



EMERALD KEEPERS

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For an Emerald Green, Ocean Blue Coronado

CRUISE SHIP POLLUTION

A TITANIC PROBLEM

October is the start of peak cruise ship season, bringing more than 100 cruise stops and approximately 460,000 passengers to the San Diego area.

San Diego's B Street Pier is California's third-busiest cruise port, after Long Beach and Los Angeles. Popular itineraries from San Diego take passengers to the Mexican Riviera as well as up the California coast.

ENVIRONMENTAL IMPACT

Cruises offer a convenient, food-filled option to travel the world, but they are the most polluting form of travel.

- **Water pollution.** Maritime regulations allow cruise ships to discharge treated sewage three nautical miles off U.S. shores. Untreated sewage can be discharged once ships are 12 miles or more off U.S. shores.

The Environmental Protection Agency estimates that a ship

with 3,000 passengers plus crew produces about 21,000 gallons of sewage daily.

Around 60% of cruise ships treat their waste before discharging. Untreated sewage contains chemicals, pathogens, and nutrients. This water pollution can lead to harmful algal blooms and oxygen depletion that disturb marine ecosystems. Ships are not required to document the amount of discharged waste.

- **Air pollution.** Cruise ships are powered by diesel or liquefied natural gas that emit significant air pollutants such as sulfur dioxide, nitrogen oxides, and particulate matter. They produce more carbon dioxide annually than any other kind of ship due to air conditioning, heated pools and other hotel amenities.

Studies show that cruise ships produce four times more carbon dioxide per passenger than airplanes.

- **Waste.** Cruise ships produce enormous quantities of solid waste, including food, plastic and non-biodegradable materials that are challenging to manage and dispose of properly.

According to Friends of the Earth, researchers estimate cruise ships release a billion gallons of sludge made from excrement and food scraps into the ocean every year. Ships have been fined for dumping plastic into the ocean.

- **Emissions.** The fuel burned to power cruise ships is a major source of methane emissions that contribute to climate change. On average, cruise ships at sea worldwide emit more sulfur oxide emissions than 13 million cars and more soot than 1 million cars in a single day.

REGULATION

The cruising industry is regulated by the U.S. Environmental Protection Agency and the International Maritime

Organization. Almost all the major cruise lines have been fined for violating environmental regulations.

SAN DIEGO PORT

The Port of San Diego now has electric power at both cruise ship piers, so two ships can use shore power in place of diesel while docked.

Starting early 2024, San Diego will have the nation's first all-electric tugboat, eWolf, to bring cruise ships to port.

VACATION PLANNING

Minimize the environmental impact of your vacations by finding alternatives to cruising. If you plan to go on a cruise, research the environmental programs on different ships. Also check environmental performance ratings of the largest cruise lines at Friends of the Earth (foe.org). The average grade is a D in the organization's annual survey.



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