

## Emre Kucukkirca



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**Graduate Program:** CEE Student

**Project:** Properties of Geosynthetics Exhumed From Landfills

**Research Focus:**

Final covers employing geosynthetic materials are widely used for closure of modern engineered landfills. Large advances in our understanding of the engineering properties of new geosynthetics for waste containment have been made over the last two decades. However, limited information exists regarding the in-service properties of geosynthetics in waste containment systems, particularly in systems where known failures have not occurred. This information is important because the engineering properties of geosynthetics may be affected by factors such as installation damage, freezing, wetting and drying, biota intrusion, and sustained normal and shear stresses under conventional in-service conditions. Understanding the in-place properties of geosynthetics used in final covers, and how these properties differ from those measured or anticipated during design, is important to ensure that final covers function as expected.