

## Minimum Separation Standards for Water and Sewer Lines – Plan Review of 6’ Horizontal Separation and Exception Requests

This list is for Division of Drinking Water **internal** use to review **acceptable design** and **exception requests** related to the minimum separation requirements in R309-550-7. Water systems should identify the following information, which will be used to assess the risk to public health and the degree of protection needed to justify approving the design or granting the exception.

1. Water System Name \_\_\_\_\_ Water System Number \_\_\_\_\_
2. Name, contact information, and job title of the person making the exception request or proposing the design *[This person must be a water system’s representative or its agent.]*
3. Reason for not meeting the minimum separation standards (e.g., constraint due to road or existing utilities, etc.)
4. Location(s) where the water line and sewer line cross or do not meeting the minimum horizontal/vertical separation standards (e.g., station information, street or intersection names, address, building name, etc.)
5. Description of the crossing or how the minimum horizontal/vertical separation standards are not met (e.g., the sewer line is 6 inches above or under the water line; for 500 feet on Hayes Street, the edge of sewer pipe is only 6 feet from the edge of water pipe, etc.)
6. Minimum horizontal and vertical clearances between the sewer and the water lines, from edge of the pipe to edge of the pipe *[If the exact clearance is unknown but it is suspected that the design will not meet the minimum separation requirement, and if the water system wishes to obtain an exception in advance, DDW can consider granting an exception with a condition requiring that additional detailed information be submitted later based on field verification.]*
7. If available, a drawing or schematic of the water line and sewer line layout, showing minimum clearance, depth, etc.
8. Sewer line information — new or existing, pipe material, thickness or pressure class, diameter, joint type, pipe condition (e.g., new, old, recently videoed, etc.), pressurized or gravity feed, etc.
9. Water line information — new or existing, pipe material, thickness or pressure class, diameter, joint type, pipe condition (e.g., new, old, deteriorated, etc.), typical water pressure range, etc.
10. Ground water table conditions based on recent or nearby construction (e.g., known ground water table depth, very high or low ground water table, whether expected to encounter ground water during installation, etc.)
11. Proposed means to mitigate the risk (e.g., remove/replace the aged vitrified clay sewer pipe; replace the aged or cracked existing sewer pipe; use thicker or higher pressure class PVC instead of the typical thin-wall sewer pipe; install an in-situ lining to the existing sewer pipe for XX feet; center the sewer line over the crossing to keep the joints as far as possible from the water line; add plastic warning tape placed 12 inches above the sewer and/or the water line(s) to minimize possible damage during future excavations; use HDPE pipe for water line or sewer line to eliminate the joints *[if there is no sagging or lack-of-sufficient slope problems for HDPE sewer pipes]*; use restrained joints for water line and/or sewer line near the crossing.)