INTERNATIONAL MARITIME ORGANIZATION

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Agenda item 4

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PREVENTION OF AIR POLLUTION FROM SHIPS

Sulphur monitoring for 2008

Note by the Secretariat

SUMMARY

Executive summary:	This document presents the results of sulphur monitoring for 2008
Strategic direction:	7.2
High-level action:	7.2.2
Planned output:	7.2.2.1
Action to be taken:	Paragraph 10
Related documents:	MEPC 56/4; MEPC 57/4/24 and resolution MEPC.82(43)

General

1 In accordance with regulation 14(2) of MARPOL Annex VI and the Guidelines for monitoring the worldwide average sulphur content of residual fuel oils supplied for use on board ships adopted by resolution MEPC.82(43), and as agreed by the Committee, the results of the sulphur monitoring should be presented to a subsequent session of the Committee every year (in this case, MEPC 59).

Average sulphur content

2 Calculation of the worldwide figure for the average sulphur content in residual fuel oil 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.

3 As shown in the annex to this document, the average sulphur content of the tested residual fuel oil has decreased since 2007 by 0.05 percentage points from 2.42% to 2.37%. 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 decreased, the explanation may be that ships take on board smaller quantities of low-sulphur fuel oil for consumption within the SECA (Sulphur Emission Control Area). The significant increase in low

sulphur samples (see paragraph 5) may indicate that low-sulphur fuel oil is tested more frequently to secure compliance. Both these factors may lead to an increased number of low sulphur samples and thereby a lower average sulphur level in the Sulphur Monitoring Programme than the actual global sulphur level. The Secretariat has also received, from one of the three data suppliers, the average sulphur content based on actual quantity; this figure is 2.64% and shows a higher value than that calculated on the basis of the number of samples which is 2.37%.

Distribution of samples

4 A graphical representation of the distribution, as mentioned in paragraph 4.2 of the Guidelines, with a breakdown of the data provided per increment of 0.5% of sulphur, is shown in the annex to this document.

5 The distribution of samples shows that 24.1% of the samples are below 1.5% sulphur content, in contrast to last year's 20.6% and earlier years when this figure has been between 7 and 9%. The distribution also shows that the figure for sulphur content between 1.5-2.0% is less than the figure for sulphur content between 1.0-1.5%.

6 Just 23 out of the 106,925 samples (0.02%) 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

7 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 2006, 2007 and 2008 now presents the eighth consecutive rolling average. The first rolling average was based on sulphur data for 1999, 2000 and 2001 and is also the reference value.

8 The rolling average, as mentioned in paragraph 4 of the Guidelines, is calculated on the basis of the average sulphur contents calculated for 2006 (MEPC 56/4), 2007 (MEPC 57/4/24) and 2008 (MEPC 59/4). These values were 2.59, 2.42 and 2.37%, respectively.

Therefore the three-year rolling average for 2006 to 2008 is now 2.46%. The previous three-year rolling average for 2005 to 2007 was 2.57% (MEPC 57/4/24). The reference value mentioned in paragraph 5 of the Guidelines is 2.70%.

9 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 2008. 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

10 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 2008, and take action as appropriate.

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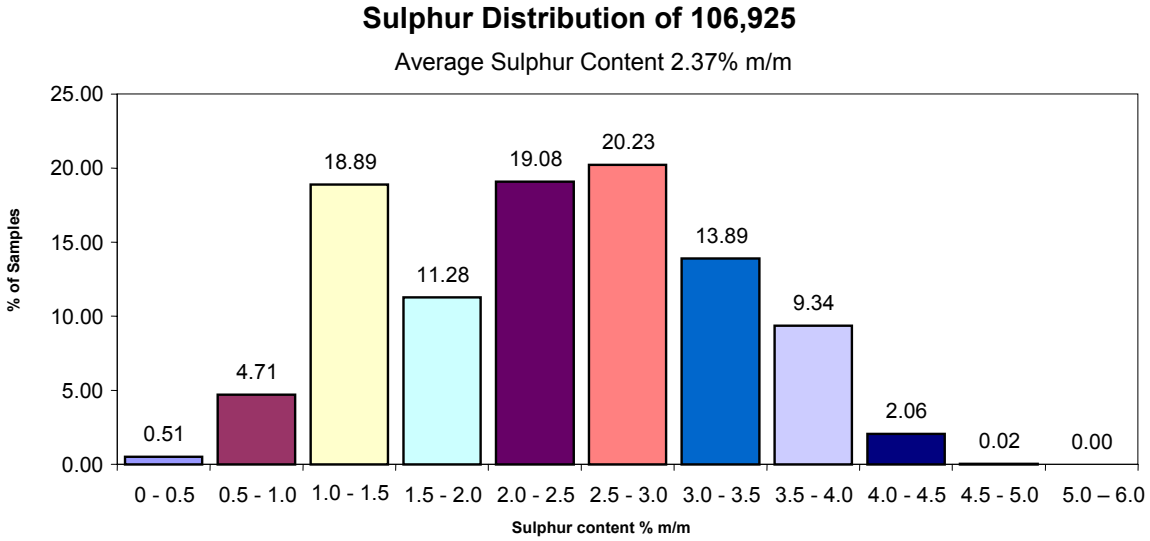
ANNEX

Data for 2008:

Total number of samples tested : 106,925
Corresponding quantity of residual fuel oil : 97,600,555 tonnes
Calculated average sulphur content : 2.37% m/m
Distribution per increment of 0.5% S m/m : as per graphical representation



Sulphur monitoring programme 1999-2008

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%
2007	MEPC 57/4/24	92,757,373 tonnes	97,172	954	2.42%
2008	**MEPC 59/4**	**97,600,555 tonnes**	**106,925**	**913**	**2.37%**

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%
2007	2.42%	2005, 2006 and 2007	2.57%
2008	**2.37%**	**2006, 2007 and 2008**	**2.46%**

* Reference value.