



Amy Jankowiak  
Water Quality Program  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160<sup>th</sup> Avenue SE  
Bellevue, WA 98008-5452

Dear Ms. Jankowiak:

Re: Washington Cruise MOU Compliance Report: 2018 Cruise Season

Carnival Legend  
IMO #9224726  
EPA # FLR000093948-Florida

Section 9 of the Memorandum of Understanding for Cruise Operations in Washington State (signed April 20, 2004 and amended March, 2016), requires an annual submittal detailing the compliance with the MOU for the each vessel within the NWCA that calls to a port in Washington for the previous cruise season. Please accept this letter on behalf of Carnival Cruise Line for the 2018 cruise season.

The following ship operated Washington waters during 2018:

- Carnival Legend operated in Seattle, Washington from May 15<sup>th</sup> through September 5<sup>th</sup> 2018, calling on Seattle May 15, 22, 29; June 5, 12, 19, 26; July 3, 10, 17, 24, 31; August 7, 14, 21, 28; and September 5, a total of 17 calls.

Carnival Legend's operations in Washington State addressed the following key provisions of the MOU as follows:

Section 2.1 Wastewater Management. Carnival Legend managed its wastewater in compliance with this section as follows:

- In compliance with Section 2.1.1 and 2.1.2, Carnival Legend held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters. Based on a thorough review of ships' logs and



records we certify that the Carnival Legend, equipped with Marine Sanitation Device Type II, complied with these provisions of the MOU. Sewage and Grey Water Discharge Logs from May 15<sup>th</sup> – September 5<sup>th</sup> for the Carnival Legend are attached.

Section 2.1.3 (C)(1-3) Shellfish and “upset” conditions. Based on a review of Carnival Legend ship’s logs and records, Carnival Cruise Line certifies that we complied with the prohibition on discharging within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology and that any “upset” conditions were stopped and immediately reported to the Washington State Department of Health.

Section 2.1.3 (C)(4-10) Other discharge approval requirements. Based on a review of Carnival Legend ship’s logs and records and other knowledge, Carnival Cruise Line certifies that the requirements in this section were met.

Section 2.1.4 Discharge of Residual Solids. Based on a review of Carnival Legend ships’ logs and records, Carnival Cruise Line certifies that we complied with the prohibition on discharging residual solids coming from any type of treatment system within 12 nautical miles from shore and within the Olympic Coast National Marine Sanctuary. Carnival Cruise Line will make these records available to Ecology upon request.

Section 2.2.1 through 2.2.4 Hazardous Waste Management. Based on a review of Carnival Legend ship’s logs and records, Carnival Cruise Line certifies that Hazardous Wastes were managed in accordance with these sections of the MOU. Hazardous wastes were collected and disposed of through approved vendors while the vessel called Port of Seattle in accordance with the Washington State Department of Ecology and RCRA regulations. Garbage Record Receipts are attached.

Section 6. Marine Mammal Protection Act, Invasive Species Act, and the Washington Ballast Water Management Act. Based on a review of Carnival Legend ship’s logs and records, Carnival Cruise Line certifies that the provisions of the above laws were implemented as required by these laws. Carnival Cruise Line will make these records available to Ecology upon request. The Carnival Legend did not load or discharge any ballast water while in Seattle (Washington State Waters) during this season.



Section 9. Immediate self-reporting to Ecology of any incidences of non-compliance with any provisions of the MOU. Based on a review of the Carnival Legend ship's logs and records, there were no incidences of non-compliance to be reported to Ecology.

I hereby certify that the above information is true and can be verified through documentation. If you have any questions or concerns, please call me at 305-599-2600 ext. 64691.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. Pruitt", with a long horizontal flourish extending to the right.

Richard Pruitt  
VP Environmental Operations  
Carnival Cruise Line

CC: Carnival Legend Captain  
Carnival Legend Chief Engineer  
Carnival Legend Environmental Officer  
Richard Pruitt  
Domenico Rognoni  
Benton Lobo  
Matteo Cavallarin  
Natalie Vecchione



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Amy Jankowiak  
Water Quality Program  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160<sup>th</sup> Avenue SE  
Bellevue, WA 98008-5452

Dear Ms. Jankowiak:

Re: Washington Cruise MOU Compliance Report: 2018 Cruise Season

Section 9 of the Memorandum of Understanding for Cruise Operations in Washington State (April 20, 2004 and amended May 19, 2008), requires an annual submittal detailing the compliance with the MOU for the each vessel within the NWCA that calls to a port in Washington for the previous cruise season. Please accept this letter on behalf of Celebrity Cruise Lines for the 2018 cruise season.

The following ships operated Washington waters during 2018:

- *Celebrity Infinity*, May 25; September 03.
- *Celebrity Solstice*, May 10, 11, 17, 18, 25, 31; June 01, 07, 08, 14, 15, 21, 22, 28, 29; July 05, 06, 12, 13, 19, 20, 26, 27; August 02, 03, 09, 10, 16, 17, 23, 24, 30, 31; September 06, 07, 13, 14, 20, 21.

*Celebrity Solstice and Celebrity Infinity* operations in Washington State addressed the following key provisions of the MOU as follows:

Section 2.1 Wastewater Management. *Celebrity Solstice and Celebrity Infinity* managed its wastewater in compliance with this section as follows:

- In compliance with Section 2.1.1 and 2.1.2, *Celebrity Solstice and Celebrity Infinity* held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters. List the ships that held their effluent and describe the type of treatment system each ship in this category has. Based on a thorough review of ships' logs and records we certify that our ship(s) complied with these provisions of the MOU. *Celebrity Solstice and Celebrity Infinity* will make these records available to Ecology upon request.



Royal Caribbean International



Celebrity Cruises



Azamara Club Cruises



TUI Cruises



Pullmantur Cruises



SkySea Cruise Line



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Section 2.1.3 (C)(1-3) Shellfish and “upset” conditions. Based on a review of *Celebrity Solstice* and *Celebrity Infinity* ship’s logs and records, *Celebrity Solstice* and *Celebrity Infinity* certifies that we complied with the prohibition on discharging within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology and that any “upset” conditions were stopped and immediately reported to the Washington State Department of Health.

Section 2.1.3 (C)(4-10) Other discharge approval requirements. Based on a review of *Celebrity Solstice* and *Celebrity Infinity* ship’s logs and records and other knowledge, *Celebrity Solstice* and *Celebrity Infinity* certifies that the requirements in this section were met.

Section 2.1.4 Discharge of Residual Solids. Based on a review of *Celebrity Solstice* and *Celebrity Infinity* ships’ logs and records, *Celebrity Solstice* and *Celebrity Infinity* certifies that we complied with the prohibition on discharging residual solids coming from any type of treatment system within 12 nautical miles from shore and within the Olympic Coast National Marine Sanctuary. *Celebrity Solstice* and *Celebrity Infinity* will make these records available to Ecology upon request.

Section 2.2.1 through 2.2.4 Hazardous Waste Management. Based on a review of *Celebrity Solstice* and *Celebrity Infinity* ship’s logs and records, *Celebrity Solstice* and *Celebrity Infinity* certifies that Hazardous Wastes were managed in accordance with these sections of the MOU. *Celebrity Solstice* and *Celebrity Infinity* will make these records available to Ecology upon request. Add a description of how hazardous waste is managed while in Washington.

Section 6. Marine Mammal Protection Act, Invasive Species Act, and the Washington Ballast Water Management Act. Based on a review of *Celebrity Solstice* and *Celebrity Infinity* ship’s logs and records, *Celebrity Solstice* and *Celebrity Infinity* certifies that the provisions of the above laws were implemented as required by these laws. *Celebrity Solstice* and *Celebrity Infinity* will make these records available to Ecology upon request. Add a description of how compliance with these laws was achieved.

Section 9. Immediate self-reporting to Ecology of any incidences of non-compliance with any provisions of the MOU. During the 2018 season the *Celebrity Solstice* and *Celebrity Infinity* did not have any incidences of non-compliance.



Royal Caribbean International



Celebrity Cruises



Azamara Club Cruises



TUI Cruises



Pullmantur Cruises



SkySea Cruise Line



ROYAL CARIBBEAN CRUISES LTD.

I hereby certify that the above information is true and can be verified through documentation.  
If you have any questions or concerns, please call me at 305-539-4434.

Sincerely,

Patrik Dahlgren  
Senior Vice President  
Global Marine Operations  
Royal Caribbean Ltd.  
pdahlgren@celebrity.com



Royal Caribbean International



Celebrity Cruises



Azamara Club Cruises



TUI Cruises



Pullmantur Cruises



SkySea Cruise Line





Amy Jankowiak  
Water Quality Program  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160<sup>th</sup> Avenue SE  
Bellevue, WA 98008-5452

November 13, 2018

Dear Ms. Jankowiak:

Re: Washington Cruise MOU Compliance Report: 2018 Cruise Season

Section 9 of the Memorandum of Understanding for Cruise Operations in Washington State April 20, 2004 (Amended March 6, 2016), requires an annual submittal detailing the compliance with the MOU for the each vessel within the NWCA that calls to a port in Washington for the previous cruise season. Please accept this letter on behalf of Crystal Cruises for the 2018 cruise season.

The following ships operated Washington waters during 2018:

- Crystal Symphony; Seattle - July 11, 2018.

Crystal Cruises operations in Washington State addressed the following key provisions of the MOU as follows:

Section 2.1 Wastewater Management. Crystal Symphony managed its wastewater in compliance with this section as follows:

- In compliance with Section 2.1.1 and 2.1.2, Crystal Symphony held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters. List the ships that held their effluent and describe the type of treatment system each ship in this category has. Based on a thorough review of ships' logs and records we certify that our ship(s) complied with these provisions of the MOU. Crystal Symphony will make these records available to Ecology upon request.

Section 2.1.3 (C)(1-3) Shellfish and "upset" conditions. Based on a review of Crystal Symphony ship's logs and records, Crystal Symphony certifies that we complied with the prohibition on discharging within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology and that any "upset" conditions were stopped and immediately reported to the Washington State Department of Health.

Section 2.1.3 (C)(4-10) Other discharge approval requirements. Based on a review of Crystal Symphony ship's logs and records and other knowledge, Crystal Symphony certifies that the requirements in this section were met.

Section 2.1.4 Discharge of Residual Solids. Based on a review of Crystal Symphony ships' logs and records, Crystal Symphony certifies that we complied with the prohibition on discharging residual solids coming from any type of treatment system within 12 nautical miles from shore and within the Olympic Coast National Marine Sanctuary. Crystal Symphony will make these records available to Ecology upon request.

Section 2.2.1 through 2.2.4 Hazardous Waste Management. Based on a review of Crystal Symphony ship's logs and records, Crystal Symphony certifies that Hazardous Wastes were managed in accordance with these sections of the MOU. Crystal Symphony will make these records available to Ecology upon request. Add a description of how hazardous waste is managed while in Washington.

- Hazardous Waste is typically held onboard and discharged ashore in either Vancouver or San Francisco.

Section 6. Marine Mammal Protection Act, Invasive Species Act, and the Washington Ballast Water Management Act. Based on a review of Crystal Symphony ship's logs and records, Crystal Symphony certifies that the provisions of the above laws were implemented as required by these laws. Crystal Symphony will make these records available to Ecology upon request. Add a description of how compliance with these laws was achieved.

- No ballast operations were held in Washington State waters.

Section 9. Immediate self-reporting to Ecology of any incidences of non-compliance with any provisions of the MOU. Describe any incidences of non-compliance and when they were reported to Ecology and any corrective actions taken.

- No non-compliance incidents to report for the 2018 season.

I hereby certify that the above information is true and can be verified through documentation. If you have any questions or concerns, please call me at 310-203-4467.

Sincerely,



Johnny Diep  
Director Marine Compliance  
Crystal Cruises

Amy Jankowiak  
Water Quality Program  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160<sup>th</sup> Avenue SE  
Bellevue, WA 98008-5452

Dear Ms. Jankowiak:

Re: Washington Cruise MOU Compliance Report: 2018 Cruise Season

Section 9 of the Memorandum of Understanding for Cruise Operations in Washington State signed on April 4, 2016, requires an annual submittal detailing the compliance with the MOU for the each vessel within the NWCA that calls to a port in Washington for the previous cruise season. Please accept this letter on behalf of Holland America Group for the 2018 cruise season.

The following Holland America Group ships operated Washington waters during 2018. Attached is a list of the specific dates of the Seattle calls.

- Holland America Line
  - AMSTERDAM
  - EURODAM
  - NIEUW AMSTERDAM
  - ZAANDAM
- Seabourn Cruise Line
  - SEABOURN SOJOURN
- Princess Cruise Line
  - EMERALD PRINCESS
  - GRAND PRINCESS
  - RUBY PRINCESS

Holland America Group's operations in Washington State addressed the following key provisions of the MOU as follows:

Section 2.1 Wastewater Management. Holland America Group managed its wastewater in compliance with this section as follows:

- In compliance with Section 2.1.1 and 2.1.2, Holland America Group held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters. Based on a thorough review of ships' logs and records we certify that our ship(s) complied with these provisions of the MOU. Holland America Group will make these records available to Ecology upon request. Below is a list of the vessels that called in Washington state and the type of MSD they are equipped with.



- Holland America Line
  - AMSTERDAM Hamworthy Type II MSD
  - EURODAM Hamworthy AWWYS
  - NIEUW AMSTERDAM Hamworthy AWWTS
  - ZAANDAM Zenon AWWTS
- Seabourn Cruise Line
  - SEABOURN SOJOURN Hamworthy AWWTS
- Princess Cruise Line
  - EMERALD PRINCESS DeNora AWWTS
  - GRAND PRINCESS Hamworthy AWWTS
  - RUBY PRINCESS Hamworthy AWWTS

Section 2.1.3 (C)(1-3) Shellfish and “upset” conditions. Based on a review of Holland America Group ship’s logs and records, Holland America Group certifies that we complied with the prohibition on discharging within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology and that any “upset” conditions were stopped and immediately reported to the Washington State Department of Health.

Section 2.1.3 (C)(4-10) Other discharge approval requirements. Holland America Group did not submit documentation as described in sections 2.1.3 A. or B. of the MOU.

Section 2.1.4 Discharge of Residual Solids. Based on a review of Holland America Group’s ships’ logs and records, Holland America Group certifies that we complied with the prohibition on discharging residual solids coming from any type of treatment system within 12 nautical miles from shore and within the Olympic Coast National Marine Sanctuary. Holland America Group will make these records available to Ecology upon request.

Section 2.2.1 through 2.2.4 Hazardous Waste Management. Based on a review of Holland America Group’s ship’s logs and records, Holland America Group certifies that Hazardous Wastes were managed in accordance with these sections of the MOU. Holland America Group will make these records available to Ecology upon request. Hazardous waste was not offloaded from Holland America Group vessels in Washington State in 2018.

Section 6. Marine Mammal Protection Act, Invasive Species Act, and the Washington Ballast Water Management Act. Based on a review of Holland America Group ship’s logs and records, Holland America Group certifies that the provisions of the above laws were implemented as required by these laws Holland America Group will make these records available to Ecology upon request. Holland America Group has developed internal procedures designed to ensure compliance with all ballast water regulations. This procedure is in HESS-MS section ENV 1500 Ballast Water & Biofouling Management.

Section 9. Immediate self-reporting to Ecology of any incidences of non-compliance with any provisions of the MOU. No instances of non-compliance occurred during 2018.

I hereby certify that the above information is true and can be verified through documentation. If you have any questions or concerns, please call me at 206-626-3867.

Sincerely,

A handwritten signature in black ink, appearing to read "Daniel E. Grabb". The signature is stylized and cursive.

Daniel E. Grabb

Manager Environmental Ops  
Holland America Group

# NORWEGIAN CRUISE LINE HOLDINGS LTD.

Amy Jankowiak  
Water Quality Program  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160th Avenue SE  
Bellevue, WA 98008-5452

Dear Ms. Jankowiak:

Re: Washington Cruise MOU Compliance Report: 2018 Cruise Season

Section 9 of the Memorandum of Understanding for Cruise Operations in Washington State (March 4, 2011), requires an annual submittal detailing the compliance with the MOU for the each vessel within the NWCA that calls to a port in Washington for the previous cruise season. Please accept this letter on behalf of Norwegian Cruise Line (NCL) for the 2018 cruise season.

The following ships operated Washington waters during 2018:

- Norwegian Bliss– Port of Seattle
  - 5/29 – 6/3, 6/8 – 6/10, 6/15 – 6/17, 6/22 – 6/24, 6/29 – 7/1, 7/6 – 7/8, 7/13 – 7/15, 7/20 – 7/22, 7/27 – 7/29, 8/3 – 8/5, 8/10 – 8/12, 8/17 – 8/19, 8/24 – 8/26, 8/31 – 9/2, 9/7 – 9/9, 9/14 – 9/16, 9/21 – 9/23, 9/28 – 9/29 and 10/1
  -

**Norwegian Bliss** operations in Washington State addressed the following key provisions of the MOU as follows:

Section 2.1 Wastewater Management. Norwegian Bliss managed its wastewater in compliance with this section as follows:

- In compliance with Section 2.1.1 and 2.1.2, Norwegian Bliss held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters. Norwegian Bliss is fitted with The Scanship System AWP – 60 Treatment Plant, whose peak performance is designed for 80 m<sup>3</sup> / hr. Wastewater is treated through the AWP system and transferred to Treated Waste Water Holding Tanks while in WA waters.

The Scanship Advanced Wastewater Purification (AWP) consists of 6 treatment steps:

1. Mechanical screening of black water.
2. Filtrate mixed with GW from GW mixing Tanks T49-T50.
3. Biological process to convert dissolved organic matter into bio sludge and to remove nitrogen biologically with nitrification and denitrification.



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4. Removal of bio sludge with dissolved air flotation with chemicals consist of dry-polymer and coagulant for coagulation.
5. Polishing filter for separation of suspended solids.
6. UV disinfection to remove all micro-organisms / bacteria.

All wastewater streams except bilge water are treated in one common advanced wastewater purification plant (AWP). Different are only the collecting systems and the pre-treatment of the various wastewater streams. The wastewater streams are divided in accommodation, laundry, galley, food-waste reject, condensate from external dryer and black water. Galley water is loaded with grease and enters for this reason as a first processing step grease separators. These separators remove grease and heavy sediments by gravity out of the water.

Downstream from the biological step, wastewater is treated chemically to remove color, nutrients and micro-particles. This treatment step is based on particle coagulation in a flocculator, followed by particle separation in a flotation chamber where particles form sludge. The sludge is then separated with dissolved air and skimmed off by a scraper. Sludge is pumped to the bio sludge tank T 14, while treated wastewater is pumped to the polishing filter downstream. The functionality of the sludge tank is a storage tank. After this process the sludge is dewatered via decanters. The separated solids are burned, reject water from the decanter process is led into the GW mixing tank WTC 12. The bio sludge tank is divided into two individual tanks in order to allow easy maintenance. The polishing filter separates solids from the wastewater as it passes through a slowly rotating drum with filter cloths. The liquid solids are collected and returned into the mixing tank, while particle- and color-free wastewater is pumped through the final treatment step for exposure to a strong UV radiation "killing" remaining bacteria and viruses. The AWP effluent is continuously analyzed for suspended solids in the UV step prior to being pumped to clean holding or pumped directly overboard in accordance with specified requirements.

Based on a thorough review of ships' logs and records we certify that our ship(s) complied with these provisions of the MOU. NCL will make these records available to Ecology upon request.

Section 2.1.3 (C)(1-3) Shellfish and "upset" conditions. Based on a review of Norwegian Bliss's logs and records, NCL certifies that we complied with the prohibition on discharging within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology. Any "upset" conditions would be stopped and immediately reported to the Washington State Department of Health, but there were no issues of non-compliance.



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Section 2.1.3 (C)(4-10) Other discharge approval requirements. Based on a review of Norwegian Bliss's logs and records and other knowledge, NCL certifies that the requirements in this section were met.

Section 2.1.4 Discharge of Residual Solids. Based on a review of Norwegian Bliss's logs and records, NCL certifies that we complied with the prohibition on discharging residual solids coming from any type of treatment system within 12 nautical miles from shore and within the Olympic Coast National Marine Sanctuary. NCL will make these records available to Ecology upon request.

Section 2.2.1 through 2.2.4 Hazardous Waste Management. Based on a review of Norwegian Bliss's logs and records, NCL certifies that Hazardous Wastes were managed in accordance with these sections of the MOU. NCL will make these records available to Ecology upon request. Onboard, all Hazardous Waste materials are collected, sorted, and stored in various correctly labeled UN rated Drums (DF or DM) or cardboard boxes(CF) and palletized within the dedicated Hazardous Waste Storage Room. No Hazardous Waste Offloaded in Washington in 2018. All Hazardous waste was offloaded in Victoria, BC.

Section 6. Marine Mammal Protection Act, Invasive Species Act, and the Washington Ballast Water Management Act. Based on a review of Norwegian Bliss's logs and records, NCL certifies that the provisions of the above laws were implemented as required by these laws. NCL will make these records available to Ecology upon request.

The Norwegian Bliss complies with the Marine Mammal Protection Act 16 USC Ch. 31 by first ensuring that the bridge watch-standers receive training using speed and course changes to avoid contact with marine mammals. By receiving the training, the Norwegian Bliss lessens the chances of: (1) for any person subject to the jurisdiction of the United States or any vessel or other conveyance subject to the jurisdiction of the United States to take (harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill) any marine mammal on the high seas. Speed was reduced in areas where speed reduction was requested due to marine mammals.

The Chief Officer is to be informed any time the ship's Ballast Water condition has been changed. The Norwegian Bliss exchanges ballast water in open ocean in accordance with their Ballast Water Management Plan and Company Policy. The Ballast Reporting Form (and amended BRF) are sent to the appropriate authorities. The Norwegian Bliss is fitted with a Ballast Treatment System; Alfa Laval Pure Ballast 3.1 Flow 500

Section 9. Immediate self-reporting to Ecology of any incidences of non-compliance with any provisions of the MOU. The Norwegian Bliss has no incidents of non-compliance to report.



# NORWEGIAN CRUISE LINE HOLDINGS LTD.

I hereby certify that the above information is true and can be verified through documentation. If you have any questions or concerns, please call me at 305-436-4349.

Sincerely,



Sarah Ferguson-Brown  
Director, Environmental Operations  
Norwegian Cruise Line Holdings Ltd.



# NORWEGIAN CRUISE LINE HOLDINGS LTD.

Amy Jankowiak  
Water Quality Program  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160th Avenue SE  
Bellevue, WA 98008-5452

Dear Ms. Jankowiak:

Re: Washington Cruise MOU Compliance Report: 2018 Cruise Season

Section 9 of the Memorandum of Understanding for Cruise Operations in Washington State (March 4, 2011), requires an annual submittal detailing the compliance with the MOU for the each vessel within the NWCA that calls to a port in Washington for the previous cruise season. Please accept this letter on behalf of Norwegian Cruise Line (NCL) for the 2018 cruise season.

The following ships operated Washington waters during 2018:

- Norwegian Jewel—
  - 5/25 – 26, 6/3 – 4

**Norwegian Jewel** operations in Washington State addressed the following key provisions of the MOU as follows:

Section 2.1 Wastewater Management. Norwegian Jewel managed its wastewater in compliance with this section as follows:

In compliance with Section 2.1.1 and 2.1.2, Norwegian Jewel held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters. . N. Jewel is fitted with The Mussel FA 40 Sewage Treatment Plant, designed for 60m<sup>3</sup>/hrs. Five step process. 1. Screening 2. Biological 3. Flotation 4. Polishing 5. Disinfection. Galley Water, Gray Water, and Laundry Water are collected in GW Collection Tanks; Black Water is held in the vacuum units. All GW and BW is pumped to Drum Screens, which removes and sends sludge and particles to Sludge Holding Tank 15P (Bio-sludge). From the Drum Screens, the water is led to a small Buffer Tank and is then pumped to 18C (GW/BW Mixing Tank). From here the water is pumped to Bio Tank 1 then to Bio Tank 2. After the Bio Tanks, polymer and coagulant is added to the water and pumped into the Flotation Module, where more sludge is separated from the water and pumped to 15P. The water goes from the Flotation Module and into the Polishing Screen where it is finely filtered before passing through the UV units. If the treated water after the UV Units is within the limits of the Turbidity meter/ TSS (<30 mg/l limit setting) it is allowed to go overboard via WTC13 (if the ship operating parameters are correct) or to any of



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the holding tanks if overboard discharge is not permitted at that time. If it is not within the limits (TSS >30 mg/l or high or low pH), the water is re-circulated back to the Mixing Tank (18C) for re-treatment or to any of the holding tanks for later discharge. Based on a thorough review of ships' logs and records we certify that our ship(s) complied with these provisions of the MOU. NCL will make these records available to Ecology upon request.

Based on a thorough review of ships' logs and records we certify that our ship(s) complied with these provisions of the MOU. NCL will make these records available to Ecology upon request.

Section 2.1.3 (C)(1-3) Shellfish and "upset" conditions. Based on a review of Norwegian Jewel's logs and records, NCL certifies that we complied with the prohibition on discharging within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology. Any "upset" conditions would be stopped and immediately reported to the Washington State Department of Health, but there were no issues of non-compliance.

Section 2.1.3 (C)(4-10) Other discharge approval requirements. Based on a review of Norwegian Jewel's logs and records and other knowledge, NCL certifies that the requirements in this section were met.

Section 2.1.4 Discharge of Residual Solids. Based on a review of Norwegian Jewel's logs and records, NCL certifies that we complied with the prohibition on discharging residual solids coming from any type of treatment system within 12 nautical miles from shore and within the Olympic Coast National Marine Sanctuary. NCL will make these records available to Ecology upon request.

Section 2.2.1 through 2.2.4 Hazardous Waste Management. Based on a review of Norwegian Jewel's logs and records, NCL certifies that Hazardous Wastes were managed in accordance with these sections of the MOU. NCL will make these records available to Ecology upon request. Onboard, all Hazardous Waste materials are collected, sorted, and stored in various correctly labeled UN rated Drums (DF or DM) or cardboard boxes (CF) and palletized within the dedicated Hazardous Waste Storage Room. No Hazardous Waste Offloaded in Washington in 2018. All Hazardous waste was offloaded in Victoria, BC.

Section 6. Marine Mammal Protection Act, Invasive Species Act, and the Washington Ballast Water Management Act. Based on a review of Norwegian Jewel's logs and records, NCL certifies that the provisions of the above laws were implemented as required by these laws. NCL will make these records available to Ecology upon request.



# NORWEGIAN CRUISE LINE HOLDINGS LTD.

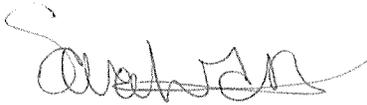
The Norwegian Jewel complies with the Marine Mammal Protection Act 16 USC Ch. 31 by first ensuring that the bridge watch-standers receive training using speed and course changes to avoid contact with marine mammals. By receiving the training, the Norwegian Jewel lessens the chances of: (1) for any person subject to the jurisdiction of the United States or any vessel or other conveyance subject to the jurisdiction of the United States to take (harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill) any marine mammal on the high seas. Speed was reduced in areas where speed reduction was requested due to marine mammals.

The Norwegian Jewel exchanges ballast water in open ocean in accordance with their Ballast Water Management Plan and Company Policy. The Ballast Reporting Form (and amended BRF) are sent to the appropriate authorities.

Section 9. Immediate self-reporting to Ecology of any incidences of non-compliance with any provisions of the MOU. The Norwegian Jewel has no incidents of non-compliance to report.

I hereby certify that the above information is true and can be verified through documentation. If you have any questions or concerns, please call me at 305-436-4349.

Sincerely,



Sarah Ferguson-Brown  
Director, Environmental Operations  
Norwegian Cruise Line Holdings Ltd.



# NORWEGIAN CRUISE LINE HOLDINGS LTD.

Amy Jankowiak  
Water Quality Program  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160th Avenue SE  
Bellevue, WA 98008-5452

Dear Ms. Jankowiak:

Re: Washington Cruise MOU Compliance Report: 2018 Cruise Season

Section 9 of the Memorandum of Understanding for Cruise Operations in Washington State (March 4, 2011), requires an annual submittal detailing the compliance with the MOU for the each vessel within the NWCA that calls to a port in Washington for the previous cruise season. Please accept this letter on behalf of Norwegian Cruise Line (NCL) for the 2018 cruise season.

The following ships operated Washington waters during 2018:

- Norwegian Pearl– Port of Seattle
  - 4/29, 5/6, 5/13, 5/20, 5/27, 6/3, 6/10, 6/17, 6/24, 7/1, 7/8, 7/15, 7/22, 7/29, 8/5, 8/12, 8/18, 8/26, 9/2, 9/9, 9/16, 9/23, 9/30, 10/7

**Norwegian Pearl** operations in Washington State addressed the following key provisions of the MOU as follows:

Section 2.1 Wastewater Management. Norwegian Pearl managed its wastewater in compliance with this section as follows: In compliance with Section 2.1.1 and 2.1.2, Norwegian Pearl held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters. Norwegian Pearl is fitted with Scanship “The Mussel” FA 45, as taken from the ISPP Certificate Wastewater is treated through the AWP system and transferred to Treated Waste Water Holding Tanks while in WA waters through Five step process: 1. Screening 2. Biological 3. Floatation 4. Polishing 5. Disinfection.

Galley Water, Gray Water and Laundry Water are collected in GW Collection Tanks; Black Water is held in the vacuum units. All GW and BW is pumped to the Drum Screens, which remove and send sludge and particles to the Sludge Holding Tank – 15P – Bio-sludge. From the Drum Screens, the water is directed to a small Buffer Tank and is then pumped to 18 P/Sbd (GW/BW Mixing Tank). Thereafter the water is pumped to Bio Tank #1 then to Bio Tank #2.

After the Bio Tanks, polymer and coagulant is added to the water and pumped into the Floatation Module, where more sludge is separated from the water and pumped to 15P. The water goes from the Floatation Module and into the Polishing Screen where it is finally filtered before passing through the U.V. units. If the treated water after the U.V.

# NORWEGIAN CRUISE LINE HOLDINGS LTD.

units is within the limits of the Turbidity Meter / TSS (<30mg/1 limit setting) it is permitted to be discharged overboard via WTC 13 ( if the ship operating parameters are correct) or to any of the Holding tanks if overboard discharge is not permitted at that time. If the water for discharge is not within the limits (TSS >30 mg/1 or of a high or low pH value) the water is recirculated back to the Mixing tank (18 Center S/P) for retreatment or to any of the Holding Tanks for later discharge.

Based on a thorough review of ships' logs and records we certify that our ship(s) complied with these provisions of the MOU. NCL will make these records available to Ecology upon request.

Section 2.1.3 (C)(1-3) Shellfish and "upset" conditions. Based on a review of Norwegian Pearl's logs and records, NCL certifies that we complied with the prohibition on discharging within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology. Any "upset" conditions would be stopped and immediately reported to the Washington State Department of Health, but there were no issues of non-compliance.

Section 2.1.3 (C)(4-10) Other discharge approval requirements. Based on a review of Norwegian Pearl's logs and records and other knowledge, NCL certifies that the requirements in this section were met.

Section 2.1.4 Discharge of Residual Solids. Based on a review of Norwegian Pearl's logs and records, NCL certifies that we complied with the prohibition on discharging residual solids coming from any type of treatment system within 12 nautical miles from shore and within the Olympic Coast National Marine Sanctuary. NCL will make these records available to Ecology upon request.

Section 2.2.1 through 2.2.4 Hazardous Waste Management. Based on a review of Norwegian Pearl's logs and records, NCL certifies that Hazardous Wastes were managed in accordance with these sections of the MOU. NCL will make these records available to Ecology upon request. Onboard, all Hazardous Waste materials are collected, sorted, and stored in various correctly labeled UN rated Drums (DF or DM) or cardboard boxes(CF) and palletized within the dedicated Hazardous Waste Storage Room. No Hazardous Waste Offloaded in Washington in 2018. All Hazardous waste was offloaded in in Victoria, BC, Canada, for the season.

Section 6. Marine Mammal Protection Act, Invasive Species Act, and the Washington Ballast Water Management Act. Based on a review of Norwegian Pearl's logs and records, NCL certifies that the provisions of the above laws were implemented as required by these laws. NCL will make these records available to Ecology upon request.

# NORWEGIAN CRUISE LINE HOLDINGS LTD.

The Norwegian Pearl complies with the Marine Mammal Protection Act 16 USC Ch. 31 by first ensuring that the bridge watch-standers receive training, and using speed and course changes to avoid contact with marine mammals. By receiving the training, the Norwegian Pearl lessens the chances of: (1) for any person subject to the jurisdiction of the United States or any vessel or other conveyance subject to the jurisdiction of the United States to take (harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill) any marine mammal on the high seas. Speed was reduced in areas where speed reduction was requested due to marine mammals.

Since October 2017 Norwegian Pearl has been equipped, according to regulation D-2 of the Ballast Water Management Convention, as per BWM Certificate issued by DNV, with the Alfa Laval Tumba AB PureBallast 3.1 Flow 250 Ballast Water Treatment System. Therefore all Ballast Water is treated by technology Filtration and ultraviolet radiation (UV) when taking ballast onboard and again when discharging.

For Best Management Practice, all ballast operations, if required, take place in open waters only, preferably as far as possible away from land. Ballast water is taken on and de-ballasted in accordance with State regulations.

Section 9. Immediate self-reporting to Ecology of any incidences of non-compliance with any provisions of the MOU. The Norwegian Pearl has no incidents of non-compliance to report.

I hereby certify that the above information is true and can be verified through documentation. If you have any questions or concerns, please call me at 305-436-4349.

Sincerely,



Sarah Ferguson-Brown  
Director, Environmental Operations  
Norwegian Cruise Line Holdings Ltd.

# NORWEGIAN CRUISE LINE HOLDINGS LTD.

Amy Jankowiak  
Water Quality Program  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160th Avenue SE  
Bellevue, WA 98008-5452

Dear Ms. Jankowiak:

Re: Washington Cruise MOU Compliance Report: 2018 Cruise Season

Section 9 of the Memorandum of Understanding for Cruise Operations in Washington State (March 4, 2011), requires an annual submittal detailing the compliance with the MOU for the each vessel within the NWCA that calls to a port in Washington for the previous cruise season. Please accept this letter on behalf of Norwegian Cruise Line (NCL) for the 2018 cruise season.

The following ships operated Washington waters during 2018:

- Norwegian Sun– Port of Seattle
  - 4/2/2018
  - 4/18/2018
  - 4/20/2018

**Norwegian Sun** operations in Washington State addressed the following key provisions of the MOU as follows:

Section 2.1 Wastewater Management. Norwegian Sun managed its wastewater in compliance with this section as follows:

- In compliance with Section 2.1.1 and 2.1.2, Norwegian Sun held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters. The vessel held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters
- Treatment system – Scanship “The Mussel” FA 40, as taken from the ISPP Certificate. Five step process: 1. Screening 2. Biological 3. Flootation 4. Polishing 5. Disinfection. Galley Water, Gray Water and Laundry Water are collected in GW Collection Tanks; Black Water is held in the vacuum units. All GW and BW is pumped to the Drum Screens, which remove and send sludge and particles to the Sludge Holding Tank – 14S – Bio-sludge. From the Drum Screens, the water is directed to a small Buffer Tank and is then pumped to 14 P/port (GW/BW Mixing Tank). Thereafter the water is pumped to Bio Tank #1 then to Bio Tank #2. After the Bio Tanks, polymer and coagulant is added to the water and pumped into the



# NORWEGIAN CRUISE LINE HOLDINGS LTD.

Floatation Module, where more sludge is separated from the water and pumped to 14S. The water goes from the Floatation Module and into the Polishing Screen where it is finally filtered before passing through the U.V. units. If the treated water after the U.V. units is within the limits of the Turbidity Meter / TSS (<30mg/1 limit setting) it is permitted to be discharged overboard via WTC B ( if the ship operating parameters are correct) or to any of the Holding tanks if overboard discharge is not permitted at that time. If the water for discharge is not within the limits (TSS >30 mg/1 or of a high or low pH value) the water is recirculated back to the Mixing tank (14P - port) for retreatment or to any of the Holding Tanks for later discharge.

Based on a thorough review of ships' logs and records we certify that our ship(s) complied with these provisions of the MOU. NCL will make these records available to Ecology upon request.

Section 2.1.3 (C)(1-3) Shellfish and "upset" conditions. Based on a review of Norwegian Sun's logs and records, NCL certifies that we complied with the prohibition on discharging within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology. Any "upset" conditions would be stopped and immediately reported to the Washington State Department of Health, but there were no issues of non-compliance.

Section 2.1.3 (C)(4-10) Other discharge approval requirements. Based on a review of Norwegian Sun's logs and records and other knowledge, NCL certifies that the requirements in this section were met.

Section 2.1.4 Discharge of Residual Solids. Based on a review of Norwegian Sun's logs and records, NCL certifies that we complied with the prohibition on discharging residual solids coming from any type of treatment system within 12 nautical miles from shore and within the Olympic Coast National Marine Sanctuary. NCL will make these records available to Ecology upon request.

Section 2.2.1 through 2.2.4 Hazardous Waste Management. Based on a review of Norwegian Sun's logs and records, NCL certifies that Hazardous Wastes were managed in accordance with these sections of the MOU. NCL will make these records available to Ecology upon request. Onboard, all Hazardous Waste materials are collected, sorted, and stored in various correctly labeled UN rated Drums (DF or DM) or cardboard boxes(CF) and palletized within the dedicated Hazardous Waste Storage Room. No Hazardous Waste Offloaded in Washington in 2018, Hazardous waste was landed ashore only in Victoria, BC, Canada

Section 6. Marine Mammal Protection Act, Invasive Species Act, and the Washington Ballast Water Management Act. Based on a review of Norwegian Sun's logs and



# NORWEGIAN CRUISE LINE HOLDINGS LTD.

records, NCL certifies that the provisions of the above laws were implemented as required by these laws. NCL will make these records available to Ecology upon request.

The Norwegian Sun complies with the Marine Mammal Protection Act 16 USC Ch. 31 by first ensuring that the bridge watch-standers receive training using speed and course changes to avoid contact with marine mammals. By receiving the training, the Norwegian Sun lessens the chances of: (1) for any person subject to the jurisdiction of the United States or any vessel or other conveyance subject to the jurisdiction of the United States to take (harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill) any marine mammal on the high seas. Speed was reduced in areas where speed reduction was requested due to marine mammals.

The Chief Officer is to be informed any time the ship's Ballast Water condition has been changed. The Norwegian Sun exchanges ballast water in open ocean in accordance with their Ballast Water Management Plan and Company Policy. The Ballast Reporting Form (and amended BRF) are sent to the appropriate authorities. The Norwegian Sun is fitted with a Ballast Treatment System; Alfa Laval Pure Ballast 3.1 - 300

Section 9. Immediate self-reporting to Ecology of any incidences of non-compliance with any provisions of the MOU. The Norwegian Sun has no incidents of non-compliance to report.

I hereby certify that the above information is true and can be verified through documentation. If you have any questions or concerns, please call me at 305-436-4349.

Sincerely,



Sarah Ferguson-Brown  
Director, Environmental Operations  
Norwegian Cruise Line Holdings Ltd.



# NORWEGIAN CRUISE LINE HOLDINGS LTD.

Amy Jankowiak  
Water Quality Program  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160th Avenue SE  
Bellevue, WA 98008-5452

Dear Ms. Jankowiak:

Re: Washington Cruise MOU Compliance Report: 2018 Cruise Season

Section 9 of the Memorandum of Understanding for Cruise Operations in Washington State (March 4, 2011), requires an annual submittal detailing the compliance with the MOU for the each vessel within the NWCA that calls to a port in Washington for the previous cruise season. Please accept this letter on behalf of Oceania Cruises for the 2018 cruise season.

The following ships operated Washington waters during 2018:

- Regatta– Port of Seattle
  - 19th June
  - 29th June
  - 06th July
  - 13th July
  - 23rd July
  - 02nd August
  - 09th August
  - 16th August
  - 27th August
  - 07th September
  - 17th September

**Regatta** operations in Washington State addressed the following key provisions of the MOU as follows:

Section 2.1 Wastewater Management. Regatta managed its wastewater in compliance with this section as follows: In compliance with Section 2.1.1 and 2.1.2, Regatta held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters. Regatta is fitted with a Triton AWP System, as taken from the ISPP Certificate. Wastewater is treated through the AWP system and transferred to Treated Waste Water Holding Tanks while in WA.

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Based on a thorough review of ships' logs and records we certify that our ship(s) complied with these provisions of the MOU. Oceania will make these records available to Ecology upon request.

Section 2.1.3 (C)(1-3) Shellfish and "upset" conditions. Based on a review of Regatta's logs and records, Oceania certifies that we complied with the prohibition on discharging within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology. Any "upset" conditions would be stopped and immediately reported to the Washington State Department of Health, but there were no issues of non-compliance.

Section 2.1.3 (C)(4-10) Other discharge approval requirements. Based on a review of Regatta's logs and records and other knowledge, Oceania certifies that the requirements in this section were met.

Section 2.1.4 Discharge of Residual Solids. Based on a review of Regatta's logs and records, Oceania certifies that we complied with the prohibition on discharging residual solids coming from any type of treatment system within 12 nautical miles from shore and within the Olympic Coast National Marine Sanctuary. Oceania will make these records available to Ecology upon request.

Section 2.2.1 through 2.2.4 Hazardous Waste Management. Based on a review of Regatta's logs and records, Oceania certifies that Hazardous Wastes were managed in accordance with these sections of the MOU. Oceania will make these records available to Ecology upon request. Onboard, all Hazardous Waste materials are collected, sorted, and stored in various correctly labeled UN rated Drums (DF or DM) or cardboard boxes(CF) and palletized within the dedicated Hazardous Waste Storage Room. One hazardous waste offload was conducted in Seattle with Clean Harbors (manifest provided), and all Hazardous waste was offloaded in in Victoria, BC, Canada, for the season.

Section 6. Marine Mammal Protection Act, Invasive Species Act, and the Washington Ballast Water Management Act. Based on a review of Regatta's logs and records, Oceania certifies that the provisions of the above laws were implemented as required by these laws. Oceania will make these records available to Ecology upon request.

The Regatta complies with the Marine Mammal Protection Act 16 USC Ch. 31 by first ensuring that the bridge watch-standers receive training, and using speed and course changes to avoid contact with marine mammals. By receiving the training, the Regatta lessens the chances of: (1) for any person subject to the jurisdiction of the United States or any vessel or other conveyance subject to the jurisdiction of the United States to take (harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill) any marine mammal on the high seas. Speed was reduced in areas where speed reduction was requested due to marine mammals.

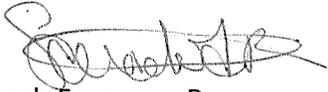
# NORWEGIAN CRUISE LINE HOLDINGS LTD.

The Regatta is equipped with the Alfa Laval Tumba AB PureBallast 3.1 Flow 250 Ballast Water Treatment System. Ballast Water is treated using filtration and ultraviolet radiation (UV) when taking ballast onboard and when discharging.

Section 9. Immediate self-reporting to Ecology of any incidences of non-compliance with any provisions of the MOU. The Regatta has no incidents of non-compliance to report.

I hereby certify that the above information is true and can be verified through documentation. If you have any questions or concerns, please call me at 305-436-4349.

Sincerely,



Sarah Ferguson-Brown  
Director, Environmental Operations  
Norwegian Cruise Line Holdings Ltd.



ROYAL CARIBBEAN CRUISES LTD.

Amy Jankowiak  
Water Quality Program  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160<sup>th</sup> Avenue SE  
Bellevue, WA 98008-5452

Dear Ms. Jankowiak:

Re: Washington Cruise MOU Compliance Report: 2018 Cruise Season

Section 9 of the Memorandum of Understanding for Cruise Operations in Washington State (April 20, 2004 and amended May 19, 2008), requires an annual submittal detailing the compliance with the MOU for the each vessel within the NWCA that calls to a port in Washington for the previous cruise season. Please accept this letter on behalf of Royal Caribbean Cruise Ltd. (RCL) for the 2018 cruise season.

The following ship operated within the Washington waters during 2018:

- *Explorer of the Seas*, Seattle: May 13, 14, 15, 18, 19, 24, 25, 31; June 01, 07, 08, 14, 15, 21, 22, 28, 29; July 05, 06, 12, 13, 21, 22, 28, 29; August 02, 03, 09, 10, 16, 17, 23, 24, 30, 31; September 06, 07, 13, 14, 15, 17, 18, 21, 22, 27, 28, 29; October 04, 05, 06.

RCL operations in Washington State addressed the following key provisions of the MOU as follows:

Section 2.1 Wastewater Management. RCL managed its wastewater in compliance with this section as follows:

- In compliance with Section 2.1.1 and 2.1.2, *Explorer of the Seas* held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters. List the ships that held their effluent and describe the type of treatment system each ship in this category has. Based on a thorough review of ships' logs and records we certify that our ship(s) complied with these provisions of the MOU. *Explorer of the Seas* will make these records available to Ecology upon request.



Royal Caribbean International



Celebrity Cruises



Azamara Club Cruises



TUI Cruises



Pullmantur Cruises



SkySea Cruise Line



ROYAL CARIBBEAN CRUISES LTD.

Section 2.1.3 (C)(1-3) Shellfish and “upset” conditions. Based on a review of *Explorer of the Seas* ship’s logs and records, *Explorer of the Seas* certifies that we complied with the prohibition on discharging within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology and that any “upset” conditions were stopped and immediately reported to the Washington State Department of Health.

Section 2.1.3 (C)(4-10) Other discharge approval requirements. Based on a review of *Explorer of the Seas* ship’s logs and records and other knowledge, *Explorer of the Seas* certifies that the requirements in this section were met.

Section 2.1.4 Discharge of Residual Solids. Based on a review of *Explorer of the Seas* ships’ logs and records, *Explorer of the Seas* certifies that we complied with the prohibition on discharging residual solids coming from any type of treatment system within 12 nautical miles from shore and within the Olympic Coast National Marine Sanctuary. *Explorer of the Seas* will make these records available to Ecology upon request.

Section 2.2.1 through 2.2.4 Hazardous Waste Management. Based on a review of *Explorer of the Seas* ship’s logs and records, *Explorer of the Seas* certifies that Hazardous Wastes were managed in accordance with these sections of the MOU. *Explorer of the Seas* will make these records available to Ecology upon request. Add a description of how hazardous waste is managed while in Washington.

Section 6. Marine Mammal Protection Act, Invasive Species Act, and the Washington Ballast Water Management Act. Based on a review of *Explorer of the Seas* ship’s logs and records, *Explorer of the Seas* certifies that the provisions of the above laws were implemented as required by these laws. *Explorer of the Seas* will make these records available to Ecology upon request. Add a description of how compliance with these laws was achieved.

Section 9. Immediate self-reporting to Ecology of any incidences of non-compliance with any provisions of the MOU. During the 2018 season the *Explorer of the Seas* did not have any incidences of non-compliance.



Royal Caribbean International



Celebrity Cruises



Azamara Club Cruises



TUI Cruises



Pullmantur Cruises



SkySea Cruise Line



ROYAL CARIBBEAN CRUISES LTD.

I hereby certify that the above information is true and can be verified through documentation.  
If you have any questions or concerns, please call me at 305-982-4874.

Sincerely,

Gregory M. Purdy  
Senior Vice President  
Royal Marine Operations  
Royal Caribbean Cruises Ltd.  
[Gpurdy@rccl.com](mailto:Gpurdy@rccl.com)



Royal Caribbean International



Celebrity Cruises



Azamara Club Cruises



TUI Cruises



Pullmantur Cruises



SkySea Cruise Line





November 7, 2018

Via Email -- [AJAN461@ECY.WA.GOV](mailto:AJAN461@ECY.WA.GOV)

Amy Jankowiak  
Water Quality Program  
Washington State Department of Ecology  
Northwest Regional Office  
3190 160<sup>th</sup> Avenue SE  
Bellevue, WA 98008-5452

Subject: Washington Cruise MOU Compliance Report: 2018 Cruise Season

Dear Ms. Jankowiak,

Section 9 of the Memorandum of Understanding for Cruise Operations in Washington State (originally signed April 20, 2004 and Amended May 19, 2008), requires an annual submittal detailing the compliance with the MOU for the each vessel within the NWCA that calls to a port in Washington State for the previous cruise season. Please accept this letter on behalf of Windstar Cruises for the 2018 cruise season.

The following ships operated Washington waters during 2018:

M/V Star Legend, Seattle, Washington, June 27, 2018.

M/V Star Legend's operations in Washington State addressed the following key provisions of the MOU as follows:

Section 2.1 Wastewater Management. M/V Star Legend managed its wastewater in compliance with this section as follows:

In compliance with Section 2.1.1 and 2.1.2, M/V Star Legend held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters. Based on a thorough review of ships' logs and records we certify that M/V Star Legend complied with these provisions of the MOU and will be providing these records in conjunction with this letter.

Section 2.1.3 (C)(1-3) Shellfish and "upset" conditions. Based on a review of M/V Star Legend's ship's logs and records, Windstar Cruises certifies that the ship complied with the prohibition on discharging within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology and that any "upset" conditions were stopped and immediately reported to the Washington State Department of Health.

2101 4th Avenue, Suite 210  
Seattle, Washington 98121

phone: 206.733.2703  
fax: 206.292.0809

[WindstarCruises.com](http://WindstarCruises.com)

Section 2.1.3 (C)(4-10) Other discharge approval requirements. Based on a review of M/V Star Legend's ship's logs and records and other knowledge, Windstar Cruises certifies that the requirements in this section were met.

Section 2.1.4 Discharge of Residual Solids. Based on a review of M/V Star Legend's ships' logs and records, Windstar Cruises certifies that the ship complied with the prohibition on discharging residual solids coming from any type of treatment system within 12 nautical miles from shore and within the Olympic Coast National Marine Sanctuary. Windstar Cruises will be providing these records in conjunction with this letter.

Section 2.2.1 through 2.2.4 Hazardous Waste Management. Based on a review of M/V Star Legend's ship's logs and records, Windstar Cruises certifies that Hazardous Wastes were managed in accordance with these sections of the MOU. Windstar Cruises did not offload any hazardous waste in Washington and copies of appropriate garbage record pages are being provided in conjunction with this letter.

Section 6. Marine Mammal Protection Act, Invasive Species Act, and the Washington Ballast Water Management Act. Based on a review of M/V Star Legend's ship's logs and records, Windstar Cruises certifies that the provisions of the above laws were implemented as required by these laws. M/V Star Legend did not take on or discharge ballast water in U.S. waters as per its classification society approved Ballast Water Management Plan.

Section 9. Immediate self-reporting to Ecology of any incidences of non-compliance with any provisions of the MOU. No incidents of non-compliance with the MOU occurred.

I hereby certify that the above information is true and can be verified through documentation. If you have any questions or concerns, I can be contacted at [mike.inman@windstarcruises.com](mailto:mike.inman@windstarcruises.com) or 206-733-3028.

Sincerely,



Michael D. Inman  
*Director, Risk Management and Compliance*  
Windstar Cruises