



ALASKA CRUISE SHIP INITIATIVE

2000 Season Accomplishments

AIR QUALITY

240 total opacity readings of cruise ship emissions were conducted by DEC and EPA. 34 observations exceeded the opacity standard. 16 ships were cited by the state and four by EPA. Opacity readings will occur for the next four seasons as a part of the Royal Caribbean settlement

Ambient air quality was monitored in downtown Juneau at four locations: near the old police station, the Baranof Hotel, Capital School, and the Court Plaza Building. From August 13 through September 30, 2000 levels were well below (50%) health based standards. The work group will determine the extent of future sampling.

WATER QUALITY

Wastewater samples were taken from each of 21 large cruise ships visiting Juneau. Blackwater, (from toilets) and graywater (from showers, sinks, galleys, laundry) were tested in the same manner as land based sewage treatment plants. Results showed that treated blackwater often exceeded the federal treatment standard and that graywater had surprisingly high fecal coliform levels.



Following the initial sampling results, the Coast Guard focused on how marine sanitation devices are operated and maintained by conducting follow-up inspections. Five regulatory actions are pending, based on 12 expanded examinations. Coast Guard oversight of marine sanitation devices will continue as needed, when these same ships call on other U.S. ports.

Each ship's discharges were additionally analyzed for a suite of chemicals, called priority pollutants, that would indicate if there was improper disposal of hazardous chemicals. Current results indicate that hazardous wastes are not being improperly disposed of. A few priority pollutants are present at levels above water quality standards; however, there is not enough information to determine if exceedences have occurred. Priority pollutant analysis is complex. A panel of experts is being assembled to assist with data analysis and determining if there are impacts to public health or the environment. Sampling of blackwater and graywater discharges, and certain priority pollutants will likely continue next year.

The Coast Guard implemented Operation Cruise Watch 2000, which increased the aircraft and cutter oversight of cruise ships. No violations were noted.

OIL SPILL RESPONSE

Through the Royal Caribbean settlement, \$2.1 million has been given to the South East Alaska Pollution Response Organization (SEAPRO) to increase oil spill response capabilities in Southeast Alaska. In consultation with the DEC and the U.S. Coast Guard a variety of pollution response equipment was selected for purchase. Major purchases include:

- Two 48 ft. multi-mission fast response vessels
- One 55 ft. oil spill response barge for the Northern Lynn Canal Near Shore oil spill response package
- LORI brush skimming system
- 1,000 feet Shoreguard boom
- 2,000 ft of containment boom
- Seven 21 ft spill response skiffs

ENVIRONMENTAL LEADERSHIP

Environmental Awareness Days were conducted July 12 through July 14, with tours of ships environmental systems available daily. Additionally, during the evening of July 13, a joint panel of experts provided information to the public on environmental management systems on ships and updated the public on the 2000 Season activities.

Next summer, Princess Cruises will connect four of its ships to Juneau shore power, eliminating the need to run generators, thereby reducing emissions while in port.

The North West CruiseShip Association paid for four sets of Oil Spill Recovery Barges that have been located at Haines, Juneau, Glacier Bay, and Ketchikan. Each set consists of two barges, one with a skimmer, and both with 249 barrels of storage capacity. These barges significantly increase the states oil spill safety net, as they can be used for responses to spills other than just from cruise ships.

WASTE WATER TREATMENT:

- Eliminated discharges of treated blackwater and untreated graywater in ports.
- All capable ships held discharges until 10 miles from port, and discharged at a speed of at least 6 knots.
- There were no discharges of garbage or untreated wastewater in so-called “donut holes”, once the policy was enacted.
- Four pilot projects are underway to test new ways of treating graywater.
 - Reverse osmosis: initial analysis indicated this process meets standards.
 - Aerated membrane treatment system: preliminary results from one ship are promising.
 - Activated oxidation process: currently being evaluated.
 - Chemical treatment with mechanical decanting: shipboard sampling indicated that early modifications were successful.
- Industrial wastewater treatment methods have not changed in decades. These initiatives may fundamentally change wastewater treatment methods for the marine trade.

