

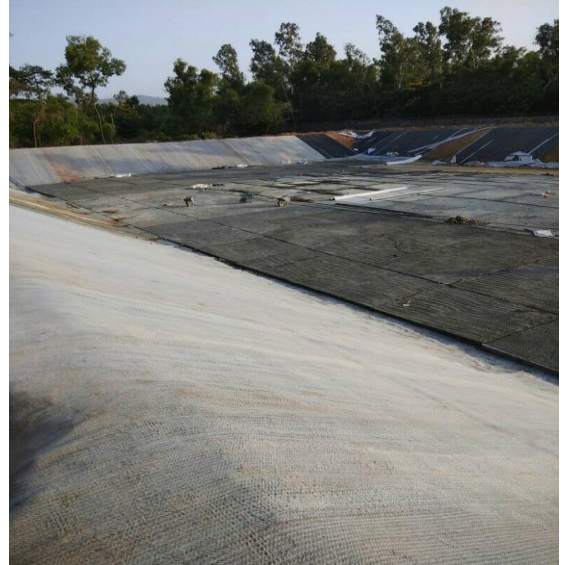
**CASE HISTORY**

<b>Ref. No.:</b> CH/16/03/V-12-16-44		<b>Year:</b> 2017
<b>Name of the Work:</b> Construction of Raw Water Pond using Geosynthetic material at NMD.		
<b>Client:</b> Reliance Industries Limited.		
<b>Prime Contractor:</b> Maccaferri Environmental Solutions Pvt Ltd.		
<b>Site Address:</b> NMD Nagothane, Maharashtra		
<b>Type of Work:</b> Construction of Raw Water Pond using Geosynthetic material.		
<b>Start Date:</b> 08 <sup>th</sup> March 2017		<b>Completion Date:</b> 06 <sup>th</sup> June 2017
<b>Value of Work:</b> 102.35 lacs		
<b>Nature of work:</b>	<p>The works are required to be carried out for installation of Raw water pond using Geosynthetic Clay liner and concrete as surface layer.</p> <p>The raw water pond construction was to be carried out using Geosynthetic Clay Liner (GCL) which has bentonite slurry sandwiched between two Geotextile layers. The design guidelines suggested for installation of Geotextile layer installed prior to GCL layer.</p> <p>The GCL weighs approximately 4500gms/sqm and requires specialized installation techniques for handling. The roll size is of 4.5mx100m in size. This has to be lifted and handles by help of 7MT Crane. This clay liner acts as an impermeable membrane and avoids water to permeate to the soil below.</p> <p>On top of the GCL layer a concrete layer of 75mm thick was to be overlaid as per the design guidelines. The concrete grade was M20 grade concrete provided to overlay weight over the GCL layer and keep the geosynthetic layer intact in position post installation.</p> <p>The pond size 300m x 50m with a laying plan area of approximately 15000sqm.</p> <p>The laying and concreting was started</p>	

**Laying of Geotextile layers**



**Geotextile layers**



**Slurry sandwiched between two Geotextile layers**

