UNIFORM PLUMBING CODE OF ABU DHABI: AN ENVIRONMENTAL GUIDE FOR WATER SUPPLY AND SANITATION

- (I) The potable water system shall be activated and pressurized. The gray water system shall be shut down and completely drained.
- (II) The potable water system shall remain pressurized for a minimum period of time specified by the Authority Having Jurisdiction while the gray water system is empty. The minimum period the gray water system is to remain depressurized shall be determined on a case-by-case basis, taking into account the size and complexity of the potable and gray water distribution systems, but in no case shall that period be less than 1 hour.
- (III) Fixtures, potable and gray, shall be tested and inspected for flow. Flow from any gray water system outlet shall indicate a cross-connection. No flow from a potable water outlet would indicate that it is connected to the gray water system.
- (IV) The drain on the gray water system shall be checked for flow during the test and at the end of the period.
- (V) The potable water system shall then be completely drained.
- (VI) The gray water system shall then be activated and pressurized.
- (VII) The gray water system shall remain pressurized for a minimum period of time specified by the Authority Having Jurisdiction while the potable water system is empty. The minimum period the potable water system is to remain depressurized shall be determined on a case-by-case basis, but in no case shall that period be less than 1 hour.
- (VIII) Fixtures, potable and gray, shall be tested and inspected for flow. Flow from any potable water system outlet shall indicate a cross-connection. No flow from a gray water outlet would indicate that it is connected to the potable water system.
- (IX) The drain on the potable water system shall be checked for flow during the test and at the end of the period.
- (X) If there is no flow detected in any of the fixtures that would have indicated a cross-connection, the potable water system shall be repressurized.

- (3) Cross-Connection Discovered. In the event that a cross-connection is discovered, the following procedure, in the presence of the Authority Having Jurisdiction, shall be activated immediately:
 - Gray water piping to the building shall be shut down at the meter, and the gray water riser shall be drained.
 - (II) Potable water piping to the building shall be shut down at the meter.
 - (III) The cross-connection shall be uncovered and disconnected.
 - (IV) The building shall be retested following procedures listed in subsections (B)(1) and (B)(2) above.
 - (V) The potable water system shall be chlorinated with 30 ppm chlorine for 1 hour.
 - (VI) The potable water system shall be flushed after 1 hour, and a standard bacteriological test shall be performed. If test results are acceptable, the potable water system shall be permitted to be recharged.
- (C) An annual inspection of the gray water system, following the procedures listed in Section 1625.0 (B)(1), shall be required. Annual cross-connection testing, following the procedures listed in Section 1625.0(B)(2), shall be required by the Authority Having Jurisdiction, unless site conditions do not require it. In no event shall the test occur less often than once in 4 years. Alternate testing requirements shall be permitted by the Authority Having Jurisdiction.

1626.0 Sizing.

Gray water distribution piping shall be sized as outlined in this code for sizing potable water piping.