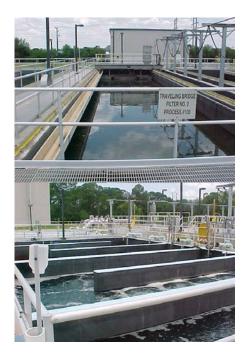
#### PROCESS 100

# FILTERS AND CHLORINE CONTACT CHAMBERS



The clear effluent from the clarifiers flows through the sand filters to remove fine particles and then is disinfected with chlorine.

### PROCESS 120 AND 130

# SLUDGE DEWATERING AND HOLDING TANKS





Excess solids from the clarifiers are pumped to the aerated sludge holding tanks then on to the sludge dewatering facility where a polymer agent is utilized that helps bind the solids together, enhancing water removal. Two belt filter presses compress the liquid waste sludge into a cake-like form. The dewatered sludge is then transported to the Charlotte County Bio-Recycling Center where it is utilized in their compost facility

#### PROCESS 140

#### LABORATORY



The laboratory is utilized for process control tests. All compliance testing is performed by an independent outside laboratory.

# **City of Venice**



## **EASTSIDE**

### WATER RECLAMATION FACILITY



## **FACILITY TOUR GUIDE**

EASTSIDE WATER RECLAMATION FACILITY

3510 LAUREL RD. E.

NORTH VENICE, FL 34275-3269

(941) 486-2788

The **Eastside WRF** is made up of several processes that correspond to the varying stages of treatment.

#### PROCESS 10

#### PRELIMINARY TREATMENT



The raw wastewater is pumped to the plant through the City's collection system. The preliminary treatment consists of screening to remove large solids and grit.

#### PROCESS 30

### FIRST ANOXIC BASINS



The flow continues to the first anoxic basins. This treatment step provides conditions ideal for the growth of bacteria necessary to remove nitrogen compounds from the wastewater, as required by the facility's Permit.

#### PROCESS 40

#### **AERATION BASINS**



The heart of the treatment process is the aeration basin. The wastewater is mixed and aerated, providing an environment that is ideal for bacteria utilized for reducing the strength of the wastewater which is measured as biochemical oxygen demand (BOD).

#### PROCESS 60

#### SECOND ANOXIC BASINS



The mixed liquor from the aeration basin then flows to the second anoxic basin for additional removal of nitrogen compounds.

#### PROCESS 70

#### **RE-AERATION BASIN**



After the second anoxic stage, the mixed liquor is re-aerated to increase dissolved oxygen prior to final settling in the clarifiers.

#### PROCESS 80

#### **CLARIFIERS**



The solids in the mixed liquor settle to the bottom of the clarifier, where they are pumped back to the first anoxic basin or to the sludge holding tanks prior to dewatering and removal from the facility. The clear water then flows to the filters.