

Arsenic danger in bore water

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Arsenic at 1800 times the safe level for drinking and 120 times the safe level for irrigation has been recorded in ground-water monitoring bores in Gwelup, prompting the Health Department to instruct people to stop using their garden bores until they have had them tested.

Letters have been sent to 1480 households in the affected area east of Lake Karrinyup golf course — an area where some residents have blamed cracks in their buildings on the acid soil problem.

Department of Environment land and water quality manager Sharon Clark said the problem — caused by iron minerals in peaty soil oxidising when exposed to air — may have been triggered by several factors, including low rainfall and the extraction of groundwater for drinking, irrigation and during developments in the area.

It is the first time a warning on using groundwater in Gwelup has been issued, although the suburb of Stirling, a few kilometres to the east, has been plagued by acid in groundwater for at least five years.

Osborne/Stirling Coalition of Resident Ratepayer Groups president Elaine McNeill said she was frustrated that development was still being allowed despite it being increasingly obvious that the earthworks they caused were increasing acidity in the soil.

She predicted scheme water supplies would eventually be affected.

"This is a public health issue," she said.

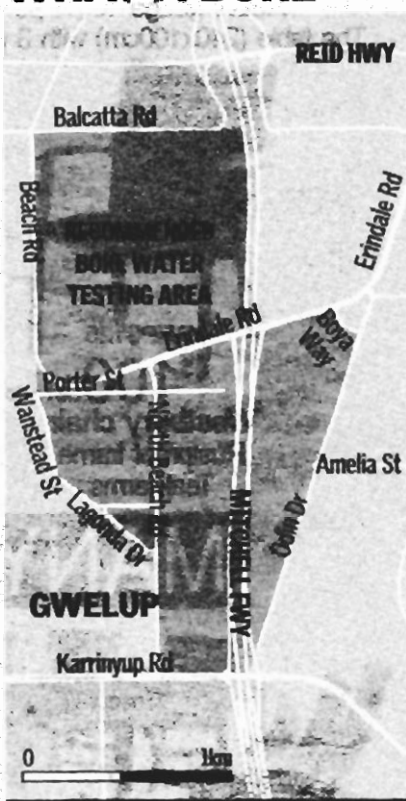
Ms Clark said 17 department and developers' monitoring bores tested for arsenic had shown levels ranging from less than a microgram per litre of arsenic to 12,800 micrograms per litre.

The drinking water standard is seven micrograms and irrigation water is 100 micrograms.

"We're recommending people avoid using their bores until it's confirmed that the groundwater is safe," she said.

Department of Health environment

WHAT A BORE



health director Jim Dadds advised against people drinking bore water or using it to fill swimming and paddling pools.

He said people who used bore water to irrigate fruit and vegetables should use scheme water to wash them before eating.

The affected area spans Mitchell Freeway and is bordered by Balcatta, North Beach, Karrinyup, Erindale and Odin roads.

The World Health Organisation says long-term exposure to arsenic through drinking water can cause skin, lung, bladder and kidney cancer and skin pigmentation changes or thickening.

It warns increased risks of lung and bladder cancer and of arsenic-associated lesions have been observed at drinking-water arsenic concentrations of less than 0.05 mg/L.