

# Mold, Yeast, and Microbes, Oh My! 2019



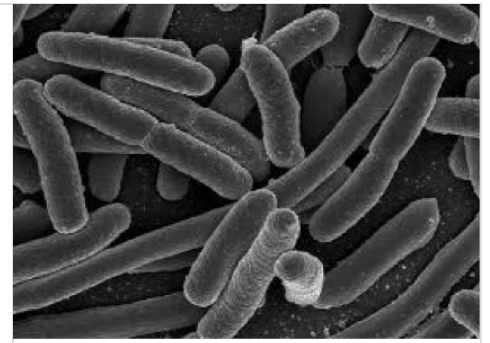
## Microbial Issues

As we say farewell to winter and welcome Spring, it is a good time to start thinking about the possibility of microbial growth in tanks and the proper responses we can have when an issue arises. The temperature fluctuations between warm and cold help to introduce moisture through condensation and breed microbial growth, commonly referred to as bugs or algae.

Microbial growth depends on moisture to provide a place in fuel tanks where it can activate and thrive. Although these issues can cause operational issues when they occur, if they are handled properly, they can also be a great opportunity to solidify customer relations and show them how you can go the extra mile.

## What is Microbial Growth?

The microbes that ultimately cause issues in fuel are present in all fuels. They have been living since prehistoric times and depend on water as a breeding ground to start feeding and creating waste. Almost always, it is the waste that the microbes create from feeding on fuel that causes operational issues for us or our customers. Some of these issues include the following: filter plugging, tank corrosion, or general operational difficulty.



## Tell Tale Signs

The first sign that we see when microbial growth is occurring is plugged filters in equipment and storage tanks. The filters can show a slimy goo that is causing the plugging. Contaminated fuel can sometimes smell, other times it can look completely "normal". There are many different types of microbial organisms and as a result, there is not a "golden rule" of what happens when a problem has occurred. When microbial growth occurs, it can be very frustrating to the end user because the equipment they are depending on might not function as needed.



## Proper Response When Contacted

It is very important to take samples of fuel and failed filters when microbial issues are suspected in order to properly diagnose and eliminate the issues. At times, what appears to be a microbial issue can be something completely different, so the proper sampling of fuels and equipment can be paramount to finding the proper solution. If you have an issue, please try to collect the following for analysis:

- Clogged fuel filters, and fuel contained within them
- Fuel from the affected equipment
- Fuel from storage tanks that equipment was filled from (bottom samples if possible)
- Try to collect the filter in plastic bags that will prevent leakage and contamination from outside microbial sources. Plastic food bags are usually a good choice.

## Solutions

Microbial analysis takes up to 72 hours after the sample has been received to get a positive or negative result. Often it is most practical to treat tanks with biocide to kill any possible contamination before results are finalized, and then await confirmation. It is important to also let users know that they can expect to see more clogged filters after treatment.

Treatment will kill the microbes, but will not remove bio mass material. ET products has several extremely effective biocide options that can help solve any possible issue. Please contact your ET Products representative if we can help!