

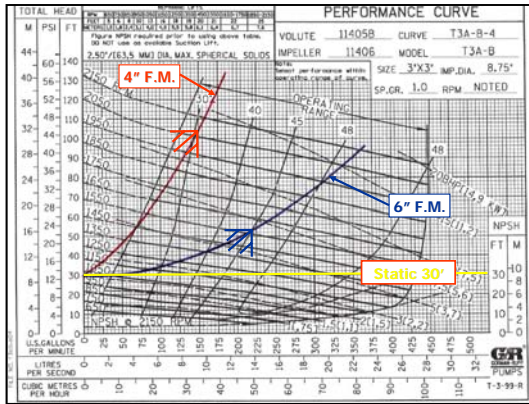
SEMINAR AGENDA

7:30 AM Registration
8:00 AM Seminar Begins
12:00 – 1:00 PM Lunch (provided)
4:30 PM Seminar Ends

REGISTER NOW SPACE IS LIMITED!

For information on dates, locations and cost of this seminar, please see the enclosed registration form. Cost of seminar includes refreshments, lunch and all course materials.

Please complete the registration information and return with your payment. No registrations will be accepted at the door.



QUESTIONS REGARDING THIS SEMINAR SHOULD BE DIRECTED TO:

ENVIREP, INC.
3705 TRINDLE ROAD
CAMP HILL, PA 17011
717-761-7884



WASTEWATER PUMP STATION DESIGN



PRESENTED BY:

ENVIREP, INC.
3705 TRINDLE ROAD
CAMP HILL, PA 17011
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SITE VISIT

Seminar includes a visit to an operating pumping station for a hands-on demonstration of pump station components, troubleshooting techniques and design considerations.

WASTEWATER PUMP STATION DESIGN SEMINAR

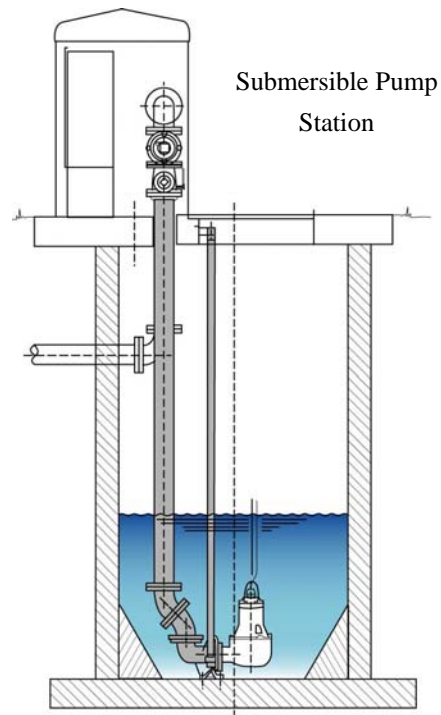
DESCRIPTION

A good wastewater pumping station design should result in a reliable pumping system including efficient equipment, minimal downtime, low maintenance, operator safety and low cycle costs. This seminar includes equipment selection, design procedures, operation and maintenance considerations, and electrical considerations for the design of new pumping stations and upgrade of existing pumping stations. This seminar emphasizes both theory and practical application and is a great opportunity to discuss relevant design concepts and problems.



PROGRAM TOPICS

Pump Station Types and Selection
Pump Types and Selection
Pump Performance Curves
System Head Curves
NPSH, Cavitation and Priming
Wet Well and Intake Design
Force Main Sizing
Series and Parallel Operation
Variable Speed Pumping
Electrical Concerns
Liquid Level Controls
Emergency Power Options
Operation and Maintenance Issues
Common Pump Operating Problems
Avoiding Common Design Blunders



WHO SHOULD ATTEND

Engineers
Wastewater Professionals
Authority Managers

SPEAKERS

Michael J. Gillespie, P.E., Envirep, Inc.
Steven M. Solon, Envirep, Inc.
Roger G. Stauffer, Envirep, Inc.
Dwight D. Swan, Envirep, Inc.

CONTINUING EDUCATION

CREDITS

After completion of this seminar, attendees will receive a personalized Certificate of Completion and 7 CEU's approved by the Pennsylvania Department of Environmental Protection and Maryland Department of the Environment.

