

**SUPERIOR WASTEWATER SYSTEMS, LLC
DOCKET NO. 23-00051 – PETITION FOR A CCN TO PROVIDE SERVICE
TO TRIUNE
SWS SUPPLEMENTAL RESPONSE
TO TPUC STAFF’S 3RD DISCOVERY REQUEST**

- 3-3. *During the November 6th meeting, Superior representatives stated that the system to be installed is different from systems that have typically been installed by Superior and other TPUC regulated wastewater utility providers. Please describe the differentiation between how the proposed system will provide wastewater utility service and how other systems operated by Superior provide wastewater service. Include in the description the significance of the distinction between the types of systems described.*

RESPONSE:

The differentiation primarily involves the way that the wastewater effluent is treated.

Superior currently operates its wastewater treatment facility by using a Recirculating Sand Filtration (RSF) system. Most of the other wastewater utilities in Tennessee use this same type of RSF system.

Superior has now built a new BioMicrobic (BM) treatment system to provide wastewater service to Kings Chapel Subdivision. It is Superior’s intention to build another separate BM treatment system to provide wastewater service to the Triune Area. Unlike an RSF system, which can only treat wastewater, the BM systems can actually process raw sewage. In addition, the BM system operates with air blowers whereas the RSF systems rely on multiple hydraulics from electric pumps.

A significant advantage of the BM system is the ability of an operator to continually inspect the wastewater treatment from the bottom to the top of the treatment process. This continual inspection is not possible with RSF treatment methods. Further, the BM system allows the solids to be moved over to a separate zone for handling and removal. In addition, there are fewer moving parts to a BM treatment system, which reduces the costs for repairs and replacement.

Finally, the BM system employs an equalization tank. This tank allows the system to treat wastewater on a consistent basis during any 24-hour period. The BM treatment system along with our drip system allows Superior to regulate the water flow in and then out of the entire treatment system. In contrast, RSF systems only treat wastewater on demand as it enters the treatment process and then is sent to drip fields.

SUPPLEMENTAL RESPONSE:

In addition to technical differences, the system differs in terms of its intended use.

The proposed Triune-Arrington-Area wastewater system is designed to be a regional

wastewater system with the capacity to provide service to all lots and parcels within the boundaries identified in the Petition that might require such service. Instead of just providing site- or project-specific, decentralized service to a single subdivision, such as Kings Chapel Subdivision, the Triune-Arrington-Area wastewater system will provide centralized service to the entire identified geographic region that is requested in this case, which is presently unserved by any wastewater utility. The boundaries for the proposed Triune-Arrington-Area wastewater system were determined by comparing the projected capacity of the proposed system with the estimated demand of this area. Superior believes its system will be able to handle all reasonable demand within the area requested. In other words, Superior has a present and actual intent to provide service to the entire area requested through the use of this centralized system, which can serve the entire geographic region at issue.