

## NWEA Training Topics

- Preventative maintenance/risk assessments
  - All types of equipment including pumps, compressors, etc.
- Process optimization
  - Understanding/calculating F/M, MCRT, Sludge age, SVI, etc.
  - Trending data and graphs
  - Implement data into process decisions
- Microbiology
  - Microscope/slide preparation
  - What organisms to look for and adjustments needed to maintain healthy floc
- Bioreactors
- Sand Filtration/Tertiary treatment
  - Different types of filtration
  - Maintenance
- Disinfection Practices and Chlorine Safety
  - Chlorination/Dechlorination
  - Processes (Cl gas, Sodium Hypochlorite, Ozone, etc.)
- Chemical addition
  - Chemical types: gas, liquid, solid
  - Location of chemical addition and benefit
  - Safety and use
- H<sub>2</sub>S awareness
  - Safety (confined space)
  - Corrosion in equipment (valves, pipes, etc.)
- Odor control
- Industrial Waste Treatment
  - How to monitor and divert toxic chemicals/organic overloading.
  - Effects on systems and solutions
- Solids Handling
  - Types of dewatering systems
- Clarification troubleshooting
  - Difference in sludge rising, bulking and pin floc
  - Solutions
- Secondary treatment
  - Understanding different modes and processes of secondary treatment
  - Activated Sludge, RBCs, Trickling Filters, Stabilization Ponds, Bioreactors
- Administration training on wastewater facility operations
  - especially as it pertains to the certification exams

- Process control math
  - activated sludge and other processes
- Computer classes
  - on word and excel
- Pump classes
  - breaking down the basics and maybe an advanced one for some of our more experienced mechanics
- BNR and trickling filters
  - nitrification and denitrification biochemistry
- Mechanical training on various tools and their uses
  - beginner level
- Hydraulic classes
  - pressure relationships and conversions, i.e. psi to ft.H<sub>2</sub>O
- Pump curve basics
  - for mechanical applications
- Electrical awareness
  - E-hazard apparently has a good series on this
- Sealing leaks the right way... when to use thread tape, o-rings, washers...etc.
- Digestion basics