**Table-1 Characteristics of the wastewater (CETP)**

|  |  |  |
| --- | --- | --- |
| **Parameters** | **Influent Characteristics of CETP** | **Tolerance Limits according to TNPCB** |
| **pH** | 7.0 – 8.1 | 6.0-9.0 |
| **TDS** | 5500-8300 mg/L | 2100 mg/L |
| **TSS** | 1000-2000 mg/L | 100 mg/L |
| **COD** | 3500-5000 mg/L | 250 mg/L |
| **BOD** | 1100-1600 mg/L | 30 mg/L |
| **Chloride** | 1000-2000 mg/L | 750-2000 mg/L |
| **Sulphate** | 40-50 mg/L | 2 mg/L |
| **Chromium** | 0.01-0.02 mg/L | 2 mg/L |

**Table 2 MLVSS and MLSS Ratio for CETP**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date of sampling | MLSS (mg/L) | MLVSS (mg/L) | Ratio | Desirable ratio |
| 10/01/11 | 2000 | 1220 | 0.61 | 0.60 |
| 10/01/11 | 2300 | 1334 | 0.58 | 0.60 |
| 11/01/11 | 2200 | 1320 | 0.60 | 0.60 |
| 12/01/11 | 2350 | 1363 | 0.58 | 0.60 |

**Table 3 F/M Ratio for CETP**

|  |  |  |
| --- | --- | --- |
| Date of sampling | F/M Ratio | Desirable ratio |
| 10/01/11 | 0.23 | 0.18 |
| 10/01/11 | 0.20 | 0.18 |
| 11/01/11 | 0.20 | 0.18 |
| 12/01/11 | 0.27 | 0.18 |

**Table 4 Experimental Mean Residence Time**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| System under investigation | Volume (Cum) | Flow rate (m3/min) | Theoretical MRT (Min) | Experimental MRT (min) | Dead volume (%) |
| CETP | 2400 | 1.04 | 2240 | 1920 | 19.6 |

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**Figure-1 BOD of the tannery effluent in the various units of CETP**



**Fig-2 COD of the tannery effluent in various units of CETP**

**Fig-3 TSS of the tannery effluent in various units of CETP**

