

TREATMENT PROCESSES

PRELIMINARY TREATMENT

BAR SCREENS

PHYSICAL PROCESS

Prior to entering the wastewater treatment process, all wastewater moves through two bar screens (6' x 8') with bars 3/8" wide. The material that accumulates on the screens is automatically raked and deposited in a dumpster via conveyor. The rakes are normally operated automatically by a timer every 10-15 minutes; if flow conditions require, the rakes may be operated continuously. The bar screens remove large solids consisting of bricks, concrete, wood, rags, and fecal matter. Removing the large objects protect downstream processes (pumps, pipes, and orifices). Screenings are disposed in the Knox County Landfill. Approximately 1/2 cubic yard of screenings are removed each day.

EXCESS FLOW FACILITIES

STORM WATER LAGOONS

The capacity of the Galesburg Sanitary District Wastewater Treatment is 28 MGD. Parallel to the bar screens there is a wet well for collection of excess flows during storms/rain/snow melt. The wet well has three 60 Hp submersible pumps. Each submersible is capable of pumping over 4,000 GPM. The excess flow is pumped into a three million gallon storage lagoon, then into a six million gallon storage lagoon. If more than nine million gallons are pumped, the excess flow is chlorinated (disinfected) and discharged to Cedar Creek. Once the storm ends and influent flow is reduced, the lagoons are drained back into the interceptor ahead of the bar screens.