



WORKS CONTINUE TO TACKLE WATER AESTHETICS ISSUES – GEOSMIN UPDATE

Dubbo Regional Council (DRC) is aware of an aesthetics issue regarding the taste and smell of Dubbo's water in some parts of the city.

Geosmin, a natural compound found in water sources including in the Macquarie River, has been determined as the cause of the earthy smell.

The detection range for Geosmin in humans is very low, with as little as 0.006 micrograms of the substance per litre of water being detectable to the senses. The substance is almost always present in drinking water though it is usually below noticeable levels. It is more prominent during the warmer months

While the taste and odour from Geosmin can be unpleasant, it is purely an aesthetic issue and the water is safe to consume.

All water treated at the John Gilbert Water Treatment Plant meets the parameters set by the Australian Drinking Water Guidelines.

Council staff are actively looking at ways to improve the taste and odour of Dubbo's water by further reducing the amount of Geosmin it contains.

Manager Strategy Water Supply and Sewage Chris Godfrey said the water treatment process within the John Gilbert Water Treatment Plant is complex, as the facility both filters and softens water.

"DRC utilises Powdered Activated Carbon (PAC) as a means of water purification. When raw water is pumped from either the Macquarie River or ground water bore sites into the Treatment Plant, it is first dosed with PAC within the PAC tank. Here, the raw water is mixed and aerated to enhance the effect of the PAC before it moves on for clarification, filtration and chlorination. The process consumes around 800 kilograms of PAC daily and absorbs organic substances which cause odours and flavours, and pollutants such as chlorinated solvents, insecticides, pesticides and detergents.

"The PAC and absorbed pollutants are then filtered out of the water during the clarification and filtration stages of treatment.

"DRC are investigating ways of improving the effectiveness of the PAC dosing system which may mean reviewing the operation of the PAC tank, to further remove Geosmin and its unpleasant aesthetics from Dubbo's water supply, noting the plant is operating at 100% in regards to the PAC."

"It is a complex issue and we are pushing the treatment very hard in terms of its design specifications and capability," Mr Godfrey said.

DRC appreciates residents' patience and understanding while staff work through the issues in consultation with bodies such as DPE Water.

ENDS.

Last Edited: 17 Jul 2023