

## **CEU Evaluation Request**

(7 hours – Wastewater O&M)

Class: **Vogelsang Rotary Lobe Pump Maintenance & Troubleshooting**

Relevancy: Wastewater

Date: July 17, 2024

Location: Canby, OR

Instructor: Rich Owens

Description: This is a one-day course that will provide specific troubleshooting and repair for equipment in the wastewater treatment system. Specific training will be done partially via classroom setting, and then more practical in a shop environment.

### Day 1

- 8:00-8:15 **Introduction to Owens Pump & Equipment and Staff**
- Municipalities Introduction.
  - OPE Staff Introduction.
- 8:15-8:45 **How Positive Displacement Pumps Work**
- Vogelsang History & Background
  - Operating principles and dynamics of positive displacement pumps.
  - Everyday use of positive displacement pumps for wastewater sludges.
- 8:45-9:15 **Standard Operating Procedures**
- Initial startup and shutdown of the equipment
  - Routine monitoring of the equipment
  - Offline storage and Safety Precautions.
  - Pump Identification
- 9:15-10:00 **Preventative Maintenance & Troubleshooting**
- Inspection procedure & PM intervals of each component
  - Lubrication Schedules & Checks
  - Spare Parts and Special Tools Required for Maintenance
  - Removal, repair, disassembly and re-assembly of equipment.
  - Torque, calibration and alignment.
  - Repair testing.
  - Equipment troubleshooting via matrix and local support available.
- 10:00-10:15 **Break**
- 10:15-12:00 **Live Training – Dismantling the pump for Repair**
- Removal of the lobes
  - Removal of the wear plates
  - Removal of the housing segments
  - Removal of the mechanical seals

Day 1 (Continued)

12:00-1:00     **Lunch Break (Lunch Provided)**

1:00-3:30     **Live Training – Dismantling the pump for Repair**

- Removal of the lobes
- Removal of the wear plates
- Removal of the housing segments
- Removal of the mechanical seals

3:30-4:45     **Summary & Final Questions**

3:15-4:30

(0.125) Lab Procedures and Compliance

- Proper sampling procedures. DMR recording and reporting.
- Discuss the requisition of supplies, materials and equipment.
- Discuss pertinent federal, state and local laws, codes and regulations.