Guidance on reduction of isolation distances between wastewater disposal systems and potable water lines

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There are situations in which it is necessary or desirable to install a wastewater disposal system with less than the standard isolation distance between it and a potable water line. The following are general principles that may be used as a basis for approval of a reduction in isolation distances upon written request of the licensed designer of the wastewater disposal system.

Reductions in isolation distances for new projects should be approved when there will be no significant increase in risk to the potable water system because the specific site conditions or a combination of materials and construction methods, such as those listed in 2-5 below, provides an equivalent level of protection.

When installing replacement wastewater disposal systems, reductions in isolation distance from the existing conditions should only be granted when there will be no significant increase in risk to the potable water supply.

1. A replacement wastewater system should not be installed closer to a waterline than the existing system, unless the standard isolation distance will be met. If the existing system is less than the standard isolation distance, the replacement system should be installed further from the waterline, and in full compliance with the standard isolation distance if possible, while taking into consideration that any relocation to increase the isolation distance should not increase the chance for failure of the replacement wastewater system. The existing water line would not need to be relocated or sleeved, as long as the isolation distance for the replacement system is equal or greater than the existing system and as long as the site conditions such as soils, SHWT, slope, etc. are equally or more protective of the waterlines at those where the existing system is located.
2. If the water line is at a higher elevation than the leachfield, a reduction in isolation distance could be approved.

3. If the seasonal water table is always significantly below the water line elevation, the isolation distance could be reduced.

4. If, based on a hydrogeologic analysis, the groundwater slopes from the leachfield area away from the waterline, the isolation distance could be reduced.

5. Slewing of the water line is acceptable as a basis for reducing the separation distance.

In situations 2-5, the isolation distance of the replacement system could be less than the existing system. Any decision to allow for a reduction should be based on the same criteria that would be used for a new system to be installed at the proposed isolation distance.