

## **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: 2013DB0004-0010

**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 – RESPONSIBLE PARTY INFORMATION		
Issued to: Princess Cruise Line, Ltd.		

SECTION 2 - FACILITY INFORMATION		
ADEC File Number:	920.45.024	
Authorization Number	2013DB0004-0010	
Facility Name:	Star Princess	
Type of Facility	Large Commercial Passenger Vessel	
Type of Wastewater Authorized for Discharge:	Treated mixed, black and greywater - 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	

d by the Downtown tip the assument Vessel Consider Counting
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.
No discharges are authorized in the waters of Skagway, AK.

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 Star Princess is not authorized to discharge wastewater into the waters 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 Star Princess must submit a monthly DMR with effluent limits that is available on the Department's website:  ( <a href="http://dec.alaska.gov/water/cruise_ships/gp/2014gp.html">http://dec.alaska.gov/water/cruise_ships/gp/2014gp.html</a> ) 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.		
Skagway Discharge at Ore or Broadway Docks	N/A, no discharge authorized in Skagway, AK.		

SECTION 5 – ADDITIONAL TERMS AND CONDITIONS (GP 4.3.2)		
Skagway Discharges	scharges The Star Princess is not authorized to discharge wastewater 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		
Edul E. White	4/30/2015	
Signature	Date	
Edward E White	EPS III, ADEC CPVEC	
Printed Name	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 passenge	er 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, operate	tor, 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				
Vessel Owner's or Operator's Alaska Agent Information				
Vessel Owner's or Operator's Alaska Agent Information Company Name: Cruise Line Agencies of Alaska				
	Phone: 907-586-1282			
Company Name: Cruise Line Agencies of Alaska  Mailing Address: 1330 Eastaugh Way #4	Phone: 907-586-1282  Email: Juneau@claalaska.com			
Company Name: Cruise Line Agencies of Alaska  Mailing Address: 1330 Eastaugh Way #4  Juneau, AK 99801	Email: Juneau@claalaska.com			
Company Name: Cruise Line Agencies of Alaska  Mailing Address: 1330 Eastaugh Way #4  Juneau, AK 99801  Representative: Andrew Green	Email: Juneau@claalaska.com siness Name			
Company Name: Cruise Line Agencies of Alaska  Mailing Address: 1330 Eastaugh Way #4 Juneau, AK 99801  Representative: Andrew Green  Vessel Operator's Business Name if Different From the Owner's Business Name	Email: Juneau@claalaska.com siness Name			

Vessel Information (Y/N)	I we say		1	
Are you seeking authorization to discharge with a mixing zone?			Υ	
Are you seeking authorization to discharge while moving at 6 knots or greater?			Y	
Are you seeking authorization to discharge while moving at under 6 knots?			Y	
Are you seeking authorization to discharge while in Skagway at Broadway or Ore Docks?			N	
1.—	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:		Star Princess		
Vessel IMO Number:		9192363		
Vessel Gross Tonnage:		108977		
Port of Registry:		Hamilton, Bermuda		
Maximum Passenger Capacity per Voyage:		3100		
Maximum Crew Capacity per Voyage:		1150		
Vessel Draft <sup>1</sup> :		8.6 meters		
Vessel Length in Meters at Waterline <sup>2</sup> :		289.5		
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:		Harbor Way		
	Suite			
	Juneau, AK 99801			
Contact's name, email address,	Marine Exchange of Alaska			
	907-4	63-2607		
and phone number:	ODC4	@MXAK.ORG		

<sup>&</sup>lt;sup>1</sup> 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.)
<sup>2</sup> 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	each AWTS Port. If more than one discharge pump attach sheet with capacity for each.			
Discharge Port Name <sup>3</sup> :	Discharge Port A	Location (Starboard/Port):	Port	
Discharge Port Internal Diameter:	100 mm	Discharge Port Centerline Vertical Distance from Keel:	6.1 meters	
Discharge Port Distance from Bow at Waterline (normal load):	215.3 meters	Discharge Port Centerline Vertical Distance from Waterline (normal load) <sup>4</sup> :	2.5 meters	
Discharge Port shape (round, oval, square):	Round	Discharge Port Pump Capacity (m³/hr) for each Pump⁵:	25 m3/h x 2 pumps	
Discharge Port Vertical Angle Relative to Waterline <sup>6</sup> :	35 Degrees	Discharge Port Horizontal Angle Relative to Centerline <sup>7</sup> :	80 degrees	

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:	1070 m3	
	Maximum:	1070 m3	
	Startup Date:	05/16/2015	
	Ending date:	09/17/2015	

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 $<sup>^{\</sup>rm 3}$  Name or identification as used in VSSP and Waste Water Discharge Logbook.

<sup>&</sup>lt;sup>4</sup> Vertical distance from the vertical centerline of the discharge port relative to the standard (loaded) conditions waterline.

<sup>&</sup>lt;sup>5</sup> 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.

<sup>&</sup>lt;sup>6</sup> 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).

<sup>&</sup>lt;sup>7</sup> 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 systems (AWTS) onboard;	Type (s) (including manufacturer, model name, model number, and year built):	Hamworthy Membrane Bioreactor	
systems (AW 15) onboard,	Number of AWTS:	3	
	Combined design capacity:	960 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 Biore	eactor	
	Combined design capacity: 9	60 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: 9	60 m3	
Average volume of sewage generation per day in cubic meters;	160 m3		
Maximum volume of sewage generation per day in cubic meters;	160 m3		
Average graywater generation per day in cubic meters for the following	Accommodations: 450 m3		
sources;	Galley: 260 m3		
	Laundry: 200 m3		
	Other (list types and volume:	s):	
Maximum graywater generation per	Accommodations: 450 m3		
day in cubic meters for the following sources;	Galley: 260 m3		
	Laundry: 200 m3		
	Other (list types and volume	s):	

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	Printed Name
Most	Michael Inman
Title/Company	Date
Vice President, Safety and Environmental Operations	April 3, 2015
Colours the Manager of Landau Ann	

**Submit this Notice of Intent to:** 

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