



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

INTERNET ARTICLE

DWS's treatment plant contributes to water protection

26 January 2017

The Department of Water and Sanitation's (DWS's) Eastern Acid Mine Drainage Treatment Plant, the largest in the world, is making good on its plan to respond to the pollution of freshwater, making sure that the rising water levels in the abandoned Grootvlei mine does not contaminate groundwater.

Currently the department is pumping water from the Grootvlei mine in Springs and controlling Acid Mine Drainage (AMD) to prevent it from flowing onto the surface of the ground. In the absence of the department's intervention, the Blesbokspruit and the Marievale Bird Sanctuary would have been contaminated with the acidic mine water. The Blesbokspruit forms part of the Vaal River catchment.

On Wednesday, 25 January 2017, the treatment plant was opened to the Rand Water Services Forum and officials from the Department of Water and Sanitation to tour the plant. The plant started operating in May last year following the mine's closure.

Acid mine drainage flows from disused and active mines and pollutes underground and surface water reserves.

The Eastern Basin is part of the Witwatersrand's Western and Central Basins where there is a critical challenge of AMD. The plant is pumping 70 million litres per day.

The construction of the plant is part of efforts by the department to contain the contamination of the environment following the establishment of the Ministerial Committee on Acid Mine Drainage (IMC) in 2010 to tackle the challenge of AMD.

DWS's Acting Director in the Chief Directorate: Mine Water Management, Bashan Govender, who was part of the tour, said having been involved with acid mine drainage management for the past eight years, the tour was a reflection of the efforts of various individuals to make the Eastern Basin AMD plant a reality.

He said the Eastern Basin Acid Mine Drainage Plant, currently the largest mine water treatment facility in the world, is an indication of the department's commitment to ensure water resources protection.

Govender said even more exciting was that the plant was in the process of being developed further so that mine water may be treated for direct beneficial re-use which contributes to water supply security.

He said the impact of the Eastern Basin acid mine drainage plant, together with related AMD plants in the Central and Western Basins, were substantially reducing AMD pollution impacts on Gauteng's limited water resources.



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

He said: “The intention of these plants is to prevent AMD-induced pollution of surface and groundwater resources, and in the longer run, to reclaim polluted mine water and treat it to standards fit for potable, industrial or agricultural use.”

Govender said they considered the Western Basin AMD plant as an example as it was able to reverse the effect of AMD on the local water resources.

“Other positive outcomes will be realized once the plants are further developed to make AMD re-usable,” Govender said.

Hosia Sithole