

Jonathan Rucker, PE, LEED AP



Education

Bachelor of Mechanical Engineering,
Georgia Institute of Technology, 1986

Professional Engineering Registrations

Georgia
Florida
Alabama
North Carolina
South Carolina
Ohio
Tennessee
Virginia

Accreditations

LEED AP

Professional Associations

American Society of Mechanical Engineers

American Society of Heating, Refrigeration & Air Conditioning Engineers (ASHRAE)

Georgia Association of Water Professionals

Mr. Rucker has extensive experience for design of mechanical systems in industrial, water/wastewater and commercial facilities. His work includes design of systems for mechanical processes for air pollution control, gas handling, power generation and process pumping systems as well as HVAC, plumbing and fire protection. Descriptions of his various experiences are identified below.

Experience – Mechanical Process Engineering

- Served as engineer of record for the odor control systems at the South River Water Reclamation Center in Atlanta, Georgia, consisting of two-stage, packed bed, wet scrubbers with an air flow capacity of approximately 36,000 cubic feet per minute for the dewatering system and 129,000 cubic feet per minute for the primary treatment system.
- Designed a landfill gas compression and conditioning system for the city of LaGrange, Georgia to process 600 standard cubic feet per minute of landfill gas at a discharge pressure of 65 psig to serve a new utility distribution system as a retrofit to an existing landfill gas flare system. Incorporated variable volume output and remotely monitored controls.
- Designed a landfill gas-to-energy system for Coffee County, Alabama landfill facility. Work consisted of providing 3,200 kW of capacity by dehydrating landfill gas and burning it in gas engine-generators. Project design is planned for completion in the 3rd quarter 2011.
- Designed the odor control system at the Utoy Creek water Reclamation Center in Atlanta, Georgia, which consisted of five single-stage, packed-bed, wet scrubbers with an air flow capacity of approximately 167,000 cubic feet per minute.
- Designed process cooling and hydraulic power systems for the Newell Recycling Materials Recovery Facility in Doraville, GA.
- Designed a particulate-control system for the Charlotte-Mecklenburg Utility Department residuals management facility in Charlotte, North Carolina.
- Designed an upgrade to the raw-water pumping system for the 202-mgd Peachtree Electric Pumping Station utilizing vertical turbine pumps, ranging up to 2,500 horsepower, in Atlanta, Georgia. Designed pump station surge control systems using surge tanks with volumes greater than 22,000 gallons and operating pressures exceeding 180 psig for the Peachtree Electric and Hemphill Pumping Stations in Atlanta, Georgia.
- Designed the odor control system at the R.M. Clayton Water Reclamation Center in Atlanta, Georgia, which consisted of dual, two-stage, packed-bed, wet scrubbers with an air flow capacity of approximately 105,000 cubic feet per minute.

- Evaluated and made recommendations to optimize the efficiency and product transport of sludge dryers operated by the Massachusetts Water Resources Authority Interim Sludge Processing and Disposal Facility in Boston, Massachusetts.
- Served as mechanical engineer for evaluation and optimization of particulate and odor control equipment for the Massachusetts Water Resources Authority Interim Sludge Processing and Disposal Facility in Boston, Massachusetts. Evaluated cartridge dust collectors, baghouses, cyclones, wet venturi scrubbers, wet electrostatic precipitators, carbon filter beds, regenerative thermal oxidizers, and packed tower scrubbers.
- Designed chlorine scrubbing and 20,000-gallon generator fueling systems for the Town Creek Water Treatment Plant in Macon, Georgia.
- Designed hydraulic valve-actuation systems for high-service pumping systems in Atlanta, Georgia.
- Designed a chlorine scrubbing system for the Lake Blalock Water Treatment Plant in Spartanburg, South Carolina.
- Designed compressed air systems for high-pressure instrument air services, laboratories, valve actuators, and industrial plant tool operation for numerous municipal, industrial and commercial projects in Atlanta, Georgia.
- Served as the senior reviewer for design of odor control systems for the F. Wayne Hill Water Reclamation Center in Buford, GA.
- Designed chlorine scrubbing system for the Middle Oconee WPCP in Athens, GA.

Experience – HVAC, Plumbing & Fire Protection Engineering

- Designed HVAC, plumbing, and fire protection systems for the Catawba River Raw Water Pump Station in Charlotte, NC.
- Designed HVAC and plumbing systems for the Laboratory, Administration Building and Maintenance Building at the Camp Creek water pollution control plant in Fulton County, Georgia.
- Served as mechanical engineer of record for HVAC, plumbing, and fire protection systems for the F. Wayne Hill water reclamation center in Buford, Georgia.
- Designed the laboratory HVAC system for the Lakeside Water Treatment Plant in Gainesville, Georgia.
- Designed HVAC, plumbing, and fire protection systems for the Lake Blalock Water Treatment Plant in Spartanburg, South Carolina.
- Served as the engineer of record and senior reviewer for the design of HVAC and plumbing systems for the Analytical Laboratory serving the Flat Creek WPCP in Gainesville, GA.
- Designed HVAC, plumbing, and fire protection systems for the Bear Creek Water Treatment Plant in Jefferson, Georgia.
- Designed HVAC, plumbing, and fire protection systems for the Lakeside Water Treatment Plant process facilities in Gainesville, Georgia.
- Designed approximately 500,000 square feet of conditioned-air distribution for Concourse E at Hartsfield International Airport in Atlanta, Georgia.
- Designed HVAC, plumbing, and fire protection systems for the Town Creek Water Treatment Plant in Macon, Georgia.
- Designed the HVAC, plumbing, and fire protection systems for the 265,000-square-foot Charlotte-Mecklenburg Utility Department Residuals Management Facility in Charlotte, North Carolina.
- Designed HVAC, plumbing, and fire protection systems for the 214,000-square-foot Delta International air cargo facility in Atlanta, Georgia.

1 - Staff experience gained while working at Engineered Systems & Services and prior firms.