Residences and/or facilities served by both a public water system (PWS) and an auxiliary water supply (e.g., individual well) present a potential cross-connection and backflow hazard. In accordance with West Virginia Legislative Rule 64 CSR 15, Cross-Connection Control and Backflow Prevention, the PWS is responsible for establishing a cross-connection and backflow prevention program. The PWS has authority to conduct inspections to determine the existence of, and to classify for the purpose of establishing required equipment to correct, an actual or potential health hazard.

This policy outlines the requirements for issuing a well permit to a property also served by a PWS.

1. The owner/operator must obtain a letter from the PWS acknowledging the installation of the well or document, to the satisfaction of the Local Health Department, that the PWS is aware of the pending well permit.

2. All public health laws, regulations and design standards must be met. Specifically, West Virginia Legislative Rule 64 CSR 15, Cross-Connection Control and Backflow Prevention; 64 CSR 19, Water Well Regulations; and 64 CSR 46, Water Well Design Standards.

3. The water well must not be located within 100 feet of any previously approved areas reserved for septic tank field absorption lines. This includes the owner/operator’s property and all adjacent properties.

4. If the PWS tap is to remain in service, an approved backflow prevention method must be installed by the customer on the service tap, as determined by the PWS. Approved methods are defined in 64 CSR 15. If the PWS fails to approve a backflow prevention method, 64 CSR 15, Section 64-15-6.2 would apply.

5. Facilities permitted by the Local Health Department that require a backflow prevention device, and who utilize storage water heating equipment, must have an approved thermal expansion control device installed in accordance with the 2003 International Plumbing Code, as adopted in the State Building Code, 87 CSR 04.

   It is highly recommended that residences that require a backflow prevention assembly also install an approved thermal expansion device to protect the structure’s plumbing system from excessive pressure build up.

   The proper installation of an approved backflow prevention assembly eliminates the backflow of thermally expanded water into the PWS main line, giving rise to potential problems in the structure’s plumbing system. See the attached articles for more information: Thermal Expansion & Hot Water Heaters, and Thermal Expansion & Water Hammer.
If the above items are not complied with, the Local Health Department will refrain from issuing an individual water well construction permit.

References: 64 CSR 15, Cross-Connection and Backflow Prevention
64 CSR 19, Water Well Regulations
64 CSR 46, Water Well Design Standards
87 CSR 04, State Building Code

History: Replaces DW-19 dated January 28, 2008
Replaces DW-19 dated September 5, 1989
Replaces DW-19 dated November 30, 1987

Attachment: Articles: Thermal Expansion & Hot Water Heaters
Thermal Expansion & Water Hammer