



SUB-COMMITTEE ON BULK LIQUIDS AND
GASES
15th session
Agenda item 11

BLG 15/INF.7
10 December 2010
ENGLISH ONLY

**REVIEW OF RELEVANT NON-MANDATORY INSTRUMENTS AS A CONSEQUENCE OF
THE AMENDED MARPOL ANNEX VI AND THE NO_x TECHNICAL CODE**

**Investigating the dilution and dispersal of exhaust gas cleaning systems
washwater discharge**

Submitted by the Institute of Marine Engineering, Science and Technology (IMarEST)

SUMMARY

Executive summary: This document outlines ongoing research into dilution and dispersion of Exhaust Gas Cleaning Systems washwater to be reported at MEPC 62

Strategic direction: 7.3

High-level action: 7.3.1

Planned output: 7.3.1.1

Action to be taken: Paragraph 6

Related documents: MEPC 59/24, MEPC 59/4/19 and resolution MEPC.184(59)

Introduction

1 The Marine Environment Protection Committee, at its fifty-ninth session, adopted the 2009 Guidelines for Exhaust Gas Cleaning Systems by resolution MEPC.184(59), as set out in annex 9 to document MEPC 59/24/Add.1. In adopting resolution MEPC.184(59), the Committee agreed that the criteria for washwater discharge from Exhaust Gas Cleaning Systems (EGCS) should be revised in the future when more data become available on the contents of discharge and its effects, taking into account advice provided by GESAMP in document MEPC 59/4/19 (paragraph 4.32.6 of document MEPC 59/24).

Research

2 The Exhaust Gas Cleaning Systems Association (EGCSA) has requested University College London to provide an insight into the main physical processes associated with dilution and dispersion of EGCS washwater in the water in the immediate vicinity of a ship.

3 The work will consider the acidity of the washwater as well as its concentration. The dilution and dispersion mechanism appears to be a combination of:

- .1 dilution (by washwater jet);
- .2 chemistry (buffering capability of sea water); and
- .3 dilution/mixing in the wake of the ship (when underway).

4 The work will be a combination of theoretical analysis supported by physical models. It will consider variables such as washwater flow rate, pH value, injection angle and temperature.

5 The findings of the above-mentioned research will be presented at MEPC 62.

Action requested of the Sub-Committee

6 The Sub-Committee is invited to note the information provided in this document.
