

UDC's Environmental Quality Testing Lab Receives National Accreditation

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The College of Agriculture, Urban Sustainability and Environmental Sciences (CAUSES) of the University of the District of Columbia (UDC) is pleased to announce the full accreditation of the Environmental Quality Testing Laboratory (EQTL) by the National Environmental Laboratory Accreditation Program (NELAP) Accreditation Council. NELAP accreditation is the highest national laboratory accreditation achievable.

The New Hampshire Environmental Laboratory Accreditation Program (NH ELAP) awarded primary NELAP Accreditation to the EQTL of Washington, D.C., for minerals and trace metals in potable and non-potable waters in accordance with the provisions of the National Environmental Laboratory Accreditation Conference (NELAC) Standards and the NH Env-C 300 laboratory accreditation administrative rules. NH ELAP is one of few authorized laboratory programs that awards primary and secondary accreditation to out-of-state environmental laboratories.

The Laboratory is required to use EPA-approved methods required by regulation. Because the District of Columbia is not a state, there is no state level EPA accrediting body; therefore, the EQTL had to acquire NELAP accreditation, which has more strenuous requirements, including annual recertification. This is a huge endeavor for UDC.

Opening in 2012, the Environmental Quality Testing Lab was constructed to give District residents a convenient and affordable way of testing water and soil for environmental contaminants and other impurities; and to serve as an unbiased monitor of surface, ground and municipal water quality in D.C., helping to protect water resources and human health. Equipped with high-end analytical technologies with water quality models, the EQTL is not only essential for research and training needs of faculty and students, but directly benefits the community by providing research based solutions and supporting science based policies that impact the residents of the District of Columbia.



State of the art equipment analyzes chemical and biological water quality parameters in soil, water and wastewater. By integrating monitoring and modeling, the EQTL also has the capacity to measure existing environmental conditions and identify alternative solutions to address environmental problems. The lab tests for everything from organic contaminants to pesticides to pharmaceutical and personal care products. Measuring for water and soil contaminants is of utmost importance, especially with the urban agriculture movement underway in the District of Columbia. The EQTL even has the ability to analyze food for various contaminants.

"This is only the first step in a long process and we are not yet certified for all key substances. The NELAP accreditation is, however, a huge step for the University and for the District of Columbia," explained Dr. Sabine O'Hara, dean of CAUSES. "To my knowledge, it is the first time that the District of Columbia is home to a certified environmental testing laboratory and we will soon be open for business."

The certification of the lab will directly benefit D.C. residents by giving them a local option for common assessments such as water quality and soil quality testing. Currently, residents must pay for these laboratory services outside of the District.

"While NELAP accreditation was challenging, we took this as an opportunity to enhance our research, teaching and

community services,” explained Dr. Tolessa Deksisssa, who serves as director of the Water Resources Research Institute (WRII), and technical director and quality assurance officer of the Environmental Quality Testing Lab.

As part of the preparations for lab accreditation, WRII offered two trials of free soil testing services to District residents in 2014 and 2015. The service was part of a U.S. Department of Agriculture grant, funded to analyze soil samples in home and community gardens around D.C. The usually-costly analysis, performed by undergraduate and graduate students at the lab, measured macro nutrients and environmental trace metals including lead and arsenic. Now that the EQTL has received NELAP certification, it is prepared to offer a similar fee-based service the future, and D.C. residents will no longer have to send their soil out of state.



“We receive several inquiries a week as to whether we offer this service, and we’ve always had to recommend out of state laboratories,” explained Dr. Tolessa Deksisssa. “In time, when we offer soil testing at cost, being located in the District along with our use of innovative techniques to measure specific environmental contaminants will help to make services more cost effective.”

For research purposes, laboratories are not required to be certified; but offering services to the community such as soil and water testing for compliance, requires lab certification. The U.S. Environmental Protection Agency established NELAC as a voluntary program in the absence of a Federal accreditation program.

Spearheaded by Dr. Deksisssa, the Laboratory technicians Sebhat Tefera and Yacov Assa were invaluable to the certification process. “NELAP accreditation is a testament to the dedication and commitment of our competent staff as we continue to build quality programs at UDC to improve the quality of life and economic opportunities for our District residents,” stated William Hare, associate dean of programs, CAUSES.

CAUSES would also like to acknowledge the support of the Department of Energy and Environment, which provided \$600,000 through a three year Memorandum of Understanding as initial startup funds for the lab.

“We are grateful for the partnership forged and appreciative of their commitment to utilize our lab services to benefit District residents,” said Hare.

Additional details regarding future service offerings are forthcoming.

The [EQTL](#) is located on the Van Ness campus of the University of the District of Columbia. The Water Research Resources Institute is a separate program under the Center for Sustainable Development, CAUSES, and helps to provide the analytical capacity for D.C. to improve water infrastructure management and analyses through its Environmental Quality Testing Lab. Funded by USGS, the Institute provides seed grants to innovative water-related projects that identify problems of and contribute solutions to DC water issues.

For more information, contact Dr. Tolessa Deksisssa at tdeksissa@udc.edu or (202) 274-5273. For more information on CAUSES, visit www.udc.edu/causes.

About the University of the District of Columbia

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