

Cistern Disinfection Guidance

5.5. CLEANING AND DISINFECTION *(source: DEQ-20 Circular)*

c. Disinfection of a cistern can be accomplished by using a solution of household bleach at a concentration of between 100-200 ppm. Common household bleach containing approximately 5% chlorine by weight may be used. Approximately 4 oz. of Chlorine per 5 gallons of water will provide the proper concentration. All inside surfaces must be brushed with this solution. Allow a contact time of 12 to 24 hours.

d. The cistern must now be filled with water from a potable water source. Faucets and water taps must be turned on in the commercial unit or living unit. After the water has run for a few minutes, turn off all the faucets and taps and again let the water stand for 12 to 24 hours. This will disinfect all the water lines of the delivery system.

e. After the allotted time, the cistern must be emptied, and the water lines drained. The chlorinated water is not safe for human consumption. The chlorinated water used for disinfection must not be discharged to a stream, river, or other waterway where damage to aquatic life may occur. The chlorinated water must not be drained to a sewer system. The cistern must now be filled a second time from a potable water source. This water should now be ready for use. If the cistern is constructed from concrete, it may be desirable to use at least 3 loads of water prior to drinking the water. The water may still have a “chalky” appearance and may also have a slight “cement taste”. Circular DEQ-20 Page 39 of 40 December 2023 Edition

f. It is highly recommended that cistern water be sampled annually for bacteriological contents. Other guidelines would be to drain, clean, and disinfect a cistern approximately every five years, especially if a water sample indicates contamination.