

**Tennessee Department of Environment and Conservation**  
**Division of Water Resources**  
**Fact Sheet on Water Quality State Operating Permit SOP-24025**

Applicant: CTC Property LLC  
Colossus Water Recycling Plant  
3644 Riverport Rd., Memphis, Tennessee

- Who needs a Water Quality State Operating Permit?
  - Persons engaged in the operation of a sewage treatment system that does not have a direct discharge to any surface or subsurface waters must obtain a State Operating Permit (SOP) from the Tennessee Division of Water Resources.
- This specific Water Quality State Operating Permit is for operation of a reclaimed wastewater treatment plant and non-potable reuse water distribution system for restricted urban reuse. This will reduce use of potable water that is withdrawn from the Memphis Sand Aquifer supplied by MLGW for industrial purposes.
- Scope of activity proposed by applicant:
  - Operate a treatment and non-potable reuse water distribution system
    - Pump up to 13.5 million gallons of treated sewage daily from the City of Memphis T.E. Maxson Wastewater Treatment Plant.
    - Further treat the wastewater for industrial use.
    - Will divert a portion of the existing Memphis discharge away from the Mississippi River.
  - Operate a limited non-potable reuse water distribution system to three companies to be used as cooling water, reducing the need to use water from other sources, such as ground water:
    - xAI;
    - TVA – Allen Combined Cycle Power Plant (currently uses potable water supplied by MLGW); and
    - Nucor Steel Plant (currently uses potable water supplied by MLGW).

- Permit conditions that must be met by applicant:
  - Contract with City of Memphis;
  - Reclaimed water management plan;
  - End user agreements
  
  - Cross connection control to ensure no reused water is connected to a potable water supply;
  - Grade IV Wastewater Operator;
  - Must meet specific conditions set by the permit:
    - Recycled water will not be discharged;
    - Carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>) or ammonium nitrogen (NH<sub>3</sub>-N);
    - Total suspended solids (TSS);
    - E.coli;
    - pH (how acidic or alkaline a substance is); and
    - Residual chlorine.
  
- Project timeline:
  - September 18, 2024 – Preliminary project discussions held with applicant.
  - February 18, 2025 – Division of Water Resources receives State Operating Permit application and preliminary-engineering report.
  - March 18, 2025 – Division of Water Resources receives supplemental information, a reclaimed water master plan.
  - April 15, 2025 – Division of Water Resources issues draft permit and puts it on public notice, per state rules.
  - April 19, 2025 – Division of Water Resources receives first request for a public hearing on the draft permit.
  - June 25 and 26, 2025 – Division of Water Resources holds public hearings on Water Quality State Operating Permit.