

2006 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 2006 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 2006 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: 2006 Hazardous Waste Offloads for Large Ships

	<u>Vessel</u>	2006 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	1,105 L	2,661 L	325 L	207,824 L	687 L	387 Kg	478 L		
	Diamond Princess	1,190 L	100 L	636 L	241,630 L	225 L	905 Kg	1,342 L	2,700 Kg	
	Island Princess	1,530 L	175 L	1,986 L	188,216 L	339 L	650 Kg	119 L	580 Kg	
	Regal Princess	120 L	2,149 L	737 L	321,005 L	80 L	3,443 Kg	3,255 L		
	Sapphire Princess	680 L	1,248 L	832 L	138,992 L	0 L	82 Kg	560 L		
Holland America	Oosterdam	87 L	3,470 L	187 L	123,922 L	152 L	1,527 Kg	3 L		
	Ryndam	1,295 L	3,317 L	268 L	163,675 L	0 L	571 Kg	29 L		
	Statendam	1,700 L	3,561 L	418 L	223,141 L	0 L	1,213 Kg	340 L		
	Veendam	1,185 L	4,911 L	29 L	20,208 L	0 L	15 Kg	441 L		
	Volendam	1,190 L	4,878 L	170 L	196,164 L	150 L	470 Kg	908 L		
	Westerdam	140 L	4,720 L	266 L	211,579 L	236 L	1,345 Kg	9 L		
	Zaandam	214 L	2,635 L	338 L	54,934 L	210 L	650 Kg	1,255 L	615 L	
	Zuiderdam	1,355 L	3,234 L	439 L	78,872 L	319 L	361 Kg	174 L		
Royal Caribbean Cruises	Radiance of the Seas	1,955 L	6,466 L	228 L	130,248 L	0 L	0 Kg	0 L		
	Serenade of the Seas	5,185 L	5,168 L	322 L	84,080 L	416 L	28 Kg	58 L		
	Vision of the Seas	662 L	4,265 L	575 L	421,203 L	410 L	3,679 Kg	93 L		
Celebrity Cruises	Infinity	1,105 L	3,026 L	0 L	56,580 L	208 L	0 Kg	0 L		
	Mercury	740 L	0 L	416 L	382,488 L	416 L	363 Kg	0 L		
	Summit	1,360 L	2,838 L	416 L	86,353 L	416 L	0 Kg	0 L		
Norwegian Cruises	Norwegian Star	115 L	6,000 L	3,719 L	288,597 L	115 L	12,511 Kg	296 L		
	Norwegian Sun	120 L	4,001 L	2,970 L	187,988 L	65 L	5,245 Kg	850 L		
	Norwegian Wind	1,606 L	2,154 L	2,496 L	372,568 L	0 L	357 Kg	476 L		
Other	Carnival Spirit	1,020 L	6,410 L	536 L	450,380 L	0 L	325 L	497 L		
	Topaz	50 L	50 L	350 L	0 L	0 L	50 L	0 L		
	Seven Seas Mariner	0 L	9,324 L	0 L	197,452 L	2,022 L	0 Kg	233 L		
	Silver Shadow	85 L	0 L	4,324 L	85,780 L	0 L	433 L	636 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.

Holland America

The Statendam, Veendam, and Ryndam have eliminated hazardous dry cleaning waste using new methods of cleaning.

Norwegian Cruise Lines

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.

Silver Shadow

The Silver Shadow submitted information for each major waste stream. ADEC has been informed that this ships uses digital cameras which eliminates photo waste.

Topaz

The Topaz estimated the amount of hazardous waste produced while in Alaska waters. It was in Alaskan waters for less than a week.

Table 2: 2006 Hazardous Waste Offloads for Small Ships

2006 Small Ship Hazardous Waste Offloads							
Operator	Vessel	Product	Quantity	Units	Offload Location		
					Alaska	Canada	Washinton
Cruise West	Spirit of Alaska	Used Oil	1,325	L	X		
	Spirit of Discovery	Used Oil	1,249	L	X		
	Spirit of 98						
	Spirit of Columbia	Used Oil	1,798	L	X		
	Spirit of Endeavor	Used Oil	1,798	L	X		
	Spirit of Oceanus	Misc.Waste	250	L			X
	Yorktown Clipper	Used Oil	2,366	L	X		
Alaska Marine Highway	All Ferries Combined	Oil Waste	288,890	L	X		
		Paint	546	L	X		
		Solid Waste	59	Kg	X		

Small Ships

Cruise West

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

Alaska Marine Highway

Alaska Marine Highway has submitted a combined total for all state ferries for the offload of waste oil and other wastes in Alaska.

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 Sea Lion, Sea Bird, Clipper Odyssey, Bremen, and Empress of the North. Small cruise ships generally produce a very 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.