

SUMMARY OF KEY REGULATIONS GOVERNING OUR OPERATIONS

This table summarizes some of the principal 2017 international, national, state and local laws, acts, codes, directives, legislation, treaties, protocols, statutes, rules, regulations and voluntary guidelines that govern the operation of our ships as related to environmental, maritime safety and security, and labor requirements in the jurisdictions in which our ships operate. Carnival Corporation & plc complies with these various requirements and we update our practices and procedures, as well as our management systems, based on changes to these requirements, as appropriate.

INTERNATIONAL CONVENTIONS:

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA ("SOLAS")

Regulation Description & Summary of Requirements

SOLAS contains safety requirements for design, construction, equipment, operations, safety management, and security, set forth in numerous chapters, including the following which apply to Carnival Corporation & plc's operations:

- Chapter I – General Provisions
- Chapter II-1 – Construction – Subdivision and stability, machinery and electrical installations
- Chapter II-2 – Fire protection, fire detection and fire extinction
- Chapter III – Life-saving appliances and arrangements
- Chapter IV – Radio-communications
- Chapter V – Safety of navigation
- Chapter IX – Management for the safe operation of ships
- Chapter XI-1 – Special measures to enhance maritime safety
- Chapter XI-2 – Special measures to enhance maritime security
- Chapter XIII – Verification of Compliance
- Chapter XIV – Safety Measures for Ship Operating in Polar Waters

Compliance with SOLAS is verified by inspections and surveys conducted by the Flag State, or by its delegated representative (usually a classification society), and certificates are issued that confirm compliance. Port States also verify compliance with these requirements. In addition, cruise ships are subject to surveys that examine the ship's structure (subdivision and stability), machinery and equipment, including life-saving appliances, fire protection and fire-safety systems, navigational equipment, radio installations, and other equipment to confirm compliance with the requirements of SOLAS. These surveys are conducted before the ship is put into service, annually thereafter, and as necessary. The Flag State issues a Passenger Ship Safety Certificate as evidence of compliance with SOLAS requirements.

On January 1, 2017, the International Code for Ships Operating in Polar Waters ("Polar Code"), adopted by the IMO in May 2015, entered into force and is mandatory under SOLAS and MARPOL. The Polar Code establishes a new chapter of SOLAS, Chapter XIV, which provides additional operational safety measures for new vessels operating in polar waters.

How We Meet or Exceed Regulation

Carnival complies with SOLAS.

We have also developed and implemented standardized policies and procedures **that go beyond SOLAS requirements** to further ensure the safety of our guests, ship personnel and ships, and cover a number of subjects including:

- ✓ bridge team management;
- ✓ training;
- ✓ fire protection, detection and suppression;
- ✓ ship stability;
- ✓ life-saving equipment and systems.

✓ **Carnival Corporation & plc exceeds regulations**

INTERNATIONAL CONVENTIONS:

INTERNATIONAL SAFETY MANAGEMENT CODE (“ISM CODE”), CONTAINED IN CHAPTER IX OF SOLAS

Regulation Description & Summary of Requirements

The ISM Code is an international standard for the safe management and operation of ships and for pollution prevention. It requires all ship operating companies and ships to develop, implement and obtain certification of their Safety Management System (“SMS”). The SMS covers both shipboard and shore-based activities and must include:

- a company safety and environmental protection policy;
- instructions and procedures to ensure the safe operation of ships and protection of the environment;
- procedures for preparing for and responding to emergencies;
- defined levels of authority and lines of communication between shore and shipboard personnel, and identification of a designated person ashore responsible for ISM Code compliance;
- procedures for reporting accidents and ISM Code non-conformities; and
- procedures for internal and external audits and management reviews.

In order to evaluate the effectiveness of the SMS, pursuant to amendments which entered into force on January 1, 2015, the company must also periodically verify whether personnel undertaking delegated ISM related tasks are acting in conformity with the company’s responsibilities under the ISM Code.

How We Meet or Exceed Regulation

Compliance with ISM code is verified by inspections and surveys conducted by the Flag State, or by its delegated representative (usually a classification society), and certificates are issued that confirm compliance. Carnival Corporation & plc complies with ISM Code and has also obtained additional certifications that **go beyond the requirements of the ISM Code**, including:

- ✓ ISO 14001 Environmental Management System certification (all Brands),
- ✓ ISO 9001 Quality Management System certification (some Brands), and
- ✓ HSAS 18001 Occupational Health and Safety Management System certification (some Brands).



INTERNATIONAL SHIP AND PORT FACILITY SECURITY CODE (“ISPS” CODE), CONTAINED IN CHAPTER XI-2 OF SOLAS

Regulation Description & Summary of Requirements

The ISPS Code:

- defines security standards, requirements, arrangements and procedures for ships, ports, and governments; and
- prescribes responsibilities for governments, shipping companies, shipboard personnel, and port/facility personnel, among others, to develop security plans, detect security threats and take preventative measures against potential security incidents affecting ships or port facilities.

Compliance is verified by inspections and surveys conducted by the Flag State, or by its delegated representative (usually a classification society), and certificates are issued that confirm compliance.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the ISPS Code.



INTERNATIONAL CONVENTIONS:

INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS (“MARPOL”)

Regulation Description & Summary of Requirements

MARPOL is the principal international convention governing marine pollution prevention and response.

Compliance with MARPOL is verified by inspections and surveys conducted by the Flag State, or by its delegated representative (usually a classification society), and certificates are issued that confirm compliance. Port States also verify compliance with these requirements.

MARPOL has six Annexes, four of which are applicable to Carnival Corporation & plc’s ships and are described in the following:

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the requirements of MARPOL. We have also developed and implemented procedures that **go beyond MARPOL and other regulations** to further ensure environmental protection. They cover a number of subjects including:

- ✓ control of refrigerants and other ozone depleting substances,
- ✓ refrigerant personnel training,
- ✓ wastewater management,
- ✓ oily waste management,
- ✓ hazardous waste management,
- ✓ hazardous materials management,
- ✓ Environmental Management Systems,
- ✓ environmental organization,
- ✓ environmental training,
- ✓ environmental performance monitoring and reporting,
- ✓ underwater paint coating,
- ✓ environmental accountability and reporting.



Carnival Corporation & plc exceeds regulations

Regulation Description & Summary of Requirements

Annex I, Regulations for the Prevention of Pollution by Oil, establishes requirements that prevent pollution from oil. Annex I sets forth a comprehensive list of requirements that include:

- designing and constructing vessel equipment specifications to reduce the occurrence of oil discharge;
- fitting vessels with oil discharge monitoring and control systems, oily water separating equipment, oil content meters (bilge alarms) and a filtering system, slop tanks, sludge tanks, piping and pumping arrangements;
- recordkeeping requirements for such equipment; and
- having an approved shipboard oil pollution emergency plan (SOPEP).

On January 1, 2017, IMO amended regulation 12 of MARPOL Annex I, concerning tanks for oil residues (sludge). The amendments update and revise the regulation, expanding on the requirements for discharge connections and piping to ensure oil residues are properly disposed.

How We Meet or Exceed Regulation

Carnival Corporation & plc exceeds the requirements of Annex I in areas that include, but are not limited to:

- ✓ often reducing the oil content of bilge water effluent from oily water separators to five parts per million (ppm) or less, lower than the MARPOL-required 15 ppm; and
- ✓ requiring that Carnival Corporation & plc’s Brands install “bilge control discharge boxes” which are redundant systems that monitor treated bilge water.
- ✓ Carnival Corporation & plc’s Brands discharge treated bilge water outside 12 NM from the nearest land, whereas Annex I has no distance restrictions provided the ship is “en route” (sailing).



Carnival Corporation & plc exceeds regulations

INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS ("MARPOL") *continued*

Regulation Description & Summary of Requirements

Annex IV, Regulations for the Prevention of Pollution by Sewage from Ships:

- establishes regulations for the discharge of sewage into the sea from ships, including regulations regarding the ships' equipment and systems for the control of sewage discharge, the provision of facilities at ports and terminals for the reception of sewage, and requirements for survey and certification;
- requires ships to be equipped with either an approved sewage treatment plant, or an approved sewage comminuting and disinfecting system, or a sewage holding tank;
- prohibits the discharge of sewage into the sea, except when the ship has in operation an approved sewage treatment plant, or when the ship is discharging comminuted and disinfected sewage using an approved system at a distance of more than 3 NM from the nearest land;
- limits discharges of sewage that is not comminuted or disinfected to specific rates and at a distance of more than 12 NM from the nearest land; and
- establishes stricter discharge requirements in designated Special Areas, including the Baltic Sea.

Amendments to MARPOL Annex IV relating to the dates for implementation of the discharge requirements for passenger ships while in a special areas entered into force on September 1, 2017.

These amendments apply to the ISPP Certificate form include two options for the MEPC.227(64) type approval standard and set the dates for when the Baltic Sea special area shall take effect.

Regulation Description & Summary of Requirements

Annex V, Regulations for the Prevention of Pollution by Garbage from Ships:

- establishes rules and guidelines to eliminate and reduce the amount of garbage disposed of into the sea from ships;
- provides a general prohibition on the disposal of garbage from ships into the sea, with limited exceptions, for food wastes and operational wastes not harmful to the marine environment;
- defines garbage as all kinds of food, domestic and operational waste, including plastics and cooking oil, and excluding fresh fish, generated during the normal operation of the vessel and liable to be disposed of continuously or periodically;
- prohibits the disposal of plastics anywhere into the sea;
- restricts discharges of garbage from ships into "Special Areas;" and
- requires vessels to implement a Garbage Management Plan and record all disposal and incineration operations in a Garbage Record Book.

How We Meet or Exceed Regulation

Carnival Corporation & plc exceeds the requirements of Annex IV by:

- ✓ installing Advanced Waste Water Purification Systems (AWWPS) for the treatment of black and gray water in some ships. AWWPS utilize technologies designed to produce a higher effluent quality that is above MARPOL black water treatment standards, and meets or surpasses standards for secondary and tertiary effluents and reclaimed water. Annex IV does not regulate gray water management or treatment.



How We Meet or Exceed Regulation

Carnival Corporation & plc complies with Annex V.



INTERNATIONAL CONVENTIONS:

INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS ("MARPOL") *continued*

Regulation Description & Summary of Requirements

Annex VI, Regulations for the Prevention of Air Pollution from Ships:

- establishes reduction requirements for sulfur oxides ("SOx"), nitrogen oxides ("NOx") and particulate matter;
- sets limits on the sulfur content of fuel oil used by ships;
- requires that, in special Sulfur Emission Control Areas ("SECAs"), the sulfur content of fuel burned cannot exceed 0.10 percent as of January 2015;
- establishes stricter controls on emissions of SOx and NOx in the North American Emission Control Area (ECA), which encompasses most of the United States and Canada's coastal waters out to 200 nautical miles from the coastline, and requires that vessels use fuel with a maximum 0.10 percent sulfur content as of January 1, 2015;
- similar to the North American ECA, the U.S. Caribbean ECA, which includes the waters adjacent to the Commonwealth of Puerto Rico and the U.S. Virgin Islands out to approximately 50 nautical miles from the coastline and requires that vessels use fuel with a maximum 0.10 percent sulfur content as of January 1, 2015;
- requires that, in non-SECA areas, the sulfur content of fuel burned cannot exceed 3.5 percent, though this will be decreased worldwide to 0.50 percent in 2020;
- requires ships to carry an International Air Pollution Prevention ("IAPP") Certificate;
- restricts the use of Ozone Depleting Substances ("ODS"), by requiring the recording of ODS, usage of rechargeable equipment, emissions and disposal of equipment containing ODS;
- requires the Energy Efficiency Design Index ("EEDI") for certain new ships, including certain passenger vessels as of September 2015, and the Ship Energy Efficiency Management Plan ("SEEMP") for all ships; and
- establishes new requirements for survey and certification for the International Energy Efficiency Certificate ("IEEC"), which is in addition to the IAPP Certificate. The IEEC is issued by the Flags States upon completion of required survey to demonstrate compliance with SEEMP and EEDI.

Pursuant to Polar Code, which will entered into force on January 1, 2017, amendments to MARPOL Annexes I, II, IV and V were adopted mandating additional provisions for the protection of the polar environment for vessels operating in the polar waters.

At its 71st session July 3-7, 2017, the IMO's Marine Environmental Protection Committee adopted amendments designating the North Sea and the Baltic Sea as NOx emission control areas under the International Convention for the Prevention of Pollution from Ships, Annex VI, Regulation 13.

1 March 2018 - MARPOL Annex VI Collection and reporting of ship fuel oil consumption data; Adopted by MEPC 70 will enter into effect.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with Annex VI by using fuel oil that is at or below the Annex VI limits for sulfur content. In addition, the following programs have been implemented:

- ✓ Carnival Corporation & plc has installed Exhaust Gas Cleaning Systems that are capable of reducing sulfur compounds.
- ✓ Use of recovery units certified to meet refrigerant recycling and recovery requirements.
- ✓ Programs to reduce ODS releases.
- ✓ Carnival Corporation & plc ships are certified to SEEMP energy efficiency management for reducing GHG emissions.
- ✓ Carnival Corporation & plc actively participates in the working groups at the IMO that are developing efficiencies and standards that could affect the cruise industry.

✓ **Carnival Corporation & plc meets regulations**

INTERNATIONAL CONVENTIONS:

INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS (IMO "BALLAST WATER CONVENTION")

Regulation Description & Summary of Requirements

On September 8, 2017 the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 ("Ballast Water Management Convention") entered into force. The Ballast Water Management Convention:

- aims to prevent the spread of harmful aquatic organisms from one region to another;
- establishes standards and procedures for the management and control of ships' ballast water and sediments;
- requires all ships to implement a Ballast Water and Sediments Management Plan and carry a Ballast Water Record Book;
- require ships to implement ballast water management procedures to a given standard;
- phases-out ballast water exchange as the primary control mechanism; and
- phases-in ballast water discharge standards.

Compliance with the Ballast Water Convention is verified by inspections and surveys conducted by the Flag State or by its delegated representative (usually a classification society). Port States also verify compliance.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the IMO's Ballast Water Management Guidelines. In addition:

- ✓ Carnival Corporation & plc aims to minimize any discharges of ballast water by monitoring the levels of fuel, potable water, gray water and black water, and uses those tanks when possible to stabilize the vessel as opposed to taking on or discharging ballast water.
- ✓ Carnival Corporation & plc's fuel and potable water bunkering is often managed to reduce the need for ballast water.
- ✓ Some Operating Lines have worked with ballast water technology manufacturers to advance the development of treatment technologies and testing requirements.

✓ **Carnival Corporation & plc meets regulations**

INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS ("STCW")

Regulation Description & Summary of Requirements

STCW requirements include:

- standards for the training, qualification and certification of seafarers;
- specific standards of competency of crew members; and
- methods for demonstrating competency. All eight chapters of STCW apply to Carnival Corporation & plc's operations:

Chapter I: General provisions

Chapter II: Master and Deck Department

Chapter III: Engine Department

Chapter IV: Radio-communication and radio personnel

Chapter V: Special training requirements for personnel on certain types of ships

Chapter VI: Emergency, occupational safety, medical care and survival functions

Chapter VII: Alternative certification

Chapter VIII: Watchkeeping

Training requirements apply to all levels of crew members and are tailored to their specific on board responsibilities. Compliance is verified by inspections and surveys conducted by the Flag State, or by its delegated representative (usually a classification society), and certificates are issued to crew members that confirm compliance. Port States also verify compliance with these requirements.

The U.S. Coast Guard published a final rule on December 24, 2013, that implements the STCW Convention and STCW Code, including the 2010 amendments and provisions for the STCW security endorsements. Additionally, the rule strengthens U.S. authority to enforce the STCW Convention and STCW Code against foreign flag vessels in U.S. waters. The rule became effective on March 24, 2014.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the requirements of STCW.

✓ **Carnival Corporation & plc meets regulations**

INTERNATIONAL CONVENTIONS:

POLAR CODE

Regulation Description & Summary of Requirements

The International Code for Ships Operating in Polar Waters ("Polar Code") entered into force on January 1, 2017. The Polar Code applies to ships operating in Arctic and Antarctic waters and establishes mandatory construction, equipment, operational, safety, training and environmental protection standards. Pursuant to various related amendments, the Polar Code is mandatory under both SOLAS and MARPOL, and applies to new ships constructed after January 1, 2017. Ships constructed before January 1, 2017 will be required to meet relevant requirements of the Polar Code by the first intermediate or renewal survey, whichever occurs first, after January 1, 2018. Polar Code amendments to STCW were also adopted which will become effective in July 2018.

Mandatory minimum requirements for the training and qualifications of masters and deck officers on ships operating in polar waters were adopted by IMO's Maritime Safety Committee in November 2016. They will become mandatory under STCW and its related STCW Code beginning July 1, 2018.

How We Meet or Exceed Regulation



Carnival Corporation & plc meets regulations

MARITIME LABOR CONVENTION ("MLC"), 2006

Regulation Description & Summary of Requirements

MLC 2006, which was ratified in August 2012, entered into force August 2013, consolidates and updates the International Labor Organization standards into a single document. It:

- provides comprehensive rights and protection at work for seafarers on a global basis;
- aims to be globally applicable, easily understandable, readily updatable and uniformly enforced; and
- was designed to become the "fourth pillar" of the international regulatory regime for quality shipping (SOLAS, MARPOL and STCW).

The MLC establishes standards regarding the working conditions of seafarers including:

- minimum requirements for seafarers to work on a ship;
- conditions of employment;
- accommodation, recreational facilities, food and catering;
- health protection, medical care, welfare; and
- social security protection.

Compliance will be verified by inspections and surveys conducted by the Flag State, or by its delegated representative (usually a classification society), and certificates will be issued that confirm compliance. Port States will also verify and enforce compliance with these requirements.

Amendments to the MLC, adopted in 2014, addressing the protection of seafarers from abandonment and compensation in case of death or disability by requiring members to have a financial security and compensation system and requiring ships to carry certificates or other documents demonstrating financial security, entered into force on January 18, 2017.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the MLC 2006 requirements.



Carnival Corporation & plc meets regulations

SOME OF THE KEY PORT STATE REQUIREMENTS:¹

LIMITS ON SULFUR CONTENT IN FUEL IN THE EUROPEAN UNION (EU)

Regulation Description & Summary of Requirements

In January 2010, a 0.1 percent sulfur limit on all marine fuels used by ships at berth in EU ports, with limited exceptions, entered into force, requiring the use of distillate fuels. Regulations were adopted in 2012 further reducing the sulfur limit from the current 1.5 percent to 0.5 percent in 2020 when in EU member state territorial waters, exclusive economic zone and ecological areas outside ECAs.

Regulation (EU) 2015/757

On July 1, 2015, the EU Monitoring, Reporting, Verification (MRV) regulation entered into force. The EU MRV requires ship owners and operators of vessels larger than 5,000 gross tonnage (GT) conducting commercial voyages and calling at any EU and EFTA (Norway and Republic of Iceland) port to annually monitor, report and verify CO2 emissions. Data collection requirements under the EU MRV are to begin on January 1, 2018.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with EU requirements.



CANADIAN BALLAST WATER CONTROL AND MANAGEMENT REGULATIONS — TRANSPORT CANADA (TP 13617 E)

Regulation Description & Summary of Requirements

The purpose of the Regulations is to protect waters under Canadian jurisdiction from non-indigenous aquatic organisms and pathogens that can be harmful to ecosystems and introduced by ships. The Regulations are intended to minimize the probability of future introductions of harmful aquatic organisms and pathogens from ships' ballast water, while protecting the safety of ships. In 2010, Canada ratified the International Convention for the Control and Management of Ships' Ballast Water and Sediments, which entered into force in September 2017, and Canada will implement the Convention.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the Canadian ballast water requirements.



DIRECTIVE 2000/59/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL 27 NOVEMBER 2000

Regulation Description & Summary of Requirements

In November 2000, EU adopted Directive 2000/59/EC1 on port reception facilities for ship-generated waste and cargo residues ("the PRF Directive"). This directive defines requirements intended to reduce the discharges of ship generated waste and cargo residues to sea, especially illegal discharges, from ships using ports in the European Union by improving the availability and use of port reception facilities. Annex II of this directive was amended on December 13, 2007 and 8 November 8, 2015.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with this directive.



(1) Port State Requirements include those rules and regulations from the countries and other geographic areas where Carnival Corporation & plc's ships operate that may differ from those already summarized in this table. Carnival Corporation & plc complies with Port State requirements of those countries in which its ships call.

PORT STATE CONTROL REQUIREMENTS: UNITED STATES

NATIONAL MARINE SANCTUARIES ACT ("NMSA")

Regulation Description & Summary of Requirements

Under the NMSA, certain marine environment areas are designated as national marine sanctuaries and are protected due to their national significance, recreational, ecological, historical, scientific, cultural, archaeological, educational or aesthetic values. The NMSA requires permits for certain commercial operations and includes more stringent discharge restrictions.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the NMSA.



THE OIL POLLUTION ACT OF 1990 (33 U.S.C. §§ 2701–2761) ("OPA 90")

Regulation Description & Summary of Requirements

OPA 90 amended the Clean Water Act, and created a comprehensive prevention, response, liability and compensation regime regarding oil pollution in U.S. waters caused by vessels and facilities. OPA 90 increased federal oversight of maritime oil transportation and increased environmental safeguards by:

- establishing new requirements for vessel construction and crew licensing and manning;
- mandating contingency planning;
- enhancing federal response capability;
- expanding the scope of enforcement authority;
- increasing penalties and liabilities; and
- increasing the scope of financial responsibility requirements.

The U.S. Coast Guard issued a final rule, which became effective October 30, 2013, requiring owners and operators of nontank vessels to update and submit Nontank Vessel Response Plans ("NTVRPs") by January 30, 2014. This final rule implements a 2004 statutory mandate expanding oil spill response planning standards to self-propelled nontank vessels of 400 gross tons or greater, that carry oil of any kind as fuel for main propulsion and that operate on the navigable waterways of the United States.

On November 19, 2015, the US Coast Guard issued a final rule increasing limits of liability under OPA 90 for non-tank vessels. Pursuant to the final rule, the limits of liability applicable to all non-tank vessels, including cruise ships, increased by about 10% for removal costs and damages.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with OPA 90.



PORT STATE CONTROL REQUIREMENTS: UNITED STATES

U.S. ENVIRONMENTAL PROTECTION AGENCY'S VESSEL GENERAL PERMIT ("VGP")

Regulation Description & Summary of Requirements

The VGP, issued pursuant to the Clean Water Act, regulates discharges incidental to the normal operation of vessels.

Each vessel is required to apply for an authorization to discharge in accordance with VGP requirements. The VGP regulates 27 specific discharge streams and contains inspection, monitoring, recordkeeping and reporting requirements. The VGP requires vessel owners and operators to adhere to "best management practices" and, in some cases, technology, to manage the covered discharges, including but not limited to ballast water, grey water and bilge water.

The 2008 VGP expired on December 19, 2013 and a new VGP went into effect thereafter, which remains effective until December 19, 2018. The current VGP, which contains more stringent requirements than the 2008 VGP, implements numeric technology-based ballast water effluent limitations that replace the non-numeric based best management practice requirements in the 2008 VGP to reduce the number of living organisms discharged via ballast water into regulated waters. The current VGP also contains more stringent effluent limits for oil-to-sea interfaces and exhaust gas scrubber washwater, which seeks to improve environmental protection of U.S. waters.

EPA is expected to publish for review and comment a draft VGP in the second quarter of 2018, which will replace the VGP that expires on December 19, 2018.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the 2013 VGP.

- ✓ Carnival Corporation & plc's procedure exceeds the VGP's 3 NM restriction on discharges of gray water by requiring that discharges of gray water be outside 4 NM from the nearest land.
- ✓ Carnival Corporation & plc's Brands exceed the VGP's 1 NM restriction on discharges of treated bilge water by requiring that treated bilge water discharges be outside 12 NM from the nearest land.
- ✓ Carnival Corporation & plc takes all reasonably available and appropriate measures to minimize the extent and effects of ballast water discharges and comply with the 2013 VGP, which went into effect in December 2013.



U.S. RESOURCE CONSERVATION AND RECOVERY ACT ("RCRA")

Regulation Description & Summary of Requirements

RCRA requires hazardous waste management from "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous wastes. RCRA also sets forth a framework for the management of non-hazardous solid wastes.

How We Meet or Exceed Regulation

- ✓ Carnival Corporation & plc complies with RCRA and its implementing regulations once waste is landed ashore, including transportation requirements, such as packaging, labeling, manifesting, and recordkeeping and reporting.
- ✓ Carnival Corporation & plc voluntarily follows the intent of the RCRA as it pertains to the generation and storage of hazardous waste while the waste is on board the vessel.



PORT STATE CONTROL REQUIREMENTS: UNITED STATES

U.S. COAST GUARD BALLAST WATER REGULATIONS

Regulation Description & Summary of Requirements

Ballast Water Management reduces the threat to the world's oceans, and resultant environmental, economic and public health impacts from invasive aquatic species by addressing the transfer of harmful aquatic organisms and pathogens in ships' ballast water. These requirements include ballast water management, exchange, reporting and recordkeeping. The United States is not party to the IMO's Ballast Water Management Convention, so it imposes its own regulatory regime regarding ballast water management.

The U.S. Coast Guard's ballast water regulations establish a standard for the allowable concentration of living organisms in ships' ballast water discharged in U.S. waters. Vessel owners/operators are required to comply with the U.S. ballast water regulations provided in Title 33 Code of Federal Regulations (CFR) Part 151.

The U.S. Coast Guard's ballast water regulations apply to new ships constructed on or after December 2013 upon delivery of the ship, as well as to existing ships from January 1, 2014 or January 1, 2016 onwards, based on a phase-in schedule determined by the dry dock schedule and ballast water capacity of the ship as specified in 33 CFR 151.2035(b). Existing vessels with a ballast water capacity between 1500 and 5000 cubic meters, which include some of Carnival Corporation & plc's vessels, must comply by their first scheduled drydocking after January 1, 2014. Those vessels that have a ballast water capacity greater than 5000 cubic meters, must comply by their first scheduled drydocking after January 1, 2016.

Upon a vessel's compliance date, the U.S. Coast Guard's ballast water regulations require use of one of the approved ballast water management methods: 1) Install and operate a U.S. Coast Guard type-approved ballast water management system (BWMS) (since December 2016, the U.S. Coast Guard has type-approved six ballast water management systems); 2) Use only water from a U.S. public water system; 3) Use an Alternate Management System (AMS) for up to five years from the vessel's compliance date; 4) Do not discharge ballast water into waters of the United States, or 5) Discharge to an onshore facility or to another vessel for purposes of treatment.

In addition, the U.S. Coast Guard may grant an extension to a respective vessel's compliance date if an owner/operator documents that, despite all efforts, compliance with one of the approved ballast water management methods is not possible. Vessels with a valid extension can continue to exchange ballast water in accordance with U.S. Coast Guard regulations. Some Carnival Corporation & plc Brands have obtained extensions to their compliance dates from the U.S. Coast Guard.

Vessels which have not yet reached their original compliance date for installing a USCG approved BWMS can continue to exchange ballast water in accordance with U.S. Coast Guard regulations.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with international, federal, and state ballast water-management requirements and aims to minimize any discharges of ballast water.

- ✓ Carnival Corporation & plc monitors the levels of fuel, potable water, gray water and black water, and uses those tanks when possible to stabilize the vessel as opposed to taking on or discharging ballast water.
- ✓ Carnival Corporation & plc coordinates fuel and potable water bunkering in such a way as to reduce the need for ballast water.



Carnival Corporation & plc meets regulations

THE MARITIME TRANSPORTATION SECURITY ACT OF 2002 ("MTSA")

Regulation Description & Summary of Requirements

The MTSA is U.S. legislation implementing the International Ship and Port Facility Security Code ("ISPS") described above. The MTSA:

- establishes a maritime security framework including U.S. vessel and port facility security requirements and standards; and
- provides for U.S. Coast Guard enforcement of such provisions, including security assessments, security plans, training and drills.

How We Meet or Exceed Regulation

Carnival Corporation & plc's ships, which all have valid International Ship Security Certificates confirming compliance with the ISPS Code, also comply with the requirements of MTSA.



Carnival Corporation & plc meets regulations

PORT STATE CONTROL REQUIREMENTS: UNITED STATES

INTELLIGENCE REFORM AND TERRORISM PREVENTION ACT OF 2004

Regulation Description & Summary of Requirements

This Act, enacted in response to the terror attacks of September 11, 2001, requires cruise ship operators to provide certain passenger and crew information to the U.S. Department of Homeland Security (“DHS”) to enable DHS to compare this information to watch lists to prevent suspected or known terrorists and their associates from boarding, or to subject them to additional security scrutiny.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the requirements of this Act.



Carnival Corporation & plc meets regulations

CRUISE VESSEL SECURITY AND SAFETY ACT (“CVSSA”) OF 2010

Regulation Description & Summary of Requirements

The CVSSA applies to passenger vessels that are authorized to carry at least 250 passengers and have on board sleeping facilities. The CVSSA:

- promotes the safety and security of cruise vessel passengers and crew;
- requires cruise vessels to adopt basic reporting, safety and security measures; and
- mandates that cruise vessels adopt several other basic security measures, including:
 - updated ship design;
 - providing public access to information regarding crime on board cruise ships;
 - improved precautions, response and medical care and support for victims of sexual assault; and
 - preservation of evidence necessary to prosecute criminals.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the requirements of this Act.



Carnival Corporation & plc meets regulations

ALASKA CRUISE SHIP LEGISLATION; TITLE XIV – “CERTAIN ALASKAN CRUISE SHIP OPERATIONS”

Regulation Description & Summary of Requirements

Sets federal effluent standards for treated sewage and graywater and allows continuous discharge if treatment standards are met and confirmed via sampling.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the Alaska Cruise Ship Legislation.



Carnival Corporation & plc meets regulations

ENDANGERED SPECIES ACT (“ESA”) AND MARINE MAMMAL PROTECTION ACT (“MMPA”)

Regulation Description & Summary of Requirements

The purpose of the ESA is to protect and recover imperiled species and the ecosystems upon which they depend. It is administered by the U.S. Department of Interior’s Fish and Wildlife Service and the U.S. Department of Commerce’s National Marine Fisheries Service (“NMFS”).

The MMPA prohibits, with certain exceptions, the “take” of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the U.S.

Pursuant to the Right Whale Ship Strike Reduction Rule, vessels 65 feet or longer must travel at 10 knots or less in certain locations (“SMAs”) along the east coast of the U.S. Atlantic seaboard at certain times of the year to reduce the threat of ship collisions with critically endangered North Atlantic right whales. These SMAs were expanded in 2016.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the ESA and MMPA.

In 2006, Carnival Corporation & plc partnered with the U.S. National Oceanic and Atmospheric Administration (“NOAA”), and the National Park Service to train navigators to identify different whale species and predict their behaviors in order to avoid collisions with ships. This program was licensed to NOAA and is freely distributed to shipping companies around the world to help train their personnel to avoid whale strikes.



Carnival Corporation & plc meets regulations

KEY U.S. STATE REQUIREMENTS:²

(2) There are numerous state requirements that apply to Carnival Corporation & plc's ships; only select State requirements are included here as examples. Certain states, including, but not limited to Washington, Oregon, Alaska and California have more extensive requirements than those under federal regulations.

ALASKA STATE CRUISE SHIP LEGISLATION: ALASKAN STATE LAW, AS §§ 46.03.460–46.03.490 “COMMERCIAL PASSENGER VESSEL ENVIRONMENTAL COMPLIANCE PROGRAM”

Regulation Description & Summary of Requirements

Establishes effluent limits for gray and black water, describes non-hazardous and hazardous waste requirements, permitting and reporting requirements for commercial passenger vessels operating in the marine waters of the state.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the Alaska State Cruise Ship Legislation.



ALASKA STATE REGULATION 18 AAC 50.070.—MARINE VESSEL VISIBLE EMISSION STANDARDS

Regulation Description & Summary of Requirements

Establishes state visible emissions requirements for marine vessels operating within three miles of the Alaska coastline.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with AAC 50.070. Some Operating Lines have installed opacity meters as an additional tool for monitoring air quality.



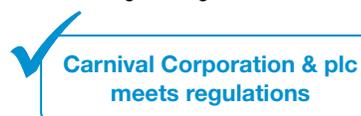
ALASKA OCEAN RANGER PROGRAM

Regulation Description & Summary of Requirements

Alaskan Department of Environmental Conservation (ADEC) program, which became law in 2006, requires U.S. Coast Guard licensed marine engineers, or equivalent, on board certain cruise vessels to act as independent observers monitoring state environmental and marine discharge requirements. Ocean Rangers also check that passengers and crew are protected from improper sanitation, health and safety practices. This program is managed by ADEC's Commercial Passenger Vessel Environmental Compliance Program.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the Alaska Ocean Ranger Program.



HAWAII STATE CRUISE SHIP LEGISLATION— DISCHARGES FROM COMMERCIAL PASSENGER VESSELS 2005 HAWAII LAWS ACT 217 (H.B. 422) AND HI ST §§ 342D-101, ET SEQ.

Regulation Description & Summary of Requirements

The Hawaii State Cruise Ship Legislation establishes standards for the discharge of treated sewage and air emissions from cruise ships and commercial passenger vessels. It prohibits the discharge of untreated sewage from commercial passenger vessels, and it includes specific recordkeeping and monitoring requirements.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the Hawaii Cruise Ship Legislation and some of our Corporate Standards exceed these requirements.



STATE BALLAST REQUIREMENTS: CALIFORNIA CODE OF REGULATIONS, TITLE 2, DIVISION 3, CHAPTER 1, ARTICLES 4.5–4.9

Regulation Description & Summary of Requirements

Ballast Water Management reduces the threat to the world's oceans and resultant environmental, economic and public health impacts from invasive aquatic species, by addressing the transfer of harmful aquatic organisms and pathogens in ships' ballast water.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with State Ballast Requirements.



CALIFORNIA STATE LIMITS ON SULFUR CONTENT IN FUEL - 13 CCR § 2299.2 AND 17 CCR § 93118.2

Regulation Description & Summary of Requirements

Since August 1, 2012, California regulations required the use of marine gas oil with 1.0 percent sulfur or less or marine diesel oil with 0.5 percent sulfur or less within 24 NM of California's coast. Effective January 1, 2014, the limit for both was reduced to 0.10 percent.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the California requirements. Several of Carnival Corporation & plc's Brands have installed shore power connections, which operate in the ports of Juneau, Seattle, Long Beach, San Diego, San Francisco, Brooklyn, Halifax and Vancouver. Carnival Corporation & plc ships operating in California participate in the Port of Long Beach's Voluntary Vessel Speed Reduction Program, which is aimed at reducing vessel speed in an effort to help reduce air pollution.

 **Carnival Corporation & plc meets regulations**

CALIFORNIA SEWAGE DISCHARGE REQUIREMENTS

Regulation Description & Summary of Requirements

Effective March 28, 2012, California established a no-discharge zone ("NDZ") that prohibits large passenger vessels of 300 gross tons or greater from discharging all sewage, whether treated or not, while in California marine waters. The NDZ extends along the California coast from Oregon to Mexico and applies to Carnival Corporation & plc ships.

How We Meet or Exceed Regulation

Carnival Corporation & plc exceeds the California requirement by requiring that discharges of treated black water be made beyond 12 NM from the nearest land (California only restricts treated black water discharges to outside 3 NM).

 **Carnival Corporation & plc exceeds regulations**

CALIFORNIA AT-BERTH REQUIREMENTS - 17 CCR § 93118.3

Regulation Description & Summary of Requirements

On January 1, 2014, California's shore-power requirements became effective, which apply to Carnival Corporation & plc ships, and require the use of shore power or equivalent emissions reductions for vessels at all California ports with target goals of 50% reduction by 2014, 70% by 2017, and 90% by 2020. Fleets can comply through the Reduced Onboard Power Generation Option or the Alternative Equivalent Emissions Reduction Option. Beginning January 1, 2017, at least 70% of a fleet's visits to a port must limit auxiliary engine operation to no more than three hours during the entire time the vessel is at-berth and the fleet's total onboard auxiliary engine power generation must be reduced by at least 70% from the fleet's baseline power generation, or vessels must reduce NOx and PM by 70% or more through use of an approved technology, such as shore power.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with the California requirements. Several of Carnival Corporation & plc's Brands have installed shore power connections, which operate in the ports of Juneau, Seattle, Long Beach, San Diego, San Francisco and Vancouver.

 **Carnival Corporation & plc meets regulations**

CALIFORNIA BIOFOULING MANAGEMENT REQUIREMENTS

Regulation Description & Summary of Requirements

On October 1, 2017, California enacted biofouling management regulations in support of California's Marine Invasive Species Program (MISP). (2 CCR § 2298.1 et seq.).

Beginning January 1, 2018, operators must implement a vessel-specific Biofouling Management Plan and Biofouling Record Book. In addition, operators must submit a Marine Invasive Species Program Annual Vessel Reporting Form must be submitted once annually, at least 24 hours in advance of the first arrival at a California port in each calendar year.

How We Meet or Exceed Regulation

 **Carnival Corporation & plc meets regulations**

FLAG STATE REQUIREMENTS:

FLAG STATE REQUIREMENTS

Regulation Description & Summary of Requirements

Rules and regulations that generally implement international conventions from which Carnival Corporation & plc's ships are registered: Bahamas, Bermuda, Italy, Malta, the Netherlands, Panama and the United Kingdom.

How We Meet or Exceed Regulation

Carnival Corporation & plc complies with all Flag State requirements.



Carnival Corporation & plc meets regulations

STATE, TRADE ASSOCIATION AND OTHER VOLUNTARY GUIDELINES:

A) MEMORANDUM OF UNDERSTANDING – CRUISE OPERATIONS IN WASHINGTON STATE

B) FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION MEMORANDUM OF UNDERSTANDING

C) CRUISE LINES INTERNATIONAL ASSOCIATION WASTE MANAGEMENT BEST PRACTICES AND PROCEDURES

Guideline Description & Summary of Requirements

These are voluntary guidelines related to environmentally responsible handling and disposal of various waste streams, including hazardous wastes, agreed upon by specific states and cruise lines to prevent pollution.

How We Meet or Exceed Guideline

Carnival Corporation & plc's procedures meet or exceed the levels recommended by the Guidelines, for example, by requiring discharge of treated black water outside 12 NM.



Carnival Corporation & plc meets and exceeds some guidelines

D) THE VENICE BLUE FLAG AGREEMENT

Guideline Description & Summary of Requirements

Adopted in 2007 and renewed annually, this encourages ships and ferries that transit from the Lido Port to the Maritime Station to voluntarily use fuel with 0.1 percent or less sulfur prior to entering the Venice lagoon.

How We Meet or Exceed Guideline

Carnival Corporation & plc complies with the voluntary Blue Flag agreement.



Carnival Corporation & plc meets guidelines