

ment, Discovery Bay, and aircraft noise.

According to Joanna Ruxton, senior conservation officer at the Worldwide Fund for Nature (known as the World Wildlife Fund in Canada), much of the dolphins' shallow feeding and nursery grounds are now being reclaimed. Dredging also creates a problem because it disturbs the seabed, interrupting the food chain with what can be dire consequences for higher life forms. Ruxton says the dolphins may also be affected by blasting, since shock waves can rupture the dolphins' lungs and ears.

Water quality in the harbour

The quality of the water is also damaged by toxic dump pits dug underwater. Although they are eventually sealed with sand, the pits, and their noxious contents, remain open while they are being filled, polluting the water and seabed nearby. Fishing has not been stopped in these areas, according to Ruxton.

Sewage is another problem, one that is most evident in Hong Kong's polluted harbour. While much of Hong Kong waters have been gazetted by the government, Victoria Harbour is the last — and as yet undeclared — quality control zone. "The harbour is dead," according to Ruxton. The few fish (and the few fishermen) have adapted to the toxic conditions, she says.

But by 1997, 70 per cent of the waste now pumped into Victoria Harbour will be removed by the new sewage disposal scheme. Many environmentalists are optimistic. "You could see a big improvement in the water quality," says Ruxton, citing the example of Singapore. Twenty five years ago, the Singapore River was a filthy, stinking cess pool. Today, it's clean.

The new sewage disposal scheme is symbolic of the increasing attention Hong Kong people and government are paying to the environment. Ruxton says that cooperation from government has improved dramatically, "particularly over the last three years," adding that government groups are now approaching environmental and green groups for

suggestions. Explains Lisa Hopkinson, campaigns coordinator at Friends of the Earth: "The government is not stupid. They realize the environment has been underfunded. They've got a lot of catching up to do."

While the government is planning to spend billions on its Strategic Sewerage Disposal Scheme, controversy still surrounds the plans. Over the next 10 years, the Environmental Protection Department (EPD) project will be completed in two phases. The first will collect sewage from Hong Kong and Kowloon for primary chemical treatment at Stonecutters Island. Under the second, treated sewage will be piped through tunnels that will end in the South China Sea.

The plans have been controversial because the lime treatment is seen as outdated and inefficient, since it only partially treats waste and produces a lot of sludge. It is, however, a less expensive solution to the problem. Processes that remove 100 percent of the toxins and bacteria and leave little sludge are double or triple the cost of Hong Kong's planned system. Plans have also sparked heated debate because the Scheme cannot be completed before 1997, leaving funding, as well as approval for the long sea outfall, in China's hands (Note: see China sidebar).

A business niche

While the fate of the dolphins and the planned sewage treatment system — like Hong Kong's smog — remain up in the air, the expanding market for environmental products and services is as real as the 15 million plastic bags that get dumped in the harbour every day. That's not the only eye-opening statistic Hong Kong waste produces. Consider:

- toxic metals that weigh as much as a double-decker bus are dumped in Hong Kong's harbour everyday, according to a 1992 U.S. consulate report;
- enough copper is dumped into the harbour to plate the 84-storey Bank of China building three times a week;

- more than two million tonnes of sewage (half of it untreated) is dumped in Victoria Harbour each day — enough to fill 1,000 Olympic-size pools;
- the construction industry alone produces 16,000 tonnes of waste each day;
- the new airport development will produce 26 million cubic metres of toxic mud and sludge;
- Hong Kong exports 1.6 million tons of plastic, paper, and metal to China waste; and
- meanwhile, Western countries export 425,000 tonnes of plastic waste to Hong Kong every year, with Canada having exported 5,000 tonnes of heavy metal waste to Hong Kong in 1992



While these environmental sins seem grim, they also represent opportunities for those in the business of cleaning up, reducing and eliminating waste. According to *Prospects* magazine, Hong Kong's government will spend about US\$2.85 billion cleaning up the environment before June 30, 1997. About \$4 billion has been budgeted for the 10-year programme to upgrade sewage and drainage, and improve waste disposal.

Stephen Lam, executive director of the Private Sector Committee Environment Centre, has made it his business to consider the environment from an economic perspective (Note: see PSCEC sidebar). He suggests that opportunities exist in four areas: water, air, energy, and noise. In the short-term, Lam says that industrial and urban water pollution, and waste water treatment, will provide the most immediate opportunities. On big projects, there are a lot of opportunities for sub-contractors. In the longer term, Lam suggests processing technology, recycling technology, and waste processing will be growth industries.

