
Water System Improvements, Operation & Maintenance

Customer: Woodstock Job Corps CE
Location: Woodstock, Baltimore County, MD



Description:

Hydro-Terra Group (HTG) was contracted with the Woodstock Job Corps Center (WJCC) in Woodstock, MD to evaluate the existing potable water supply. WJCC, located in rural Baltimore County and supplied by an on-site water system, is a school that teaches various trades such as welding, security, plumbing, electrical, masonry and carpentry construction. The school has an in-residence student population with a water demand of approximately 18,000 gallons per day.

HTG performed a thorough potable water treatment system analysis (deficiency study) which included a hydrogeologic study, source water evaluation, aquifer yield test, permit review and assessment of the existing potable water treatment system. Results of the analysis indicated several deficiencies including inappropriately sized well pumps, significant scaling/clogging in the distribution piping, hazardous electrical controls, deteriorating physical structures, atmospheric exposure of the water supply (post treatment), bypassed treatment equipment and diminished control systems. HTG subsequently performed a complete system refurbishment that included deepening and developing the existing wells, abandoning unused wells, upgrading all system components and piping and connecting to the existing distribution system, refurbishing physical structures and incorporating new controls.

Project Highlights:

- ✓ Water source (ground and surface) evaluation and hydrogeologic assessment.
- ✓ Reconstruction and development of existing groundwater supply wells.
- ✓ Complete refurbishment of existing well house structure
- ✓ Installation of updated water quality treatment and monitoring equipment.
- ✓ Incorporation of automated pump and treatment system controls.
- ✓ Continued site monitoring, system checks and on-call repair services



Initial Wellhouse Condition



Refurbished Wellhouse