



PROBLEM: Constant maintenance due to debris clogging the pipeline to the digesters.

SOLUTION: 3-HYDRO-I Dual-shafted Waste Grinder

CONSULTANT: Jelcon

The fleet of the BC Ferry Corporation, a Crown Corporation of the British Columbia provincial government, is gargantuan. In a typical year, its armada of 40 ships traverses the waters of the Gulf of Georgia, ferrying a staggering 9 to 10 million cars and some 23 million passengers among Vancouver Island, the gulf islands, and the provincial mainland.

This annual payload includes commuters who live on the islands and work in Vancouver, and tourists visiting Victoria, the provincial capital on Vancouver Island.

The largest island of North America, Vancouver Island is separated from the mainland by Queen Charlotte Sound and the Strait of Georgia. British explorers founded the island in the 16th century and it became a crown colony in 1846. Heavily forested and mountainous, the island is noted for its strong fishing, mining, timber, and fruit-growing industries.

A few years ago, the corporation bought four 3-HYDRO-I units

and had them installed in four of its larger vessels. These waste grinders were sorely needed because the wastewater treatment systems on the ferries were experiencing continual solids backup that required maintenance every four or five hours. As corporation Assistant Vice President for Technical Operations Bob Ogston explains, the processing works consist of an aeration tank for primary treatment. The solids settle out and are periodically pumped out and trucked to landfills. The treated water is pumped to a second tank where the water undergoes ultraviolet radiation treatment before being discharged overboard.

Before the waste grinders were installed, filters in the aeration tanks, which are designed to sift and separate the solids, built up so quickly with debris that the crewmen had to go in by hand and clean them out at least twice a day. "All kinds of strange things come down the toilets," says Ogston, listing such items as cans and smashed bottles, clothing, plastic items and even cutlery.

The waste processing grinders, he adds, "crunch up this material into little pieces," allowing for a smoother wastewater flow and creating excellent savings in maintenance. "Our guys love them," Ogston notes. "Crew morale has never been higher, because now, with the waste grinders, the filters have to be cleaned out only every four to five days. This impacts not only maintenance but the health of the crew. Installing the 3-HYDRO-I on our ships was one of the best decisions our company could have made," said Ogston, "enabling us to improve service while lowering costs. We are definitely sold on them."

About JWC Environmental

JWC Environmental (JWC), a Sulzer Brand, is a world leader in solids reduction, removal systems and product destruction for municipal and industrial applications. JWC Muffin Monster® sewage grinders are the first choice to protect vital sewage pumping stations and sludge system equipment, and JWC headworks screens are proven performers to protect essential treatment plant equipment from debris and wastewater. Plants globally turn to JWC systems like Auger Monsters® and Screening Washer Monsters® for unique all-in-one packaged solutions for solids separation and dewatering. JWC provides industrial wastewater treatment equipment through its IPEC screens and separation equipment. JWC industrial screening equipment is used in a variety of food and beverage, oil and gas, general manufacturing and industrial wastewater applications. JWC Monster Industrial shredders and grinders are uniquely designed to cut through the toughest solids and bring them down to size. Monster Industrial products are working every day, protecting pumps and destroying debris. They are found in applications like recycling, waste-to-energy, commercial facility sewage, food processing, agriculture, and oil and gas. Founded in 1973, the company has built and shipped more than 40,000 Monster grinders, shredders and screens to customers worldwide.

