## Concept of geo-environmental engineering and importance of proper landfill design

## Mohammad Reza Namaee, PhD, P.Eng, PMP

## Sessional civil engineering instructor at UNBC, Department of Civil Engineering

## **Abstract**

Geo-environmental Engineering is a scientific discipline that studies rock and soil mechanics, environmental engineering, groundwater hydrology, and the effects of these on human health and the environment. Geo-environmental Engineering deals with difficult challenges such as containment systems (such as landfills), contamination movement, contaminated site cleanup, and material reuse. In this talk, I will talk about the field of Geo-environmental engineering, landfills and how they should be constructed and their operation and the impact of improper design of them on the environmental as well as human health such as drinking water contamination, underground water pollution. I will also talk about sources of wastes and their impact on environmental and human health