

# **PORTAGE COUNTY EXTENDED AERATION WORKSHOP**

**JULY 11, 2017 - 8:00 AM—5:00 PM**

**MAPLEWOOD CAREER CENTER**

**7075 STATE ROUTE 88**

**RAVENNA, OH 44266**

**7:30 to 8:00**      Registration

**8:00 - 9:30**      Components Identification - **1.5 Contact Hours - Rick Smith**

Identify various components of the extended aeration system and review how they work, including pretreatment devices, aeration chamber, settling chamber, and tertiary treatment. Additional components discussed will include, sludge holding, equalization chambers and chlorine and ultraviolet disinfection. There will be a lecture on these components as to how they function in the treatment of wastewater and the required operation and maintenance of the components to ensure they continue to operate properly.

**9:30 - 9:45**      Break

**9:45 – 11:15**      Conversion and Separation of Wastewater- **1.5 Contact Hours - Rick Smith**

Conversion and separation of organic material and solids in wastewater

**11:15-12:00**      Phosphorus Reduction - **0.75 Contact Hours - Bob Hockstock**

Steps and procedures to reduce phosphorus within the existing wastewater treatment train.

**12:00-12:30**      Lunch

**12:30 –1:45**      Air Systems Analysis- **1.25 Contact Hours – Rick Smith**

Discuss the care and maintenance of the blower and motor units. Cleaning and checking the air supply system including, air filters, belts, valves, downpipes, air lift pumps, and types of diffusers.

**1:45 - 3:45**      On-Site Training - **2.0 Contact Hours – Rick Smith**

There will be on-site training at a local wastewater treatment system. The visit will demonstrate concepts covered in lecture and will allow for instruction on testing, monitoring and process control techniques needed to operate small wastewater treatment systems. This will allow participants to see different components associated with small wastewater treatment systems. Hands on demonstrations of testing equipment will include participant interaction.

**4:00-4:30**      Polymers for Sludge Reduction & Demonstration- **0.5 Contact Hours -Bob Hockstock**

The use of polymer to manage the sludge volume in wastewater treatment system. What type of polymer should be used. Demo on the use of polymer, the correct amounts for the volume and different types of polymer will be shown.



**Workshop hosted by Portage County Health District**

**Portage County Health District \* 705 Oakwood Street \* 2nd Fl \* Ravenna \* Ohio \* 44266 \* 330-296-9919**