DPW

ARNOLD WTP EXPANSION

Background

The Arnold Water Treatment Plant (WTP) is an 8.0 million gallon per day (mgd) facility that serves the Broadneck 220 pressure zone. The County is expanding the treatment capacity of the facility to 16.0 mgd to increase the amount of finished water that can be supplied to the northern portion of the County and reduce purchases from Baltimore City. The overall project includes the drilling of 5 new groundwater production wells and the construction of two new raw water transmission mains.

As part of the expansion project, the chlorine gas system that was used for pre- and post-disinfection will be replaced with a sodium hypochlorite system sized for the 16.0 mgd facility.

The major features of the expansion include three aerators, two rapid mixers, expanded influent channel, four flocculation and sedimentation basins, six filter process units with weir box and filter gallery expansion, two circular clarifiers and conversion of existing gravity tanks to equalization tanks, upgrade of fluoride and polymer feed systems, caustic soda feed trimming system, and two higher capacity low lift pumps. The expansion also includes electrical upgrades and modifications.

Benefits

- Meet County planned growth and development needs
- Increase reliability and redundancy of County's water supply and production system
- Expand capacity and more fully utilize groundwater sources
- Further County's goal to optimize own well field capacity and reduce dependency of less reliable Baltimore City water supply

Project Status

- Expansion 70% complete
- Expected to be on-line by late fall 2010

Project Information

Project Manager	Sharon Cole (410) 222-7976
Design Consultant	Stearns & Wheler, LLC
Contractor	Galway Bay
Inspection Manager	EA Engineering
Estimated Total Project Cost	$23.9M
Design Notice to Proceed	July 2005
Construction Notice to Proceed	October 2008
Projected Completion Date	October 2010

For more information contact Customer Relations at 410-222-7582 or email us at customer@aacounty.org