

# How pure is our water?

**WATER** - can we drink it?

This was the question asked in a column in this newspaper recently.

"Yes, you can drink it," responded Umgeni Water, whose senior manager of strategic support, Dan Naidoo said Umgeni's water is rated among the best in the world. He said Umgeni Water's mission was "to provide effective and affordable bulk water, bulk sanitation and related solutions to local government in accelerating the water sector's national development agenda".

The *Highway Mail* was invited on a tour of the Durban Heights Reservoir to find out exactly what process and chemicals are used to treat the water people consume.

According to Naidoo, tap water supplied by Umgeni Water consistently meets the South African National Drinking Standards (SANS 241) and is safe to drink.

He added another common question directed to his department was, should the public filter its water? The answer - no additional water filtering is needed.

Raw water from dams is gravity-fed to the water treatment plant. When the water reaches the plant, it is tested to determine the quality of the water.

The main chemical ingredient for water treatment is chlorine. One part per million (just 1mg for every litre is the trace amount of



chlorine that reaches your home).

Other disinfectants are lime (ph) and coagulation (alum). The disinfectant turns the water cloudy.

The fourth chemical that is active is carbon to absorb tastes and odours. The fifth chemical is bentonite (clay).

After the filtration process, chlorine is used again, to prevent the growth of bacteria and other harmful micro-organisms. The cleaning or water treatment process takes four to six hours, and runs on a 24-hour service operation.

"An amazing 600 000 kilolitres of water passes through the Durban Heights Reservoir every hour and Durban uses almost 1000 mega litres of water a day," said Naidoo.

"The entire water treatment process is checked on a two hourly basis to ensure only the cleanest water reaches residents' taps and can be consumed through drinking or household chores", added Naidoo.

