Wastewater

All You Need to Know About Sewage and Graywater Discharges From Ships

Ocean Conservancy®

Passenger vessels discharge significant volumes of sewage and graywater. While people understand the dangers of untreated sewage, few realize that untreated graywater can be just as nasty:

- Fecal coliform concentrations in untreated vessel graywater have been found to be higher than untreated domestic wastewater.
- Graywater may contain bacteria, metals, chemicals, pathogens, food waste, and high concentrations of nutrients such as nitrogen and phosphorus.

Fortunately, sewage and graywater treatment and regulation options exist. Ocean Conservancy will continue to work with our community partners and other stakeholders to strengthen sewage management and create international graywater regulation.

ENVIRONMENTAL IMPACTS

Oxygen Depletion

Pathogen Vector

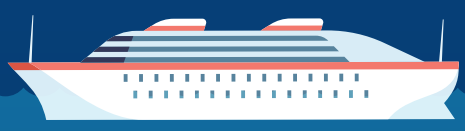
Increase Nutrient Levels

Sewage and graywater discharges can lead to harmful algal blooms, species die-offs, and the spread of viruses and bacteria to humans and aquatic species.

CURRENT REGULATIONS

There is no international regulation of graywater. With just a few national exceptions, discharge of untreated graywater is permitted virtually **anywhere**.

Ships may discharge untreated sewage anywhere as long as it is discharged **12 nautical miles** *offshore (or 12 nautical miles away from areas of ice in polar waters).*



The State of Alaska has the most stringent sewage and graywater regulations in the world. Large cruise ships must use an advanced wastewater treatment system to treat both graywater and sewage before discharging in state waters.

RECOMMENDATIONS TO MITIGATE VESSEL DISCHARGE IMPACTS

Equal Treatment Standards

Implement regulations requiring at least the same treatment standards for graywater as those that exist for sewage in international law

No-Discharge Zones

Pursue creation of sewage and/or graywater no-discharge zones in Arctic waters

Support International Maritime Organization

Support current IMO process to modify current regulations to require sampling, monitoring and record-keeping of sewage discharges

Proper Port Reception Facilities

Support the build-out of proper port reception facilities for wastewater in Arctic ports located in areas where waste management is feasible