

## Plan Review Checklist for R309-550-7 Minimum Separation Standards

This list is for Division of Drinking Water internal use to ensure consistency in the review of the exception requests for the minimum separation requirements between the water and sewer lines. The water systems should identify the following information in the exception requests. Such information is used to assess the risk to public health and the degree of protection needed to justify granting the exception.

1.  Water System Name \_\_\_\_\_ Water System Number \_\_\_\_\_
2.  Name, contact information, and job title of the person who makes this exception request on behalf of the water system *[DDW only accepts an exception request submitted by 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) of the waterline and sewer line crossing or 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 and/or not meeting the minimum horizontal/vertical separation standards (e.g., the sewer pipe 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.)
6.  Minimum clearance between the sewer pipe and the water pipe *[If the exact clearance is unknown but it is suspected that the design could 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 the actual field condition.]*
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, type of joint, pipe condition (new, old, recently videoed, etc.), pressurized or gravity feed, etc.
9.  Water line information — new or existing, pipe material, thickness or pressure class, diameter, type of joint, pipe condition (new or old), typical water pressure range, etc.
10.  Ground water table condition 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 pipe over the crossing to keep the joints as far as possible from the waterline; add plastic warning tape one foot above the sewer pipe and/or one foot above the water pipe 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.)