

TRIUMVIRATE ENVIRONMENTAL WASTEWATER SERVICES

Triumvirate Environmental is a provider of water and wastewater engineering and technical services for industrial clients in North America.

1. Front End Studies

- Planning and Permitting
- Water and Wastewater Characterization
- Water and Mass Balance
- Treatment Technology Alternative Evaluation
- Modeling
- Bench and Pilot Studies
- Treatability Studies

2. Preliminary Engineering

- Concept and Preliminary Designs
- Design Basis
- Process Flow Diagrams
- Piping and Instrumentation Diagrams
- Equipment Sizing, Selection, and Specifications
- Electrical One Line Diagrams
- Cost Estimates
- Risk Analysis

3. Detailed Engineering

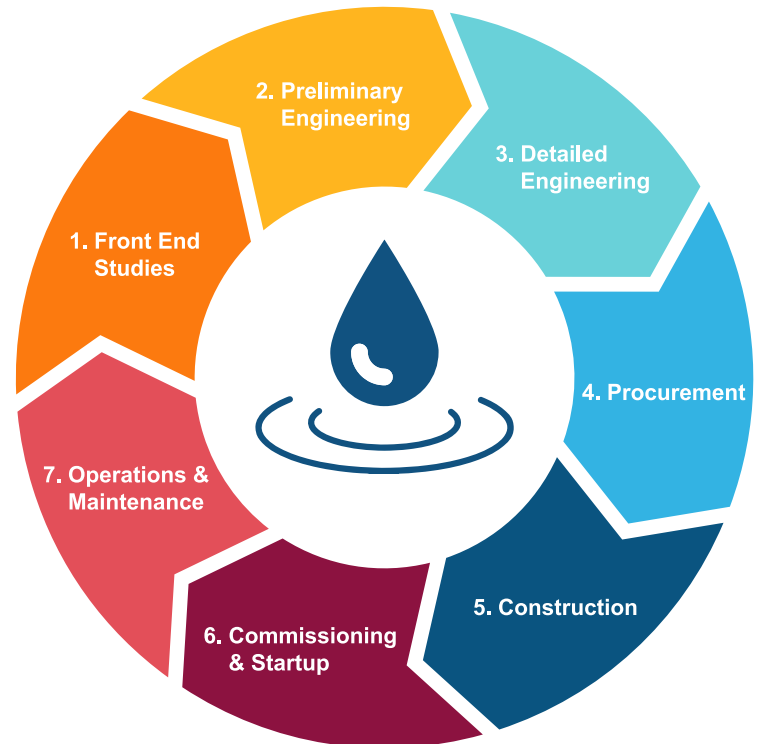
- Civil and Structural Designs
- Geotechnical Designs
- Mechanical Designs
- Electrical Designs
- Instrumentations and Controls
- Specifications

4. Procurement

- Bid Package Preparation
- Contractors Pre-Qualification
- Bid Solicitation and Contractor Selection
- Purchasing

5. Construction

- Constructability Review and Value Engineering
- Construction Management
- Construction Oversight
- Quality Control
- Submittal Review



6. Commissioning & Startup

- Commissioning Plans and Reports
- Operation and Maintenance Plans
- Operator Training
- Punch List

7. Operations & Maintenance

- Troubleshooting
- Onsite Operation and Maintenance
- Operation Optimization
- Regulatory Compliance Assistance
- Technical Assistance
- System Performance and Compliance Sampling

