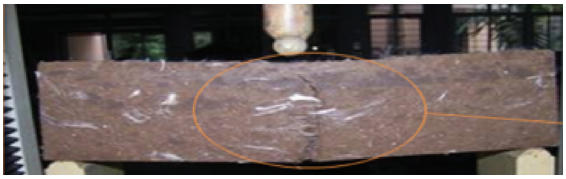
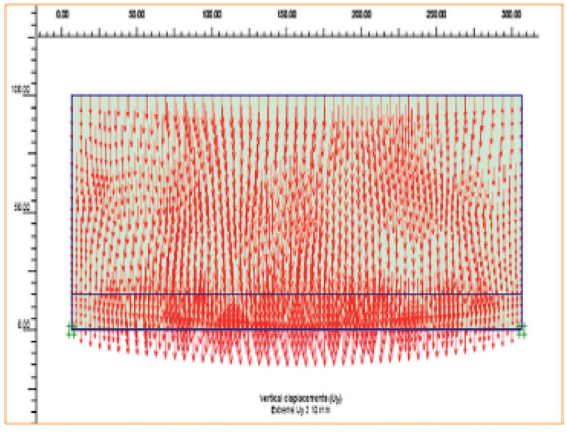
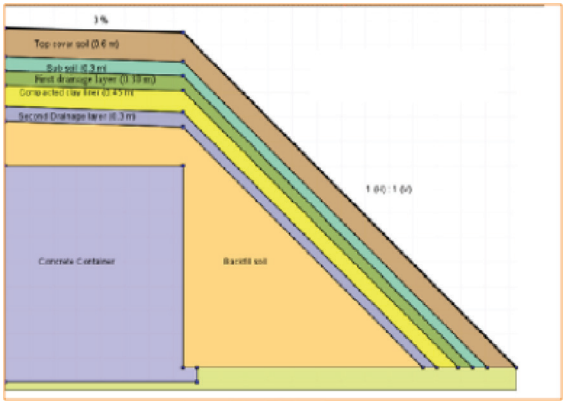
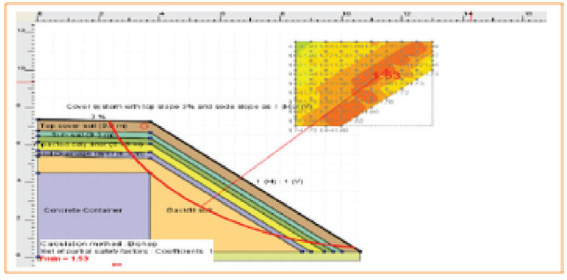
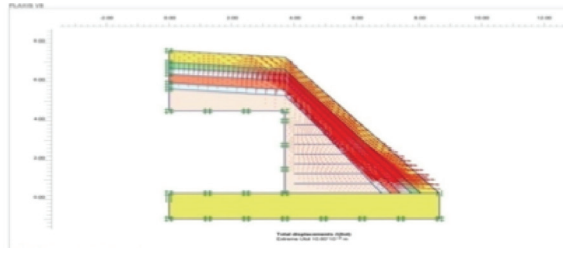
Closure of near surface disposal facility for low level radioactive waste











The development of new proposed engineered cover system units have will be replace the conventional cover system to reduce the potential for water infiltration and minimize crack formation. Inclusion of fibres improves shear strength of soil. PP S fibre having fibre content 1% shows better shear strength as compare to others, so fibres can be provided in cover soil. The flexural test results and results of this study have significant importance on the design and construction of cover soil of low level radioactive waste disposal facility, on soft sub-grade where ground settlements (subsidence) cannot be neglected. The excellent ability of geogrids, geocells and fibres of flexural tensile strength of cover soil and their 'low cost' in relation to conventional reinforcement. Slope stability analysis of conventional and propopsed cover system by Bishop's method (with TALREN 4) shows that more stable and steeper slope of cover system can be achieved with the use of fibres and geosynthetics as a reinforcement. Slope stability analysis shows that more stable and steep proposed cover system up to 60 degree can be achieved with geosynthetics.

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