



# Treating

Hubbard-Hall

With 525 consults per year, our experts are trusted tank side. To stay within discharge limits, you must know what's in your wastewater and how it got there. Our experts can help you optimize your treatment plan, even if it means making changes upstream.

## 5 ways to remove heavy metals in your wastewater

Have you struggled with removing metals from your wastewater stream? Hubbard-Hall will look at the top five ways to remove chrome, nickel, copper, zinc, and cadmium from metal finishing wastewater. We will also go over hydroxide versus sulfide as well as metal precipitants and how to use them. Learn:

- Hydroxide versus sulfide precipitation.
- Metal precipitants: how and when to use them.
- Flocculants: the differences in them, their makeup, and their use.
- Mechanical treatment, such as membrane filtration, electrocoagulation, and ion exchange.

## Phosphates: How they impact your discharge

To meet EPA regulations, a facility needs to understand how to remove phosphorus from its water. This session will cover two processes – chemical and biological removal. The presentation looks at what the future holds and further discussion around additional work that is being done - such as the Hypoxia Task Force, industry research for better practices, and nutrition management plans for the recovery of impaired water. Learn:

- About the element phosphorus and its uses.
- How it can ultimately lead to the eutrophication of our water supply and how to alleviate this issue.
- How to remove phosphorus from wastewater—chemical and biological.
- What the future of wastewater looks like.

## 5 ways to future proof your wastewater system

Whether you are scaling up production or just want to ensure that your wastewater system is running smoothly for the future, planning is crucial. Let's look at changes and precautions that a plant can do to ensure that its wastewater system is up to par with the production demands. Learn:

- If production increases, can your wastewater system keep up with the increased flow?
- How do you remove the metal contaminants from the wastewater effectively?
- Has phosphorus showed up on your discharge permit; are there concerns about how to remove it effectively?
- Let's discuss the top ways to remove phosphorus from your wastewater system.

