

# Campbell River's RAS pumps are clogging no more



*Thanks to the new N-Pump design*



The Norm Wood Sewage Treatment Plant situated in Campbell River, BC - Vancouver Island was commissioned in 1996.

Since the start of operation the two Return Activated Sludge Pumps were having problems.

Because there is no pre-screening before this section of the plant, all the solids (fibrous materials, plastics, rags) that get into the system are collected by the RAS pumps' impellers and would clog both of them. The clogging decreases the capacity and efficiency of the pumps and requires more power as it gets clogged. Victor Isaacson- the plant's chief operator and his assistant George McPherson would have to specially monitor the flow at the SCADA control and adjust the pump's speed to maintain the constant flow needed to feed the clarifiers.

One more thing that Victor and George had to worry about was to open both pumps everyday to clear the clogging. This was about an hour's worth of cleaning not only of the clogging but also the floor of the RAS building to sanitize and clean it of the raw sewage that spilled during the clog cleaning process. Should they miss a day, the clog would become hard-packed and had to be mechanically pulled out.



Norm Wood.07.03

"It's a time consuming and messy job, but needs to be done everyday." said George.



Victor says "The difference is night and day."

### The solution :

When the new design N-Pump that matches the flow of this system was available, we talked to the District's Operations Manager Gordon Brown and to Rick Graebner to offer them a no obligation free trial on one unit for three months. If it does not work, we promised to take back the test unit and put the old pump back in its place.

The NT3153 LT pump was installed for trial in August 2002. Evidently, from the start of its use, the N-Pump did not clog and maintained its efficiency and flow and, as a result, Victor could just let it run continuously without changing the speed.

Best of all, it does not need to be unclogged. A second pump was budgeted for 2003 by Graham Stewart- Public Works Supervisor, and an order has been placed in early January 2003.