Dale Duetta, manager of environmental and technical affairs, began tackling the problem in 1990 and started a

technical study in 1992. The result was the Water Management Plan.

The plan was to use the company's south quarry. which was mined out in the mid-80s. as a holding unit from which water could be re-used (the company's north quarry is

still being mined). Under the plan. Essroc would stop taking in water from the harbour

and use the water that has filled the south quarry.

So the company installed a valve where the water was formerly discharged after use, and re-routed the water to the south quarry. There, two primary holding tanks, also known as settling basins, were constructed within the

quarry.

The first

used to allow

any large par-

water to settle

ticles in the

released into

the main sec-

common basin.

holding tank is

used for col-

lecting water

that accumu-

north quarry

and formerly

lates in the

The second

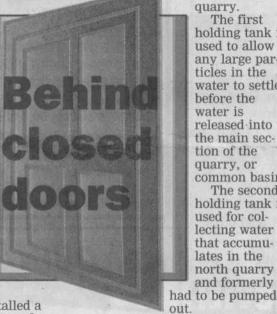
tion of the

quarry, or

before the

water is

holding tank is



Now it is pumped into the second holding tank and once it has settled there, is also drained into the primary basin, where it can remain for up to 30 days. It's then pumped into the plant by a new. state of the art pump house constructed at the side of the common

basin. Nearly 1.6 kilometres of drainage ditches were constructed on Essroc property, to collect storm water runoff, snow melt, used water from the plant, and water collected in the north basin, to the primary basin in the south

quarry.

Construction on the project began in August, 1998 and the system became operational in April at a cost of \$2.5 million, savs Duetta.

"It was just he right thing to

do so we took the bull by the horn and did it."

Along with complying with MISA regulations, the new sys-

tem eliminates the problem of zebra mussels and gizzard shad, which had become such a problem that they occasionally caused the shut down of the plant. As well, sediment stirred up by lake freighters at the plant's docking facilities, and weeds stirred up by storms, were drawn into the distribution system and caused mainte0055

nance problems.

⁶It was just

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horn and did it.

Duetta says the company is currently doing a chemical monitoring program of the water to determine if there is any change to its quality over a 12 month period. To date, he says, the system is working well.