

## City of Findlay, Ohio

### Process Description

The City of Findlay Water Pollution Control Center receives flow from three major trunk lines (48", 42", and 36") which enter the influent pumping station.

The flow is then pumped to a screen building, where it combines with the flow from the Bright Road Pumping Station before passing through a mechanical bar screen. The bar screen is a mechanical filter used to remove objects such as rags, wipes, plastics and other solids from the wastewater.

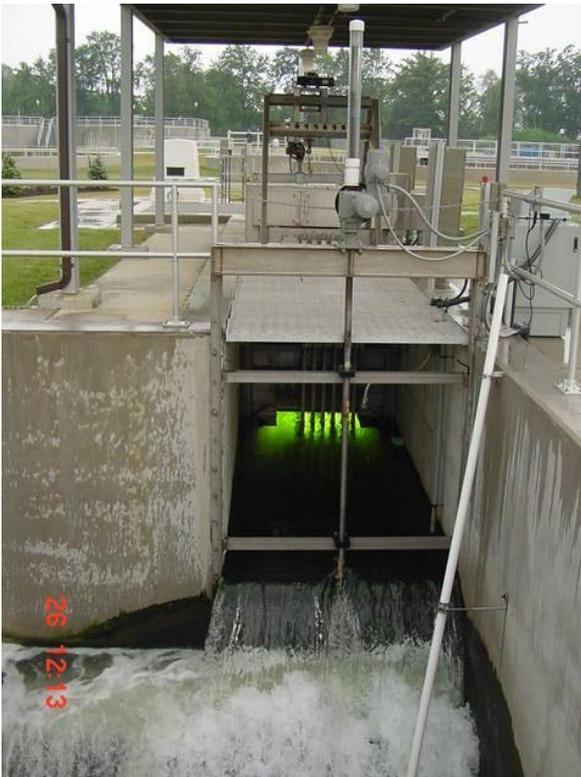


The screened wastewater flows to a splitter box and is divided into 4 oxidation ditches. Ferrous chloride is added in this splitter box to assist in phosphorous removal. The oxidation ditches act as aeration basins where an environment is created to promote growth of micro-organisms which feed upon organic wastewater. Two vertical aerators in each oxidation ditch agitate the wastewater to provide oxygen for the micro-organisms. The wastewater flows to another splitter box and is divided between five final clarifiers.



In the clarifiers, biological growth is settled from the wastewater and a portion is returned to the oxidation ditches to maintain the process. After clarification, the wastewater is piped into the disinfection chamber.

Ultraviolet light is used for disinfection before the effluent is discharged into the Blanchard River.





Wasted biosolids from the activated sludge process are retained in the sludge holding tanks for further compaction. The thickened sludge, 1% solids, is then applied to the belt presses for dewatering prior to final disposal. The belt presses remove an average of 8-9 dry tons of solids per day from the waste biosolids.

The treatment process is entirely computer monitored. This PC based computer provides the operators with current information such as flow rates, valve positioning, pump operating status and pumping station data. Using this data, the operators can adjust the facility's processes to effectively treat the varying wastewater flow.



The Bright Road Pumping Station has the capacity to pump 15 MGD to the Water Pollution Control Center through two 24" force mains. This pumping station services the eastern and southern sections of the City. The pumping station is equipped with a carbon absorption unit to eliminate any odors produced by this station.

