

2005 Hazardous Waste Offloading and Generated in Alaska

OFFLOADING

As part of the plan required under AS 46.03.475(e)(2), Commercial Passenger Vessels operating in the State of Alaska are required to submit a hazardous waste and hazardous substance offloading plan to the Department of Environmental Conservation (DEC) for each year of operation within the state. This plan must describe the vessels policies and procedures for offloading hazardous waste within Alaska.

Most commercial passenger vessels **do not** offload hazardous waste in Alaska and do not have to submit a plan. However all vessels have to fulfill requirements required under AS 46.03.475(d) by providing a copy of hazardous waste manifests submitted to Federal or Provincial governments to show disposal of hazardous wastes GENERATED while operating in state waters.

AS 46.03.826 defines hazardous substance as; (1) an element or compound which, when it enters into the atmosphere or in or upon the water or surface or subsurface land of the state, presents an imminent and substantial danger to the public health or welfare, including but not limited to fish, animals, vegetation, or any part of the natural habitat in which they are found; (2) oil; or (3) a substance defined as a hazardous substance under 42 U.S.C. 9601(14)¹;

MANIFESTS FOR HAZARDOUS WASTE GENERATED IN ALASKA

Large Ships

The following table (Table 1) provides the actual volumes of hazardous waste GENERATED by commercial passenger vessel while operating in Alaska and offloaded in Canada, Washington and California during the 2005 season.

Small Ships

Small ships do not have dry-cleaning or photo processing on board. Small ships do not produce enough hazardous waste to be required by law to manifest these wastes to a Federal or Provincial government. Typically, the only hazardous waste produced by the small vessels is used oil. However, some small ships have voluntarily reported other hazardous wastes that were offloaded during the 2005 season in Alaska, Canada, and Washington. The quantity and description of hazardous waste offloaded by the small vessels while operating in Alaska is summarized in Table 2.

¹ Please refer to the following website for more information:
[http://assembler.law.cornell.edu/uscode/search/display.html?terms=9601%20\(14\)&url=/uscode/html/uscode42/usc_sec_42_00009601----000-.html](http://assembler.law.cornell.edu/uscode/search/display.html?terms=9601%20(14)&url=/uscode/html/uscode42/usc_sec_42_00009601----000-.html)

Table 1: 2005 Large Ships Hazardous Waste or Substances Generated in Alaska but offloaded in Canada, Washington or California

	<u>Vessel</u>	2005 Hazardous Waste Offloads Outside of Alaska (Required Information)								
		<u>Medical</u>	<u>Photo*</u>	<u>Paint</u>	<u>Oil</u>	<u>Dry Cleaning</u>	<u>Other (Solid)</u>	<u>Other (Liquid)</u>	<u>Incinerator Ash</u>	<u>Waste Water</u>
Princess Cruises	Coral Princess	1,360 L	5,641 L	2,364 L	224,382 L	170 L	39 Kg	3,705 L	--	--
	Dawn Princess	2,555 L	6,779 L	3,704 L	261,104 L	175 L	148 Kg	2,786 L	--	--
	Diamond Princess	425 L	6,804 Kg	980 Kg	359,916 L	281 Kg	5,363 Kg	--	107,888 Kg	1,996 Kg
	Island Princess	1,785 L	7,194 L	1,248 L	774,906 L	69 L	32 Kg	1,940 L	2,705 Kg	--
	Regal Princess	657 L	3,545 L	452 L	384,264 L	1,090 L	2,446 Kg	5,297 L	--	610 L
	Sapphire Princess	269 L	13,415 Kg	1,143 Kg	142,759 L	186 Kg	7,027 Kg	--	54,937 Kg	5,194 Kg
	Sun Princess	1,870 L	4,910 L	1,624 L	403,795 L	1,080 L	320 Kg	2,516 L	--	--
Holland America	Amsterdam	496 Kg	2,916 L	715 L	136,679 L	176 L	1,408 Kg	1,730 L	--	1,635 L
	Oosterdam	99 Kg	3,192 L	292 Kg	33,010 L	137 Kg	1,351 Kg	549 L	--	205 L
	Ryndam	1,360 L	2,741 L	208 L	263,788 L	--	36 Kg	139 L	--	--
	Statendam	1,020 L	3,375 L	605 L	119,500 L	--	12 Kg	436 L	--	--
	Veendam	1,955 L	2,073 L	368 L	72,882 L	180 L	17 Kg	112 L	--	--
	Volendam	1,190 L	4,612 L	225 L	190,088 L	120 L	6 Kg	711 L	--	--
	Zaandam	5,185 L	4,113 L	482 L	824 L	220 L	127 Kg	527 L	--	--
Royal Caribbean Cruises	Radiance of the Seas	2,945 L	8,112 L	1,664 L	63,674 L	416 L	--	--	1,180 Kg	--
	Serenade of the Seas	1,530 L	6,392 L	832 L	68,040 L	416 L	--	640 L	--	--
	Vision of the Seas	510 L	6,032 L	810 L	297,360 L	225 L	--	1,876 L	--	--
Celebrity Cruises	Infinity	1,700 L	4,992 L	--	71,691 L	416 L	420 Kg	8,530 L	--	--
	Mercury	899 L	4,782 L	826 L	160,970 L	759 L	2,132 Kg	3,648 L	--	--
	Summit	1,360 L	2,912 L	208 L	27,234 L	416 L	--	--	--	--
Norwegian Cruises	Norwegian Dream	35 Kg	1,150 L	2,460 L	602,335 L	140 L	366 Kg	2,370 L	--	205 L
	Norwegian Spirit	52 Kg	2,545 L	2,061 L	387,263 L	640 L	161 Kg	4,621 L	--	820 L
	Norwegian Star	139 Kg	2,025 L	935 L	349,895 L	205 L	281 Kg	7,080 L	--	--
	Norwegian Sun	1,171 L	5,325 L	1,175 L	90,102 L	155 L	50 Kg	699 L	--	--
Other	Carnival Spirit	3,060 L	3,536 L	388 L	617,640 L	--	7 Kg	--	--	--
	Seven Seas Mariner	105 L	1,461 L	--	298,200 L	90 L	--	832 L	--	--
	Crystal Harmony**	--	1,894 L	214 L	275,798 L	393 L	--	12 L	--	--

* Note: The photo waste volumes reported in this table include some non-hazardous photo waste.

**The Crystal Harmony offloaded 15m³ of incinerator ash in Juneau, Alaska.

Large Ships

Princess Cruise Lines

All ships submitted information pertaining to each major waste stream in summary table. The Sapphire, Island, Regal and the Diamond Princess submitted info on incinerator ash and/or blackwater. All of the waste streams were off loaded out of state.

The Island Princess has a volume of dry cleaning waste that is considerably lower than any of the other Princess ships, and this is due to the shipboard practices of reusing the old liquid waste instead of adding new fluids.

Holland America Lines

All ships submitted information pertaining to each major waste stream with the exception of the Ryndam and Statendam who did not report dry cleaning waste. In an effort to reduce certain waste streams Holland America has replaced the dry cleaning systems on board the Ryndam and Statendam with new "wet cleaning systems" which uses soap and water instead of the hazardous chemicals that dry cleaning systems use. The reduced oil waste volume on board the Zaandam can also be explained by Holland America's efforts to reduce certain waste streams. Currently the Zaandam has installed new equipment that reduces oily bilge water and additional equipment that allows for oil sludge to be reused. All waste streams were offloaded out of state in Canada.

Royal Caribbean Cruise Lines

All ships submitted information pertaining to each major waste stream. All offloads occurred out of state in Canada and California.

Celebrity

All ships submitted information for each major waste stream. All offloads occurred out of state in Canada.

Norwegian

All ships submitted information pertaining to each major waste stream in summary table. All offloads occurred out of state.

Carnival Spirit

The Carnival Spirit submitted information for each major waste stream except dry cleaning, which is a service not offered aboard ship. All offloads occurred out of state.

Seven Seas Mariner

The Seven Seas Mariner submitted information for each major waste stream except for paint waste. All offloads occurred out of state

Crystal Harmony

The Crystal Harmony submitted information pertaining to each major waste stream in the summary table. All offloads occurred out of state except for 15m³ of incinerator ash which was offloaded in Canada.

Table 2: 2005 Hazardous Waste Offloads for Small Ships

2005 Small Ship Hazardous Waste Offloads							
Operator	Vessel	Product	Quantity	Units	Offload Location		
					Alaska	Canada	Washington
Glacier Bay Cruise	Wilderness Adventurer & Discoverer	Used lube oil	1893	L	x		
Cruise West	Spirit of Alaska	Motor Oil-used	190	L	x		
	Spirit of 98	Motor Oil-used	5	L	x		
	Spirit of Columbia	Motor Oil-used	200	L	x		
	Spirit of Endeavor	Motor Oil-used	800	L	x		
	Spirit of Oceanus	Paint Rags	416	L		x	
Alaska Marine Highway	All Ferries Combined	Waste Oil	264,978	L	x		
	Columbia	Paint Thinners	208	L	x		
	Taku	Paint Thinners	38	L			x
	Taku	White Gas	4	L			x
	Malaspina	Paint Thinners	38	L	x		
	Malaspina	Indicating liquid	0.5	L	x		
Linblad Expeditions	Sea Bird	Misc. Solid Waste	12	Kgs	x		
	Sea Lion	Misc. Solid Waste	16	Kgs	x		
New World Ship	Yorktown Clipper	Oily Sludge	5,084	L		x	

Small Ships

Glacier Bay

The Wilderness Discoverer and Adventurer estimated an offload of 500 gal (1893 liters) of used lube oil; this number is a combined estimate for both ships. Information was obtained from the vessel's operators submitted plans at the beginning of the season.

Cruise West

Cruise West reported the actual volumes of used oil for all ships offloaded while operating in Alaska. The Spirit of Oceanus did not offload any used oil in the Alaska.

Alaska Marine Highway

Alaska Marine Highway (AMHS) reported a combined total for all state ferries for the offload of waste oil in Alaska. Additionally, AMHS reported other hazardous waste substances that were offloaded in Alaska and Washington during the 2005 season.

Lindblad Expeditions

Lindblad reported that Sea Lion and Sea Bird did offload a small amount of miscellaneous hazardous waste in Alaska during the 2005 season.

New World Ship Management

New World Ship Management reported that the Yorktown Clipper offloaded oily sludge in Alaska during the 2005 season. It was also reported that the Clipper Odyssey did not offload any hazardous waste in Alaska during the 2005 season.

American West Steamboat Company

American West Steamboat Company reported that the Empress of the North did not offload hazardous waste in Alaska during the 2005 season.