

2007 Hazardous Waste Offloading 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. This plan includes:

- the estimated volume of each waste or substance that the owner/operator anticipates offloading;
- the proposed offloading and disposal method;
- material safety information provided by the manufacturer (if applicable);
- identification of contractors to be used for offloading;
- the controlled storage, processing, or disposal facilities or treatment works proposed to be used; and
- a description of vessel crew training in offloading procedures.

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 2007 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 2007 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: 2007 Hazardous Waste Offloads for Large Ships

	<u>Vessel</u>	2007 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	1,190 L	0 L	1,057 L	237,340 L	85 L	649 Kg	0 L		
	Dawn Princess	263 L	320 L	1,920 L	308,066 L	60 L	1,920 Kg	433 L		
	Diamond Princess	1,870 L	9,096 L	774 L	224,664 L	655 L	774 Kg	90 L	2,752 Kg	
	Golden Princess	125 L	20 L	1,073 L	34,775 L	45 L	1,073 Kg	1,692 L		
	Island Princess	850 L	0 L	742 L	127,768 L	624 L	742 Kg	15 L		
	Pacific Princess	340 L	20 L	378 L	204,423 L	0 L	378 Kg	25 L		
	Sapphire Princess	1,020 L	1,664 L	0 L	286,562 L	60 L	1,655 Kg	0 L		
	Sun Princess	82 L	120 L	410 L	2,665 L	140 L	3,419 Kg	51 L	18 Kg	
Holland America	Amsterdam	760 L	0 L	199 L	277,126 L	108 L	557 Kg	450 L		
	Noordam	102 L	807 L	36 L	55,768 L	140 L	525 Kg	229 L		
	Oosterdam	54 L	0 L	249 L	488,974 L	145 L	3,305 Kg	559 L		
	Ryndam	1,105 L	962 L	114 L	275,638 L	0 L	115 Kg	1,567 L		
	Statendam	1,785 L	1,044 L	0 L	161,248 L	0 L	1,647 Kg	2,671 L		
	Volendam	1,870 L	2,156 L	150 L	304,272 L	0 L	110 Kg	1,891 L		
	Zaandam	1,020 L	832 L	120 L	124,110 L	0 L	1,575 Kg	3,314 L		
	Zuiderdam	1,530 L	738 L	330 L	65,739 L	236 L	528 Kg	2,838 L		
Royal Caribbean Cruises	Radiance of the Seas	1,615 L	2,032 L	342 L	380,902 L	208 L	8 Kg	2,850 L		
	Serenade of the Seas	3,570 L	2,000 L	416 L	174,900 L	0 L	330 Kg	2,228 L		
	Vision of the Seas	50 L	1,010 L	460 L	157,135 L	205 L	1,932 Kg	230 L		
Celebrity Cruises	Infinity	1,360 L	2,810 L	0 L	17,889 L	416 L	0 Kg	40 L		
	Mercury	1,423 L	0 L	416 L	652,016 L	416 L	372 Kg	0 L		
	Summit	1,615 L	5,864 L	208 L	98,729 L	0 L	0 Kg	1,000 L		
Norwegian Cruises	Norwegian Pearl	71 L	0 L	1,230 L	341,174 L	345 L	3,941 Kg	2,100 L		
	Norwegian Star	97 L	6,590 L	4,215 L	599,589 L	1,750 L	14,697 Kg	4,871 L		
	Norwegian Sun	765 L	2,000 L	3,274 L	257,952 L	273 L	411 Kg	3,655 L		
Other	Carnival Spirit	1,530 L	3,536 L	952 L	372,465 L	0 L	40 Kg	705 L		
	Asuka II	200 L	0 L	0 L	52,159 L	0 L	400 Kg	0 L		
	Pacific Venus	0 L	0 L	0 L	0 L	0 L	0 Kg	0 L		
	Seven Seas Mariner	170 L	0 L	0 L	224,862 L	0 L	832 L	0 L		
	Topaz	200 L	200 L	1,400 L	0 L	0 L	200 L	0 L		

Large Ships

General Information

Dry cleaning waste amounts have been dropping, and in some cases reduced to zero as new technology eliminate or reduce the need for toxic chemicals. The amount of photo waste should also continue to drop as the public and companies move to digital photography and printing.

Princess

All ships submitted information for each major waste stream. According to Princess Cruises, photo waste is filtered to recover silver, reducing the amounts of this waste stream.

Holland America

All ships submitted information for each major waste stream. The Statendam, Volendam, Zaandam, and Ryndam have eliminated hazardous dry cleaning waste using new methods of cleaning.

Norwegian Cruise Lines

All ships submitted information for each major waste stream. The large amount of other (solid) waste includes electronics and batteries.

Royal Caribbean Cruises

All ships submitted information for each major waste stream.

Celebrity Cruises

All ships submitted information for each major waste stream.

Carnival Spirit

The Carnival Spirit submitted information for each major waste stream, except dry cleaning which is not offered aboard ship.

Seven Seas Mariner

Hazardous waste manifests for the Seven Seas Mariner offloads in Canada were provided to ADEC.

Asuka II, Pacific Venus, Topaz

These ships had brief visits to Alaska. The Topaz estimated the amount of hazardous waste produced while in Alaska waters. It was in Alaskan waters for less than a week. The Asuka provided manifests for the offload of waste oil in Canada. The Pacific Venus provided a deviation report at the end of the 2007 season.

Table 2: 2007 Hazardous Waste Offloads for Small Ships

2007 Small Ship Hazardous Waste Offloads							
Operator	Vessel	Product	Quantity	Units	Offload Location		
					Alaska	Canada	Washington
Hapag-Lloyd	Hanseatic	Incinerator Ash	220	L			Other
Cruise West	Spirit of Alaska	Used Oil	568	L	X		
	Spirit of 98	Used Oil	1355	L	X		
	Spirit of Columbia	Used Oil	1230	L	X		
	Spirit of Discovery	Used Oil	0	L	X		
	Spirit of Endeavor	Used Oil	1287	L	X		
	Spirit of Oceanus	Oil	8000	L		X	
	Yorktown Clipper	Used Oil	0	L			
Alaska Marine Highway	All Ferries Combined	Waste Oil	120,430	Gal	X		X
		Sodium Silicate	8	L	X		
		Disc cleaner	95	L	X		
		Medical waste	4	L	X		
New World	Clipper Odyssey						
Linblad Expeditions	Sea Bird						
	Sea Lion	Freon	0.5	Kg			
Majestic America	Contessa						
	Empress of the North						

Small Ships

Cruise West

Cruise West reported amounts of oil offloaded in Alaska, and hazardous waste offloaded in Canada by the Spirit of Oceanus. Cruise West also reported waste oil offloads in Alaska.

Linblad Expeditions

Linblad expeditions reported one can of Freon offloaded. Not included in totals but submitted are 12 printer cartridges and one large battery.

Alaska Marine Highway

The Alaska Marine Highway reported 120,430 gallons (455,827 L) of oil waste offloaded. This was for year-round operations. Oil was offloaded in Ketchikan, Juneau, and Bellingham (35,212 gallons or 133,277 L).

Ships that did not offload in Alaska

Small cruise ships that operated in Alaska during the 2006 season but did not offload hazardous waste are the Contessa, Clipper Odyssey, and Empress of the North. Small cruise ships generally produce a small amount of hazardous waste, so they are not required to provide hazardous waste manifests to the state. However, small ships are required to estimate the amount of hazardous waste they expect to offload in the State of Alaska for each season of operation. Small ship operators are encouraged to provide manifests or receipts of hazardous waste landed to the state.