

Steve Demmer

Environmental Engineer

- Email me on Indeed: [indeed.com/r/Steve-Demmer/67035c0d697f4f74](https://www.indeed.com/r/Steve-Demmer/67035c0d697f4f74)

WORK EXPERIENCE

Environmental Engineer

Belmont Water Treatment Plant - Philadelphia, PA - May 2011 to September 2013

Facilitated optimal operating conditions of a conventional drinking water plant that supplies water to all of West Philadelphia and neighboring communities

- Ownership over performing jar tests, chemical demand tests and filter inspections per American Water Works Association (AWWA) and in accordance with laboratory standards
- Assisted in publishing a paper evaluating the effects of pre-chlorine removal in reducing disinfection byproducts in drinking water produced at Belmont Water Treatment Plant
- Authored and updated Standard Operating Procedures (SOP) for various water plant operations including filter inspections, laboratory procedures, emergency plant response and chemical pumping systems
- Responsible for submitting monthly turbidity, plant flow, total organic carbon, residual sludge, chlorine and fluoride reports to the Pennsylvania Department of Environmental Protection (PADEP) and the Environmental Protection Agency (EPA)
- Developed and implemented training initiative for Drexel University interns involving daily lab and filter testing
- Organized and led Safety Committee meetings which addressed hazardous issues in and around plant premises and collaborated with plant management to determine best course of action to remediate safety issues
- Employed the use of turbidimeters, spectrometers, pH meters, titration, multiparameter sondes and other lab techniques/equipment to properly measure and identify water quality parameters
- Disinfected new and replaced water mains, pumping stations and reservoirs with a team of engineers according to PADEP regulations before putting said systems into service

Senior Design Project

- September 2009 to May 2011

Results oriented water Efficient Energy Using Submersed Geothermal System

resources and • Completed study of a pond-loop geothermal system to heat and cool a residential complex environmental engineer • Utilized EQuest design software to determine theoretical heat load of residential complex

seeking an environmental • Measured heat gains and losses in modeled pond-loop system, utilizing temperature sensors

engineering position to in conjunction with data acquisition

• Established optimal placement of sensors for adequate data

apply and expand capacity within the industry RELEVANT EXPERIENCE

Laboratory Assistant

Dudley Street - Philadelphia, PA - September 2009 to May 2011

Philadelphia, PA 19145 • One of three undergraduate students selected to work on a graduate project analyzing soil

samples collected from beaches in the Gulf of Mexico affected by an oil spill

- Utilized laboratory equipment to separate microorganisms from soil, plate and incubate microorganisms and observe plates for reactions with chemicals commonly found in petroleum such as benzene

TEL • Prepared laboratory reagents under supervision of graduate student according to established procedures

908.770.3512

- Extracted microbial DNA from soil samples with DNA extraction kit
- Amplified and characterized DNA using polymerase chain reaction technique (PCR)

EDUCATION

Bachelor of Science in Civil & Environmental Engineering

Temple University - Philadelphia, PA

May 2011

ADDITIONAL INFORMATION

CERTIFICATIONS & SKILLS

- Water Treatment Plant Operator Certification • AutoCAD
- Maximo Asset Management Software • Microsoft Office Suite
- steve.demmer@gmail.com • ABB Distributed Control System (DCS) • Vista Data Acquisition Software