

# **STUDY THE REASONABLE DISTANCE OF SAND BEDDING TO CONTROL SEEPAGE FOR SMALL AND MEDIUM-SIZED DAMS**

**Pham Dinh Van**

## **Summary**

Seepage controlled by providing sand bedding in downstream of earth dam is an effective solution to filter water seeped through the downstream of small and medium-sized dams. In one article posted previously on the Agriculture and Rural Development Magazine (Cir. 24-2016), the author had scrutinized the effectiveness of sand-bedding in lowering the saturated line applied in the Dong Be earth dam – Thanh Hoa province. However, the article only analyzed the effectiveness of the lowering saturation line in case the distance between sand beddings is 4 m, compared the results calculated with Midas GTS software and the actual measured line at Dong Be reservoir. In this article, with Midas GTS, the author calculated the effectiveness of lowering saturated lines for the earth dams at 10 m and 15 m high, the reasonable distance to ensure the safety of construction of cutting for the sand bedding is at 3,8 m, and the suitable lowering of saturated line in case the distance between sand beddings is in range of 3m to 4m.

**Keywords:** *Earth dam, sand bedding for water filtering and collection, phreatic line.*