

according to specifications, however, the outlet chamber and the outlet pipe had never been cleaned since the initial installation. (Our installation crew had left written instructions to clean them every two months). After cleaning these parts by pouring boiling water through the outlet chamber, we obtained the satisfactory performance in the last column of Table 2.

CONCLUDING REMARKS

Several independent laboratory tests of the UVWw unit indicate a delivered dose potential of 160 mW-s/cm^2 and bacterial load reductions of 3 to 6 logs in both seeded and "wild" water. The Lily of the Valley field test is the first long-term test of the unit. Deep borehole water from the Lily of the Valley AIDS hospice was found to be contaminated with fecal and total coliforms. The UVWw unit successfully treated this water for the first 4.5 months (early August - late December) and again after cleaning the outlet port and pipe. During these periods, the delivered drinking water met and meets WHO and USEPA bacterial standards. The results so far suggest that the unit continued to deliver good disinfection performance without any maintenance, however, attention must be paid to periodic (recommended every 2 months) cleaning of the outlet chamber and pipes to control biofilm growth. We are beginning to explore other measures to slow the growth of such biofilm for the future sites.