

# Cruise Ship Fact Sheet

## Frequently Asked Questions

As of July 24, 2006

### How does the Alaska state law differ from the federal law?

The federal law “Title XIV—Certain Alaskan Cruise Ship Operations” of the Miscellaneous Appropriations Bill (H.R. 5666) on December 21, 2000 in the Consolidated Appropriations Act of 2001 (P.L. 106-554) applies to large commercial passenger vessels only, which are defined as those vessels having more than 500 passengers. Effluent standards are set for blackwater only. Allows continuous discharge if secondary treatment standards are met and compliance is demonstrated through semi-monthly sampling. Federal law closed former “donut holes”. “Donut holes” were areas greater than three nautical miles from shore but within Alexander Archipelago that in the past ships could discharge of raw sewage. The US Coast Guard enforces this law. EPA is authorized to create additional standards at its discretion. EPA has begun the process of evaluating current cruise ship wastewater discharge requirements in Alaska.

The state law AS 46.03.460 – 46.03.490 ([http://www.legis.state.ak.us/cgi-bin/folioisa.dll/stattx04/query=\\*/doc/{@19481}](http://www.legis.state.ak.us/cgi-bin/folioisa.dll/stattx04/query=*/doc/{@19481})?) effective July 1, 2001 and revised on July 8, 2004, applies to large (defined as 250+ passengers) as well as small passenger vessels (50 – 249 passengers) including some Alaska Marine Highway System vessels. Effluent limits are set for both graywater and blackwater. The Alaska Department of Environmental Conservation (DEC) enforces this law and may create additional standards if science and technology warrant and would be done through an additional regulatory process. Industry fees pay for the program.

The state law also addresses the offloading and/or disposal of nonhazardous solid wastes (besides sewage) and hazardous wastes in Alaska. Vessel owner/operators are required to annually submit a description of the vessel nonhazardous and hazardous waste handling procedures and to report any deviations from the vessel plan to the DEC. The DEC also gets copies of reports and notices submitted to Canadian or U.S. authorities when hazardous wastes generated while in Alaska waters are offloaded elsewhere (e.g., Vancouver or Seattle).

Following the 2004 change in statute, the state drafted regulations to address discharges from small passenger vessels. The proposed regulations have been finalized and are effective as of May 18, 2006. For a copy of the regulations please see <http://www.dec.state.ak.us/regulations/pdfs/18%20AAC%2069%20Revised%20as%20of%20May%2018,%202006.pdf>

### What are the effluent limits set by the Alaska state law?

As established in AS 46.03.460 - 46.03.490, the effluent limits for blackwater, graywater, and other wastewater are 150 milligram per liter for total suspended solids (TSS) and 200 fecal coliform colonies per 100 milliliters for vessels that are traveling at least 6 knots and are at least 1 nautical mile from shore. Vessels are allowed to discharge wastewater continuously if they

have received approval from the U.S. Coast Guard. DEC and the U.S. Coast Guard work together closely to monitor and enforce cruise ship wastewater issues in Alaska.

[Does DEC do its own wastewater sampling?](#)

All large vessels under the federal program (500+ passengers) pay a third party sampler and laboratory to take at least two samples per season. The U.S. Coast Guard requires large cruise ships that have been certified for continuous discharge to sample twice per month. Small vessels can use their crew members only after they prove to the DEC that their crew members have appropriate background and training to perform wastewater sampling.

DEC approves the protocol and procedures used by the industry samplers and the laboratory and also conduct audits of the third party sampler or crew member. Based on DEC audits of industry sampling and laboratory analytical testing, we believe that the industry samples have integrity. In addition, the DEC (or its contractor) takes its own wastewater samples in Southeast and Southcentral Alaska.

[How many vessels have registered in Alaska since the passage of the law?](#)

**Cruise Ship Registration History**

	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
<b>Total</b>	<b>43</b>	<b>44</b>	<b>52</b>	<b>50</b>	<b>47</b>
Large Ships	24	25	32	31 <sup>1</sup>	29
Small Ships	14	14	15	14	13
State Ferries	5	5	5	5	5

[How many cruise ship passengers are expected to visit Alaska during 2006?](#)

**Estimated Cruise Ship Passengers Visiting Alaska<sup>2</sup>**

	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b>Total</b>	<b>881,901</b>	<b>947,664</b>	<b>937,150</b>	<b>930,464</b>
Small Cruise Ships	26,496	36,345	18,400	21,152
Large Cruise Ships	855,405	911,319	918,750	909,312

<sup>1</sup> Thirty-one vessels registered but only twenty-nine vessels visited Alaska. Universe Explorer and Explorer canceled their one voyage in 2004

<sup>2</sup> Total passengers are estimated by vessel capacity (assuming all vessels operate at full capacity) multiplied by the number of voyages stated in vessel registration documents.

## What are the conditions under which large cruise ships can discharge wastewater?

Due to the overlap of the state and federal law, large cruise ships have one of three options for their wastewater discharge:

1. Vessels may hold their wastewater and only discharge it once they are outside of Alaska waters (roughly 3 nautical miles from shore but excluding former “donut holes”). The wastewater from these vessels is excluded from the State-required sampling regime and effluent standards.
2. Vessels may discharge their wastewater only when the vessel is at least 1 nautical mile from shore and traveling at least 6 knots. The gray and blackwater must meet the following effluent standards: 150 milligram per liter for total suspended solids and 200 fecal coliform colonies per 100 milliliters.
3. Vessels may operate advanced wastewater treatment systems that meet the stringent requirements that enable them to be certified by the U.S. Coast Guard for continuous discharge.

Most large cruise ships operate under option 1 or 3. Vessels typically only operate under condition 2 while they are seeking certification from the U.S. Coast Guard for continuous discharge (option 3).

## What are the stringent standards that large cruise ships must meet in order to be certified to discharge continuously?

33 Code of Federal Regulations (CFR) 159.309

1. Geometric mean from samples during a 30-day period do not exceed 20 fecal coliforms/100 ml and not more than 10% of the samples exceed 40 fecal coliforms/100 ml.
2. Total residual chlorine not to exceed 10 ug/l.
3. Meet CFR 133.102 secondary treatment standards for biological oxygen demand (BOD) suspended solids, and pH.

Test results from at least five effluent samples taken during a 30-day period must satisfy the criteria above. The U.S. Coast Guard Captain of the Port either approves or denies the continuous discharge status. Once a vessel is approved for continuous discharge, it must continue to sample for fecal coliform, chlorine, BOD, TSS and pH at least two times per month.

## What large cruise ships are approved by the U.S. Coast Guard for continuous discharge in 2006?

Please see information under “OF INTEREST” DEC REPORTS 2006 Large Ship Wastewater treatment and Discharge status.

## What large cruise ships will hold all of their wastewater for discharge outside Alaska waters in 2006?

Please see information under “OF INTEREST” DEC REPORTS 2006 Large Ship Wastewater treatment and Discharge status.

## Were there any wastewater violations for previous cruise seasons?

- 2005 Three compliance letters were issued to small cruise ships for exceedences of the fecal coliform standard. One notice of violation was issued to a small ship for failure to take all required samples during the season.
- 2004 DEC sent four compliance letters to large cruise ships for exceedences of the fecal coliform standard and one notice of violation to a small ship for failure to take samples during the season. Notice of Violation is usually a case referred to the Alaska Department of Law.
- 2003 Seven compliance letters were sent to large cruise ships and one compliance letter was sent to the Alaska Marine Highway System for sampling problems. No incident warranted a Notice of Violation.
- 2002 DEC issued one Notice of Violation to Holland America for fecal coliform exceedences on the *Ryndam* and the *Volendam*. The state and federal government settled cases against Holland America for the August 2002 *Ryndam* spill on December 7, 2004. The state received \$65,000 from Holland America for this incident.

## Where can I find information about the Alaska Cruise Ship Initiative that led to the passage of Alaska's federal and state cruise ship laws?

Please go to this website [http://www.state.ak.us/dec/water/cruise\\_ships/cruiseinitiative.htm](http://www.state.ak.us/dec/water/cruise_ships/cruiseinitiative.htm)

## What regulation applies to cruise ship air emissions? Where can I find this regulation?

The Marine Visible Emission Standards are set in 18 AAC 50.070.

[http://www.state.ak.us/dec/water/cruise\\_ships/cruise\\_air.htm](http://www.state.ak.us/dec/water/cruise_ships/cruise_air.htm) The regulations apply to all marine vessels, not just to cruise ships.

## Does this program cover air emission from cruise ships?

The Commercial Passenger Vessel Environmental Compliance program monitors emissions from cruise ships and ferries. Since the summer of 2000, a contractor has done over 250 opacity readings per year on large cruise ships in four Southeast Alaska ports (Juneau, Haines, Skagway, and Ketchikan). In addition, DEC hired a contractor to do opacity readings on large vessels and small vessels in Southcentral Alaska beginning in 2002. As of 2005 season, DEC hired a new contractor to perform opacity readings in Alaska's five busiest cruise ship ports-Ketchikan, Juneau, Skagway, Whittier and Seward.

Have there been any violations of the marine visible emissions laws?

The Department is pleased with the improvements that we have seen the cruise industry make in this area. Since 2000, the number of Notices of Violation issued for by DEC for cruise ship air emissions has decreased considerably (see table).

<b>Year</b>	<b>Number of Air Emission Notice's of Violation</b>
2000	15
2001	11
2002	1
2003	2
2004	1
2005	2

Do the vessels create any ambient air quality problems?

Ambient air was monitored in downtown Juneau for SO<sub>2</sub>, NO<sub>x</sub>, and PM<sub>2.5</sub> during 2000 and 2001. The pollutant levels were found to be way below federal and state health based standards. See “Interim Cruise Ship Sampling Data Summary”

[http://www.state.ak.us/dec/water/cruise\\_ships/pdfs/interimsumm090601.pdf](http://www.state.ak.us/dec/water/cruise_ships/pdfs/interimsumm090601.pdf) and “Alaska Cruise Ship Initiative 2000 Season: Part 2 Final Report”

<http://info.dec.state.ak.us/DECPermit/ACSIRreport.pdf>

I still have questions. Who can I contact?

Contact Moana Leirer at [moana\\_leirer@dec.state.ak.us](mailto:moana_leirer@dec.state.ak.us) or 907-465-5278 Environmental Program Specialist or Albert Faure at [albert\\_faure@dec.state.ak.us](mailto:albert_faure@dec.state.ak.us) or 907-465-5279 Program Marine Engineer.