



Protect Our Oceans: Stop Cruise Ship Pollution

Cruise Ship Waste—U.S. Laws and Regulations

Cruise ships have a sweet deal when it comes to environmental laws. They are not held to the same important environmental protection standards that apply to cities and industries that produce a similar amount of waste.

Under the Clean Water Act, cities and industries are required to obtain a permit to treat and discharge wastes. These permits ensure that sewage treatment systems are effective, and that both the U.S. Environmental Protection Agency (EPA) and the public know how much pollution is actually being discharged. Limits in the permits regulate the amount of pollution being discharged to prevent long-term environmental harm. The Clean Water Act also gives citizens the right to enforce some provisions of the law that are not being enforced properly by the government.

Cruise ships, however, are not required to have permits to dump raw sewage into the oceans, and they are not required to monitor or report what they release. As a result, neither the government nor the public know how much pollution is released, and there are no means for citizen enforcement.

Following is a look at the types of waste that cruise ships produce and the applicable U.S. laws and regulations.

Sewage

The average cruise ship with 3,000 passengers and crew generates about 30,000 gallons of human waste and 255,000 gallons of non-sewage gray water every day.

Cruise ships are allowed to release treated sewage almost anywhere they sail. They are also permitted to release untreated gray water—non-sewage wastewater from galleys, dishwashers, baths, sinks, showers, and laundries—anywhere they sail, except Alaska. Cruise ships can also lawfully release untreated sewage, or black water, anywhere beyond three miles from the shore (except in certain areas of Alaska). Cruise ships are required to have onboard waste treatment systems, known as marine sanitation devices (MSDs), the industry is required to keep logbooks of their discharges, but are not required to monitor the quality of the waters into which they routinely dump their waste.

Solid Waste

The average cruise ship produces seven tons of garbage and solid waste every day.

Under Annex V of the International Convention for the Prevention of Pollution from Ships, or MARPOL 73/78, (implemented by the federal Act to Prevent Pollution from Ships, Marine Plastic Pollution Research and Control Act and their regulations), cruise ships are barred from dumping plastics anywhere

at sea and floatable garbage within 25 miles of shore. They are permitted, however, to dump garbage that has been ground into pieces smaller than one inch when they are three miles from shore, and unground garbage when they are at least 12 miles from shore.

Toxics

The average cruise ship with 3,000 passengers and crew generates 15 gallons of toxic chemicals every day.

Toxic chemicals generated by cruise ships are generally waste products from photo developing, dry cleaning, painting and other activities. Under the Resource Conservation and Recovery Act, ships are required to store these wastes onboard while under way, and then, once in port, to transfer them to certified chemical treatment and disposal facilities. Since this information is not made available to the public there's no way to ensure that each ship is complying with this requirement.

Oil

The average cruise ship with 3,000 passengers and crew generates 37,000 gallons of oily bilge water every day.

In the wake of the *Exxon Valdez* disaster, the Oil Pollution Act amended the Clean Water Act to prevent oil dumping by ships. Oil discharged within 12 miles of shore must leave no "visible sheen" and measure less than 15 parts per million (ppm). Beyond 12 miles from shore, ships may release oily waste that measures less than 100 ppm. The law also requires ships to retain the remaining oily waste onboard until it can be disposed at appropriate reception facility on shore. Ships also must record the disposal of oily residues and bilge water.

Air Pollution

The average cruise ship with 3,000 passengers and crew generates and air pollutants equivalent to 12,000 automobiles every day.

Cruise ships and other large marine vessels have diesel engines that are major sources of air pollution and are especially hazardous to persons with asthma and respiratory illnesses. One cruise ship can emit 1.5 tons of smog-forming nitrogen oxides (the equivalent of 12,000 automobiles), 1.3 tons of sulfur oxides (the equivalent of a large cement plant), 253 pounds of carbon dioxide, 100 pounds of volatile organic compounds, and 75 pounds of particulate matter. Emissions from cruise ship diesel engines are unregulated. Although the EPA plans to issue new emission standards for large marine engines in early 2003, the proposed standards are unlikely to significantly reduce air pollution from cruise ships.

Ballast Water

The average cruise ship with 3,000 passengers and crew generates hundreds of thousands of gallons of ballast water, which contains diseases, bacteria and invasive species from foreign ports.

The problems associated with the transport of invasive, non-native marine species in the ballast water of ships are well-documented. Invasive species cost the U.S. economy billions of dollars annually in terms of clean up and damage to public works facilities and the environment. Yet, federal laws do not prevent cruise ships from discharging their ballast water in federal ocean waters. Only California and the Great Lakes states require ships to exchange their ballast water prior to entering state waters within three miles from shore. This practice should be adopted much more broadly to minimize the introduction of invasive species.

MOUs: Tough or Toothless?

Instead of passing laws to reduce pollution from cruise ships, Florida and Hawaii have negotiated agreements, known as memoranda of understanding (MOU), with cruise industry associations. But unlike laws and regulations, MOUs are not legally binding, do not carry any penalties, do not apply to all cruise ships and may be canceled with only a few month's notice. They also contain loopholes that benefit cruise ships. For example, while members of the Florida-Caribbean Cruise Association and the International Council of Cruise Lines have agreed not to discharge treated sewage within four miles of the Florida coast, they reserved the right to adhere to local law, which allows discharge of treated sewage anywhere. In some instances, cruise companies have been caught breaking their promises to meet and exceed international requirements for removing oil from bilge and wastewater. This brings the value of other provisions of this MOU, as well as those in other states like Hawaii, into question and raises concerns as to the whether these agreements are anything more than the cruise industry's attempt to avoid more protective laws and regulations.

A Note About Flags of Convenience

Nearly every cruise ship that operates in U.S. waters flies a "flag of convenience." Because these ships are registered in countries like Panama, Liberia and the Bahamas, they enjoy weak environmental regulations, lax labor laws and low taxes that those countries provide. One cruise line, Royal Caribbean, even argued in U.S. federal court that because its ships are registered outside the United States, they are not subject to U.S. environmental laws—even when operating in U.S. waters. Fortunately, the court rejected this argument. Royal Caribbean eventually pleaded guilty and paid an \$18 million fine.

Oceana is a non-profit international advocacy organization solely dedicated to protecting and restoring the world's oceans through policy advocacy, science, law and public education. Founded in 2001, Oceana's global movement to save the oceans includes members and activists from more than 200 countries. In 2002, Oceana and American Oceans Campaign merged to expand this international effort to protect ocean eco-systems and sustain the circle of life. Oceana, headquartered in Washington, D.C., has additional offices in key U.S. coastal areas and will open offices in Latin American and Europe in 2003.

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