ICCL Legislative Issues and Outreach

February 16, 2005

AAPA Cruise Workshop

New Orleans, LA

2004 Overview

- U.S. Commission on Ocean Policy
- Clean Cruise Ship Act
- State Legislative Activity
  - California
  - Maine
  - Washington
  - Alaska
  - Hawaii
- ISPS Implementation
- Port Security Council

MOU

- Key components:
  - On-going discussions
  - Goals, continuous improvement
  - USCG inspections NAVIC 04-04
  - EPA & hazardous waste disposal
  - Waste minimization, reuse and recycling
  - ICCL Waste Management Practices and Procedures
  - ISM Code – procedures incorporated into Safety Management Systems

ICCL WASTE MANAGEMENT PRACTICES AND PROCEDURE

Waste Streams

- Gray Water
- Black Water
- Oily Sludge
- Bilge Water
- Solid Waste
- Hazardous Waste
- Bio-Medical Waste

Gray Water

- Sources
  - Cabin sinks, & showers
  - Laundry, Galley and Salon
  - Potable water & A/C Condensate
- Policy
  - Discharge beyond 4nm and at greater than 6 knots
  - Landed to shoreside treatment facility
- Exception
  - Emergency situation
  - When treated with advanced wastewater system

Black Water

- Sources
  - Toilets and urinals
  - Medical facility water
- Policy
  - Discharge treated waste beyond 4nm at speed of 6 knots
  - Pump to shoreside treatment facility
- Exception
  - Emergency situation
  - Treated by advanced wastewater system

Oily Sludge

- Sources
  - Used lubricating oil
  - Impurities from lube and fuel oil
  - Oily Water Separator
- Policy
  - Incinerate on board, or
  - Landed to approved recycling facility
- Exception
  - Emergency situation

Bilge Water

- Sources (high water content)
  - Machine and engine spaces
  - Condensation on the hull and machinery leaks
- Policy
  - Landed to approved recycling facility
  - Discharge overboard ONLY IF
    - Processed through bilge water treatment system AND
    - less than 15 ppm
- Exception
  - Emergency situation

Non-Hazardous Solid Waste

- Sources (Domestic trash)
  - Packaging, consumer goods, newsprint, etc.
  - Food waste
  - Recyclables (cans, bottles, plastics, steel, batteries, etc.)
- Policy
  - Collected and sorted for recycling
  - Avoid dumping or throwing overboard
  - Landed ashore
  - Incinerated onboard
- Exception
  - Food waste may be ground and discharged >3nm

Incinerator Ash

- Sources
  - Incinerator
- Policy
  - Land as non-hazardous waste
  - No incineration of hazardous materials
  - Annual testing by approved lab for dangerous materials
- Exception
  - May be discharged at sea greater than 3nm in accordance with MARPOL Annex V

Hazardous Waste

- Sources
  - Dry Cleaning
  - Photo/Print Shops
  - Deck and Engine operations
- Policy
  - Landed to approved hazardous waste contractor as:
    - Hazardous waste, or
    - Non hazardous universal waste for recycling, or
    - Returned to vendor for credit
- Exception
  - Some waste streams can be processed onboard by approved methods to remove hazardous characteristics
    - Silver bearing photo waste, cleaning acids, etc.

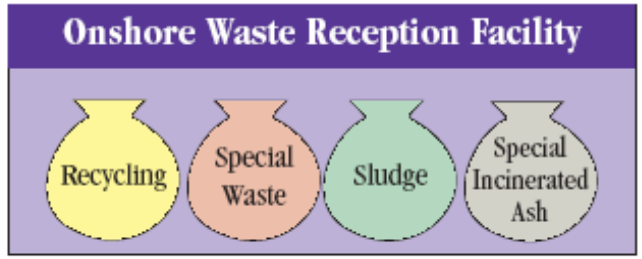
Medical Waste

- Sources
  - Medical Facility
  - Guests
- Policy
  - Landed as medical waste to approved medical waste management firms
- Exception
  - Incinerate burnable items onboard

WHERE DOES CRUISE SHIP WASTE GO?

Cruise ships must comply with international, domestic and state laws from the International Maritime Organization (IMO), U.S. Coast Guard, Environmental Protection Agency (EPA) and state and port agencies.

Member lines of the International Council of Cruise Lines (ICCL) are committed to preserving the waters upon which cruise ships sail. ICCL member lines have adopted mandatory environmental practices that meet or go beyond the requirements of international and domestic law.



Graywater

- Cabin sinks & showers
- Laundry
- Galley
- Salon

Holding Tank

OR Approved Shoreside Treatment Facility

OR Discharged at greater than 6 knots beyond 4 miles from shore

OR Treated by advanced waste-water system and discharged

Blackwater

- Toilets
- Medical facility water

Holding Tank

Blackwater Treatment System

OR Approved Shoreside Treatment Facility

OR Discharged at greater than 6 knots beyond 4 miles from shore

All blackwater is treated by U.S. Coast Guard approved and certified equipment. Either a Marine Sanitation Device (MSD) or an advanced wastewater treatment system.

Bilge Water

- Machine and engine oil collection
- Lubricated seals
- Water

Treated through oily water seperator

Documentation

Approved Shoreside Treatment Facility

Discharged-if oil content is less than 15 parts per million (ppm)

Sludge

- Used lube oil
- Fuel sludge

Documentation

Approved Shoreside Treatment Facility

OR Incinerated Ash for shoreside disposal or discharged at sea in accordance with MARPOL Annex V

Garbage

- Paper & packaging materials
- Food waste
- Cans
- Glass

Incinerator

Grinder

Compacter

Crusher

Discharged beyond 3 miles from shore

Cold Storage

Documentation

Landed ashore for recycling

Discharged at sea in accordance with MARPOL Annex V

Special Waste

- Dry cleaning waste
- Photo/print waste
- Batteries
- Used/dated pharmaceuticals
- Other

Leakproof containers

Documentation

Landed ashore to authorized waste handling professionals

Florida MOU

- *First MOU with a state entered March 2000*
- *Accepts ICCL Waste Management Practices as Policy*
- *Recognizes USCG as primary law enforcement agency*
- *Recognizes FL authority when hazardous waste is landed.*
- *Continues in Effect*

HAWAII MOU

- *Renewed February 2004*
- *Based on ICCL waste Management Procedures*
- *SOPEP plan Annex for Hawaii contractors*
- *Agree to no wastewater discharge to 4 miles beyond 100 fathom contour. If using AWP's can discharge outside of 1 mile at 6 knots, if advance notice of effluent tests provided to Hawaii.*
- *No incinerator use in Hawaii ports*
- *No more than 20% opacity for more than 6 minutes in any 60 minute period*
- *Opacity meters and recording devices will be installed*
- *Use less than 2.8% sulfur content in fuel or notify Hawaii in writing*
- *Acknowledges and accepts USCG NAVIC 04-04*
- *Hawaii can inspect ship's Hazardous waste records*

Washington MOU

- *Acknowledges ICCL Waste Management Practices and Procedures*
- *Covers waters of Puget Sound and straits of Juan de Fuca to international boundary and 3 miles from shore elsewhere.*
- *No discharge of untreated blackwater or untreated graywater.*
- *Allows discharge from AWP's if effluent tested and meets Alaska standards and vessel is 1 mile from Port of Seattle at 6 kts.*
- *60 day advance notice to Washington of intent to discharge with specific info to certify compliance with Alaska law. Final cleansing with UV. Use Washington lab to test samples once a month. Wet testing bi-annually. Washington officials can inspect at least once per year.*
- *No sludge discharge in waters subject to MOU, within 12 miles of shore or in Marine Sanctuary.*
- *No solid waste disposal in waters subject to MOU.*

continue…

Washington MOU

- *Washington has right to inspect hazardous waste records, and ships offloading hazardous waste in Washington will follow Washington regulations*
- *USCG has primary jurisdiction USCG NAVIC 04-04 applies. All ships will incorporate waste management practices into shipboard SMS*
- *Washington Ballast Water Management law applies*
- *MOU only applies to vessels that actually call in Washington.*
- *24 hour notification of failure to comply.*

Alaska Law

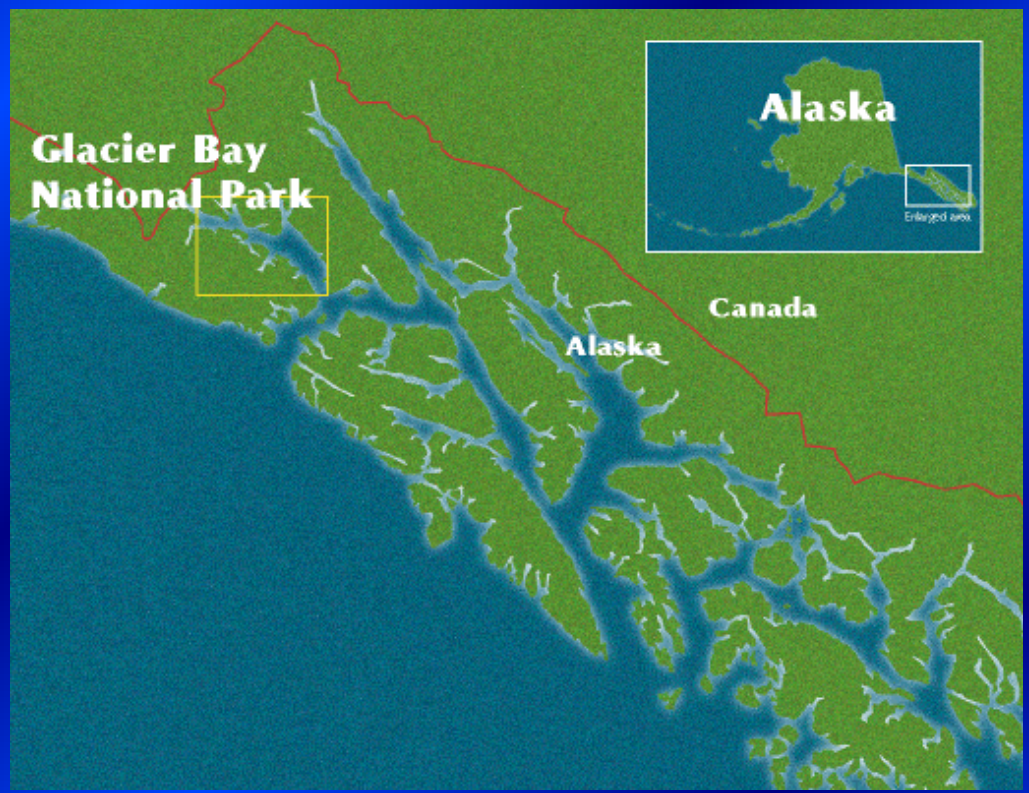
GRAY AND BLACK WATER

Federal Legislation Introduced by Senator Frank Murkowski to regulate large ship discharges. Law Title XIV ----"Certain Alaskan Cruise Ship Operations" passed 12/21/00, Regulations 33 CFR 159, Subpart E was effectively passed July 26, 2001. Alaska Statue (AS) 46.03.460 - .490 also covers visible emissions, solid waste, and hazardous waste.

Alaska Law

Federal Legislation closed “Donut Holes” areas Within the Inside Passage where discharge of untreated sewage was allowed. Untreated sewage Discharged from large ships is prohibited since December 2000.

USCG administers Federal Law & certifies vessels that meet stringent standards.



Alaska Law

State Law Created the ***"Commercial Passenger Vessel Environmental Compliance Program"***

CPVEC requires:

- Annual registration
- Program fees•Wastewater sampling by industry
- Ship record keeping of wastes•Enforcement of standards
- State verification by taking additional samples or auditing the industry samples

CPVEC does not cover: bilge, ballast, & sludge

Comparison of Federal and State Law Standards

Law	State	Federal
# overnight passengers	50+	500+
Discharge limits	1 mile from shore @ min. 6 knots	
	BW & GW	BW only
Fecal Coliform/100 ml	200	200
Total Suspended Solids (TSS) (mg/l)	150	150
Discharge limits	Continuous discharge (in port)	
	BW & GW	BW
Fecal Coliform/100 ml	Refers to Fed Law	20
Chlorine (mg/l)		10
Total Suspended Solids (TSS) (mg/l)		30

Sewage treatment standards commonly use fecal coliform

Alaska Law

SCIENCE PANEL RECOMMENDATIONS TO PROTECT SENSTITIVE AREAS

- Avoid stationary discharges
- No discharge within 0.5 nautical miles of shellfish beds
- Concluded cruise ship waste water has similar risks as Alaskan towns, cities, and Municipal Treatment Plants
- Bacteria, nutrients, sediments are not a threat from large ships due to dilution and advanced treatment systems.

Large Ship Dilution

- EPA's Study in 2001
- Developed formula for an initial dilution factor (DF):

$$DF = \frac{4 \times width \times draft \times speed}{\text{rate of discharge } m^3/sec}$$

- Initial + Far Field dilution

1:50,000 + 1:100 = 1:5,000,000

Large Ship Risk Characterization

- The wastewater samples indicate that hazardous chemicals are not being discharged through these wastewater systems
- Large ship effluents meet all *Alaska Water Quality (WQ) Standards* in the "receiving water" during underway discharge for pollutants tested in 2003. Some ships exceeded fecal coliform standards in 2000-2002.
- Large ship effluents met all *Alaska Water Quality Standards* in the "receiving water" during stationary discharge for pollutants tested in 2003 using advance systems. In 2000-2002, Large ships did not meet water quality standards for free chlorine, fecal coliform and copper in the "receiving water" during stationary discharge
- Large ships using functioning advance systems do not pose a risk to human health in areas where aquatic life is harvested for raw consumption.

Comparing Passenger Vessel Dischargers to Municipal Treatment Systems

(all units are per 100 ml)

Large cruise ship	20 fecal coliform
Juneau-Douglas	200 fecal coliform
Ketchikan	1,000, 000 fecal coliform
Sitka	1,000,000 fecal coliform
Skagway	1,000,000 fecal coliform

Conclusion - Alaska

- ADEC expects that only large cruise ships with advanced wastewater treatment systems will discharge wastewater in Alaska in the future.
- Whole Effluent Toxicity test results and a comparison of sample results with *Alaska Water Quality Standards* indicate that the effluent from these advanced systems is not expected to cause toxicity to the marine environment.
- The wastewater samples indicate that hazardous materials are not being discharged through these wastewater treatment systems.
- No human health risk is posed by the low concentration of tested pollutants found in Advance system wastewater samples.

Alaska Law

BALLAST WATER

- USCG mandatory reporting program for vessels over 300 gross tons effective 6/14/04
- Requires ballast exchange from vessels entering the 200 nautical mile “Economic Exclusions Zone” (EEZ).
- Cruise ships traveling within the EEZ do not have to exchange ballast, but must report.

California Law

AB 2672

Establishes marine waters or marine sanctuary areas of the state to have non-discharge zones for sewage from all vessels in effect until January 1, 2010. Sewage consists of:

- sludge

sewage sludge

Marine sanctuary areas: Channel Islands,Cordell Bank, Gulf of the Farallones, and Monterey Bay.

California Law

AB 2093

Prohibits the discharge of graywater from cruise ships while in California waters within three miles off shore. It also requires reporting to the state Water Board any graywater discharges in California waters with a penalty violation of $25,000 for each release.

California Ocean Protection Council

Both Bills are part of the California Governors' formation of the Council which is to enforce the California Marine Life Protection Act that mandates the creation of coastal reserves to protect fish and other marine life. The Council will review their regulation of large passenger vessels and evaluate whether the state should pursue changes in federal law to establish prohibition discharge in state waters.

Maine Law

Chapter 650 S.P. 378-L.D. 1158

Operators of large passenger vessels may not discharge graywater However, effective January 1, 2006 large passenger vessels may discharge into coastal waters a mixture of graywater and blackwater if:

- discharge meets standards under the Alaska requirements
- operator/owner maintains a discharge log as required by federal regulation Code 33 159.315
- operator/owner meets sampling and reporting requirements of Code 33 159.315 while operating in coastal waters
- Vessels can certify no discharge in Maine territorial sea

Maine Law

Chapter 650 S.P. 378-L.D. 1158

The State of Maine has adopted language, for territorial seas, similar to the State of Alaska which authorizes the discharge of graywater or a mixture of graywater and blackwater in Alaska pursuant to the federal Consolidated Appropriations Act in 2001.

The intent of this legislation is the regulation of graywater and black water mixture discharges from large passenger vessels that are equipped with wastewater treatment systems, that require continuous discharge, consistent with the regulation of similar vessels in Alaska.

Maine Law

Chapter 650 S.P. 378-L.D. 1158

The legislation also provides for Maine's Department of Environmental Protection to petition the US EPA for selected no discharge zones pursuant to the Clean Water Act.

"No-discharge" zones are defined in the legislation as areas within coastal waters that have been designated by the U.S. EPA Code 33 1322.

2005 Challenges

- Comprehensive Oceans Bill
- CI Partnership: Science Panel, Destination Partnerships & Communication
- Marpol Annex VI implementation
- Air emissions restrictions
- ADA – Supreme Court case and ruling
- ILO – Labor Standards

2005 Preview

- ICCL's 15th Anniversary
  - Magazine and website update
- 2004 Economic Study
- Cruise 101/grassroot events
  - New Orleans; Tampa
- Environment
  - OCTA: science panel recommendations and educational outreach
  - Media outreach: coastal states

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