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1. INTRODUCTION

Description of the Science Advisory Panel mandate to evaluate the most effective and economically feasible current and emerging cruise ship wastewater pollution prevention, control and treatment technologies, and perform an analysis of the environmental costs and benefits of implementing new methods and technologies.

2. CURRENTLY USED METHODS AND TECHNOLOGIES

Description of what methods and technologies are currently used by large commercial passenger vessels for pollution prevention, control and treatment; and a report of the levels of effluent quality achieved by these systems. Information for this section will be taken from the Source Reduction Evaluations (SREs) and the 2009 Large Cruise Ship Wastewater Sampling Report.

2.1. Pollution Prevention Methods

2.2. Pollution Control Methods

2.3. Wastewater Treatment Systems

2.4. Levels of Effluent Quality Achieved

3. EMERGING METHODS AND TECHNOLOGIES

Description of additional economically feasible methods and technologies identified at the 2011 Technology Conference. The 2011 Technology Conference will showcase emerging methods and technologies identified by the Panelists. The Final FS will be updated with information from the 2011 Technology Conference.

3.1. Pollution Prevention Methods

3.2. Pollution Control Methods

3.3. Wastewater Treatment Systems

3.3.1. Ammonia

3.3.2. Copper

3.3.3. Nickel

3.3.4. Zinc

4. ENVIRONMENTAL COST/BENEFIT ANALYSIS

This section will be an evaluation of the environmental benefits and costs associated with implementing new or additional methods of pollution prevention, control, and treatment technologies.

4.1. Gap Analysis

Description of what the cruise ship industry is currently doing and what can feasibly be done to meet water quality standards at the point of discharge.

4.2. Estimate timeframes

4.2.1. Design

4.2.2. Construction

4.2.3. Installation

4.2.4. Regulatory Approval

4.3. Economic Impacts

Discussion of the economic impacts of transitioning to new technologies.

4.4. Environmental Benefits

Discussion of the environmental benefits of transitioning to new technologies.

5. CONCLUSIONS

Panel position and recommendation to DEC. Majority and Minority opinions will be documented.