

Lance Mason

Senior Operations Specialist

Education

M.S., Biology, Stephen F. Austin State University, 1994

B.S., Biology, Chemistry, Stephen F. Austin State University, 1992

Certifications

- Grade Four Wastewater Treatment Operator, State of Arizona, Certification No. 20253
- Grade Four Wastewater Collections Operator, State of Arizona, Certification No. 20253
- Grade Four Water Treatment Operator, State of Arizona, Certification No. 20253
- Grade Four Water Distribution System Operator, State of Arizona, Certification No. 20253
- Currently Obtaining Reciprocity in State of Texas

Relevant Experience

Mr. Mason has experience in water and wastewater operations, including process optimization, operations training, water and wastewater facilities' and staff management, process troubleshooting, and facility start-up/commissioning. Additionally he has experience in wastewater plant mathematical modeling and on-line monitoring instrumentation. Mr. Mason has been involved in numerous research projects on three different continents dealing with wastewater process, chemistry, instrumentation, mathematical modeling and energy efficiency. He has a thorough knowledge of regulations in regard to drinking water, wastewater and biosolids compliance. Mr. Mason also gained teaching experience through graduate school and as an instructor at a local community college.

Currently Mr. Mason's main focus as an operations consultant is working with operations staffs all around the country to provide them with the learning tools needed to optimize and/or troubleshoot the process to achieve the highest level of efficiency while maintaining regulatory compliance for water quality.

Experience Prior to Jacobs / CH2M HILL

Senior Operations Specialist; Brown & Caldwell; Houston, Texas. Responsibilities included providing assessment and consultation to wastewater process operations, provide operational training for process optimization and troubleshooting, assist water and wastewater operations in the start-up of new or upgraded facilities, creation of facility electronic O&M manuals, provide operational review of facility engineering design, provide project management support to engineering jobs, and remain current to regulatory requirements related to water, wastewater, and biosolids compliance. Projects included Greater Cincinnati Metropolitan Sewer District; City of Chandler, AZ; City of Santa Barbara, CA; City of Kingman, AZ; and Orange County Sanitary District, CA.

Adjunct Faculty Instructor; Gateway Community College; Phoenix, Arizona. Responsibilities included part-time instructor for Water Technology Calculations (Operator Math), Chemical and Biochemical Processes in Water/Wastewater Treatment, and Water Quality for Treatment Industry. The first two of the courses are face-to-face instruction while the latter is an online course. This was the first time that the live courses had been offered face-to-face, thus a new lesson plan, course work, and schedule were created. Class includes operators, engineers, and students working for an associate's degree in Water Technology.

Project Manager; Severn Trent Services; Ocotillo Water Reclamation Facility; Chandler, Arizona.

Mr. Mason was responsible for supervising a staff of 15 administrative, operations, maintenance, and laboratory personnel at the 10 MGD water reclamation facility for Ocotillo Water Reclamation. The plant

serves approximately 60,000 people and must meet strict reuse criteria for distribution to recreational areas and the Intel Computer property. Other responsibilities included operator training, trouble-shooting, online monitoring, budgeting, energy conservation, and biological nutrient removal.

Process Specialist; Technical Services; Severn Trent Services. Responsibilities included technical support to the wastewater operations staff throughout the U.S. by resolving process deficiencies, enhancing plant performance, improving process control and developing training programs. He was responsible for the management of the MAT2000 wastewater plant monitoring system from remote locations by way of online instrumentation and interpreting data to improve economic and environmental impacts. He provided process analysis and cost calculations for contract proposals and support of business development by appropriate presentation to prospective clients and/or consultants. He prepared and presented scientific research papers to technical conferences to promote technology and services of the company. As Project Manager for the MAT 2000 online wastewater monitoring unit, Mr. Mason was involved in studies done in Texas, New York, Virginia, Pennsylvania, Mississippi, New Mexico and Arizona. He trained in equipment operation and process analysis used in remote on-line process monitoring in the U.S., Canada, Great Britain and South Africa treating industrial and municipal wastes.

Wet Chemist; Huntingdon/Southwestern Laboratories. Responsibilities included various water quality tests in compliance with EPA Standard Methods, documented and researched results, maintained standards of cleanliness in lab and communicated information to management, colleagues and field staff.

Professional Organizations/Affiliations

Water Environment Federation

Arizona Water Association

Water Environment Association of Texas

Honors and Awards

Arizona Water and Pollution Control Association, Wastewater Supervisor of the Year, 2004

Publications and Presentations

"Investigation Using Advanced On-Line Instrumentation of Industrial Loading on a Wastewater Treatment Plant in Glen Cove, New York; Lance K. Mason, Dan Ryan, John Watts, Marc Bingley, Andrew Shaw, John Upton, WEFTEC 2000

"A New On-line Monitoring Instrument for the Measurement of Nitrification and Denitrification Rates; Dr. John B. Watts, Ian Parrott, Andrew Shaw, Lance K. Mason, 2000

"Experience with Auto-calibrating Dissolved Oxygen Systems in Paper and Pulp Wastewater Treatment Facilities", Lance K. Mason, Dr. John B. Watts, TAPPI 1999

"Improvement of Energy efficiency and Plant Performance in a Water Reclamation Facility in Gilbert, Arizona Using MAT2000 Online Monitoring; Lance K. Mason, Andrew Shaw, Dennis Plzak, Jay Lydon, John B. Watts, WEFTEC 2001

"Assessment of Biomass Health Using Advanced On-line Instrumentation in a Small Facility Converted From Contact Stabilization to Extended Aeration in Houston, Texas"; Lance Mason, Dr. J.B. Watts, Andrew Shaw, 2000

"International Symposium on On-line Sensors for Water and Wastewater"; Dr. J.B. Watts, Lance Mason, Andrew Shaw, 1999

"Improvements of Energy Efficiency and Plant Performance in a Water Reclamation Facility in Chandler, Arizona Using Advanced Online Monitoring", Lance Mason, Dennis Plzak Andrew Shaw, Jodey Lane, Robert Braymiller, Dr. John Watts, WEFTEC 2002

"A Process Analysis for the Expansion of a Wastewater Facility in Bullhead City, Arizona Using Advanced Online Monitoring and Computer Modeling", Lance Mason, Dennis Plzak, David Prinzhorn, Glen Roth, WEFTEC 2003

"Improving Plant Performance and Energy Efficiency in a Sequencing Batch Reactor and Extended Aeration Facility in Central Oklahoma Using Advanced Respirometric Monitoring", Lance Mason, Kelvin Peters, John Nichols, Matt Lail; WEFTEC 2004

"SRT and OUR: Simplicity with Meaning", Lance Mason, Eric Wahlberg; AZ Water Annual Conference 2009

"Wastewater Process Optimization: A Non-Traditional Approach", Lance Mason, Eric Wahlberg; AZ Water Annual Conference 2010

"Aeration System Upgrades at the Chandler Ocotillo WRF: High-Speed Blower Technology", Lance Mason, Edmond Low; AZ Water Annual Conference 2011

"New Primary Solids Rotary Drum Thickener Benefits Multiple Treatment Processes", Edmond Low, Steven Puterbaugh, Lance Mason, Tristate Seminar 2011

"Nitrite Lock: Incomplete Nitrification Effects on Downstream Processes During Commissioning in Kingman, AZ". Lance Mason, AZ Water Annual Conference 2012

"Considerations in Design and Operations in Flat Panel Membrane Bioreactor (MBR) System in Kingman, AZ". Lance Mason, AZ Water Annual Conference 2012

"Operational Process Control Methods for Filamentous Bacteria Infestation in Avondale, AZ". Lance Mason, AZ Water Annual Conference 2014

"To Remove P or not Remove P: (Biologically?) That is the Question"; Mason, Lance, Hindy E.J., Texas WET, Issue 2 2017: 31-36

"To Remove P or not Remove P: (Biologically?) That is the Question"; Mason, Lance, Hindy E.J., Oklahoma OWEA Annual Conference 2019

