

SA's drinking water quality has dropped because of defective infrastructure, neglect

By <u>Anja du Plessis</u> 14 Jun 2023

A report <u>released</u> by the South African government paints a grim picture of the country's water resources and water infrastructure as well as the overall quality of its drinking water.



Source: www.pexels.com

The Blue Drop Watch Report – an interim report because it only assessed a sample of the facilities across the country – focused on the condition of the drinking water infrastructure and treatment processes from a technical standpoint. It also reported on water quality.

The issues of <u>biggest concern</u> that it identified included a collapse of the country's wastewater treatment works and a sharp rise in the number of local authorities that are failing to meet minimum compliance standards.

The report records continued overall decline in the status of the country's water supply services. The findings point to a culture of neglect, non-compliance and systemic collapse. The current cholera outbreak in the country should, therefore, come as no surprise. The interim report shows dysfunctional local municipalities and non-compliant wastewater treatment works.

The systemic collapse has been attributed to poor operation, defective infrastructure, the absence of disinfection chemicals, lack of monitoring and an overall lack of operating and chemistry knowledge.

The report shows that the Department of Water and Sanitation issued non-compliance letters to 244 wastewater treatment works in 2022. But only 50% had responded almost a year later.

The report shows a clear and rapid decline in the performance of local government. But only 43 out of <u>205</u> local municipalities have asked for assistance from the department. They are able to ask for financial support and assistance to help with capacity building and skills development.



50% of SA municipalities have poor or bad drinking water quality - report 7 Jun 2023



Drinking water quality

Only a test sample of some of the country's facilities was conducted. Assessments were made of 151 water supply systems – <u>out of the total 1,186</u> – managed by 140 local municipalities. In addition, 26 water boards and bulk water service providers were assessed. The assessments were done between November 2022 to February 2023.

Most of the treatment plants in the sample were found to be failing to produce acceptable drinking water according to the <u>SANS 241:2015</u> drinking water standards.

Over 60 systems (41%) of the sample had bad water quality. Another 13 systems (9%) had poor water quality. This meant that it didn't meet clean water <u>standards</u> because of high levels of contaminants such as wastewater and excrement.

Contaminated water poses acute health risks. It is responsible for water-related illnesses such as cholera.

Only 50% of the assessed treatment plants produced drinking water of a suitable quality not contaminated by sewage or other pathogens or chemicals.

A number of water supply systems were flagged as being in a critical condition, requiring urgent intervention.

The report also noted that 11 of the 140 municipalities that were assessed had no water quality monitoring systems in place or no evidence of any water testing.



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Wastewater treatment works

Wastewater treatment works are assessed in accordance with the set <u>Green Drop audit standards</u>. Of the total 850 wastewater treatment works assessed, 334 (39%) received scores below 31% and were placed under regulatory surveillance. Overall, the country's wastewater treatment works are in a poor to critical state, posing significant risks to public health and to the environment.

South Africa's Wastewater Treatment Works Preliminary Report Card:

- 208 are at critical risk (24%) indicating dysfunctional and unsatisfactory performance, with major corrections required.
- 250 are at high risk (29%) indicating partial functionality and unsatisfactory performance, with major corrections required.
- Half are in poor to bad condition. This is up from 10% in the 2014/2015 auditing period.
- The North West province recorded the highest proportion of wastewater treatment works at critical risk (60%), followed by the Northern Cape (59%) and the Free State (44%). Limpopo has 38% of its plants at critical risk and 48% as high-risk plants, placing the bulk of its treatment facilities in a vulnerable state.

Other major issues reflected in the report were:

- Only 25 systems (17%) achieved excellent water quality and 20 systems (13%) good water quality, while 106 systems (70%) failed to achieve chemical compliance. A worrying 83 systems (55%) have bad water quality compliance and 23 systems (15%) have poor water quality compliance.
- Under 40% of systems were compliant on microbiological parameters (pathogens and bacteria such as faecal coliform, E. coli and cholera). Just over 10% were partially compliant.
- Only 5% of plants were in a state of high compliance. The rest were in a poor or critical condition (64%) or had some degree of compliance (31%).
- Water losses within municipal water reticulation systems had <u>increased from 35% in 2015 to 50% in 2023</u>. This
 means that 50% of water is lost within the system before reaching consumers.

Next steps

The findings of the report come as no surprise. Recent <u>cholera outbreaks</u> in Gauteng and Free State provinces have been a warning sign that the country's water is contaminated.

The current state of affairs was predicted two decades ago by numerous researchers and experts, consistently having highlighted the deterioration of South Africa's already scarce water resources, dilapidated infrastructure, poor water governance and management, lack of service delivery and the overall threat to the country's water security, calling for urgent action.

The Department of Water and Sanitation has recently proposed the development of a <u>Water Partnership Office</u>, a new procurement office, in an attempt to address the continued water issues. The initiative is still in its developmental phase, but the government hopes it will facilitate private investment in the water industry.

But government will have to regain the trust of private institutions before they will be willing to invest in water infrastructure projects.

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