



GEOTECHNICAL PROPERTIES OF YUNOKURA LANDSLIDE DAM INDUCED BY 2008 IWATE-MIYAGI NAIRIKU EARTHQUAKE

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ABSTRACT: The 2008 Iwate-Miyagi Nairiku earthquake caused more than 50 landslide dams made of the collapsed soils and rocks. In this paper the geotechnical properties of a landslide dam were investigated in order to study the stability of landslide dam against seepage and overtopping. The in-situ tests were carried out at Yunokura landslide dam which is one of the largest landslide dams along the Hasama River. In addition the laboratory tests with the disturbed samples obtained at Yunokura were performed. The tests results show that the rock ratio in the boring core varied with depth. The soil parts without rocks were relatively soft with lower N values and lower elastic wave velocities. The permeability coefficients of plastic soil samples were lower than the coefficient measured at the bore hole. The erosion resistances of the samples were higher than that of a non-plastic soil.

Key Words: Landslide dam, SPT, PS logging, surface wave exploration, permeability test, erosion test