

## ***Annex A***

---

## MOS 461 - SEWAGE DISPOSAL ASSESSMENT

### A. G.F.A.

Location	Existing G.F.A.	Proposed G.F.A.	Net Reduction / Addition of G.F.A.
Hotel	50,576.787	0	-50,576.787
Commercial	4,776.228	3,067	-1709.228
Residential	0	45,680	(45,680)
Exhibition/ Convention Hall	0	998	(998)

### Sewage Discharge Estimation

<b>Existing Hotel Development</b>	
GFA of Hotel (sq. m)	50,576.787
GFA of Commercial (sq.m)	4,776.228
No. of Employee for Hotel / 100 sq. m of GFA <sup>1</sup>	1.40
No. of Employee for Commercial / 100 sq. m of GFA <sup>1</sup>	5.10
Total of Employees (Hotel + Commercial)	952
Unit Flow Factor (cu.m / day) <sup>3</sup>	1.58
<b>Total Foul Water Flow (cu.m /day)</b>	<b>1,504.16</b>
<b>Proposed Residential Development</b>	
No. of residential flat	772
Total no. of head	2162
Unit Flow Factor (cu. m/day) <sup>2,4</sup>	0.27
Foul Water Flow (cu.m/day) for Residential	<b>583.74</b>
GFA of Commercial (sq.m)	3,067
No. of Employee for Commercial/100 sq.m of GFA <sup>1</sup>	5.10
Total of Employees	157
Unit Flow Factor (cu. m/day) <sup>3</sup>	1.58
Foul Water Flow (cu.m/day) for Employee	<b>248.06</b>
GFA of Exhibition/ Convention Hall (sq. m)	998
No. of Employee for Commercial/100 sq.m of GFA <sup>1</sup>	2.30
Total of Employees	23
Unit Flow Factor (cu. m/day) <sup>3</sup>	0.28
Foul Water Flow (cu.m/day) for Employee	<b>6.44</b>
<b>Instantaneous peak flow from swimming pool</b>	
Volume of Pool (Cu. M)	1171.60
Turnover Period (Hr) <sup>1</sup>	6
Filtration Rate (Cu. M / Hr)	195.27
Backwash Cycle (No. / Day)	1
Duration of Backwash Cycle (S)	180
Total Sewage Design Flow from Swimming Pool (Cu. M / Day)	9.80
Filtration Pump provided (No.)	2
Instant Peak Flow of Filtration System (Cu. M / Hr) <sup>2</sup>	<b>97.64</b>
<b>Total Foul Water Flow (cu.m/day)</b>	<b>935.88</b>

<sup>1</sup>- Fig 16 of CIFSUS; PlanD

<sup>2 & 3</sup> Table T-1 & T-2; EPD/TP 1/05, DSD

<sup>4</sup> R2 zoning