

# Indicator bacteria and regrowth potential of the drinking water in Alice, Eastern Cape

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## Abstract

Alice drinking water has a brown colour sometimes which could imply that it is not potable. To assess the effectiveness of the purification works and ascertain whether the water distributed is safe for drinking, indicator bacteria namely, heterotrophic, total coliform, faecal coliform and injured coliform counts were performed using the membrane filtration method. In addition, the regrowth of heterotrophic bacteria, total and injured coliforms in the chlorinated water at  $15^{\circ}\text{C} \pm 2^{\circ}\text{C}$  and  $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$  was recorded. All the indicator bacteria counts were above the South African acceptable standards. Moreover, heterotrophic bacteria and total coliforms showed a remarkable regrowth indicating that the treated water had possibly high biodegradable dissolved organic carbon content due to inefficient purification systems. Considering the overall microbiological indicators, it can be concluded that the Alice drinking water is of poor quality.