# V008-009: Treatments carried out on the Effluent

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|  | **Anaerobic Plant** |  | **Aerobic Plant** |  | **MBR / RO Plant** |  |
| **Order of Treatment** | **Process** | **Description** | **Process** | **Description** | **Process** | **Description** |
| **First** | **Screen** | Removes solids and debris items | **Lagoon** | Used for balancing and buffering | **Lagoon** | Used for balancing and buffering |
| **Second** | **Anaerobic Reactor** | Anaerobic digestion via methane bacteria breaking down COD | **Primary Screening** | Removal of large solids and debris | **Primary Screening** | Removal of large solids and debris |
| **Third** | **Biomass** | Discharged for use in other AD plants | **Dissolved Air Flotation Plant (DAF)** | Removal of fine solids | **Dissolved Air Flotation Plant (DAF)** | Removal of fine solids |
| **Fourth** | **Discharge** | Liquid effluent is discharged to the lagoon for treatment in the Aerobic Plant | **Activated Sludge** | Biomass in reactors consumes soluble COD | **Activated Sludge** | Biomass in reactors consumes soluble COD |
| **Fifth** |  |  | **Clarifier** | Settlement and decants clean water | **Ultra-filtration** | Removes all solids |
| **Sixth** |  |  | **Sand Filter** | Final polish removing fine solids | **Reverse Osmosis** | Cleans and sterilises the water to potable standards |
| **Seventh** |  |  | **Discharge** | Discharge to river | **Discharge** | For use in the factory |
| **Seventh** |  |  |  |  | **Discharge** | As Trade Effluent |