Kansas City’s Wastewater Treatment Process

1. DOWN THE DRAIN
Every household and business produces liquid and solid wastes. When these wastes are flushed, they go through miles of sewer pipes.

2. PRETREATMENT
Wastewater, and stormwater from combined sewer areas, flow in and through the rock box where small and large rocks are removed. The water flows through bar screens and the trash is removed. The water then flows to the wet well where it is pumped up to the grit basins and the fine sand is removed.

3. PRIMARY TREATMENT
The water flows to primary clarifiers. Here the water is contained in large tanks and 65 percent of the solids drop out of the water and are collected.

4. SECONDARY TREATMENT
Water overflows the primary clarifiers and then is pumped on top of the biotowers, where the water is filtered. Nitrogen, biological oxygen demands (BODs) and ammonia are removed during this process. The water goes to the final clarifiers where suspended solids are removed. The water overflows the final clarifiers and then the final treatment process begins.

5. DISINFECTION
Finally, the water is disinfected. Bleach is added to the water as it leaves the final clarifiers. Water and bleach are held in contact for 30-50 minutes. Then bisulfite is added to remove any chlorine from the water. Final sampling of water is taken.

6. MISSOURI RIVER
Water is then released back into the Missouri River, cleaner than before.