Thomas Hayes
Gas Technology Institute

Dr. Tom Hayes is an environmental engineer with the Gas Technology Institute E&P Center. He holds a Bachelors degree from Indiana University in Public Health, a Masters from Purdue in Environmental Engineering and a Ph.D. from Notre Dame. For more than twenty years, Tom has developed numerous processes for the treatment of water streams associated with natural gas supply and operations. He has led numerous R&D projects on the development of biological and physical separations processes for the treatment of conventional produced waters. Recently, under a project funded by DOE, he explored the use of electrodialysis processing for the beneficial use of coalbed methane produced waters. In past work, Tom Hayes has managed R&D on innovative water treatment technologies, including nanofiltration, RO, microfiltration, ion exchange, living-filter aquaculture and high-rate biological processing. Under the support of the Marcellus Shale Coalition (MSC), Tom has teamed up with URS and the companies of the MSC to characterize waters associated with well completions at 19 locations in the states of Pennsylvania and West Virginia. His most current work, supported by RPSEA, involves the development of water management methods and technologies that reduce demands for freshwater and mitigate environmental impacts assocated with shale gas well completions.

In recent years, Tom has served as the Managing Director of the Barnett Shale Water Conservation and Management Committee and the Appalachian Shale Water Conservation and Management Committee; both of these organizations represent consortia of energy companies with a mission of developing environmentally responsible water management approaches for shale gas development.