

2019 Large<sup>1</sup> Commercial Passenger Vessel Discharge Status and Wastewater Treatment

	Vessel Operator	Vessel Name	Passenger Capacity <sup>2</sup>	Voyages	Annual Passenger capacity <sup>4</sup>	Crew Capacity	Wastewater Treatment System <sup>6</sup>	Permitted to discharge in Alaska in 2019 <sup>3</sup>		Skagway Docks discharge permitted?		
								Underway	Stationary	Railroad	Ore	Broadway
1	Azamara	<i>Azamara Quest</i>	700	10	7,000	Unknown	Unknown	No	No	No	No	No
2	Carnival Cruise Lines	<i>Carnival Legend</i>	2124	21	44,604	Unknown	Triton Type MSTP9	No	No	No	No	No
3	Celebrity Cruises	<i>Celebrity Eclipse</i>	3148	19	59,812	Unknown	Unknown	No	No	No	No	No
4	Celebrity Cruises	<i>Celebrity Millennium</i>	2449	18	44,082	1001	Hydroxyl CB-100 MSD	Yes	No	No	No	No
5	Celebrity Cruises	<i>Celebrity Solstice</i>	3148	18	56,664	Unknown	Kruger WABAG MSD	No	No	No	No	No
6	Crystal	<i>Crystal Symphony</i>	975	13	12,675	Unknown	Unknown	No	No	No	No	No
7	Cunard Line	<i>Queen Elizabeth</i>	2081	4	8,324	Unknown	2 Hamworthy 320 MBR AWTS	Yes	No	No	No	No
8	Disney Cruise Line	<i>Disney Wonder</i>	2834	17	48,178	920	2 Hamworthy MBR AWTS	Yes	No	No	No	No
9	Holland America	<i>Amsterdam</i>	1380	9	12,420	Unknown	Hamworthy Super Trident MSD	No	No	No	No	No
10	Holland America	<i>Eurodam</i>	2106	21	44,226	929	2 Hamworthy MBR AWTS	Yes	No	No	No	No
11	Holland America	<i>Maasdam</i>	1380	4	5,520	580	Zenon AWTS	Yes	Yes	Yes	No	No
12	Holland America	<i>Nieuw Amsterdam</i>	2106	21	44,226	929	2 Hamworthy MBR AWTS	Yes	No	No	No	No
13	Holland America	<i>Noordam</i>	1916	20	38,320	Unknown	Rochem UF MSD	No	No	No	No	No
14	Holland America	<i>Oosterdam</i>	1916	21	40,236	Unknown	New installation in process	No	No	No	No	No
15	Holland America	<i>Volendam</i>	1432	20	28,640	647	Zenon AWTS	Yes	Yes	Yes	Yes	Yes
16	Holland America	<i>Westerdam</i>	1916	21	40,236	Unknown	Rochem Bio-filt AWTS	No	No	No	No	No
17	Hurtigruten	<i>Roald Amundson</i>	530	2	1,060	Unknown	Unknown	No	No	No	No	No
18	Norwegian Cruise Line	<i>Norwegian Bliss</i>	3500	21	73,500	1706	Scanship AWP 60 Type II AWTS	Yes	Yes	Yes	No	No
19	Norwegian Cruise Line	<i>Norwegian Jewel</i>	2376	21	49,896	1100	Scanship Type II AWTS Mussel FA45	Yes	Yes	Yes	Yes	Yes
20	Norwegian Cruise Line	<i>Norwegian Joy</i>	3500	22	77,000	1706	Scanship AWP 60 Type II AWTS	Yes	Yes	Yes	No	No
21	NYK	<i>Asuka</i>	680	1	680	Unknown	Unknown	No	No	No	No	No
22	Oceania	<i>Regatta</i>	777	11	8,547	373	2 Triton Water MBR AWTS	Yes	Yes	Yes	Yes	Yes
23	Ponant	<i>L' Austral</i>	264	2	528	136	Rochem Bio-filt AWTS	No	No	No	No	No
24	Ponant	<i>Le Boreal</i>	264	2	528	136	Rochem Bio-filt AWTS	No	No	No	No	No
25	Ponant	<i>Le Soleal</i>	264	8	2,112	136	Rochem Bio-filt AWTS	Yes	Yes	Yes	Yes	Yes <sup>5</sup>
26	Princess Cruise Line	<i>Coral Princess</i>	1986	20	39,720	900	2 Hamworthy MBR AWTS	Yes	No	No	No	No
27	Princess Cruise Line	<i>Golden Princess</i>	2606	21	54,726	1060	3 Hamworthy MBR AWTS	Yes	Yes - Graywater only	Yes	No	No
28	Princess Cruise Line	<i>Grand Princess</i>	2606	14	36,484	1100	3 Hamworthy MBR 16 AWTS	Yes	Yes	Yes	No	No
29	Princess Cruise Line	<i>Island Princess</i>	1974	20	39,480	900	2 Hamworthy MBR AWTS	Yes	No	No	No	No
30	Princess Cruise Line	<i>Royal Princes</i>	3560	19	67,640	1378	2 Hamworthy MBR AWTS	Yes	Yes - Graywater only	Yes	No	No
31	Princess Cruise Line	<i>Ruby Princess</i>	3084	20	61,680	1201	3 Hamworthy MBR 16 AWTS	Yes	Yes - Graywater only	No	No	No
32	Princess Cruise Line	<i>Star Princess</i>	2600	20	52,000	1150	3 Hamworthy MBR AWTS	Yes	Yes - Graywater only	No	No	No
33	Princess Cruise Line	<i>Sun Princess</i>	1974	1	1,974	924	3 Hamworthy MBR AWTS	Yes	No	No	No	No
34	Regent Seven Seas	<i>Seven Seas Mariner</i>	769	18	13,842	431	2 Hamworthy MBR 240C AWTS	Yes	No	No	No	No
35	ResidenSea	<i>The World</i>	450	1	450	Unknown	Unknown	No	No	No	No	No
36	Royal Caribbean Cruises	<i>Ovation of the Seas</i>	4180	18	75,240	1551	Scanship AWP 60 Type II AWTS	Yes	No	No	No	No
37	Royal Caribbean Cruises	<i>Radiance of the Seas</i>	2502	17	42,534	Unknown	Hamann MSD	No	No	No	No	No
38	Seabourn	<i>Sojourn</i>	450	11	4,950	338	2 Hamworthy MBR AWTS	Yes	Yes	Yes	Yes	No
39	Silver Seas	<i>Silver Muse</i>	596	16	9,536	417	Scanship AWP-25, 2017	Yes	No	No	No	No
40	Viking	<i>Viking Orion</i>	930	10	9,300	499	Scanship AWP-25, 2018	Yes	Yes	Yes	No	No
			<b>Totals</b>	<b>573</b>	<b>1,258,570</b>							

MBR is a Membrane Bioreactor

Vessels highlighted in gray in the above table have planned to not discharge wastewater in Alaskan waters in 2019.

<sup>1</sup>A large vessel has overnight accommodations for 250 or more passengers.<sup>2</sup>Capacity is the number of lower berths and is calculated from Registration, Vessel Specific Sampling Plan, or Notice of Intent. Actual number of passenger aboard varies.<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 sample for wastewater.<sup>4</sup>Assumes full capacity on every voyage<sup>5</sup>Discharge at Broadway Dock allowed unless another ship is discharging at the Ore Dock<sup>6</sup>Nondischarging vessels are not required to provide crew or treatment system information.