The aim of this study is to evaluate the performance of wastewater treatment technologies in four governorates in Egypt, which are Kafr El-Sheikh, Al-Gharbia, El-Fayoum, and El-Sharqia. More than 25 full-scale wastewater treatment plants of discharges ranged between 978 and 6000m3/day including oxidation ditches, oxidation ponds, aerated lagoons, extended aeration, conventional aeration, rotating biological contactors (RBC), upward-flow anaerobic sludge blanket reactor (UASB), and compact units were assessed. The assessment has been carried out to get the optimum wastewater treatment technology for small and rural communities; and also for the improvement of wastewater quality to provide safe wastewater reuse. The performance evaluation was done on the basis of removal efficiency of biochemical oxygen demand (BOD), chemical oxygen demand (COD), and total suspended solids (TSS).Experimental results indicated that the wastewater treatment compact unit achieved the highest removal efficiency in terms of BOD, COD, and TSS which were 96.42%, 96.59%, and 95.47%, respectively. On the other hand the oxidation ponds recorded the lowest removal efficiency of BOD, COD, and TSS were 57.99%, 74.17%, and 50.13% respectively.