Ohio Administrative Code

Rule 3701-28-13 Construction and surface design of springs.

Effective: January 1, 2020

(A) Water obtained from a spring construction shall be continuously disinfected and filtered as prescribed in rule 3701-28-15 of the Administrative Code.

(B) The location of the spring shall be at a point free from flooding and, in addition to the requirements of rule 3701-28-07 of the Administrative Code, shall comply with the following:

(1) The area surrounding the spring to a distance of fifty feet downslope and two hundred feet upslope or to the crest of the slope shall be under the control of the private water system owner through ownership of the land or an easement and shall not be used for any activity that may contaminate the spring.

(2) The spring outlet shall not be located in a one-hundred year flood plain.

(C) A diversion ditch shall be located on the uphill side of the spring to divert surface water away from the spring construction. The discharge from the diversion ditch shall be a minimum of twenty-five feet and downslope from the spring.

(D) The spring box shall be built with substantial and watertight walls of concrete. All concrete tanks shall be made of materials and constructed in accordance with ASTM specification C 913-2016. All plastic or fiberglass tank materials shall meet NSF standard 61-2016 or approved by the department. All joints, connections, and other seams between component parts shall be sealed with nontoxic waterproof material that meets NSF standard 61-2016 or approved by the department.

(E) The spring box shall be provided with a watertight, secured cover. Manholes, if provided, shall be a minimum of twenty-four inches in diameter for concrete tanks and eighteen inches for plastic tanks. Manhole covers shall have a watertight curb with edges projecting a minimum of eight inches above the level of the surrounding surface. The edges of the manhole cover shall overlap the curb and extend downward a minimum of two inches. The spring box cover or manhole cover shall be

provided with locks, bolts, or equivalent means to minimize the danger of contamination, accidents, and unwarranted entry.

(F) A gravity drain or powered sump system shall be provided for the purpose of cleaning the spring box. The drain system shall be protected from freezing and be screened to prevent the entrance of insects, rodents and aquatic life.

(G) The spring box shall be provided with a screened overflow pipe located slightly below the maximum water level elevation. The overflow pipe and any other openings shall be constructed and protected with noncorroding fly screen or guards with a maximum opening of one quarter of an inch, so as to prevent the entrance of animals, insects, or other contaminating material.

(H) The inlet pipe to the spring box shall be located higher than the drain outlet and shall be screened.

(I) Pipe used to intercept spring discharges and shallow ground water of ten feet or less below the ground surface shall be made of material suitable for potable water that meets NSF standard 61-2016 or materials approved by the department for potable water.

(J) All joints, connections, and other seams between component parts of the spring construction shall be sealed with nontoxic waterproof material that meets NSF standard 61-2016 or materials approved by the department to prevent contamination or the entry of unwanted water.

(K) All new, repaired, or altered spring boxes shall be disinfected with chlorine or other disinfection products authorized by the director to reduce contamination after construction, installation, alteration, or repair prior to water being removed for human consumption.

(1) The registered private water systems contractor performing the construction, installation, alteration, or repair shall disinfect the private water system according to this rule at the time of completion of the portion of work performed by that person.

(2) The owner of the private water system shall provide access to the system to ensure that the entire private water system, including the plumbing and all related fixtures are disinfected in accordance

with this rule prior to placing that private water system into service.

(3) The following start up disinfection procedures apply to spring boxes:

(a) All loose debris, sediment, mineral encrustation and bacterial slime shall be removed from the spring box prior to disinfection.

(b) A solution of fifty milligrams per liter of chlorine shall be prepared in a storage container. The quantity of solution prepared shall be of sufficient volume to disinfect the entire spring box and all related storage or pressure tanks, existing plumbing and attached fixtures; or

(c) A solution of two hundred fifty milligrams per liter of chlorine shall be prepared in a storage container and thoroughly sprayed on all surfaces of the tank for a period of fifteen minutes.

(d) This solution shall be used to thoroughly rinse all sides of the water storage tank and/or spring box. The solution shall then be circulated through the water supply system distribution lines.

(L) All springs that are no longer being used as the primary water source as a private water system shall be decommissioned in accordance with paragraph (D)(7) of rule 3701-28-17 of the Administrative Code.