



Consolidated Additional Observations

This questionnaire combines all standard Additional Observation Questions in one condensed questionnaire.

1. SOx Emissions Controls
2. Ballast Water Project
3. Combustion Source Project
4. Food Waste Project
5. Sea Intake Project

Findings can be reported in the spaces provided for each item; feel free to use additional space for notes and information. Sketches, diagrams, photos of handwritten notes, or copies of schematics are welcome.

Several questions are checks on previous Additional Observations, check these against the previous observations. If a ship is required to have an additional observation project on a section below, skip the section below. For example if a combustion source project is required leave the section in this project blank.

A: General Information

Report Start Date:	May 20, 2018
Ocean Ranger starting report:	philip.parent
Ship Name:	Regent/Oceania 7 Seas Mariner
Ship Code:	GMA
Is this a revision of a previous report (Y/N)?	No

1: SOx Emissions Controls

1.1 Describe the SECA compliance plan.	Burns low sulfur MGO (less than .1%)
1.1 Completed by:	Philip Parent (philip.parent)
1.2 How does the vessel control SOX emissions in the ECA? Provide description. If the vessel used low sulfur fuels in AK describe the fuel switches and which combustion sources are operated on low fuel sulfur, and when.	Ship only burns low sulfur MGO in Alaska waters
1.2 Completed by:	Philip Parent (philip.parent)
1.3 Is the vessel operating or installing an exhaust gas scrubber system in the 2018 Alaska Cruise Season? If yes, complete section 1A. Otherwise skip to section 2.	No

1.a: SOx Emissions Controls

2: Ballast Water

2.1 Check the previous Additional Observation Reports (section 1.1) list of tanks used for Ballast Water storage. Including volumes and locations. List any changes.	All 12 Ballast Water and Heeling tank volumes are the same as recorded in the 2017 Ballast Water project.
2.1 Completed by:	Philip Parent (philip.parent)
2.2 Are ballast water tanks used for wastewater storage?	All Ballast Water tanks can be used for WW storage. Clean water Ballast Water tanks: 6001 SW Fore Peak (Fr 242-259) 341.34m3 6103 SW DB Tank (Fr 142-145) 124.0m3 6113 SW DB Tank (Fr 114-128) 138.0m3 6203 SW DB Tank (Fr 132-145) 124.0m3 6213 SW DB Tank (Fr 114-128) 138.0m3 Ballast Water tanks used for Gray Water retention: 6002 SW DB tank (Fr 218-232) 431.5m3 6015 SW DB tank (Fr 11-29) 246.5m3 6025 SW DB tank (Fr 46-54) 70.6m3 6114 SW DB tank (Fr 74-94) 132.0m3

6124 SW DB tank (Fr 54-69) 108.6m3
6214 SW DB tank (Fr 74-94) 132.0m3
6224 SW DB tank (Fr 54-69) 108.6m3

2.2 Completed by:

Philip Parent (philip.parent)

2.3 Ballast Water system: brief description of the combined piping system if tanks used for both.

Ballast Water system utilizes 12 Ballast tanks and two Heeling tanks as described above. All 12 Ballast Water tanks can be used for GW retention. As listed above, 5 tanks are currently Clean Ballast Water tanks and 7 Ballast Water tanks are used for GW storage. Common BW service piping runs fore and aft with valves at each tank or either BW or GW retention. One Ballast Water Pump with a capacity of 200m3/hr is used for BW transfer operations and one 30m3/hr Eductor Pump is used for stripping tanks.

2.3 Completed by:

Philip Parent (philip.parent)

2.4 Ballast Water treatment installation? If yes, describe operation/system specifics.

The Clean BW tanks receive a triple flushing procedure prior to filling, if necessary. An Alpha-Laval Pure-Ballast Water 3.0 Flow 250 PB-00526 Ballast Water treatment system installed in the Chiller AC space is also used. Max flow rate of 250m3/hr.

2.4 Completed by:

Philip Parent (philip.parent)

2.5 Ballast Water operations in AK waters (overboard intake/discharge, etc.)? Include the last date of ballast water discharges. Typically in the ballast water logs.

Last BW Operations logged on 11/04/18 was deballasting tank 6213:
Start: 10:15 - 34°49.4'N 039°14.6W Begin: 133m3
Stop: 11:40 - 34°58.6'N. 039°46.1W Stop: 1m3

2.5 Completed by:

Philip Parent (philip.parent)

3: Combustion Sources

3.1 Are there any changes from the previous Additional Observation projects (Section 2.1) on the propulsion system question on brief description of propulsion and power systems used on board (Diesel direct/reduction gears/PTO's DE, FP, CPP Azipod, etc.)?

No changes on propulsion and power systems from the 2017 report

3.1 Completed by:

Wesley Whittier (wesley.whittier)

3.2 Are there any changes from the previous Additional Observation projects (Section 1.1) on the list of the combustion equipment used for Power/Propulsion (make/model/output)?

No changes on the list of combustion equipment used for power/propulsion since the 2017 report.

3.2 Completed by:

Wesley Whittier (wesley.whittier)

3.3 Are there any changes from the previous Additional Observation projects (section 3) on the incinerators make, model, fuel used, capacity?

No change on incinerators since the 2017 report

3.3 Completed by:

Wesley Whittier (wesley.whittier)

3.4 Average Hotel power (kW) in port and underway?

In port approximately 3000kw; at sea approximately 3500kw

3.4 Completed by:

Wesley Whittier (wesley.whittier)

3.5 Average fuel consumption in port and underway?

In port approximately 0.8MT/hr; at sea approximately 1.1MT/hr

3.5 Completed by:

Wesley Whittier (wesley.whittier)

4: Food Waste Garbage Handling

4.1 How is food waste handled and disposed of?

Food waste that can be run through pullers is processed through pullers. Food waste that can not be put through pullers is stored in Cold Storage compartment in Garbage Room. All food waste will be discharged overboard when vessel is operating outside

4.1 Completed by:	12NM. Food waste not discharged overboard is offloaded in Vancouver. Wesley Whittier (wesley.whittier)
4.2 Average food waste production per day (kgs/day)?	2 cubic meters per day
4.2 Completed by:	Wesley Whittier (wesley.whittier)
4.3 Is the food waste de-watered? If yes, provide dewatering volumes and handling information.	Yes; 5-10 cubic meters per day Designated "Pulper Tank" 2055 for de-watering of food waste. This tank is 158 cubic meters. This tank can be discharged only when the ship is outside 12NM. Grease trap removes grease and grease is landed to shoreside vendor.
4.3 Completed by:	Wesley Whittier (wesley.whittier)
4.4 How are glass bottles, broken crockery, and ceramics handled?	Segregated and offloaded in Vancouver
4.4 Completed by:	Wesley Whittier (wesley.whittier)
4.5 How is food waste monitored and/or recorded?	Records are kept in the Garbage Record Book which is located in Environmental Officer's office
4.5 Completed by:	Wesley Whittier (wesley.whittier)

5: Sea Water Intakes

5.1 List all of the seawater intakes (chest); include the locations, frame, side (PS/SB) or compartment.	(2) intakes in DG Room for engines; port and stbd (1) intake Purifier Room for evap; port (2) intakes Chiller Room for A/C; port and stbd (1) intake Chiller Room for RO unit; port
5.1 Completed by:	Wesley Whittier (wesley.whittier)
5.2 List filtration systems for each intake. Describe how filter systems are maintained. What is the frequency of cleaning? Is this performed in Alaska?	Basket type filters; Staff Engineer responsible for maintenance; monthly cleaning is normal unless pressure drop requires extra cleaning. Monthly cleaning is done in Alaska but there is usually very little debris in basket in cold waters.
5.2 Completed by:	Wesley Whittier (wesley.whittier)
5.3 How is debris and mud from filtration/strainers handled?	Offloaded as garbage
5.3 Completed by:	Wesley Whittier (wesley.whittier)
5.4 Marine Growth Protection Systems in the sea intakes. Description of the control systems and information on chemicals if used.	No chemicals used; anodes
5.4 Completed by:	Wesley Whittier (wesley.whittier)
5.5 Hull cleaning in place in Alaska 2018?	No hull cleaning will be performed in Alaska 2018
5.5 Completed by:	Wesley Whittier (wesley.whittier)

6: General

6.1 Is vessel crew cooperative on this project?	Yes; When Wes worked as an EO with Princess Cruise Lines he worked closely with the Safety Engineer, Yanco. Yanco has since left Princess Cruise Lines and now works as an engineer for Regent on the Seven Seas Mariner. He was very helpful with this project.
6.1 Completed by:	Wesley Whittier (wesley.whittier)
6.2 Do you feel the vessel has a clear understanding of compliance requirements?	Yes; this is a smaller cruise ship and the crew is very knowledgeable and responsible.
6.2 Completed by:	Wesley Whittier (wesley.whittier)

6.3 Are there other remarks/ comments the OR wants to share?

All the crew were very generous with their
time and knowledge on the Seven Seas
Mariner

6.2 Completed by:

philip.parent
wesley.whittier

Z: Signature & Submit

Ocean Rangers contributing to this report:

Philip Parent (philip.parent)
Wesley Whittier (wesley.whittier)

Ocean Ranger Signature:

A handwritten signature in black ink, appearing to read 'Wesley Whittier', written in a cursive style.