2007 Non-hazardous Waste (Garbage) Offloading in Alaska

Alaska Statute (AS) 46.03.475(e)(1) requires owners/operators of commercial passenger vessels¹ to submit a nonhazardous solid waste offloading and disposal (garbage) plan to the Department of Environmental Conservation (ADEC) prior to operating in Alaska's marine waters. As established by regulation (18 AAC 69.035), the garbage plan must describe the policies and procedures for offloading non-hazardous solid waste in Alaska or disposing such waste into Alaska marine waters. The plan, which is due annually by March 1, must also provide estimates of the amount of garbage that will be offloaded and disposed in Alaska's waters. After the season is completed, any deviations from the plan must be submitted to the ADEC by November 15 of each year. Some owners/operators also submit optional information on garbage offloaded or discharged outside Alaska (i.e., in Canada, Washington or California). Tables 1 and 2 summarize garbage offloading data submitted to the ADEC during the 2007 season.

Table 1: Large Ship 2007 Nonhazardous waste (Garbage) offload summary

	2007 Large Ship Offloads in Alaska (Required Information)*						Offloads Outside of Alaska (Information not Required)		
		Garbage	Recyclables						
<u>Operator</u>	<u>Vessel</u>	Wet/Dry Garbage	Plastic	Cardboard	Glass	<u>Paper</u>	Misc.	Wet/Dry Garbage	Recycled
	Coral Princess	0 m ³	0 m ³	0 m^3	0 m^3	$0\mathrm{m}^3$	0 m	3	
	Dawn Princess	0 m ³	0 m ³	0 m^3	0 m^3	0m^3	0 m	3	
Princess	Diamond Princess	0 m^3	0 m^3	0 m^3	0 m^3	$0\mathrm{m}^3$	0 m	3	
	Golden Princess	0 m ³	0 m^3	0 m^3	0 m^3	$0\mathrm{m}^3$	0 m	3	
Cruise	Island Princess	0 m ³	0 m ³	0 m^3	0 m^3	$0\mathrm{m}^3$	0 m		
	Pacific Princess	0 m ³	0 m^3	0 m^3	0 m^3	$0 \mathrm{m}^3$	0 m	3	
	Sapphire Princess	0 m^3	0 m^3	0 m^3	0 m^3	0m^3	0 m		
	Sun Princess	0 m^3	0 m^3	0 m^3	0 m^3	0m^3	0 m		
Doval	Radiance of the Seas	0 m ³	0 m ³	0 m^3	0 m^3	$0\mathrm{m}^3$	0 m	3	
Royal Caribean	Serenade of the Seas	0 m ³	0 m ³	0 m^3	0 m^3	0m^3	0 m		
Cambean	Vision of the Seas	0 m ³	0 m^3	0 m^3	0 m^3	0m^3	0 m	3	
Colobrity	Infinity	0 m ³	0 m ³	0 m^3	0 m^3	0m^3	0 m	3	
Celebrity Cruise	Mercury	6 m ³	0 m^3	0 m^3	0 m^3	$0 \mathrm{m}^3$	10 m	3	
	Summit	786 m ³	0 m^3	0 m^3	0 m^3	0m^3	60 m	3	
Norwegian	Norwegian Pearl	0 m ³	0 m ³	0 m^3	0 m^3	$0 \mathrm{m}^3$	0 m	3	
Cruise	Norwegian Star	0 m^3	0 m^3	0 m^3	0 m^3	$0 \mathrm{m}^3$	0 m	3	
Ordise	Norweigian Sun	0 m^3	0 m^3	0 m^3	0 m^3	0m^3	0 m	3	
Carnival Cruise			1539 Kg		19306 Kg		12643 K		
Radisson	Seven Seas Mariner	0 m ³	0 m^3	0 m^3	0 m^3	$0\mathrm{m}^3$	0 m	³ 200 m3	1,195 m3
Japan Cruise	Pacific Venus	20 m ³	35 m ³	0 m^3	10 m ³	$35\mathrm{m}^3$	8 m	3	
Japan Grace	Topaz	70 m ³	10 m ³	0 m^3	0 m ³	$0 \mathrm{m}^3$	0 m		
NYK	Asuka	16 m ³	16 m ³	0 m^3	0 m^3	$0 \mathrm{m}^3$	28 m		
	Amesterdam	0 m^3	0 m^3	0 m^3	0 m ³	$0 \mathrm{m}^3$	0 m		
Holland America	Noordam	0 m^3	0 m^3	0 m^3	0 m^3	$0\mathrm{m}^3$	0 m		
	Oosterdam	0 m ³	0 m^3	0 m^3	0 m^3	$0\mathrm{m}^3$	0 m	3	
	Ryndam	0 m ³	0 m^3		0 m^3	$0 \mathrm{m}^3$	0 m		
	Statendam	0 m ³	0 m^3	0 m^3	0 m^3	$0\mathrm{m}^3$	0 m		
	Volendam	0 m ³	0 m^3	0 m^3	0 m^3	$0 \mathrm{m}^3$	0 m		
	Zaandam	0 m^3	0 m^3	0 m^3	0 m^3	$0 \mathrm{m}^3$	0 m		
	Zuiderdam	0 m ³	0 m^3	0 m^3	0 m^3	0m^3	0 m	3	

 $1\,\mathrm{m}^3$ is approximately 1.31 cubic yards. 1 Kg is approximately 2.205 pounds Garbage offloads submitted as either cubic meters or kilograms

¹ As defined in Alaska Statute (AS) 46.03.490(2)

Large ship offloads

Holland America Line

Holland America indicated in their pre-season plan that their ships would not offload garbage in Alaska, which was confirmed in their post season deviation report.

Royal Caribbean International

Royal Caribbean indicated in their preseason plan that their ships would not offload garbage in Alaska. Their post season deviation report confirmed that garbage was not offloaded in Alaska.

Celebrity Cruise Line

Celebrity indicated in their preseason plan that their ships would not offload garbage in Alaska. Their post season deviation report confirmed that garbage was not offloaded in Alaska.

Norwegian Cruise Line

Norwegian indicated in its preseason plan that their ships would not offload garbage in Alaska, which was confirmed by their post season deviation report.

Princess Cruise Lines

Princess Cruise Lines indicated in their pre-season plan that their ships would not offload garbage in Alaska, which was confirmed in their post season deviation report.

Cruise lines companies operating only one vessel during the 2007 season

Radisson and Carnival Cruise Lines each operated only one ship in Alaska, both ships submitted summaries of garbage offloads. The Carnival Spirit split the amount of garbage between Juneau and Whittier. The amounts were reported in pounds and converted to kilograms. The Radisson Seven Seas Mariner provided reports of garbage offloaded outside of Alaska. The Topaz, Nippon Maru, Asuka, and Pacific Venus all provided information on discharges.

Table 2: Small Ship 2007 Nonhazardous waste (Garbage) offload summary

	2007 Small Ship Offloads in Alaska (Required Information)					Offloads Outside of Alaska (Information not Required)			
		Garbage	Recyclables						
<u>Operator</u>	<u>Vessel</u>	Wet/Dry Garbage	Plastic	Cardboard	<u>Glass</u>	<u>Paper</u>	Misc	Wet/Dry Garbage	Recycled
Cruise West	Spirit of 98	227 m ³	Kg	425 Kg	1130 Kg	Kg	Kg		
	Spirit of Alaska	119 m ³	Kg	650 Kg	1223 Kg	Kg	Kg		
	Spirit of Columbia	119 m ³	Kg	184 Kg	408 Kg	Kg	Kg		
	Spirit of Discovery	159 m ³	Kg	328 Kg	692 Kg	Kg	Kg		
	Spirit of Endeavor	229 m ³	Kg	516 Kg	677 Kg	Kg	Kg		
	Spirit of Oceanus	119 m ³	Kg	732 Kg	406 Kg	Kg	Kg		
	Yorktown Clipper	317 m ³	Kg	571 Kg	873 Kg	Kg	Kg		
Lindblad	Sea Bird	90 m ³	12 m ³	29 m ³	17 m ³	m^3	10 m ³		
Expeditions	Sea Lion	76 m ³	4 m ³	30 m ³	12 m ³	m^3	3 m^3		
Hapag-Lloyd Cruises	Hanseatic	20 m ³	20 m ³	0 m ³	0 m ³	0 m ³	0 m ³		
New World Ship	Clipper Odyssey	39 m ³	10 m ³	${\sf m}^3$	m^3	m^3	8 m ³		
Alaska Marine Highway	Alaska Marine Highway Ferries	2,805 m ³	m^3	m^3	m^3	m^3	m^3		
Majestic America Line	Contessa	153 m ³	Kg	195 Kg	127 Kg	Kg	Kg		
	Empress of the North	557 m³	Kg	712 Kg	463 Kg	Kg	Kg		

Small ship offloads

All Lines

The garbage information in Table 2 for vessels operated by Lindblad Expeditions, Cruise West, Hapag-Lloyd Cruises, New World Ship Management, and American West Steamboat Co are estimates taken from each operator's preseason plans and verified from their deviation reports. Alaska Marine Highway System submitted garbage logs. Garbage log submittals are not required under state statute but we appreciate these vessels's detailed submittal.

Table 3: Amount of solid waste offloaded by cruise ships and state ferries in Alaska ports in 2007

Port	Amount of Garbage Offloaded
Juneau	2,067 m ³
Ketchikan	1,398 m ³
Cordova	11 m ³
Homer	3 m ³
Kodiak	129 m ³
Nome	16 m ³
Wrangell	19 m ³
Dutch Harbor	21 m ³
Seward	142 m ³
Unspecified*	2,185 m ³
Whittier	121 m ³
Total	6,112 m³

^{*} Ships are not required by regulation to report the amount disposed of at EACH port but the total needs to be included in their garbage plan. ADEC assumes the majority of the waste was offloaded in Juneau since Juneau is a frequent embanking/disembarking port.

Table 3 shows the amount in cubic meters² of garbage and recyclables offloaded by commercial passenger vessels and state ferries in Alaska ports.

² A metric cubic meter is approximately 1.31 cubic yards.

International agreements translate to Federal Law

Ships offload garbage according to the International Convention for the Prevention of Pollution from ships at sea treaty signed in 1973 and amended in 1978 (MARPOL 73/78)³. Nations that signed the treaty promulgated their own laws and regulations to enforce the treaty provisions. In the United States, US Federal Law 33 U.S.C. §§ 1901 and regulations 33 CFR 151.66-151.73 implementing MARPOL 73/78 prohibit the disposal of plastics or any garbage containing plastics into U.S. navigable waters, and allow disposal of non-plastic garbage into navigable waters as described in the placard⁴ below.



³ More information can be found on the federal Environmental Protection Agency website, http://www.epa.gov/OWOW/OCPD/marpol.html or at http://www.imo.org/home.asp

³³ CFR 151.59 requires the owners of vessels 26' in length and above to place this placard on board the vessel.