North City Water Reclamation Plant Treatment Process

BAR SCREEN
The wastewater is first sent through a screen that collects and removes large debris.

PRIMARY CLARIFIER
In primary treatment, heavy particles such as dirt sink to the bottom of large tanks and are removed.

GRIT CHAMBER
In the grit chamber heavy debris, such as sand, settles to the bottom of the tank where it is removed.

SLUDGE

OXYGEN

AERATION TANKS
In the aeration tanks, wastewater is mixed with oxygen to create an environment for bacteria to decompose organic pollutants.

SLUDGE

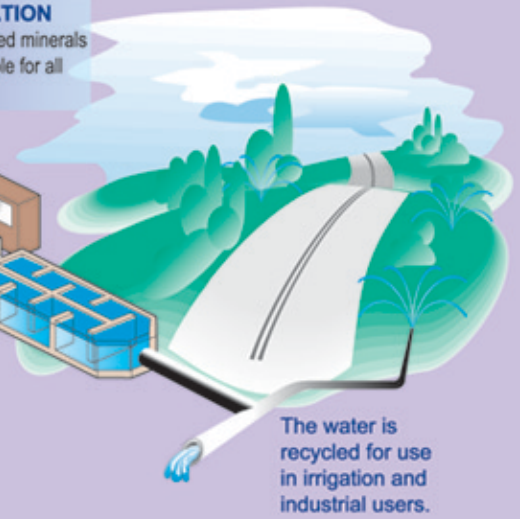
TO METRO BIOSOLIDS CENTER

SECONDARY CLARIFIER
In the secondary clarifier, organic solids settle to the bottom of the tank and are separated from the treated wastewater. The organic solids consist primarily of bacteria. Most of the bacteria are pumped back to the aeration tank to continue the treatment process.

TERTIARY FILTERS
Water trickles through anthracite coal filters to remove remaining wastes.

DEMINERALIZATION
Reduction of dissolved minerals to make water suitable for all reclamation uses.

CHLORINE CONTACT BASIN
At this stage, filtered water is disinfected with chlorine to kill any remaining bacteria.



The water is recycled for use in irrigation and industrial users.