2005 Non-hazardous Waste (Garbage) Offloading in Alaska

Alaska Statute (AS) 46.03.475(e)(1) requires owners/operators of commercial passenger vessels ¹ 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 for the upcoming season, 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 2005 season. Ships that visited Alaska but are not in this table did not offload any garbage in Alaska this season.

Table 1: Large Ship 2005 Nonhazardous waste (Garbage) offload summary

	2005 Large Ship Offloads in Alaska (Required Information)*							Offloads Outside of Alaska (Information not Required)	
		Garbage	Recyclables						
<u>Operator</u>	Vessel	Wet/Dry Garbage	Plastic	Cardboard	Glass	Paper	Misc.	Wet/Dry Garbage	Recycled
Princess Cruise	Dawn Princess						1,404 Kgs		
	Diamond Princess							293 m ³	192 m ³
	Sapphire Princess							479 m ³	261 m ³
	Sun Princess	459 m ³					16 m ³		
Royal Caribean	Vision of the Seas	15,444 Kgs							
	Radiance of the Seas							50 m ³	16,535 Kgs
Celebrity Cruise	Infinity	23 m ³							
	Mercury	408 m ³							
Norwegian Cruise	Norwegian Dream						23 m ³		
Carnival Cruise	Carnival Spirit	700 m ³							
Crystal Cruise	Crystal Harmony	435 m ³			15 m ³		49 m ³		
Radisson	Seven Seas Mariner	115 m ³							
Japan Cruise	Pacific Venus	60 m ³							

Large ship offloads

Princess Cruise Lines

Princess indicated in their pre-season plan that the only solid waste that may be offloaded in Alaska would be a minimum amount of pallets. Princess's post season deviation report indicated that pallets were not offloaded in Alaska, but the Sun Princess did offload some garbage in Juneau as a result of technical issues with their incinerator. Additionally, the Dawn and Sun Princess donated aluminum cans to the Juneau Boy Scout Troop-12, which is listed in Table 1 as miscellaneous recyclables. The Diamond and Sapphire Princess voluntarily reported some data on garbage and recyclables offloaded outside Alaska.

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.

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

Royal Caribbean International & Celebrity Cruises

Royal Caribbean indicated in their preseason plan that their ships would not offload garbage in Alaska. However, in their post season deviation report they confirmed that garbage was not offloaded in Alaska except for the Vision of the Seas who reported pallets offloaded in Juneau.

Celebrity indicated in their preseason plan that the Infinity and the Summit would not offload any garbage in Alaska. The post season report included deviations from the garbage plan. Infinity did offload some waste in Alaska during the season (Table 1). The preseason plan stated that the Mercury would offload garbage in Alaska, and the figures in Table 1 are the actual volumes offloaded during the 2005 season reported in their post season deviation report.

Norwegian Cruise Line

Norwegian indicated in its preseason plan that their ships would not offload garbage in Alaska. However, the Norwegian Dream did offload garbage in Juneau as reported in their deviation report (Table 1)

Cruise lines companies operating only one vessel during the 2004 season

Radisson Seven Seas Cruises, Crystal Cruises, Japan Cruise and Carnival Cruise Lines each operated only one ship in Alaska. These four vessels did offload garbage in Alaska, and the figures in Table 1 are from their post-season deviation reports.

Table 2: Small Ship 2005 Nonhazardous waste (Garbage) offload summary

	2005 Small Ship Offloads in Alaska (Required Information)					Offloads Outside of Alaska (Information not Required)			
		Garbage	Recyclables						
Operator	Vessel	Wet/Dry Garbage	Plastic	Cardboard	<u>Glass</u>	<u>Paper</u>	Aluminum	Wet/Dry Garbage	Recycled
Cruise West	Spirit of 98	181 m ³		2 m ³	2 m ³				
	Spirit of Alaska	93 m ³		3 m^3	4 m ³				
	Spirit of Columbia	54 m ³		5 m ³	3 m^3				
	Spirit of Discovery	63 m ³		2 m ³	1 m ³				
	Spirit of Endeavor	210 m ³		1 m ³	1 m ³				
	Spirit of Oceanus	82 m ³		4 m ³	2 m ³				
Glacier Bay Cruise	Wilderness Adventurer & Discoverer	1,089 Kgs	-		2 m ³	3 m ³			
Lindblad Expeditions	Sea Bird	98 m ³	3 m ³	27 m ³	10 m ³	1 m ³	4 m ³		
	Sea Lion	125 m ³	8 m ³	28 m ³	24 m ³	1 m ³	7 m ³		
New World Ship	Clipper Odyssey	10 m ³							
	Yorktown Clipper	710 m ³							
Alaska Marine Highway	Alaska Marine Highway Ferries	317,515 Kgs							
American West Steamboat Co.	Empress of the North			7 m ³	2 m ³		975 m³		

Small ship offloads

All Lines

The garbage information in Table 2 for vessels operated by Glacier Bay Cruises and the Alaska Marine Highway System are estimates taken from each operator's preseason plans and verified from their deviation reports. The figures for Lindblad Expeditions, Cruise West, New World Ship Management, and American West Steamboat Co. are from actual garbage logs included in their post-season report correcting pre-season estimates. Garbage log submittals are not required under state statute but we appreciate these vessel's detailed submittal.

Table 3 shows the amount in metric tons² of garbage and recyclables offloaded by commercial passenger vessels and state ferries in Alaska ports.

Table 3: Amount of solid waste offloaded by cruise ships and state ferries in Alaska ports in 2005

Port	Amount of Garbage Offloaded
Alert Bay	6 m ³
Anchorage	60 m ³
Hoonah Point	2 m ³
Juneau	2,688 m ³
Ketchikan	303 m ³
Kodiak	10 m ³
Petersburg	132 m ³
Sitka	542 m ³
Skagway	370 m ³
Unspecified*	711 m ³
Whittier	223 m ³
Total	5,048 m ³

^{*}Unspecified includes disposal amounts reported by Cruise West. 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.

The state ferries offload year-round in Juneau (200 tons) and Ketchikan (150 tons). Vision of the Seas offloaded 15,444 kgs of pallets in Juneau as well. These disposal amounts are not included in Table 3.

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 placard below.



² A metric ton is one cubic meter, or 2205 pounds.

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

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