



ALASKA
Department of
Environmental
Conservation

Department of Environmental Conservation (DEC)

**Cruise Ship Waste Water Science Advisory Panel
Meeting #3
Centennial Hall, Hickel Room
Juneau Alaska
October 21-22, 2010**

Panel members

Mark Buggins*	Municipality of Sitka
Dr. Reinaldo Gonzalez	Burns and McDonnell
Kenneth Fisher	EPA
Juha Kiukas	Ecomarine
Lamberto Sazon	United States Coast Guard
Lincoln Loehr**	Stoel Rives LLP
Thomas Weigend	Meyer Werft
Steve Reifentuhl***	Southeast Herring Conservation Alliance
Michelle Ridgway****	Oceanus Alaska Environmental Services
Dr. Silke Schiewer	University of Alaska Environmental Engineering
Dr. Simon Veronneau	Quinnipiac University School of Business

- * Mark Buggins fills the legislatively mandated coastal community Panel seat.
** Lincoln Loehr fills the legislatively mandated cruise ship industry Panel seat.
*** Steve Reifentuhl fills the legislatively mandated commercial fishing industry Panel seat.
**** Michelle Ridgway fills the legislatively mandated NGO Panel seat.

Meeting Objectives

- Conclude whether to use data from Alaska Cruise Association (ACA) Bunker Water Study or to draft sample plan to collect more data.
- Gain understanding of naval architecture considerations and physical parameters, i.e. space on cruise ships.
- Gain understanding of the wastewater treatment system approval process.
- Summarize existing Panel knowledge. Develop plan to move forward.
- Identify specific tasks for report preparation.

Draft Agenda

Thursday, October 21, 2010

8:00 a.m. - 8:15 a.m.

Sign in and sign Final Charter

8:15 a.m. – 8:45 a.m. Krista Webb – Facilitator

- Welcome and introductions
- Review, finalize, and approve draft agenda

8:45 a.m. – 9:45 a.m. David Wetzel – Admiralty Environmental

- Presentation of ACA Bunker Water Study *Handout*
 - How representative are the samples of bunker water at each port?
 - Describe Quality Assurance/Quality Control (QA/QC)
 - What are strengths and shortcomings of data set? How can Panel best use it?
 - What conclusions can be made from this data?
 - How should this study inform collection of more data?

9:45 a.m. – 10:15 a.m. Break**10:15 a.m. – 12:00 a.m.** Facilitated Panel discussion to identify Bunker Water Study data gaps

Expected Outcome: A sample plan for bunker water data collection that DEC to use to draft scope of work (SOW) to get study, OR Panel decision that existing data is adequate to use going forward

Tools: Preliminary template sampling plan from DEC for Panel to use in order to create draft *Handout*

12:00 p.m. – 1:00 p.m. No host lunch**1:00 p.m. – 1:30 p.m.** Thomas Weigend – Meyer Werft

- Cruise ship basic lay-out, space considerations, and engineering considerations associated with the installation of new types of WW tracking systems or add on controls.

1:30 p.m. - 2:15 p.m. Questions and Discussion

Expected Outcome: Panel has basic understanding of naval architecture considerations and physical parameters, i.e. space on cruise ships.

2:15 p.m. – 2:30 p.m. Break

2:30 p.m. – 3:30 p.m. LTJG Jonathan Dale, and LTJG Salomee Fisher, USCG

- Wastewater Treatment Technology Certification Process under 33 CFR 159
- Questions and Discussion

Expected Outcome: Panel has basic understanding of Coast Guard involvement and US regulations regarding time frame and approval process for Advanced Wastewater Treatment System (AWTS) on cruise ships.

3:30 p.m. – 4:30 p.m. Tio Devaney - Lloyds of London

- Presentation on Classification Society Approval Process
- Questions and Discussion

Expected Outcome: Panel has a basic understanding of the role of the Classification Societies, factors that affect a ship's classification, and the associated timelines of the classification process.

4:30 p.m. – 5:00 p.m. Public Comment

5:00 p.m. Adjourn

Friday October 22, 2010

8:00 a.m. - 8:15 a.m. Sign in

8:15 a.m. – 8:30 a.m. Krista Webb

- Review Agenda

8:30 a.m. – 10:00 a.m. Facilitated Discussion - Current Status

- What does Panel know now? *Handouts*
 - Whiteboard discussion laying out entire influent to discharge wastewater lifecycle. Discuss generic system – system inputs, outputs, and variables.
 - Discuss how water and wastewater treatment systems interrelate with other mechanical and electrical shipboard systems.
 - Identify all existing data and information.
 - Where can assumptions be made?

- Where is additional specific data from industry needed?
- What does the panel need in order to evaluate feasibility of current:
 - Pollution Prevention,
 - Pollution Control, and
 - Wastewater Treatment Systems.

Expected Outcome: Panel has a good understanding of the water and wastewater lifecycle on a vessel, existing treatment systems (Reverse Osmosis vs filtration/biological treatment) and existing data and a plan to move forward to evaluate feasibility.

Tools: Whiteboard documentation of Panel expertise summarized by facilitation team.

10:00 a.m. – 10:15 a.m. Break

10:15 a.m. – 11:00 a.m. Juha Kiukas – EcoMarine Oy

- Logistics and considerations of installation and operation of AWTS
- Questions and Discussion

Expected Outcome: Panel begins the process of identifying how they will compare information to evaluate feasibility and make recommendations.

11:00 a.m. – 12:00 p.m. Report Preparation - Facilitated Discussion

- Preparation of Report and Appendices
 - Where do we apply existing information
 - How will this be accomplished?
 - Review process
 - Timeline
 - What is needed to move forward?

Expected Outcome: Panel identifies a plan to collaborate, review information, and make conclusions for preparation of report.

Tools: Strawman Report Outline *Handout*

12:00 p.m. – 1:00 p.m. No host Lunch

1:00 p.m. – 3:30 p.m. Panel-Only Small Group Informal Discussions

Expected Outcome: Collaboration and team building

3:30 p.m. - 4:15 p.m. Regroup in Hickel Room, Krista Webb, Facilitator

- Additional/Outstanding Data Requests

1. GIS Data showing ports, anchorage, bunkers water sources, travel routes, offshore discharge zones etc.
2. Existing Shoreline Metal Treatment Systems
3. Baseline Assessment of Existing Equipment

4:15 p.m. – 4:30 p.m. Schedule next conference call and meeting
(Bring Calendars)

4:30 p.m. – 5:00 p.m. Public Comment

5:00 p.m. Adjourn

DRAFT