

AUTHORIZATION TO DISCHARGE

Alaska Department of Environmental Conservation Division of Water CPVEC Program

AUTHORIZATION TO DISCHARGE UNDER THE LARGE COMMERCIAL PASSENGER VESSEL WASTEWATER DISCHARGE GENERAL PERMIT NO. 2013DB0004

FACILITY ASSIGNED AUTHORIZATION NUMBER: 2013DB0004-0009

GENERAL PERMIT NUMBER: 2013DB0004 See this General Permit for all permit requirements.

The following facility is authorized to discharge in accordance with the terms of the State of Alaska General Permit 2013DB0004 and any specific requirements listed in this authorization.

The authorization effective date is April 30, 2015.

The authorization to discharge shall expire at midnight, **on the expiration or termination date of General Permit 2013DB0004 (August 28, 2019)** unless notified by the Department.

The permittee must reapply for an authorization when the Department issues a General Permit that replaces 2013DB0004 if the permittee intends to continue operations and discharges from the facility.

| SECTION 1 - RESPON | NSIBLE PARTY INFORMATION | |
|--------------------|----------------------------|--|
| Issued to: | Princess Cruise Line, Ltd. | |

| SECTION 2 – FACILITY INFORMATION | | | | |
|---|---|--|--|--|
| ADEC File Number: | 920.45.027 | | | |
| Authorization Number | 2013DB0004-0009 | | | |
| Facility Name: | Pacific Princess | | | |
| Type of Facility | Large Commercial Passenger Vessel | | | |
| Type of Wastewater Authorized for Discharge: | Treated mixed, black and greywater or greywater only - additional special conditions for discharge apply (see below). | | | |
| Type of Wastewater Treatment System: | Hamworthy Membrane Bioreator | | | |
| Type of Authorization: | Authorized for discharge of wastewater treated through a Hamworthy Membrane Bioreator wastewater treatment system configuration as | | | |

| approved by the Department in the current Vessel Specific Sampling Plan while underway at speeds greater than 6 knots. Authorization for discharge of treated wastewater through a Hamworthy Membrane Bioreactor wastewater treatment system while stationary or at speeds less than 6 knots except while in the port of Skagway, AK. Authorization for discharge of treated greywater, only, through a Hamworthy Membrane Bioreactor wastewater treatment system |
|--|
| of Skagway, AK. |
| Hamworthy Membrane Bioreactor wastewater treatment system while stationary or at speeds of less than 6 knots in the port of Skagway, AK – except if docked at Ore or Broadway Docks. |

| SECTION 3 – REGULATED DISCHARGE INFORMATION – EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS | | | | |
|--|--|--|--|--|
| Effluent Compliance Point: | Wastewater effluent sampling port(s) identified in the Department approved Vessel Specific Sampling Plan and Notice of Intent. | | | |
| Effluent Limitations | Table 3 of the General Permit for discharges underway at speeds greater than 6 knots.Table 4 of the General Permit for discharges while stationary or at speeds less than 6 knots. | | | |
| Special Conditions: | The Pacific Princess is not authorized to discharge blackwater into the Port of Skagway, AK. | | | |
| Monitoring Requirements | Tables 5 and 6 of the General Permit including Receiving Water Monitoring, and WET testing in 2017, and any other applicable monitoring requirements in the General Permit | | | |
| Discharge Monitoring Report (DMR) | The Pacific Princess must submit a monthly DMR with effluent limits that is available on the Department's website: (<u>http://dec.alaska.gov/water/cruise_ships/gp/2014gp.html</u>) or on a similar form approved by the Department. | | | |

| SECTION 4 - RECEIVING AREA INFORMATION-RECEIVING WATER | | | |
|--|--|--|--|
| Receiving Area Name: | Marine waters of the state of Alaska as defined in the General Permit | | |
| Underway Mixing Zone Description: | 63 meters in length, 5 meters in width, and a depth from the water surface to the depth the discharge port is below the water surface plus one meter. The shape of the mixing zone is an elongated rectangle that extends from the discharge port towards the stern of the ship. | | |
| Stationary Mixing Zone Description: | Radius of 83 meters and a depth from the water surface to the depth the discharge port is below the water surface plus one meter. The mixing zone will extend away from the hull of the vessel in a semicircle centered on the discharge port. No authorized mixing zone in Skagway, AK or for blackwater discharges while stationary or at speeds less than 6 knots. | | |
| Skagway Discharge at Ore or Broadway Docks | N/A, no application for discharge in Skagway, AK at Ore or Broadway Docks was submitted. If seeking a discharge at Ore or Broadway Docks, a revised NOI would need to be submitted. | | |

| SECTION 5 - ADDITIONAL TERMS AND CONDITIONS (GP 4.3.2) | | | | |
|--|---|--|--|--|
| Skagway Discharges | The Pacific Princess is not authorized to discharge blackwater into the | | | |
| | waters of Skagway, AK. | | | |

If you have any technical questions regarding this authorization or the requirements of the general permit, please contact the Cruise Program Manager at (907) 465-5320.

| SECTION 5 - CERTIFICATION/SIGNATURE | | |
|-------------------------------------|----------|-------|
| Grand | ς. | alite |
| S | ignature | |
| Edward E White | | |

Printed Name

4/30/2015-Date EPS III, ADEC CPVEC Title



NOTICE OF INTENT FORM

| Notice of Intent to be covered under the Wastewater General Permit 2013DB0004 for Large | |
|---|--|
| Commercial Passenger Vessels Operating in Alaska (See Sections 2 and 3 of the permit.) | |

Submission of this document constitutes a request that certain discharges into marine waters of the state resulting from the operation of the large commercial passenger vessels identified herein be authorized under General Permit 2013-DB0004.

Vessel Owner Information

Who is the main point of contact for the vessel? (e.g. owner, operator, or Alaska Agent): Operator

Vessel Owner's Business Name: Princess Cruise Line, Ltd.

| Mailing Address: 24305 Town Center Drive Santa Clarita, CA 91355 | Phone: 206-286-3203 |
|---|-------------------------------------|
| Representative: Michael Inman | Email: minman@hollandamerica.com |
| Vessel Owner's or Operator's Alaska Agent Information | - |
| Company Name: Cruise Line Agencies of Alaska | |
| Mailing Address: 1330 Eastaugh Way #4 Juneau, AK 99801 | Phone: 907-586-1282 |
| Representative: Andrew Green | Email: Juneau@claalaska.com |
| Vessel Operator's Business Name if Different From the Owner's Bu | siness Name |
| Vessel Operator's Business Name: Same as Above for "Vessel Owner Inform | ation" |
| Mailing Address: | Phone: |
| Representative: | Email: |

| Vessel Information (Y/N) | | | | |
|--|---|---|---------|--|
| Are you seeking authorization to discharge with a mixing zone? | | | Y | |
| Are you seeking authorization to discharge while moving at 6 knots or greater? | | | Y | |
| Are you seeking authorization to dis | charge v | vhile moving at under 6 knots? | Y | |
| Are you seeking authorization to dis | charge v | vhile in Skagway at Broadway or Ore Docks? | N | |
| | indicate | nich includes a mixing zone, attach (may be en s the length of the vessel and the locations of orts) on the hull. | | |
| Vessel Name: | | Pacific Princess | | |
| Vessel IMO Number: | | 9187887 | | |
| Vessel Gross Tonnage: | | 30277 | | |
| Port of Registry: | | Hamilton, Bermuda | | |
| Maximum Passenger Capacity per Voyage: | | 777 | | |
| Maximum Crew Capacity per Voyage | e: | 379 | | |
| Vessel Draft ¹ : | | 6.1 meters | | |
| Vessel Length in Meters at Waterline ² : | | 180.45 | | |
| Vessel Tracking | | | | |
| Method of submitting hourly vessel | tracking | information while in Alaskan waters (Marine E | xchange | |
| of Alaska AIS or other Department a | pproved | method): | | |
| Name, physical address, and | Marin | e Exchange of Alaska | | |
| mailing addresses of the service: 1000 l | | Harbor Way | | |
| | Suite | | | |
| | - | eau, AK 99801 | | |
| Contact's name, email address, | Marine Exchange of Alaska 907-463-2607 | | | |
| and phone number: | the second second second | 463-2607 1@MXAK.ORG | | |
| | UFSI | | | |
| | | | | |

¹ Vessel draft under a) loaded condition for Alaska operations (bunkers / waste water storage etc.) and b) under light ship conditions for Alaska operations (bunkers empty / no waste water storage etc.) ² Length of Waterline (LWL) under normal load in standard Alaska conditions.

| Discharge Port Characteristics | | | | |
|--|---------------------|---|-------------------|--|
| Note: If there is more than one discharge port attach a sheet with the characteristics below for | | | | |
| each AWTS Port. If more | e than one discharg | e pump attach sheet with capacity | for each. | |
| Discharge Port Name ³ : | Discharge Port B | Location (Starboard/Port): | Starboard | |
| Discharge Port Internal Diameter: | 160 mm | Discharge Port Centerline Vertical Distance from Keel: | 2.5 meters | |
| Discharge Port Distance from Bow at Waterline (normal load): | 108.81 meters | Discharge Port Centerline Vertical Distance from Waterline (normal load) ⁴ : | 3.6 meters | |
| Discharge Port shape (round, oval, square): | Round | Discharge Port Pump Capacity (m ³ /hr) for each Pump ⁵ : | 30 m3/h x 2 pumps | |
| Discharge Port Vertical Angle Relative to Waterline ⁶ : | 0 Deg | Discharge Port Horizontal Angle Relative to Centerline ⁷ : | 0 Deg | |

| Wastewater Discharge Information | | | | |
|--|---------------|------------|--|--|
| Estimates of the average and maximum volume of the wastewater to be discharged per 24 hour period (in cubic meters), and the beginning and ending dates between which discharges may occur the first year of the permit; | Average: | 280 m3 | | |
| | Maximum: | 320 m3 | | |
| | Startup Date: | 05/19/2015 | | |
| | Ending date: | 09/05/2015 | | |

³ Name or identification as used in VSSP and Waste Water Discharge Logbook.

⁴ Vertical distance from the vertical centerline of the discharge port relative to the standard (loaded) conditions waterline.

⁵ Treated wastewater discharge pump for the named discharge port. For vessels with variable speed / capacity pumps identify the effective discharge capacities. For vessels with more than one pump simultaneously operated identify the total effective pump capacities.

⁶ Parallel with the Vertical Longitudinal Center Plane orientation of the hull orientation angle defined as the angle in degrees between the horizontally perpendicular projected line originating from the vertical longitudinal center plane of the hull self to the center of the discharge port, and the projected perpendicular line originating from the port center self (face) vertically directed to the center plane of the hull (Y-Y axis).

⁷ Parallel with the Vertical Longitudinal Center Plane orientation of the hull orientation angle defined as the angle in degrees between the horizontally perpendicular projected line originating from the vertical longitudinal center plane of the hull self to the center of the discharge port, and the projected perpendicular line originating from the port center self (face) horizontally directed to the vertical center plane of the hull (X-X axis).

| The type, number, and combined maximum design capacity in cubic meters per 24 hour period of all advanced wastewater treatment | Type (s) (including manufacturer, model name, model number, and year built): | Hamworthy Membrane Bioreactor |
|---|---|-------------------------------|
| systems (AWTS) onboard; | Number of AWTS: | 2 |
| | Combined design capacity: | 320 m3 |
| Type(s) of sewage treatment and system capacity in cubic meters per 24 hour period; | Type (s) (including manufacturer, model name, model number, and year built): | |
| | Hamworthy Membrane Bioreactor | |
| | Combined design capacity: 320 m3 | |
| Type(s) of graywater treatment and system capacity in cubic meters per 24 hour period; | Type (s) (including manufacturer, model name, model number, and year built): | |
| | Hamworthy Membrane Bioreactor | |
| Combined design capacity: 320 m | | 20 m3 |
| Average volume of sewage generation per day in cubic meters; | 28 m3 | |
| Maximum volume of sewage generation per day in cubic meters; | 28 m3 | |
| Average graywater generation per day in cubic meters for the following sources; | Accommodations: 150 m3 | |
| | Galley: 80 m3 | |
| | Laundry: 50 m3 | |
| | Other (list types and volumes): | |
| | | |
| Maximum graywater generation per day in cubic meters for the following sources; | Accommodations: 150 m3 | |
| | Galley: 80 m3 | |
| | Laundry: 50 m3 | |
| | Other (list types and volumes): | |
| | | |
| | | |

The method of handling and disposal of sludge and biosolids produced from the treatment of sewage and graywater.

The desludging of MBR systems will be performed greater than 12 nautical miles off shore.

Signature and Certification for NOI

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature of Responsible Corporate Officer

Vice President, Safety and Environmental Operations

Michael Inman Date April 3, 2015

Printed Name

Submit this Notice of Intent to:

Title/Company

Commercial Passenger Vessel Environmental Compliance Program Division of Water Alaska Dept. of Environmental Conservation 410 Willoughby Avenue, Suite 303 PO Box 111800 Juneau, AK 99811-1800