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| **WASTEWATER TREATMENT PLANT MODELLING FORM** |
|  |
| 1 | **Client:** |  | 2 | **Project name/location:** |
|  | Firm name: |  |  |
| Contact person: |  |
| Phone: |  |
| Email: |  |
|  |
| 3 | **Units to be modelled:** |  |
| * **Preliminary treatment**
 | * **Primary treatment**
 |
| [ ]  Pumping station | [ ]  Circular primary clarifier |
| [ ]  Equalization tank | [ ]  Rectangular primary clarifier |
| [ ]  Grit chamber | [ ]  High-rate clarifier |
|  | [ ]  In-line chemical dosing |
|  | [ ]  Belt microscreening |
|  |
| * **Biological treatment**
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| * Suspended growth processes
 | * Attached growth processes
 |
| [ ]  Completely-mixed tank | [ ]  Trickling biological filter |
| [ ]  Anoxic CSTR | [ ]  Biological aerated filter |
| [ ]  Plug-flow tank | [ ]  Advanced biological aerated filter |
| [ ]  Dual-inlet plug-flow tank | [ ]  Rotating biological contactor |
| [ ]  Plug-flow tank with aeration header | [ ]  Submerged biological contactor |
| [ ]  Closed basin hygh purity oxygen (HPO) | [ ]  Integrated fixed film activated sludge reactor (IFAS) |
| [ ]  Membrane bioreactor (MBR) | [ ]  Moving bed biofilm reactor (MBBR) |
| [ ]  Completely-mixed membrane bioreactor (MBR) | [ ]  Upflow anaerobic sludge blanket |
| [ ]  Anaerobic membrane bioreactor (MBR) | [ ]  Membrane-Aerated bioreactor – hollow fiber |
| [ ]  Continous flow sequencing reactor | [ ]  Aerobic granular sludge reactor |
| [ ]  Sequencing batch reactor (SBR) |  |
| [ ]  Advanced sequencing batch reactor (SBR) | * Secondary clarifiers
 |
| [ ]  Manual sequencing batch reactor (SBR) | [ ]  Circular secondary clarifier |
| [ ]  Oxidation ditch | [ ]  Rectangular secondary clarifier |
|  |  |
| * **Tertiary treatment**
 | * **Sludge treatment**
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| [ ]  Upflow denitrification filter | [ ]  Dissolved air flotation (DAF) |
| [ ]  Downflow denitrification filter | [ ]  Thickening |
| [ ]  Sand filter | [ ]  Anaerobic sludge digestion |
| [ ]  Membrane filter | [ ]  Chemical sludge pretreatment  |
| [ ]  Disinfection | [ ]  Dewatering |
| [ ]  Disc microscreen | [ ]  Drum microscreening |
| [ ]  Advanced oxidation process | [ ]  Hydrocyclone solids separation |
|  | [ ]  Struvite recovery |
|  | [ ]  Drying  |
|  | [ ]  Incineration |
|  |
| 4 | **Wastewater treatment plant influent/effluent characteristics:** |  | 5 | **Modelling scope:** |
| * Influent flowrates:
 |  |
|  | Daily average flowrate on dry weather (Qd.avg) |  | m3/d |
| Daily maximum flowrate on dry weather (Qd.max) |  | m3/d |
| Hourly peak flowrate on dry weather (Qh.peak.dw) |  | m3/h |
| Hourly peak flowrate on wet weather (Qh.peak.ww) |  | m3/h |
| Minimum flowrate (Qh.min) |  | m3/h |
|  |
| * Concentrations:
 | Influent | Effluent |  |
|  | Total suspended solids (TSS) |  |  | mg/L |
| Biochemical oxigen demand (BOD5) |  |  | mg/L |
| Consumul Chimic de Oxigen (COD) |  |  | mg/L |
| Total nitrogen (TN) |  |  | mg/L |
| Total Kjeldhal nitrogen (TKN) |  |  | mg/L |
| Ammonium nitrogen NH4-N) |  |  | mg/L |
| Organic nitrogen (Norg) |  |  | mg/L |
| Nitrates nitrogen (NO3-N) |  |  | mg/L |
| Nitrites nitrogen (NO2-N) |  |  | mg/L |
| Total phosphorus (TP) |  |  | mg/L |
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| 6 | **Existing operation mode:** |
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