

**“BOTTLED WATER DESIGN STANDARDS”**  
**WEST VIRGINIA STATE DEPARTMENT OF HEALTH**  
**FOR**  
**PROCESSING AND BOTTLING OF**  
**BOTTLED DRINKING WATER**

These design standards shall apply in determining whether the facilities, methods, practices, controls used in the processing, bottling, holding, transporting and shipping of bottled drinking water are in compliance to assure a safe water product.

A. Plant Construction and Design

1. The bottling room shall be separated from other plant operations or storage areas by tight walls, ceilings, and self-closing doors.
2. Adequate ventilation shall be provided in processing rooms, bottling rooms, and in container washing and sanitizing areas.
3. The washing and sanitizing of containers for bottled drinking water shall be performed in an enclosed room.
4. Rooms in which product water is handled, processed, or held or in which containers, utensils, or equipment are washed or held shall not open directly into any room used for domestic household purposes.

B. Equipment and Utensils

1. All plant equipment and utensils shall be suitable for their intended use. This includes all collection and storage tanks, piping, fittings, connections, bottle washers, fillers, cappers, and other equipment which may be used to store, handle, process, package or transport product water.
2. All product water-contact surfaces shall be constructed to be adequately cleaned and sanitized.
3. Storage tanks shall be of the type that can be closed and shall be adequately vented.

C. Sanitary Operations

1. The product water-contact surfaces of all multisurface containers, utensils, pipes, and equipment used in the transportation, processing, handling, and storage of product water shall be clean and adequately sanitized.
2. After cleaning, all multiservice containers, utensils, and disassembled piping and equipment shall be stored to assure drainage and shall be protected from contamination.
3. Single-service containers and caps or seal shall be stored in sanitary closures and kept clean therein in a clean dry place until used. Prior to use they shall be examined, and as necessary, washed, rinsed, and sanitized and shall be handled in a sanitary manner.
4. Filling, capping, closing, sealing and packaging of containers shall be done in a sanitary manner so as to preclude contamination of the bottle drinking water.
5. Multiservice primary containers shall be adequately cleaned, sanitized, and inspected just prior to being filled, capped and sealed.
6. Sanitizing operations, including those performed by chemical means or by any other means such as circulation of live steam or hot water, shall be adequate to effect sanitization of the intended product water-contact surfaces and any other critical area.

D. Bacteriological Sampling Compliance

At least one (1) water sample per week for bacteriological analysis shall be collected in standard sterilized water containers by a responsible official of the plant from representative points in the bottled water supply system and submitted to the West Virginia State Hygienic Laboratory or other certified laboratory. In-state plants may obtain sterilized water containers from the West Virginia State Hygienic Laboratory.