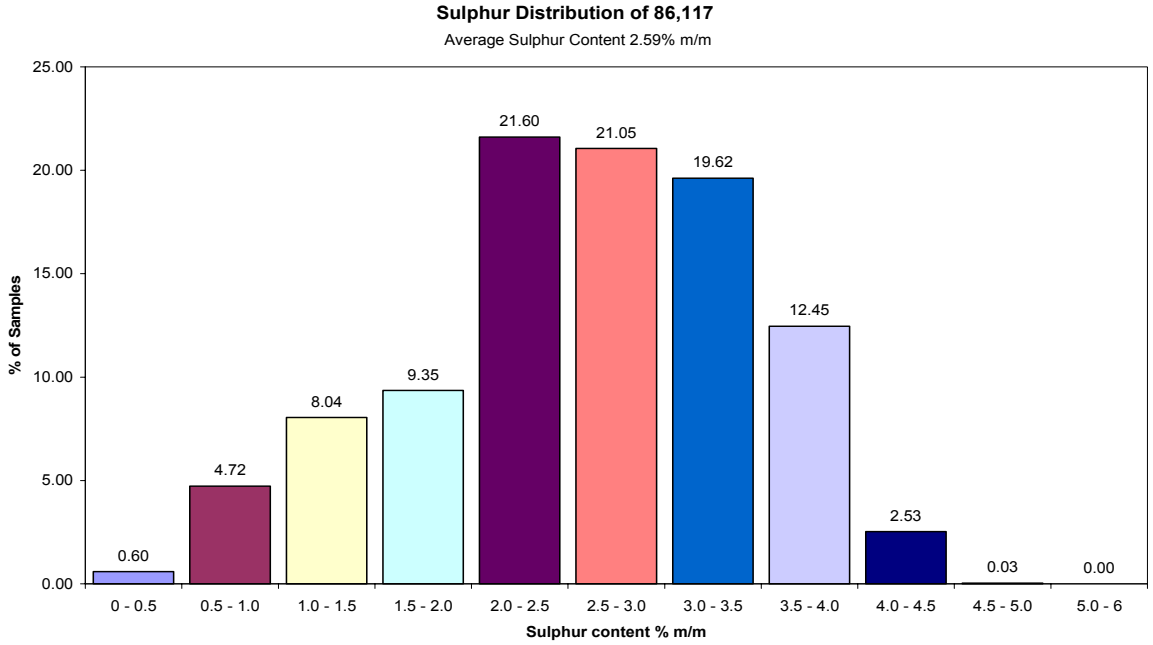
ANNEX

Data for 2006:

Total number of samples tested : 86,117
Corresponding quantity of residual fuel oil : 86,857,565 tonnes
Calculated average sulphur content : 2.59% m/m
Distribution per increment of 0.5% S m/m : as per graphical representation



Sulphur monitoring programme 1999 – 2006

Year	Document reference	Corresponding quantity of residual fuel oil (tonnes)	Number of samples tested	Tonnes per bunkering	Average sulphur content
1999	MEPC 45/INF.12	47,000,000 tonnes	53,000	886	2.7 %
2000	MEPC 47/INF.2	49,000,000 tonnes	54,000	907	2.7 %
2001	MEPC 48/INF.4	56,000,000 tonnes	62,000	903	2.7 %
2002	MEPC 49/4/1	59,000,000 tonnes	63,000	936	2.6 %
2003	MEPC 52/4/8	67,395,141 tonnes	66,958	1006	2.7 %
2004	MEPC 53/4	74,408,066 tonnes	66,312	1122	2.7 %
2005	MEPC 55/4/1	82,436,438 tonnes	79,592	1035	2.7 %
2006	**MEPC 56/4**	**86,857,565 tonnes**	**86,117**	**1008**	**2.59 %**

Three-year rolling average

Year	Average sulphur content	Three-year rolling average - Years used	Three-year rolling average
1999	2.7 %		
2000	2.7 %		
2001	2.7 %	1999, 2000 and 2001	2.70 %*
2002	2.6 %	2000, 2001 and 2002	2.67 %
2003	2.7 %	2001, 2002 and 2003	2.67 %
2004	2.7 %	2002, 2003 and 2004	2.67 %
2005	2.7 %	2003, 2004 and 2005	2.70 %
2006	**2.59 %**	**2004, 2005 and 2006**	**2.66 %**

* Reference value