

Calculation of bunding capacity of hazardous liquid waste collection (digesters pit)

<b>Bunding Capacity for Hazardous Liquid Waste Collection (Digester Pit)</b>				
<b>Pit Area</b>			2,751.00 sqmtrs	[1]
<b>Area Occupied by individual Tanks</b>				<i>Volume</i>
	Digester tank	No. 1	277.33 sqmtrs	4,502.76 cubmtrs
	Digester tank	No. 2	277.33 sqmtrs	4,502.76 cubmtrs
	Suspension Buffer		123.13 sqmtrs	2,001.31 cubmtrs
	Aeration tank	No. 1	132.75 sqmtrs	800.48 cubmtrs
	Aeration tank	No. 2	132.75 sqmtrs	800.48 cubmtrs
	Aeration tank	No. 3	132.75 sqmtrs	800.48 cubmtrs
	Process Water Tank		82.53 sqmtrs	800.51 cubmtrs
	<b>Total</b>		<b>1,158.57 sqmtrs</b>	<b>14,208.78 cubmtrs</b> [8]
<b>Remaining Area ([1] - [2])</b>			1,592.43 sqmtrs	[3]
<b>Depth of Tank Pit</b>			6.00 mtrs	[4]
<b>Volume of Tank Pit excluding volume occupied by individual tanks ([3] x [4])</b>			<b>9,554.60 cubmtrs</b>	<b>[5]</b>
<b>Volume of biggest Tank being Digester tank No. 1 / No.2</b>			4,502.76 cubmtrs	[6]
<b>Criteria:</b>				
<b>A - 110% of the capacity of the largest container within the bunded area ([6] x 110%)</b>			<b>4,953.04 cubmtrs</b>	<b>[7]</b>
<b>B - 25% of the total volume of substance which could be stored within the bunded are ([8] x 25%)</b>			<b>3,552.19 cubmtrs</b>	<b>[9]</b>
<b>The above calculations indicate that each of criteria A and B are fulfilled i.e.: [5] &gt; [7], [5] &gt; [9]</b>				