| Process | Applicable Permit Effluent Sets <i>Concentration</i> <i>milligrams per liter (mg/l)</i> | | | Maximum Organic Loading Rate Pounds BOD ₅ /day/1,000 |
|---|--|---------------------------------------|---------------------|---|
| | Five-day Biochemical Oxygen Demand (BOD ₅) | Total Suspended Solids (TSS) | Ammonia Nitrogen | cubic feet (lbs/day/1,000cf) |
| Conventional | 10 | 15 | NA | |
| activated sludge process without nitrification | 20 | 20 | NA | 45 |
| Conventional activated sludge process with nitrification when reactor temperatures exceed 15° C | 10 | 15 | 3, 2, or 1 | 35 |
| Conventional activated sludge process with nitrification when reactor temperatures are 13° to 15° C | 10 | 15 | 3, 2, or 1 | 25 |
| Conventional activated sludge process with nitrification when reactor temperatures are 10° to 12° C | 10 | 15 | 3, 2, or 1 | 20 |
| Extended aeration basins including oxidation ditches (mean cell residence time over 20 days) | 10 | 15 | 3, 2, or 1 | 15 |

Table F.1. - Design Organic Loading Rates for Sizing Aeration Basins Based on Traditional Design Methods