

From: Lisa Drake <[REDACTED]>

Subject: RE: To: All former members of the SAB Panel on ballast water treatment technology

Date: February 12, 2015 6:41:59 AM PST

To: Kevin Reynolds <[REDACTED]>, JoAnn M. Burkholder <[REDACTED]>, Andrew Cohen <[REDACTED]>, Fred Dobbs <[REDACTED]>, Allen Burton <[REDACTED]>, William Clements <[REDACTED]>, L. Conquest <[REDACTED]>, Charles Haas <[REDACTED]>, Thomas La Point <[REDACTED]>, Wayne Landis <[REDACTED]>, Edward Lemieux <[REDACTED]>, David Lodge <[REDACTED]>, Judith Meyer <[REDACTED]>, Amanda Rodewald <[REDACTED]>, Jim Sanders <[REDACTED]>, Mario Tamburri <[REDACTED]>, Nick Welschmeyer <[REDACTED]>, Chapman, Peter (Canada) <[REDACTED]>, Robert Diaz <[REDACTED]>, Ernest Benfield <[REDACTED]>

Dear SAB members,

As members of the subgroup that conducted the analysis on the ability of ballast water management systems (BWMS) to meet discharge standards more stringent than the D-2 standard, two points should be made. First, as has been discussed with Fred (and, by extension, Andy) when the first email message from Andy and Fred was being prepared, our considerations of the type approval (TA) results were based not only on the data, but importantly, also on the methods used to collect them and QA/QC. At the time, most of the facilities conducting testing lacked any sort of quality management system. Without proper QA/QC systems and transparency in conducting independent testing, the data cannot be considered reliable. This point has been made repeatedly regarding the confidence in TA testing data by a variety of constituencies: the GloBal TestNet (a consortium of test facilities' personnel and other interested parties; their meeting reports discuss this issue), the International Chamber of Shipping (e.g., submissions to the International Maritime Organization [IMO], such as MEPC 66/2/11), and the Correspondence Group updating the IMO G8 Guidelines for testing (as per the draft report of their meeting in January 2015, which was prepared by delegations from 37 member governments and 15 observer organizations). Furthermore, the sampling approaches, as well as the sample volumes collected and analyzed that were initially used in TA testing, have since been deemed inadequate (see the papers by Lee et al. and Miller et al. cited in the SAB report). Similarly, several analytical methods used in prior TA testing (in particular for living organisms in the $\geq 10 \mu\text{m}$ and $< 50 \mu\text{m}$ size class) have never been validated. Simply concluding that a series of zeros means the performance of a BWMS is 10x or 100x more stringent than the D-2 standard, without a complete understanding of sample collection methods, analytical detection limits, and overall data quality, would be a mistake.

Second, we fully concur with Kevin's suggestion that data collected since the SAB

report should be reviewed. This assertion has been made in discussions with Fred (and Andy). If the goal is to reduce the transport and delivery of invasive species—and we think it should be—the group’s effort would be much better focused on reliable data rather than revisiting old data sets, many of which were collected without proper oversight or appropriate methodologies. Rehashing these old data sets is unproductive. Convening an EPA panel to review them—should that be suggested—would be a breathtakingly irresponsible use of taxpayer money.

Neither of us has the time to engage further in this debate, as we are fully committed to completing funded work and volunteering our time in community service, such as serving on the Environmental Technology Verification Program Technical Panel.

Sincerely,
Lisa and Mario

References

ICS, BBIMCO, INTERTANKO, INTERCARGO, WSC (2014) The continuing compelling need to amend the Guidelines for approval of ballast water management systems (G8) to ensure success of the BWM Convention. MEPC 66/2/11. International Maritime Organization, London

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