HAWAI'I'S ENVIRONMENT

How state should get rid of trash

By Jan TenBruggencate

Hawai'i government agencies, businesses and residents would do well to treat their trash the way some of the state's biggest shipping firms do.

Norwegian Cruise Line, for example, has an officer in charge of recycling who oversees the separation of all recyclable products in the waste stream. Plastics are categorized and baled. Bunches of aluminum cans are crushed into briefcase-sized blocks. Glass is crushed and bagged. All are offloaded for recycling.

The ship's cooking oil is stored and turned over weekly to Pacific Biodiesel for conversion into fuel. The ship incinerates paper and cardboard, which takes up a great deal of space otherwise, the firm's officers said.

"Sixty to 70 percent of our solid waste is recyclable," said Dennis Yoshida, Norwegian's safety and environmental systems manager.

Matson Navigation's ships have a similar system for its cargo ships.

"Matson has a zero-discharge policy. We put nothing over the side" except food scraps and fully treated wastewater, said Dale Hazlehurst, Matson's marine manager. Waste brought to Honolulu is recycled or delivered to the city's H-Power plant, he said.

I toured the Norwegian Cruise Line's Pride of America Thursday to view a state-of-the-art marine wastewater system, built by the Norwegian firm Scanship Environmental. It is capable of processing 850 tons of sewage daily. Sewage is piped through aerated tanks where natural bacteria break it down. Liquids and solids are separated, and liquids are further filtered and disinfected with ultraviolet light. Ships' officers say it's probably clean enough to drink (although no one does). It is pumped over the side only after the ship is at least 12 miles from shore.

"Even if they did accidentally discharge in port, it's probably cleaner than what's coming out of our streams," said Dennis Lau, head of the state Department of Health's Clean Water Branch.

Pride of America chief engineer Matthew McKeon said that the sludge — solids left after the biological treatment and separation from liquids — represented 2.1 percent of the ship's discharge in recent weeks.

Lau said the treated sludge probably has a lower bacterial count than the material released from the state's sewage treatment plants, many of which pump treated effluent into the ocean.

On one of the Norwegian ships, sludge is dried and incinerated aboard. On the other two, it is pumped overboard at least 12 miles from shore.