

Performance of pretreatment systems  
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Advanced or innovative and alternative (I&A) decentralized wastewater treatment systems have been used successfully for over two decades to achieve high levels of BOD, TSS, nutrient, and bacterial removal. New advanced treatment systems are emerging on an almost routine basis, some having been subjected to more testing than others. Testing centers have been used to evaluate treatment performance of certain technologies under controlled conditions. Several decentralized demonstration projects have monitored treatment performance of various technologies in an effort to determine system performance under actual use in the field.

This paper will summarize treatment performance results of advanced treatment technologies installed to replace failed systems at actual sites. Treatment performance of media filters, upflow denitrification filters, and trickling filters installed in 2002 - 2003 under the auspices of onsite wastewater demonstration projects in Rhode Island will be presented. Treatment performance results for TP, TN, BOD, TSS, and F. coliform will be included.