



FX-640 Polyurea Provides Added Protection to USACE Hurricane Restoration Project



Hurricanes Katrina, Gustav and Ike severely damaged Louisiana's only beach, Grand Isle, located on the Gulf of Mexico, 50 miles south of New Orleans. Previous attempts to strengthen the beach area by the US Army Corps of Engineers had failed.



In 2009, the USACE decided to take a new approach using geotextile tubes shop-coated with **FX-640 Sprayable Aromatic Polyurea**, installed to form a protective barrier between the beachfront residences and Gulf of Mexico.



Working in the Tencate Geosynthetics facility in Georgia, Osborn Contract Services Inc. spray applied over 10,000 gallons of a custom sand colored **FX-640** at 30 mils to hundreds of geotubes. Each geotube was sprayed over an area measuring 200' in length by 15' in width. The Tencate facility's design allowed the geotubes to be sprayed in a continuous application.



Upon spray completion, the geotubes were quickly rolled up and transported to the beachfront area in Louisiana for installation.



Upon arrival in Grand Isle, the coated geotubes were unrolled and placed in their permanent beachfront locations. The installation covered a 6 mile stretch of beach, one geotube laid next to another. Each tube was filled with sand excavated from the beach itself.



FX-640 protected the geotube fabric from potential deterioration caused by strong ultraviolet light. **FX-640** also provided additional strength beyond the fabric's inherent physical characteristics.



Ultimately, the geotubes were buried into the sand, creating dunes to protect this valuable stretch of beachfront property from future hurricane erosion.