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: 2013DB0004-0013

***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:	Holland America Line

SECTION 2 – FACILITY INFORMATION	
ADEC File Number:	920.45.015
Authorization Number	*2013DB0004-0013*
Facility Name:	Volendam
Type of Facility	Large Commercial Passenger Vessel
Type of Wastewater Authorized for Discharge:	Treated wastewater as defined by the General Permit.
Type of Wastewater Treatment System:	Zenon
Type of Authorization:	Authorized for discharge of treated wastewater treated through a Zenon wastewater treatment system configuration as approved by the Department in the current Vessel Specific Sampling Plan.

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.
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:	None.
Monitoring Requirements	Tables 5 and 6 of the General Permit including for stationary discharge Receiving Water Monitoring, and WET testing in 2017, and any other applicable monitoring requirements in the General Permit
Discharge Monitoring Report (DMR)	The Volendam must submit a monthly DMR with effluent limits that is available on the Department's website: (http://dec.alaska.gov/water/cruise_ships/gp/2014gp.html) 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.
Skagway Discharge at Ore or Broadway Docks	Radius of 15 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.
SECTION 5 – ADDITIONAL TERMS AND CONDITIONS (GP 4.3.2)	
N/A	None

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 6 – CERTIFICATION/SIGNATURE

Edward G. White
Signature

4/30/2015
Date

Edward E White
Printed Name

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): **Michael D. Inman, Vice President Safety & Environmental Operations**	
Vessel Owner's Business Name: **Holland America Line, N.V.**	
Mailing Address: **300 Elliott Avenue West** **Seattle, WA 98119**	Phone: **206.286.3203**
Representative: Michael D. Inman	Email: **minman@HollandAmerica.com**
Vessel Owner's or Operator's Alaska Agent Information	
Company Name: **Ralph Samuels, Vice President Alaska Community & Government Affairs**	
Mailing Address: **601 West 5th Avenue #501** **Anchorage, AK 99501**	Phone: **907.264.2128**
Representative:	Email: R**Samuels@HollandAmerica.com**
Vessel Operator's Business Name if Different From the Owner's Business Name	
Vessel Operator's Business Name:	
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?	**N**
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?	**Y**

If the permittee is seeking authorization which includes a mixing zone, attach (may be emailed separately) a drawing to scale that indicates the length of the vessel and the locations of all wastewater effluent penetration points (ports) on the hull.

Vessel Name:	**VOLENDAM**
Vessel IMO Number:	**9156515**
Vessel Gross Tonnage:	**61214**
Port of Registry:	**Rotterdam, The Netherlands**
Maximum Passenger Capacity per Voyage:	**1432**
Maximum Crew Capacity per Voyage:	**621**
Vessel Draft[1]:	**a)FWD: 8.1m AFT: 8.0m** **b)FWD: 7.7m AFT: 7.95m**
Vessel Length in Meters at Waterline[2]:	**211.5m**

Vessel Tracking	
Method of submitting hourly vessel tracking information while in Alaskan waters (Marine Exchange of Alaska AIS or other Department approved method):	
Name, physical address, and mailing addresses of the service:	**Marine Exchange of Alaska** **1000 Harbor Way Suite 204** **Juneau, Alaska 99801**
Contact's name, email address, and phone number:	**Brett Farrell, Assistant Director** **brettfarrell@mxak.org** **907.463.4640**

[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 than one discharge pump attach sheet with capacity for each.**			
Discharge Port Name[3]:	**Port "F"**	Location (Starboard/Port):	**Port**
Discharge Port Internal Diameter:	**100mm**	Discharge Port Centerline Vertical Distance from Keel:	**5.0m**
Discharge Port Distance from Bow at Waterline (normal load):	**97.2m**	Discharge Port Centerline Vertical Distance from Waterline (normal load)[4]:	**3m**
Discharge Port shape (round, oval, square):	**Oval**	Discharge Port Pump Capacity (m^3/hr.) for each Pump[5]:	**22m^3/hr.**
Discharge Port Vertical Angle Relative to Waterline[6]:	**90°**	Discharge Port Horizontal Angle Relative to Centerline[7]:	**90°**

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:	**510m^3**
	Maximum:	**660m^3**
	Startup Date:	**14MAY15**
	Ending date:	**22SEP15**

[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 systems (AWTS) onboard;	Type (s) (including manufacturer, model name, model number, and year built):	**Type I MSD Zenon installation. The Zenon system is an amalgamation of the ZenoGem and ZeeWeed technologies. The ZenoGem system consists of a suspended growth biological reactor. The ZeeWeed system is an ultrafiltration membrane system implemented using 64 ZeeWeed ZW-500B modules arranged in 16 cassettes. The system includes a final stage UV sterilization filter.**
	Number of AWTS:	**One Zenon installation consisting of two identical parallel processes. These processes are designated Train 1 and Train 2.**
	Combined design capacity:	**Total system capacity 660m^3/day effluent from combined black and gray water influent.**
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): **Zenon Environmental Inc. Advanced Black and Gray Water Treatment System consisting of the ZenoGem and ZeeWeed processes. The system includes a final stage UV sterilization filter. Total system capacity 660m^3/day effluent from combined black and gray water influent.** Combined design capacity: **660m^3/day**	
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): **Zenon Environmental Inc. Advanced Black and Gray Water Treatment System consisting of the ZenoGem and ZeeWeed processes. The system includes a final stage UV sterilization filter. Total system capacity 660m^3/day effluent from combined black and gray water influent.** Combined design capacity: **660m^3/day**	
Average volume of sewage generation per day in cubic meters;	**Average 40 tons/day**	
Maximum volume of sewage generation per day in cubic meters;	**Maximum 100 tons/day**	

Average graywater generation per day in cubic meters for the following sources;	Accommodations: **Average 295m^3/day** Galley: **Average 75m^3/day** Laundry: **Average 100m^3/day** Other (list types and volumes): **None**
Maximum graywater generation per day in cubic meters for the following sources;	Accommodations **Maximum 330m^3/day** Galley **Maximum 100m^3/day** Laundry **Maximum 120m^3/day** Other (list types and volumes): **None**
The method of handling and disposal of sludge and bio-solids produced from the treatment of sewage and graywater. **Pre-treatment filtered Solids are landed ashore. Retained solids from the bioreactor, known as biomass, are discharged outside 12NM.**	