

PNCWA Tri-City Plant Tour

Speaker Bio: Blake Raines

Blake Raines is a lead operator at the Tri-City Water Resource Recovery Facility. He holds a DEQ Grade IV Treatment Certificate, #13301, and has an Associate's Degree in Water and Environment Technology from Clackamas Community College. Blake always addresses safety first before projects are initiated. His skills to anticipate problems and potential safety hazards have been noted on several occasions and is appreciated by all work groups. Blake takes initiative to help organize specific safety training required by operations staff. Blake continually meets all the requirements for the WES safety program by attending all required training and participating in the safety incentive program.

Blake worked closely with contractors through 2011 to prepare the MBR facility for operation. He currently is one of the lead operators for the facility, responsible for all operation and maintenance. Blake is responsible for preparing monthly DEQ monitoring reports. He performs daily process and permit lab analyses, maintains daily operational logs, inputs plant data into several software packages, operates all process equipment, authors SOP's, and analyzes data for process control strategies.

Blake was instrumental in implementing the Paracetic Acid disinfection pilot study for the CAS process. Blake was one of the lead operators on this project, requiring much attention to detail. Severable parameters required constant monitoring: flow conditions, secondary effluent solids, contact time, and dosing. Blake was involved with developing new procedures for disinfection residual testing and documentation of the new monitoring data.

He continually seeks to improve his knowledge within the field and our organization. He has steadily committed himself to advancement at WES: Blake started as a temporary employee in June 2007, became a WES Assistant in December 2007, advanced to Operator 1 in February 2010, in February 2017, was promoted to Operator 2, and Operator 3 in April 2019.

Blake has provided multiple presentations focused on his expertise with Membrane Bioreactor Technology. In July of 2016, Blake provided a similar presentation at the American Membrane Technology Association Conference in Vancouver, WA. In March 2017, he provided a presentation to the annual Water Environment School held at Clackamas Community College.

