

Our Company is committed to reducing onboard waste, both from food and wastewater, through innovative technologies, staff training and implementing stringent recycling programs.



MANAGEMENT STRATEGY

As one of our Sail & Sustain objectives, our progressive waste mitigation program lessens the environmental impact of our operations, reduces pollution, promotes diversion of material from landfills, conserves natural resources and saves energy. We reduce waste through reusing and recycling, with clear benchmarks serving as the measurement.

There are many important factors in creating a successful waste mitigation operation, including proper training. Our environmental familiarization training emphasizes the importance of separating at the source and also helps identify which materials can be recycled and how to properly handle those items. As a result of onboard operations, Norwegian Cruise Line was awarded the 2018 USCG William M. Benkert Marine Environmental Protection Award – Gold, as well as receiving the award in 2012 and 2014.

REDUCE, REUSE, RECYCLE

Our crew adheres to a rigorous recycling program to ensure that our ships take advantage of every opportunity to recycle and reduce waste to landfill. Over the past decade, the availability of recycling programs has increased, and we continue to focus on working with vendors who are committed to this as well.

WORKING WITH WASTE MANAGEMENT:

In 2019, vessels who offloaded with Waste Management® in Florida were able to recycle over 2,300 tons of aluminum, cardboard/paper, scrap metals, plastics, wood pallets, and glass. These recycling efforts conserved the following resources:



**7,698
MATURE TREES**

Represents enough saved timber resources to produce 130,866,000 sheets of printing and copy paper.



**6,442 CUBIC YARDS OF
LANDFILL AIRSPACE**

Enough airspace to fulfill the annual municipal waste disposal needs for 8,272 people.



**4,442,702 KW-HRS
OF ELECTRICITY**

Enough power to fulfill the annual electricity needs of 425 homes.



**PREVENTED 3,714 METRIC
TONS OF GHG EMISSIONS**

The recycling of these materials prevented these GHG emissions.



**4,490,500 GALLONS
OF WATER**

Represents enough saved water to meet the daily fresh water needs of 59,873 people.

Sources: U.S. Environmental Protection Agency, International Aluminum Institute, National Association for PET Container Resources, Institute of Scrap Recycling Industries, Earth Works Group Recycler's Handbook, One Earth Recycle, Bring Recycling.org, National Recycling Coalition, US Forest Products Laboratory, and Waste Management. © Waste Management 2017

Solid waste materials are collected, processed, palletized and landed for recycling and disposal shoreside or are incinerated on board our ships. Solid waste consists of aluminum and tin cans, glass bottles, cardboard, office paper, food preparation and table scraps, plastic bottles and containers, packaging, expired light bulbs, paints and chemicals, refurbishment debris, and medical waste.

We utilize food digesters to reduce the amount of food waste discharged to sea or landed. Food digesters use air, water and microbiology to safely turn food waste into liquid. Our crew receives training on how to use them and what types of food waste are better digested. More than 30% of our ships have onboard food digesters.

WASTE MITIGATION



BILGE WATER

Wastewater collected in machinery and engine spaces is known as bilge water. To ensure compliance, bilge water is treated before running through an oil content meter, which will analyze and record the oil content of the bilge water. All ships are equipped with an automatic stopping device so that if the clean bilge water does not meet requirements, discharging is automatically stopped and the bilge water is reprocessed until the standards are met. Bilge water that cannot be discharged is collected and landed ashore to an approved vendor.

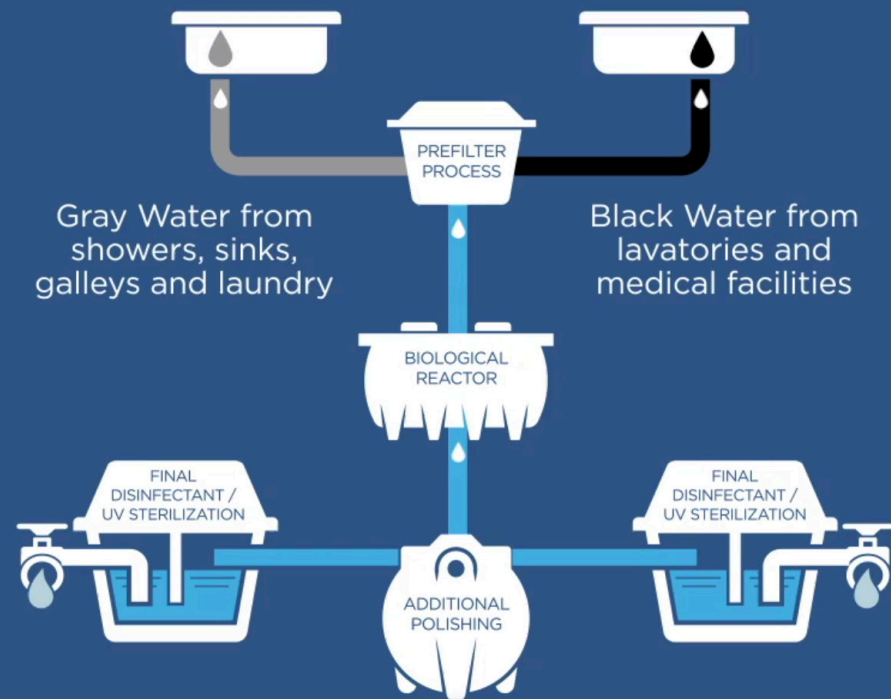
WASTEWATER TREATMENT

Our Company has strict discharge standards and policies for all wastewater generated on board. We have installed the latest technologies which are designed to produce a higher effluent quality. This is primarily done during the newbuild process; however, we continually look for opportunities to upgrade systems on our legacy ships.

GRAY & BLACK WATER

To treat wastewater on board, all of our ships are equipped with internationally compliant wastewater treatment systems where wastewater is treated prior to discharge. This produces effluent that meets or exceeds international sewage regulations and many municipal wastewater facility standards. Ninety-six percent of our ships have been installed with Advanced Wastewater Purification (AWP) systems that meet the stringent Baltic Standards. Weekly internal testing and routine external testing help us continue to meet compliance.

ADVANCED WASTEWATER PURIFICATION



4X YEAR
THIRD-PARTY QUALITY
TESTS PERFORMED ON
AWP SYSTEMS

1X WEEK
ENVIRONMENTAL
OFFICERS PERFORM
QUALITY TESTS