APPENDIX I

Raw effluent from dyehouse

↓

Equilizing tank

Collects the raw effluent of different qualities for the whole day from both the dyeing and printing sections. The effluent is mixed to make it homogenous

↓

Clarification tank

Lime is added (ca. 5 kg/400 l) to maintain pH at 10 (for medium colour) to 11 (for dark colour). The dyeing materials are precipitated

↓

Neutralization / coagulation tank

Ferrous sulphate is added to neutralize pH to 6.5 – 7.5 and coagulate suspended particles. Polyelectrolyte is added

↓

Sedimentation tank I

The effluent is allowed to stand still. The sediments (dyes) settle down at the bottom → Removal of sludge

↓

Agitation tank

The effluent is mechanically agitated. This enables the biological oxidation of the organic matter

↓

Sedimentation tank II

The effluent is allowed to stand still
The microbial flocculants and the fine particles settle down

↓

Treated effluent tank → For irrigation