

Appendix G

Jurisdiction from requiring compliance with additional requirements than those contained herein, where such additional requirements are essential to maintain a safe and sanitary condition.

- (J) Alternate systems shall be permitted to be used only by special permission of the Authority Having Jurisdiction after being satisfied of their adequacy. This authorization is based on extensive field and test data from conditions similar to those at the proposed site, or require such additional data as necessary to provide assurance that the alternate system will produce continuous and long-range results at the proposed site, at least equivalent to systems which are specifically authorized.

If demonstration systems are to be considered for installation, conditions for installation, maintenance, and monitoring at each such site shall first be established by the Authority Having Jurisdiction.

- (1) Aerobic Systems. Approved aerobic systems shall be permitted to be substituted for conventional septic tanks provided the Authority Having Jurisdiction is satisfied that such systems will produce results at least equivalent to septic tanks, whether their aeration systems are operating or not.

G 2.0 Capacity of Septic Tanks.

The liquid capacity of all septic tanks shall conform to Tables K-4 and K-5 as determined by the number of bedrooms or apartment units in dwelling occupancies and the estimated waste/sewage design flow rate or the number of plumbing fixture units as determined from Table 7-3 of this Code, whichever is greater in other building occupancies. The capacity of any one septic tank and its drainage system shall be limited by the soil structure classification, as specified in Table K-6.

G 3.0 Area of Disposal Fields and Seepage Pits.

The minimum effective absorption area in disposal fields in m^2 ($ft.^2$), and in seepage pits in m^2 ($ft.^2$) of sidewall, shall be predicated on the required septic tank capacity in L (gal.) and/or estimated waste/sewage flow rate, whichever is greater, and shall conform to Table K-6 as determined for the type of soil found in the excavation, and shall be as follows:

- (A) When disposal fields are installed, not less than fourteen $14m^2$ ($150 ft.^2$) of trench bottom shall be provided for each system exclusive of any hardpan, rock, clay, or other impervious formations.

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

Sidewall areas exceeding the required 30cm (12 in.) and not exceeding 90cm (36 in.) below the leach line shall be permitted to be added to the trench bottom area when computing absorption areas.

- (B) Where leaching beds are permitted in lieu of trenches, the area of each such bed shall be not less than 50 percent exceeding the tabular requirements for trenches. Perimeter sidewall areas exceeding the required 30cm (12 in.) and not exceeding 90cm (36 in.) below the leach line shall be permitted to be added to the trench bottom area when computing absorption areas.
- (C) No excavation for a leach line or leach bed shall be located within 1.5m (5 ft.) of the water table nor to a depth where sewage contaminates the underground water stratum that is usable for domestic purposes.

Exception: In areas where the records or data indicate that the groundwaters are grossly degraded, the 1.5m (5 ft.) separation requirement shall be permitted to be reduced by the Authority Having Jurisdiction. The applicant shall supply evidence of groundwater depth to the satisfaction of the Authority Having Jurisdiction.

- (D) The minimum effective absorption area in any seepage pit shall be calculated as the excavated sidewall area below the inlet exclusive of any hardpan, rock, clay, or other impervious formations. The minimum required area of porous formation shall be provided in one or more seepage pits. No excavation shall be located within 3m (10 ft.) of the water table nor to a depth where sewage contaminates underground water stratum that is usable for domestic purposes.

Exception: In areas where the records or data indicate that the groundwaters are grossly degraded, the 3m (10 ft.) separation requirement shall be permitted to be reduced by the Authority Having Jurisdiction.

The applicant shall supply evidence of groundwater depth to the satisfaction of the Authority Having Jurisdiction.

- (E) Leaching chambers shall be sized on the bottom absorption area (nominal unit width) in m^2 ($ft.^2$). The required area shall be calculated using Table K-6 with a 0.70 multiplier.

G 4.0 Percolation Test.

- (A) Wherever practicable, disposal field and seepage pit sizes shall be computed from Table K-6. Seepage pit sizes shall be computed by percolation tests, unless use of Table K-6 is approved by the Authority Having Jurisdiction.