

[Media Statement]



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TO: All Media
EMBARGO: For Immediate Release
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SUBJECT: **CENTRAL BASIN DECANT AFFECTS BOKSBURG LAKE**

Today, Trans-Caledon Tunnel Authority (TCTA) announced that the decant associated with the Central Basin has affected the water quality in Boksburg Lake.

TCTA operates and maintains three Acid Mine Drainage (AMD) plants within three basins on behalf of the Department of Water and Sanitation (DWS). These comprise the Western Basin (Randfontein), the Eastern Basin (Springs) and the Central Basin (Germiston). The objective of these plants is to treat the water from the mine voids before discharge into the rivers.

The Central Basin plant has a maximum treatment operating capacity of 72ML/day, including planned outages and shutdowns calculated over a year. It is currently operating at 64.7ML/day, with an average of 56.8ML/day over the past year.

The Operations Manager for AMD Plants, Goitseone Kgwele, said: “The Central Basin plant has been largely operating without any major interruptions, even though there were some hiccups that did not significantly alter the plant’s operations. It continued to maintain an average treatment operating capacity of 57ML/day over the past year, and the shaft level was maintained well below the decant point prior to the start of the current rainy season.”

Kgwele added: “Whereas TCTA was aware that the mine water was close to the surface, as the level in the mine void rose substantially during the last rainy season, it was not possible to predict where and when it would surface.” To mitigate potential impacts in light of the uncertainty, TCTA elected to monitor the possible points of decant in the vicinity of Boksburg Lake.

Evidence of the decant was observed by TCTA on 21 May 2025. “However, at that stage, the decanting water volumes were still quite low, even though it was already evident that the AMD was affecting the colour of the water in the lake,” said Kgwele. TCTA had previously conducted a routine check on 02 May 2025, and no AMD decant was observed at that point. Reports from witnesses in the area indicated that they had started to notice a change in the colour of the lake’s water from around 15 May 2025.

On 23 May 2025, the Council for Geoscience identified a point on the canal, upstream of the lake, where clear water was flowing into the canal and immediately turning a reddish colour. This area is linked to the New Blue Sky incline shaft, which surfaces 100m north of the observation point. “Although the shaft is capped, it appears that the mine water had found a pathway from the shaft to the surface,” noted Kgwele.

The red colour of the water is characteristic of AMD coming into contact with oxygen, which was also confirmed through a chemical analysis of the water. “The water is not fit for consumption and all persons near the Lake and downstream to Cinderella Dam are requested not to drink the water,” urged Kgwele.

He reported that a team comprising officials from DWS and TCTA immediately put together a water quality monitoring programme along the stream, down to Natalspruit, in order to understand the impact and to implement mitigation measures if required.

At the point of decant, the pH level was recorded to be between 5.7 and 7.2. In Boksburg Lake, the pH level ranged between 5.0 and 6.5, whilst in Cinderella Dam it was. Whilst the Lake has been negatively impacted, turning red due to the precipitation of iron in the water, it has also been affected by other sources of pollution that have lowered the pH level. By the time the water reached Cinderella Dam, the pH level was within the acceptable limits of between 6.5 and 9.5, as set by DWS to ensure achievement of the water resource objectives in the Vaal River System.

“Indications, thus far, are that the decant will possibly subside on its own within days. However, evidence of the presence of AMD in the Lake will possibly linger for a little longer,” reiterated Kgwele.

TCTA would like to emphasise that all residents and communities residing along the Boksburg Lake are urged to avoid using the water in the Lake and interlinked streams, rivers and dams until further notice.

Issued by TCTA

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