

CE 412 A: Water Supply & Wastewater Disposal Systems

Tutorial – 2019-20 I

TUTORIAL 6

Problem 1: A column analysis of a flocculating suspension is done. The initial solids concentration is 250 mg/L. The resulting matrix is shown below. What will be the overall removal efficiency of a settling basin which is 3 m deep with a detention time of 1 hour 45 minutes?

Time of sampling, min

Depth, m	30	60	90	120	150	180
0.5	133	83	50	38	30	23
1.0	180	125	93	65	55	43
1.5	203	150	118	93	70	58
2.0	213	168	135	110	90	70
2.5	220	180	145	123	103	80
3.0	225	188	155	133	113	95