“Geofoam – A lightweight Fill Alternative”

In this educational experience, the participants will learn about the utilization of geofoam as a light weight fill alternative. EPS Geofoam is a large block, rigid foam plastic material that has typical densities between 12-46 kg/m^3 (0.7-2.85 ft^3) making it up to 100 times lighter than soil. It is one of the only truly engineered fill materials that has predictable, consistent physical properties. Geofoam exhibits the highest strength to weight ratio of any fill material. Geofoam is a simple, cost effective solution for five major geotechnical conditions that engineers encounter on a regular basis:

1. The elimination or reduction of lateral loads upon structures with geofoam.
2. The utilization of geofoam in the driving block of a landslide.
3. The utilization of geofoam to reduce dead and live loads over buried utilities.
4. Creating a zero loading factor for soft oil remediation.
5. Utilizing geofoam as a structural void fill for various concrete applications.

The incorporation of geofoam for infrastructure projects has now been successfully utilized for a number of decades in a number of countries all over the world. Some of these countries are Norway, The Netherlands, the United States, Japan, Germany and Malaysia. The utilization of geofoam for commercial, residential and infrastructure projects around the United States has seen a dramatic growth trend in recent years.

In this educational experience the participants will also learn the manufacturing process of EPS, the history of geofoam, recent trends, some design considerations, specifications and installation considerations.