

Table updated on 8/4/05 by DEC

2005 Large¹ Commercial Passenger Vessels Discharge Status and Wastewater Treatment

Vessel Operator	Vessel Name	Passenger Capacity (actual)	Crew Capacity	Total Persons on Board ²	Blackwater (BW) Treatment System Manufacturer	Graywater (GW) Treatment System Manufacturer	Discharging in Alaska ³ & Subject to sampling program		Type of Treatment System
							BW	GW	
Carnival Cruise Lines	<i>Carnival Spirit</i>	2125	934	3059	Triton/Rochem	Rochem UF	Yes	Yes	Rochem is a reverse osmosis ultrafiltration system.
Celebrity Cruises	<i>Infinity</i>	2038	997	3035	Hamann	Unknown	No	No	Hamann/Lazarus is dilution and filtration system
Celebrity Cruises	<i>Mercury</i>	1870	909	2779	Biopure/Rochem	Mixed with BW	Yes	Yes	Rochem is a reverse osmosis ultrafiltration system.
Celebrity Cruises	<i>Summit</i>	2449	960	3409	Hamann/Lazarus	None	No	No	Hamann/Lazarus is dilution and filtration system
Crystal Cruise Lines	<i>Crystal Harmony</i>	940	545	1485	Triton Format	Unknown	No	No	
Holland America	<i>Amsterdam</i>	1460	647	2107	Unknown	Unknown	No	No	
Holland America	<i>Oosterdam</i>	1824	800	2624	Rochem	Mixed with BW	Yes	Yes	Rochem is a reverse osmosis ultrafiltration system.
Holland America	<i>Ryndam</i>	1266	588	1854	Zenon	Mixed with BW	Yes	Yes	Zenon is a biological reactor and ultrafiltration system.
Holland America	<i>Statendam</i>	1266	588	1854	Zenon	Mixed with BW	Yes	Yes	Zenon is a biological reactor and ultrafiltration system.
Holland America	<i>Veendam</i>	1266	588	1854	Zenon	Mixed with BW	Yes	Yes	Zenon is a biological reactor and ultrafiltration system.
Holland America	<i>Volendam</i>	1440	620	2060	Zenon	Mixed with BW	Yes	Yes	Zenon is a biological reactor and ultrafiltration system.
Holland America	<i>Zaandam</i>	1460	620	2080	Zenon	Mixed with BW	Yes	Yes	Zenon is a biological reactor and ultrafiltration system.
Japan Cruise Line, Inc.	<i>Pacific Venus</i>	750	Unknown	750 + crew	Unknown	Unknown	No	No	
Norwegian Cruise Lines	<i>Norwegian Dream</i>	1748	700	2448	Scanship		Yes	Yes	Scanship is a biological reactor and ultrafiltration system.
Norwegian Cruise Lines	<i>Norwegian Star</i>	2240	1100	3340	Scanship	Mixed with BW	Yes	Yes	Scanship is a biological reactor and ultrafiltration system.
Norwegian Cruise Lines	<i>Norwegian Sun</i>	2002	950	2952	Scanship	Mixed with BW	Yes	Yes	Scanship is a biological reactor and ultrafiltration system.
Norwegian Cruise Lines	<i>Norwegian Spirit</i>	2635	965	3600	Scanship	Mixed with BW	Yes	Yes	Scanship is a biological reactor and ultrafiltration system.
Princess Cruise Line	<i>Coral Princess</i>	1950	850	2800	Hamworthy Bioreactor	Accommodations mixed with BW	Yes	Accommodations Only	Hamworthy is a biological reactor and ultrafiltration system.
Princess Cruise Line	<i>Dawn Princess</i>	1950	900	2850	Hamworthy Bioreactor	Accommodations mixed with BW	Yes	Accommodations Only	Hamworthy is a biological reactor and ultrafiltration system.
Princess Cruise Line	<i>Diamond Princess</i>	2670	1238	3908	Hamworthy Bioreactor	Accommodations mixed with BW	Yes	Accommodations Only	Hamworthy is a biological reactor and ultrafiltration system.
Princess Cruise Line	<i>Island Princess</i>	1950	850	2800	Hamworthy Bioreactor	Accommodations mixed with BW	Yes	Accommodations Only	Hamworthy is a biological reactor and ultrafiltration system.
Princess Cruise Line	<i>Regal Princess</i>	1596	660	2256	Hamworthy Bioreactor	Accommodations mixed with BW	Yes	Accommodations Only	Hamworthy is a biological reactor and ultrafiltration system.
Princess Cruise Line	<i>Sapphire Princess</i>	2670	1238	3908	Hamworthy Bioreactor	Accommodations mixed with BW	Yes	Accommodations Only	Hamworthy is a biological reactor and ultrafiltration system.
Princess Cruise Line	<i>Sun Princess</i>	1950	870	2820	Hamworthy Bioreactor	Accommodations mixed with BW	Yes	Accommodations Only	Hamworthy is a biological reactor and ultrafiltration system.
Radisson Seven Seas	<i>Seven Seas Mariner</i>	769	431	1200	Hamworthy Bioreactor	Mixed with BW	Yes	Yes	Hamworthy is a biological reactor and ultrafiltration system.
Royal Caribbean Cruises Ltd.	<i>Radiance of the Seas</i>	2100	859	2959	Unknown	Unknown	No	No	
Royal Caribbean Cruises Ltd.	<i>Serenade of the Seas</i>	see total	see total	2501	Scanship AWP	Mixed with BW	Yes	Yes	Scanship is a biological reactor and ultrafiltration system.
Royal Caribbean Cruises Ltd.	<i>Vision of the Seas</i>	2400	800	3200	Hydroxyl	Unknown	No	No	Hydroxyl is an activated oxidation process.

¹A large vessel has overnight accommodations for 250 or more passengers.

²Capacity is calculated from Registration, Vessel Specific Sampling Plan, or Juneau Cruiseship Schedule. Actual number of passenger aboard varies dependent upon sales.

³Alaska water extends 3 miles from the coastline and includes the Alexander Archipelago. Only vessels that discharge into Alaska waters are required to meet wastewater sampling and reporting requirements.

The wastewater systems on these vessels meet stringent effluent limits and are approved by the U.S. Coast Guard to discharge continuously.