

## PARALLEL FLOW RENOVATION SYSTEM

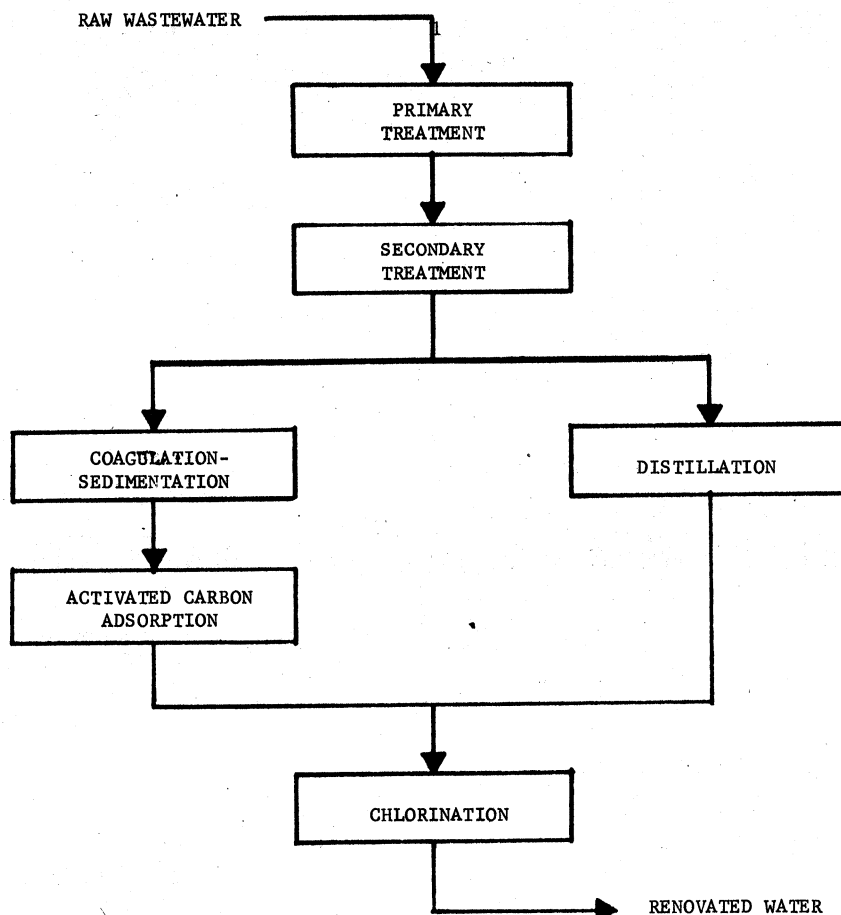


FIGURE 16

Advanced waste-treatment now generally involves the treatment of wastewaters after they have passed through conventional primary and secondary treatment. Primary treatment removes materials that easily settle or float; in general, these are the impurities that can be easily seen with the naked eye. Secondary treatment involves the use of bacteria to break down impurities—called biologically degradable contaminants—under controlled conditions. These degradable contaminants are primarily organic compounds of natural origin. After secondary treatment, the waste may be purified by such processes as filtration, coagulation-sedimentation, activated carbon adsorption, chemical precipitation, electrodialysis, distillation, reverse osmosis, or ion exchange. A possible advanced waste-treatment plant is shown in figure 17 and changes in water quality through such a plant are given in figure 18.