Basic Details

Publish Date

02 September 2025

Case ID#

3115

Title

Leak in clay core

Nation

England

Regulator Reference No.

304

Legal Status

Statutory

Reservoir Type

Non-impounding

Reservoir Capacity

10 - 24,999m3

Year of Construction

1900 - 1929

Main Construction Type

Earth fill embankment

Dam Height

15 - 29.99 metres

Dam Flood Category

A

Hazard Class

High-risk reservoir

Reservoir Use

- Other

Owner Type

Limited company

Incident Details

Date & Time of Incident

Not provided

Date Incident Closed

Not provided

Observations that Caused the Incident to be Declared

- Leakage or seepage from a new leakage point

Describe the Incident

The leaking reservoir was confirmed to be the non-impounding reservoir. During 8 June they also decided to make contact regarding use of the New Dimension pumps as a contingency. The Fire & Rescue Service have deployed one New Dimension pump, which has removed 10 Ml. Another pump will be arriving tonight. These will remain in place until the undertaker's contractor arrives with their pumps. The undertaker has signed up to pay for the use of the ND pumps. The Inspection Engineer was called on Wednesday evening when the problem first arose and was present on site from Thursday morning, providing advice and agreeing actions. The undertaker is currently monitoring the leak and dropping the level of the reservoir. They are monitoring for any change in the leak, e.g. an increased amount of water, or in the physical conditions associated with it, e.g. development of a pile of spoil. The water flow is reduced and the water is running clear. There was an existing leak but the patch became wetter and it was not possible to mow the grass as the ground has become boggy. Divers went in on 9 June to check the leak in the clay. They have possibly found the leak, a puncture in the clay. If this is the case it will be fixed with a membrane. They are also lowering the water level. The reservoir is fed solely by a large aqueduct and therefore this feed has been stopped. The water treatment works is run when necessary and not all the time. The undertaker started it up during 8 June but it was not working properly. This is why the New Dimension pumps are being considered. The water treatment works are now up and running and have removed 40 Ml from the reservoir. In addition the scour valve has removed a further 10 Ml.

Supporting Photos

No images provided.

Causes and Impacts

Natural Processes which Initiated or Contributed to the Incident

- None

Main Contributing Factors to the Incident Occurring

Dam Factors

- Deterioration of materials

External Factors

- None

Shortcomings

- Construction shortcoming

Root Cause of the Incident

Impacts on the Reservoir

- Internal erosion (fill deterioration)

Supporting Photos

No images provided.

Supporting Contributions and Studies

Human Factors which Influenced the Incident

Instrumentation at the Reservoir

Was Instrumentation Effective?

Not Applicable

Assistance by External Parties and Impacts on Downstream Population

The Fire & Rescue Service have deployed one New Dimension pump, which has removed 10 Ml. Another pump will be arriving tonight. These will remain in place until the undertaker arrives with their pumps. The undertaker was questioned as to whether the local school should be evacuated - it was not. Currently the interest is local with no media interest.

Summary of Studies or Investigations Undertaken

The Inspection Engineer was called on Wednesday evening when the problem first arose and was present on site from Thursday morning, providing advice and agreeing actions. The undertakers are currently monitoring the leak and dropping the level of the reservoir. They are monitoring for any change in the leak, e.g. an increased amount of water, or in the physical conditions associated with it, e.g. development of a pile of spoil. The water flow is reduced and the water is running clear. The company are now actively monitoring by means of a V notch. They have also dug a pipe into the wet patch for further monitoring. Divers went in on 9 June to check the leak in the clay. They have possibly found the leak, a puncture in the clay. If this is the case it will be fixed with a membrane.

Supporting Photos

No images provided.

Lessons Learnt

Closing Comments

Supporting Photos

No images provided.

Information provided has been sent from reservoir owners and engineers, and cleansed of personal information by the enforcement authority. We cannot guarantee the accuracy of the data, but if you find an error please contact the relevant enforcement authority.