

PHONE: 206 281 3535  
FAX: 206 281 7110

300 Elliott Avenue West  
Seattle, Washington 98119

September 11, 2009

Ms. Denise Koch, Program Manager  
ADEC/Division of Water CPVEC  
410 Willoughby Avenue, Suite 303  
P.O. Box 111800  
Juneau, AK 99811-1800

RE: Notice Letter of September 9, 2009 from D. Koch to W. Morani regarding  
Source Reduction Activities

Dear Ms. Koch:

We write to respond to the referenced letter requesting information about Holland America Line activities conducted in 2009 under our approved Source Reduction Evaluation (SRE) plan. This subject was discussed with members of NWCA on a conference call with yourself and other ADEC representatives on August 12th, during which you described your concerns that Ocean Rangers had not reported evidence of SRE-related activity on board. A number of operating lines expressed at that time that the majority of the SRE activities were being conducted in the engineering departments of their shore offices, and that it was not surprising that ship-board personnel may not have had much visibility of the efforts being undertaken. We assume that your request is a follow-up to that discussion.

We respectfully note that the due date for the next report, as set forth in section 1.9.12 of the Alaska Cruise Ship General Permit, is January 14, 2010. We are well on track to meet that deadline and expect that your questions will be answered in that report. We have also committed in our SRE plan to provide by November 15 an interim report on the pilot study we and Princess are conducting. Again, we are well on track to meet that deadline. Given that this request for information was not anticipated by us or required under the permit, you will understand that we cannot answer all of your questions with the completeness we will be able to provide in our January report.

Having said that, we provide answers below, to the extent we are able to do so and based on available data and analysis. The numbering corresponds to the questions in your letter:

1. **Review of Steiner products.** We have submitted the results of prior reviews in prior reports. In addition, an end of season analysis of effluent data will evaluate contaminant concentrations as well as overall water usage to determine whether such an effort is warranted. This will be addressed in the January 14<sup>th</sup> 2010 Annual Progress Report.
2. **Water Sourcing.** Bunkering vs. produced on board. This work is in progress. These values will be significantly affected by the strategic bunkering activities initiated in August of this year (see 3 below). We will be reporting on this data in the 2010 Annual Progress Report.
3. **Strategic water sourcing strategy.** HAL used the first three months of the Alaska season to establish a baseline for this year. During this baseline period, we gathered additional data on bunkered water quality as well as stored potable water on board comprised of both bunkered and evaporated water.

On August 14, 2009, instructions were issued to the fleet to commence implementing the strategic sourcing plan described in the table below.

<b>Ship</b>	<b>Program</b>	<b>Ranked Preferred Water Sources</b>	<b>Water Sources to be Minimized</b>
<b>SADM</b>	7 Day North Bound Glacier Discovery 7 Day South Bound Glacier Discovery	Haines Vancouver Seward Evaporator	Juneau Skagway
<b>VEDM</b>	7 Day North Bound Glacier Discovery 7 Day South Bound Glacier Discovery	Haines Vancouver Seward Evaporator	Juneau Skagway
<b>RYDM</b>	7 Day North Bound Glacier Discovery 7 Day South Bound Glacier Discovery	Haines Vancouver Seward Evaporator	Juneau Skagway

<b>ZADM</b>	7 Day Glacier Bay	Seattle Evaporator Juneau	Ketchikan
<b>VODM</b>	7 Day Glacier Bay Inside Passage	Vancouver Evaporated Ketchikan	Skagway

As you no doubt understand, this cannot be an absolute directive. Vessels must maintain an adequate water supply, and therefore a vessel has the discretion to bunker from a less favorable source if necessary.

We will conduct an end of season review with the complete data set and report on the complete data set in the next Annual Progress Report due January 14<sup>th</sup> of 2010.

- 4. Laundry Ozonator.** Initial discussions with a vendor were unsuccessful. We have since purchased equipment from another supplier (ArtiClean, represented by Automated Laundry Systems). The equipment is slated for delivery on board Ryndam in Seward on September 18<sup>th</sup>, with installation shortly thereafter.

In anticipation of the installation of this equipment, we have data on concentrations of constituents of concern "before" and "after" the laundry operations. This data will enable us to evaluate the impacts of the new technology post-Alaska season. Our analysis will be reported in the next Annual Progress Report due January 14<sup>th</sup> of 2010.

- 5. Volendam Nitrifying bacteria.** As a result of complications with the Volendam's system (of which you are separately aware), we will need to change the test ship to Zaandam.

We have qualified a vendor and established ordering data in our purchasing system to facilitate on-going supply. Given that Zaandam will soon leave Alaska and commence a Hawaii itinerary, we have concluded that tests would be most optimally performed after the Zenon treatment plant adapts to the different operating environment (higher ocean temperatures, different food inputs in gray water, etc.). We plan to commence implementation during the fourth Hawaii voyage, which will begin on November 22, 2009.

- 6. Water Conservation.** We have implemented a successful water conservation project, showing 13% less water consumed than in 2008 fleet-wide. We will isolate and analyze the information specific to the Alaska fleet. We will also evaluate, based on this data, whether the lower

consumption of water has had an appreciable impact on the *concentrations* of contaminants in the discharge. Our analysis will be reported in the next Annual Progress Report due January 14<sup>th</sup> of 2010.

7. **Golden Princess ammonia reduction trial.** As you will recall, the Phase I effort was essentially a characterization of the waste water influent to the treatment systems, and the subsequent effluent ammonia concentrations. The next phase (which has been ongoing this summer on the Golden Princess) will yield the information we need to establish equipment modifications and/or operational changes. We will report on the status of this trial in the Annual Progress Report due January 14, 2010.

The above discussion is a good summary of our project activity to date. As you can see, we are and have been working diligently on the source reduction activities to which we committed in our approved Source Reduction Evaluation plan. If we are able to complete our annual report before January 14, 2010 we will do so and provide it to you. If you have further concerns at this time, I believe a phone discussion would prove most beneficial as a precursor to future correspondence.

Sincerely,



William J. Morani, Jr.  
Vice President, Environmental Management Systems

WJM/jg