PVSC SUMMER INTERNSHIPS

# TITLE OF INTERNSHIP:

Microbiology Intern

# GENERAL DESCRIPTION OF POSITION:

The PVSC Analytical Lab is certified in many parameters with the New Jersey Department of Environmental Protection (NJDEP); BOD, CBOD, COD, TSS, Ammonia, Cyanide, all metals and many others. Samples are analyzed daily from the PVSC plant process as well as industrial monitoring samples, liquid waste acceptance and harbor study river waters. On average over 5,000 samples a month are analyzed for multiple parameters. The Intern will work with the samples from the chain of custody to proper disposal. He or she will learn the operation of LIMS and report writing.

# PROGRAM SUPERVISOR(S):

Jennifer Marques, Laboratory Director

# QUALIFICATIONS:

Applicants should be pursuing a degree in Biology, Chemistry or Environmental Science. Strong computer skills; word, excel. Be able to organize assigned work load and safety conscious.

1. **INTERNSHIP SPONSOR:** The Passaic Valley Sewerage Commission (PVSC)
2. **LOCATION**: Newark, New Jersey

# MISSION STATEMENT:

Building upon a century of operational excellence, preserving and improving New Jersey’s water quality through river restoration and providing sustainable wastewater services to 1.4 million Garden State residents in the Passaic River Basin.

# ABOUT PVSC:

The Passaic Valley Sewerage Commission (PVSC), established in 1902 by an act of the New Jersey State Legislature, began operation of the Newark Bay Treatment Plant in 1924 as a means to alleviate pollution in the Passaic River and its tributaries. Major expansions, upgrades and renovations throughout the twentieth century have made the PVSC one of the largest wastewater treatment plants in the United States.

Since 1902, the PVSC has expanded its mission to enhance the viability, and environmental health and security of the

* 1. million residents in the 48 municipalities of Bergen, Essex, Hudson, Passaic and Union Counties of the Passaic Valley Service District. In accordance with federal and state water quality legislation, the Commissioners and staff of the PVSC continuously work together to:
		+ Operate and maintain the PVSC infrastructure including the Newark Bay Treatment Plant and its 22-mile interceptor sewer line to enable the processing of over 300 million gallons of wastewater every day.
		+ Administer and operate monitoring and compliance programs to identify organic and inorganic pollutants and prevent them from entering the waterways of the Passaic River and its tributaries.
		+ Improve the recreational and economic uses of Newark Bay, the Passaic River and its tributaries by removing debris and other pollutants from shorelines and waterways through in-house and community based River Restoration Programs.
		+ Provide environmental instruction and awareness programs to school systems district-wide.
		+ Leverage excess treatment capacity to provide low-cost liquid waste and sludge disposal options to municipalities, industries and businesses outside of the service area.

PVSC moves forward into a second century of service to its ratepayers with an aggressive plan to control costs and identify alternative funding sources for necessary infrastructure maintenance, automation, and upgrades, while providing innovative, environmentally sound and cost effective wastewater treatment.

PVSC is one of the largest modern wastewater facilities in the eastern United States and one of the half-dozen largest in the entire country. The 140-acre plant contains more than eight miles of access roads, more than one mile of 15-foot-wide utility tunnels, miles of sewers and storm drains, miles of process pipes, thousands of instruments and valves, hundreds of pumps, and a 450-ft long bridge over Doremus Avenue.

# OVERVIEW OF POSITION RESPONSIBILITIES:

* Sterilize all glassware.
* Prepare and sterilize all dilution water.
* Prepare all petri-dishes and/or agar plates for analysis.
* Read and record daily plate counts.
* Dispose of and sterilize all biohazard waste.
* Record keeping.
* Assist microbiology supervisor in analyzing samples daily.

*Note: The following are examples of potential duties.*

# SPECIAL PROJECTS:

N/A

# SPECIFIC DAILY/WEEKLY RESPONSIBILITIES:

N/A

# POTENTIAL LEARNING EXERCISES:

Interns will also learn other wastewater laboratory parameters, including wet chemistry analyses and

 instrumentation.

#  TO APPLY:

Please visit our website at [**www.nj.gov/pvsc,**](http://www.nj.gov/pvsc)click on the “Employment” link, select and double click on the “Employment Application Download” link. Please email a completed employment application along with a cover letter and resume to **PVSCHumanResources@pvsc.com** or mail your application packet to the address below.

Passaic Valley Sewerage Commission Attn: Human Resources

600 Wilson Avenue

Newark, NJ 07105

The Passaic Valley Sewerage Commission (PVSC) is an equal opportunity employer and supports diversity in the workplace. Applicants will receive consideration without regard to race, color, religion, sex, national origin, age, disability,

PVSC Offers excellent benefit options and pension plan for full time employees.

veteran status, marital status or sexual orientation.