

2003 Small Commercial Passenger Vessels Wastewater Treatment

2003 Small* Commercial Passenger Vessels Wastewater Treatment

Small Vessel Operator	Small Vessel Name	Passenger Capacity	Crew Capacity	Total Persons on Board	Graywater treatment	Blackwater Treatment System Manufacturer	Discharging Blackwater within Alaska**?	Discharging Graywater within Alaska?	Wastewater Will be sampled in 2003	Type of Treatment System
Alaska Marine Highway System	<i>Columbia</i>	625	66	691	Mixed with BW	Exceltec	Yes	Yes	Yes^	Macerator Chlorinating System
Alaska Marine Highway System	<i>Kennicott</i>	748	56	804	Mixed with BW	Orca	Yes	Yes	Yes	Macerator Chlorinating System
Alaska Marine Highway System	<i>Malaspina</i>	500	50	550	Mixed with BW	Exceltec	Yes	Yes	Yes	Macerator Chlorinating System
Alaska Marine Highway System	<i>Matanuska</i>	498	50	548	Mixed with BW	Exceltec	Yes	Yes	Yes	Macerator Chlorinating System
Alaska Marine Highway System	<i>Taku</i>	370	42	412	Mixed with BW	Effluent Technology	Yes	Yes	Yes	Macerator Chlorinating System
America West Steamship	<i>Empress of the North</i> ^^			320	Chlorine	Orca	Yes	Yes	Yes^	Macerator Chlorinating System
CruiseWest	<i>Spirit of 98</i>	101	26	127	None	Red Fox	Yes	None	Yes^	Biological Chemical
CruiseWest	<i>Spirit of Alaska</i>			99	None	Omnipure	Yes	Yes	Yes^	Macerator Chlorinating System
CruiseWest	<i>Spirit of Columbia</i>	78	21	99	None	Omnipure	Yes	None	Yes^	Electrocatalytic
CruiseWest	<i>Spirit of Discovery</i>	84	21	105	None	Red Fox	Yes	Yes	Yes^	Biological Chemical
CruiseWest	<i>Spirit of Endeavour</i>	107	30	137	None	Omnipure	Yes	Yes	Yes	Electrocatalytic
CruiseWest	<i>Spirit of Oceanus</i>	114	64	178	None	Hamworthy	Yes	None	Yes^	Biological & Filtration
Discovery Shipping	<i>World Discoverer</i>			260	Chlorine	Biological	No	No	No	Biological
Glacier Bay Tours	<i>Wilderness Adventurer</i>	72	23	95	Mixed with BW	Omnipure 12 MX	Yes	Yes	Yes^	Electrocatalytic
Glacier Bay Tours	<i>Wilderness Discoverer</i>	88	24	112	Mixed with BW	Omnipure 12 MX	Yes	Yes	Yes	Electrocatalytic
Hapag-Lloyd	<i>Bremen</i>			240	Chlorine	Hamworthy biological/chlorination	No	No	No	Biological Chemical
Lindblad Expeditions	<i>Sea Bird</i>	70	22	92	Chlorine	Omnipure 12M	Yes	Yes	Yes^	Electrocatalytic
Lindblad Expeditions	<i>Sea Lion</i>	70	22	92	Chlorine	Omnipure 12M	Yes	Yes	Yes	Electrocatalytic
New World Management	<i>Clipper Odyssey</i>	114	73	187	Chlorine	Consillium Neptumatic	Yes	Yes	Yes^	Macerator Chlorinating System
New World Management	<i>Yorktown Clipper</i>	138	37	175	Chlorine	Omnipure 12MX824-27	Yes	Yes	Yes	Electrocatalytic

*A small vessel has overnight accommodations for 50-249 passengers. A large vessel has overnight accommodations for 250 or more passengers.

**Alaska water extends 3 miles from the coastline and includes the Alexander Archipelago.

^ Sampled by DEC personnel in addition to third party sampling

^^ Ship arrives mid August 2003