

## 2009 Large<sup>1</sup> Commercial Passenger Vessel Discharge Status and Wastewater Treatment

	Vessel Operator	Vessel Name	Passenger Capacity	Voyages	Total Passengers <sup>6</sup>	Crew Capacity	Total Persons on Board <sup>2</sup>	Blackwater (BW) Treatment System Manufacturer	Permitted to discharge in Alaska <sup>3</sup>	
									BW	GW
1	Carnival Cruise Lines	<i>Carnival Spirit</i>	2400	16	38,400	934	3334	Triton/Rochem	Yes	Yes <sup>4</sup>
2	Celebrity Cruises	<i>Infinity</i>	2449	19	46,531	930	3379	Zenon	No	No
3	Celebrity Cruises	<i>Mercury</i>	1876	19	35,644	909	2785	Biopure/Rochem	No	No
4	Celebrity Cruises	<i>Millennium</i>	2449	18	44,082	1001	3450	Hydroxyl Cleansea	No	No
5	Crystal Cruises	<i>Serenity</i>	1040	1	1,040	Unknown	1040+Crew	Unknown	No	No
6	Fred Olsen	<i>Balmoral</i>	1360	1	1,360	Unknown	1360+ crew	Scanship	No	No
7	Holland America	<i>Amsterdam</i>	1380	20	27,600	647	2027	Unknown	No	No
8	Holland America	<i>Ryndam</i>	1260	20	25,200	602	1862	Zenon	Yes	Yes
9	Holland America	<i>Statendam</i>	1258	20	25,160	588	1846	Zenon	Yes	Yes
10	Holland America	<i>Veendam</i>	1350	19	25,650	602	1952	Zenon	Yes	Yes
11	Holland America	<i>Volendam</i> <sup>5</sup>	1432	19	27,208	647	2079	Zenon	Yes	Yes
12	Holland America	<i>Westerdam</i>	1916	20	38,320	800	2716	Rochem Bio-filtration	No	No
13	Holland America	<i>Zaandam</i>	1432	21	30,072	647	2079	Zenon	Yes	Yes
14	Holland America	<i>Zuiderdam</i>	1916	20	38,320	Unknown	1916+crew	Rochem Bio-filtration	No	No
15	Japan Cruise Line	<i>Pacific Venus</i>	680	1	680	Unknown	680 + crew	Unknown	No	No
16	Norwegian Cruise Lines	<i>Norwegian Pearl</i>	2376	19	45,144	1100	3476	Scanship	Yes	Yes
17	Norwegian Cruise Lines	<i>Norwegian Star</i>	2240	21	47,040	1100	3340	Scanship	Yes	Yes
18	Norwegian Cruise Lines	<i>Norwegian Sun</i>	2002	20	40,040	950	2952	Scanship	Yes	Yes
19	Princess Cruise Line	<i>Coral Princess</i>	1970	18	35,460	900	2800	Hamworthy Bioreactor	Yes	Accommodations Only
20	Princess Cruise Line	<i>Diamond Princess</i>	2678	18	48,204	1238	3916	Hamworthy Bioreactor	Yes	Accommodations Only
21	Princess Cruise Line	<i>Golden Princess</i>	2598	20	51,960	1060	3658	Hamworthy Bioreactor	Yes	Accommodations Only
22	Princess Cruise Line	<i>Island Princess</i>	1970	18	35,460	900	2870	Hamworthy Bioreactor	Yes	Accommodations Only
23	Princess Cruise Line	<i>Pacific Princess</i>	688	9	6,192	374	1062	Hamworthy Bioreactor	Yes	Accommodations Only
24	Princess Cruise Line	<i>Sapphire Princess</i>	2678	19	50,882	1238	3916	Hamworthy Bioreactor	Yes	Accommodations Only
25	Princess Cruise Line	<i>Sea Princess</i>	2016	11	22,176	854	2870	Hamworthy Bioreactor	Yes	Accommodations Only
26	Princess Cruise Line	<i>Star Princess</i>	2598	19	49,362	1150	3748	Hamworthy Bioreactor	Yes	Accommodations Only
27	Regent	<i>Seven Seas Mariner</i>	700	17	11,900	431	1131	Hamworthy Bioreactor	Yes	Yes
28	Royal Caribbean Cruises Ltd.	<i>Radiance of the Seas</i>	2501	18	45,018	859	3360	Hamman	Yes	Yes
29	Royal Caribbean Cruises Ltd.	<i>Serenade of the Seas</i>	2100	20	42,000	850	2950	Scanship	Yes	Yes
30	Royal Caribbean Cruises Ltd.	<i>Rhapsody of the Seas</i>	2435	19	46,265	Unknown	2435+crew	Hamman	No	No
31	Silver Seas	<i>Silver Shadow</i>	382	12	4,584	305	687	Biopure/Marisan	Yes	Yes
32	World	<i>Residensea</i>	600	2	1,200	Unknown	600+ Crew	Scanship	No	No
<b>Totals</b>				<b>514</b>	<b>988,154</b>					

In Orange- These vessels were permitted by DEC to discharge but stopped discharging at beginning of season or did not discharge in 2009.

In Grey- These vessels registered to not discharge in Alaska waters during the 2009 season.

<sup>1</sup>A large vessel has overnight accommodations for 250 or more passengers.

<sup>2</sup>Capacity is calculated from Registration, Vessel Specific Sampling Plan, or Notice of Intent. Actual number of passenger aboard varies dependent upon sales.

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

<sup>4</sup> Galley graywater not discharged

<sup>5</sup> Stopped discharging in Mid-May

<sup>6</sup> Assumes full capacity on every voyage