

The development of a European Ballast Water Sampling Strategy – options, problems and solutions.

EMSA Ballast Water Workshop: Compliance Sampling and Analysis – the Development of a European Ballast Water Sampling Strategy.

23rd – 24th February 2010

1

A large, dark blue ocean wave is breaking, with white foam visible at the crest. The background image is partially covered by a semi-transparent blue rectangle containing text.

Brian Elliott

Senior Project Officer for Environmental Protection

- Analysis of the potential elements that could be in a Sampling Strategy:

- flag/port State Control;
- Indicative Analysis and Sampling;
- Sampling;
- Analysis; and,
- Interpretation of Results.

- Issues that need to be resolved,
- Questions for further debate,

Note: Strategy meant to be guidance – MS can and may have to add to it to ensure compliance with the BWM Convention under their legal system.

Later

- The way forward and BLG 15?

Key Principles

- What exactly are we trying to sample?
- Ideally – systems that don't meet the D-2 Standard:
 - Representativeness
 - Logistics
 - Liability – undue delay – 'pseudo detention'
 - Cost – how many in reality? Access issues? Standby?
 - Homogeneity
 - Inherent accuracy
- Practicality
 - pSc
 - Indicative Sampling
 - Occasional full sampling

pSc – what can we expect?

- Staged inspection - Basic certification, document and system checks;
- Dictated by pSc Guidelines – ;
 - developed by IMO –FSI and Paris MoU; and
- An indication that sampling may be needed

Issues?

- New concept – sampling obligation??????;
- Training; Liability; 'Pseudo-detention'; Options for the ship?;
- Pre-existing problem ships?;
- Timing of pSc and loading;
- 'Clear grounds'; When to sample?; Implications for ship?;
- How can we influence – joint paper to FSI/MEPC/BLG/pMOU?
- Wording harmonisation– new EC Directive

What could they do?

- Potentially – indicative sampling

Development of a practical approach

Port State Control:

- Staged Inspection,
- 'Clear grounds', stop discharge, detention, fines, prosecution etc – the Ship's problem.

Indicative sampling:

- 'Clear grounds', stop discharge, detention, fines, prosecution etc - the Ship's problem,
- But – grey areas – no clear grounds just suspicion?

Full sampling:

- Only when really necessary (developed further as the question of representativeness can be overcome).

Question is this realistic?

Indicative Sampling

- Who?
- How?
- Clear grounds – looking for gross offences?
 - ‘Fail test’ rather than a ‘pass test’
 - Principle – what sampling for?
 - “1000 to 1” rather than “10 to 9”
 - Defacto Instantaneous test!
- Review of techniques?
- Pro’s and con’s,
- Statistical assurances of any measures,
- Practicalities/logistics review,
- Legal basis – G2 - para 6.3 - guidance?

Full Sampling Protocol

- Guidance on:
 - Preparations for sampling, inc. Risk Assessment;
 - Going on board to sample; and
 - Sample handling, transport and chain of custody.
- EU/ISO Standard for a sampling procedure;
- Instantaneous versus average sampling;
- Minimum standards to ensure representativeness:
 - Tank to treatment to discharge homogeneity; and,
 - Tank to treatment to tank to discharge.
- Investigate Alternative sampling issues:
 - Set volumes taken throughout discharge; and,
 - Sampling tests with annual/interim surveys.
- Training.

Analysis of Samples

- Guidance on:
 - Preparations for analysis; and
 - Analysing samples.
- EU/ISO Standard for analysing BW Samples?
- Training/sharing expertise.

8

Research

- Indicative testing – identification and real time testing of methods and statistical analysis of methodology to prove 'clear grounds'; and,
- Development of standard procedures for sampling and analysis?
- Ideas?



Ballast water sampling
with thanks to Mahle and
GoConsult



Proposed Way Forward

- Papers put on EMSA Website – early next week;
- Workshop report:
 - circulated (EC, MS and speakers) for comments late next week;
 - include contents list for a European Ballast Water Sampling Strategy and research proposals;
 - quick 1 week turn around;
 - wide distribution – US, Can, NZ, Aus, Japan, Bz etc.; and
 - used as basis of report to ICES meeting in May.
- End of April/mid May Preliminary European Ballast Water Sampling Strategy circulated for comment;
- May – Research tender; and,
- End of Summer – Draft paper for IMO.