

Production Wells – Strategies for Sustaining Operational Life Cycles

Lunch Included, Sponsored by UHL & Associates

Course Description:

The focus will be on maintaining and rehabilitating Municipal Water Utility Production Wells completed in a range of geologic settings in New Jersey. Strategies for continuous monitoring for maintenance analysis will be discussed. Well diagnostic processes and case studies will be presented along with practical well rehabilitation technologies and case studies. This course is relevant for water utilities operators and managers and consulting engineers.

Course Agenda:

8:00-8:30 Welcome and Sign-in

8:30-8:45 Production Wells – An Overview of Basic Terminology.

8:45-9:15 Repair or Replace

Case studies on production well repairs.

9:15-9:45 Production Well Replacement Process - Major and Minor Modifications

Principal steps – bidding, construction and testing, reporting, permitting.

Regulatory steps from considering a replacement well to obtaining a permit to operate.

9:45-10:00 Coffee Break

10:00-10:30 Production Well Diagnostic Programs

Downhole Camera Inspection

Well Efficiency Testing (Specific Capacity)

Focused water quality testing (Iron; Manganese; Hardness; Biofouling Potential)

10:30-11:00 Well Rehabilitation Methods

Types of methods and specific applications.

Quantifying well re-development progress in real time.

11:00-11:15 Coffee Break

11:15-11:45 Hydrogeology of Northern New Jersey

Overview of Glacial and bedrock aquifer systems in northern New Jersey. Case Study focus on Buried Valley Glacial Aquifers that supply many municipal water systems in the region.

11:45-12:00 Q&A

Date and Location:

April 8, 2025. Ridgewood Fire House, 201 East Glen Ave, Ridgewood. Park behind the building.

Instructors:

Vincent W. Uhl, PH, PG. UHL & Associates, Inc. B.S. Mechanical Engineering, Univ. of Notre Dame; M.S. Agricultural Engineering, Oklahoma State Univ.; M.S. Hydrogeology, Univ. of Arizona

Jonathon Wells, PG. UHL & Associates, Inc.: B.S. Earth Science (Geology), University of Massachusetts; M.A. Geology, Boston University.

Ashish Daw, PG. UHL & Associates, Inc. B.Sc. Geology, Pune University, India; M.Sc. Applied Geology, Anna University, India.

Accreditation:

3.0 TCH for NJ-Licensed Water Operators. TCH Course Number 04-032504-10

3.0 Hours, CPWM, Technical. DLGS-NJWA-284

Please plan to arrive at 8:00 a.m.

Pre-Registration is required, and is available at www.njwater.org

The New Jersey Water Association