Environmental Regulation of Cruise Ships in Alaska

The Commercial Passenger Vessel Environmental Compliance Program was established in 2001, with regulations becoming effective in 2002. Currently, state and federal agencies regulate or monitor cruise ships for wastewater, hazardous and non-hazardous waste, air emissions, passenger and crew health, ballast water, and oil pollution.

Large Vessels include passenger vessels for hire that provide overnight accommodations for 250 or more passengers, determined with reference to the number of lower berths. Small Vessels are passenger vessels for hire that have 50 to 249 berths or other overnight accommodations for passengers.

This fact sheet describes existing oversight programs at DEC and other agencies. It also describes any new requirements from the 2006 ballot measure that changed existing statutes for regulation of large passenger vessels.

1) Wastewater

Agencies: DEC and U.S. Coast Guard

Requirements: Alaska state law requires large passenger vessels to follow a bi-monthly sampling regime by taking two samples of both treated sewage and graywater discharges. Twice per cruise season a more complete suite of metals and other priority pollutants are sampled and analyzed. This is an unannounced sampling event.
Under federal law the U.S. Coast Guard allows, large cruise ships over 500 passengers, to continuously discharge blackwater and graywater in Alaska while in Port, and at anchor if stringent standards are met. For discharges while underway, less stringent requirements must be met. In order to receive approval for continuous discharge a ship owner/operator must submit to the U.S.C.G. and DEC five sample results taken within 30 consecutive days that meet the more stringent requirements. If the conditions are met, the U.S.C.G. issues a continuous discharge approval letter. A ship approved by the U.S.C.G. to discharge continuously must sample their wastewater twice per month to maintain this approval. Working cooperatively with the U.S. Coast Guard, DEC audits third-party sampling and quality control/quality assurance data. The University of Alaska Southeast conducts an independent audit of third-party sampling.

New Requirements: Marine Vessel Tracking System, Large Passenger Vessel Wastewater Discharge General Permit, vessel discharge reporting requirements.

Agency actions: Vessel inspections, wastewater sampling, sampling audits, development of sampling protocol, vessel registration, receipt and review of monitoring sample data and procedures, environmental compliance verification, and violation enforcement

DEC: DEC inspects vessels, reviews discharge logs for compliance with discharge restrictions, approves sampling protocol and procedures used by industry samplers and laboratories. DEC also conducts audits of the third party wastewater sampler or crew member. In addition, the DEC (or its contractor) takes its own wastewater samples in Southeast and Southcentral Alaska. While DEC staff previously performed these duties, the new Ocean Rangers will be additional oversight.

Small vessels can operate under a DEC approved best management practice plan. Small vessel operators must prove to DEC that their crew members have the appropriate background and training to perform wastewater sampling.
As a result of the ballot measure statute changes, a Large Commercial Passenger Vessel Wastewater Discharge General Permit is being developed for the discharge of treated sewage, graywater, and other wastewater discharges from large commercial passenger vessels operating in marine waters of the state located within Southeast, Southcentral and other Alaska waters (AS 46.03.462). Whereas previous water quality monitoring was done under an environmental compliance program, a permit similar to those written for other wastewater discharges will require specific monitoring.

**U.S. Coast Guard:** In cooperation with DEC, the U.S. Coast Guard reviews wastewater systems for vessels with more than 500 passengers. The Coast Guard verifies proper operation of marine sanitation devices (wastewater treatment units), monitors other waste systems, including garbage management, photo lab waste, and conducts random unannounced inspections. The U.S. Coast Guard also conducts annual/semi-annual vessel inspections.

**Vessel Tracking:** While a commercial passenger vessel is present in the marine waters of the State, the owner or operator of the vessel must provide an hourly report of the vessel's location based on Global Positioning System technology. The purpose of this required vessel tracking is to identify the exact location of a vessel at the time of a discharge. See more information on vessel tracking below.

**2) Hazardous and Non-hazardous Waste**

**Agency:** DEC

**Requirements:** Vessel operators must submit an annual description of non-hazardous and hazardous waste procedures and report any deviation from the vessel plan to DEC for the waste produced while in Alaska. Vessels are restricted from unapproved offloading and/or disposing non-hazardous solid wastes (besides sewage) and hazardous wastes in Alaska.
Agency actions:

**DEC:** The Department receives and reviews copies of reports (manifests) and notices submitted to Canadian or U.S. authorities when hazardous wastes generated while in Alaska waters are offloaded elsewhere (e.g., Vancouver or Seattle), or occasionally in Alaska.

### 3) Air Emissions

**Agency:** DEC

**Requirements:** Alaska statutes and regulations set limits on air emissions (opacity) from stacks on registered large and small cruise vessels. These laws require that air emissions must be below an identified percentage of opacity.

**Agency actions:** DEC certified “smoke readers” (Method 9 certified) and independent contract “smoke readers” frequently take random opacity readings in the Southeast, Whittier, and Seward during the cruise ship season. When elevated opacity levels are recorded, DEC immediately contacts the vessel owner/operator. The main objective is to protect the environment, stop the emissions, and investigate what caused the elevated opacity levels. After this initial notification, DEC can further investigate and issue a Notice of Violation which may result in a fine. The vessel owner/operator must submit to DEC a written explanation, including remedial efforts that were taken to prevent a reoccurrence and report on results. DEC also works cooperatively with observers for the U.S. Forest Service (USFS) and National Park Service (NPS) who report vessel information to DEC or EPA when cruise ships have opacity concerns in areas they manage.

### 4) Passenger and Crew Health

**Agency:** U.S. Public Health Service, Centers for Disease Control and Prevention
Requirements: A comprehensive sanitation program.

Agency actions: The U.S. Public Health Service, Centers for Disease Control and Prevention (CDC) started the Vessel Sanitation Program (VSP) in the early 1970s because of several disease outbreaks on cruise ships. VSP was established to protect the health of passengers and crew by minimizing the risk of gastrointestinal illness on cruise ships. The program assists the cruise ship industry to develop and implement comprehensive sanitation programs.

VSP staff conducts sanitation inspections, provides surveillance and investigates disease, reviews construction plans for new ships, and performs onsite inspections of new ship construction and renovation. The VSP requires that violations are corrected. VSP also trains cruise ship employees in proper public health techniques including food handling and preparation, potable water system management, and pool and spa operation and maintenance.

The VSP will provide the public with results of inspections on individual vessels, and take reports of unsanitary conditions on individual vessels.

New requirement: The Ballot Measure extends some inspection/observation duties for safety, sanitation and public health to DEC ocean rangers. DEC is working to determine how these duties will complement the extensive inspections already conducted by U.S. Public Health Service officials.

5) Ballast Water

Agencies: U.S. Coast Guard, DEC

Requirements: Mandatory ballast water management practices required reporting and record keeping of ballasting operations.
Agency actions:

**U.S. Coast Guard:** Develops and maintains standards, regulations, and guidelines for industry, to implement laws and treaties on marine environmental protection. This action includes the development of regulations and non-regulatory compliance policy for the prevention of ship mediated introductions of aquatic nuisance species.

**DEC:** Commercial passenger vessel compliance staff is available to respond to ballast water discharge complaints. Ballast water discharge can be detected by DEC through review of ship discharge logs, and on board tank logs. The location at the time of discharge as entered into the vessel logbook can be verified by using the CPVEC Vessel Tracking System (VTS) and Coastal Navigator if necessary.

**6) Oil Pollution**

**Agencies:** U.S. Coast Guard, Environmental Protection Agency, and DEC

**Requirements:** The U.S. Coast Guard implements parts of the Federal Oil Pollution Act of 1990 that requires comprehensive oil spill prevention, response, liability, and a compensation regime to deal with vessel oil pollution to U.S. navigable waters.

DEC requires operators of passenger vessels over 400 gross tons to develop and be in compliance with a Department approved Oil Discharge Prevention Contingency Plan for oil discharge control, containment, cleanup, and disposal. Each vessel must have an Alaska Certificate of Financial Responsibility (AK COFR). Alaska Statutes require proof of a nontank vessel operator's ability to respond financially for claims resulting from an oil discharge.

**New Requirement:** Secure Vessel Tracking System must provide an hourly report of vessel location. While the ballot measure focused on wastewater discharge, the vessel tracking will aid in other potential spill tracking.
Agency Actions:

**U.S. Coast Guard:** The U.S.C.G. implements the Oil Pollution Act of 1990 (OPA90) regulations to ensure that passenger vessel operators are prepared to prevent, respond to, and pay for oil pollution incidents in navigable waters of the United States. OPA 90 gives the U.S. Coast Guard broad enforcement authority to mandate area oil spill contingency planning, set requirements for vessel construction, crew licensing and manning, assess penalties, and establish financial responsibility requirements for the cruise ship industry.

**DEC:** The Department reviews and approves Nontank vessel Oil Prevention and Contingency Plans at a minimum, 5 days prior to a vessel operating in Alaska waters. Upon approval, the completed application form serves as the plan document. The completed form with a DEC approval letter and of Certificate of Financial Responsibility (AK COFR) must be kept on board while the vessel operates in Alaska waters.

In addition, DEC’s Spill Prevention and Response (SPAR) Program protects public health, safety and the environment by preventing and mitigating the effects of oil and hazardous substance releases and ensuring their cleanup.

**Vessel Tracking:** While a large passenger vessel is present in the marine waters of the State, the owner or operator of the vessel shall provide an hourly report of the vessel's location based on Global Positioning System technology. The purpose of this required vessel tracking is to identify the exact location of a vessel at the time of a discharge. The Marine Exchange operates the Vessel Tracking System that employs satellites, a VHF based Automatic Identification System, and other information sources to track vessels to help ensure safe, secure, efficient and environmentally sound maritime operations. DEC has 24 hours a day/7 days a week secured access to the VTS system to verify vessel positions and specific vessel position history.