

Cruise Ship Fact Sheet

Frequently Asked Questions

As of March 23, 2005

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}?) 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 were 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 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 will also get 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).

The state law has drafted regulations as directed by the July 8, 2004 change in statute that dealt with discharges from small passenger vessels. Please see http://www.state.ak.us/dec/water/cruise_ships/proposed_reg_change.doc for more information.

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

As laid out by AS 46.03.460 - 46.03.490 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 any of 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 sampler and the laboratory as well as conducting audits of the third party sampler or crew member. Based on our sampling and laboratory audits, we feel that the industry samples have integrity. In addition, the DEC (or a contractor) takes its own wastewater samples in Southeast and Southcentral Alaska.

How many vessels have registered in Alaska since the passage of the law?

2005

46 vessels total; 13 small cruise ships, 4 AMHS (Alaska Marine Highway System) ferries, 29 large cruise ships.

2004

50 vessels total; 14 small cruise ships, 5 AMHS (Alaska Marine Highway System) ferries, 31 large cruise ships

2003

52 vessels total; 15 small cruise ships, 5 AMHS ferries, 32 large cruise ships

2002

44 vessels total; 14 small cruise ships, 5 AMHS ferries, 25 large cruise ships

2001

43 vessels total; 14 small cruise ships, 5 AMHS ferries and 24 large cruise ships

How many cruise ship passengers are expected to visit Alaska during 2004?

If all registered cruise ships are operating at full capacity, we expect 947,664 passengers to visit Alaska (911,319 large cruise ship passengers + 36,345 small cruise ship passengers). This is a 6.9% increase from 2003 when up to 881,901 passengers (855,405 large cruise ship passengers + 26,496 small cruise ship passengers) visited.

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 all of 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 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 choose to install 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 5 effluent samples taken over a 30-day period must satisfy the criterion above. The Coast Guard Captain of the Port either approves or denies the continuous discharge status. Once a vessel is approved for continuous discharge, they must sample for fecal coliform, chlorine, BOD, TSS and pH at least two times per month.

The following large cruise ships have been approved by the U.S. Coast Guard for continuous discharge in 2004.

Celebrity

1. *Mercury*

Holland America

2. *Oosterdam*
3. *Ryndam*

4. *Volendam*
5. *Veendam*
6. *Zaandam*

Norwegian

7. *Norwegian Star*
8. *Norwegian Sun*
9. *Norwegian Spirit*

Princess

10. *Coral Princess*
11. *Dawn Princess*
12. *Diamond Princess*
13. *Island Princess*
14. *Regal Princess*
15. *Sapphire Princess*
16. *Sun Princess*

V-Ships

17. *Seven Seas Mariner*
18. *Silver Shadow**

*Ship has over 250 passengers and is considered “large” by the state but not included in the federal program. DEC allowed Silver Shadow to discharge continuously under alternative terms and conditions that matched the USCG continuous discharge standards.

The following large cruise ships will hold all of their wastewater for discharge outside Alaska waters.

Carnival

1. *Spirit** received USCG certification for GW only on September 10, 2004

Celebrity

2. *Infinity*
3. *Summit*

Crystal Cruises, Inc.

4. *Crystal Harmony*

Holland America

5. *Amsterdam*
6. *Statendam*

Kyma Ship Management

7. *Topaz*

Mariser Marine

8. *Universe Explorer*

NYK Cruises

9. *Asuka*

Royal Caribbean

10. *Serenade of the Seas*

11. *Radiance of the Seas*

12. *Vision of the Seas*

During the 2003 season, which large cruise ships met the stringent standards that allowed them to discharge continuously?

The U.S. Coast Guard has certified the following vessels for continuous discharge:

Carnival

1. *Spirit* (blackwater only)

Celebrity

2. *Mercury*

Holland America

3. *Ryndam*

4. *Statendam*

5. *Maasdam*

6. *Volendam*

7. *Veendam*

8. *Zaandam*

Norwegian

9. *Norwegian Sun*

10. *Norwegian Sky*

11. *Norwegian Wind*

Princess

12. *Star Princess*

13. *Sun Princess*

14. *Dawn Princess*

15. *Coral Princess*

16. *Pacific Princess*

17. *Island Princess*

Radisson

18. *Seven Seas Mariner*

During 2003, which large cruise ships held their wastewater for discharge outside of Alaska waters?

Bershav Management

1. *World*

Celebrity

2. *Infinity*

3. *Summit*

Crystal Cruises

4. *Crystal Harmony*

Hapag-Lloyd

5. *Europa*

Holland America

6. *Amsterdam*

7. *Prinsendam*

Japan Cruise Lines

8. *Pacific Venus*

Kyma Ship Management

9. *Topaz*

Mariser Marine

10. *Universe Explorer*

Misui

11. *Nippon Maru*

Royal Caribbean

12. *Legend of the Seas*

13. *Vision of the Seas*

14. *Radiance of the Seas*

Were there any wastewater violations in 2004?

Four compliance letters were sent 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 Violations is usually a case referred to the Department of Law.

Were there any wastewater violations in 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.

Were there any wastewater violations in 2002?

DEC issued one Notice of Violation to Holland America for fecal coliform exceedances 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

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

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). The contractor continued to do opacity readings in Southeast Alaska ports during 2003 and 2004. In addition, DEC hired a contractor to do opacity readings on large vessels and small vessels in Southcentral Alaska during 2002, 2003, and 2004. The 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?

We are very pleased with the improvements that we have seen the cruise industry make in this area. In 2000, the DEC issued 15 Notices of Violation for cruise ship visible emissions. In 2001, the DEC issued 11 Notices of Violation. In 2002, the DEC issued one Notice of Violation. In 2003, we issued two Notices of Violation. We issued one Notice of Violation for 2004. We have seen this decrease in violations despite increased visible emissions monitoring.

Do the vessels create any ambient air quality problems?

Ambient air was monitored in downtown Juneau for SO₂, NO_x, and PM_{2.5} 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 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 Carolyn Morehouse at carolyn_morehouse@dec.state.ak.us or 907-465-5279.