

Microbiology Incubation Units, 150-4200-001 Comments

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I am looking at this publication from the perspective of an accredited wastewater lab, basic non-potable water category certification, which does not accept any samples from other wastewater treatment plants.

Most WWTPs fall into this category, and as in our case, we use a one (1) cubic foot dry air incubator to perform all quality control for Fecal Coliform analysis. The actual Fecal Coliform analysis is performed in a circulating water bath. The quality control is run at 35 degrees Celsius, +/- 0.5 degrees, using the dry air incubator. We perform quality control once a year due to the fact that we order a year's worth of supplies that have the same lot number. Each portion of the quality control is performed one step at a time, so there would only be two TSB tests being performed at once.

The proposed Temperature Distribution Study that would be required for dry air incubators contains a couple of questions and issues as presented. The items would be:

1. What type of thermometer would be necessary? A wireless thermometer is the only type of thermometer that would allow the door on the incubator to remain correctly closed. Then this, in turn, would require the purchase of a wireless traceable thermometer to prove the accuracy of the working thermometers. All this adds considerable costs to all small wastewater facilities. The use of a thermometer in solution would not work because the door on the incubator would have to be opened every half hour to record the temperature. This does not represent how an incubator is designed to operate.
2. Who has the staffing to perform this test? We do not have the luxury of being able to dedicate an employee for an 8 hour day to log temperatures every half hour, and to perform this test every season change to prove ambient temperature fluctuations in the lab do not affect the incubator. You can argue that you can have this done automatically with a data logger, but once again, the cost factor comes into play.

If this proposed regulation is passed as presented, I see most small WWTPs sending their Fecal Coliform Analysis to third party labs due to the cost, time, and additional paperwork that would be required. In my opinion, the small accredited labs located at wastewater treatment plant are not the problem; the commercial labs are. I have been in the wastewater industry for 33 plus years, and have watched the laboratory rules/laws change many times. The 252 regulations were put in place, and we were told that these regulations would not add extra work or create additional cost. However, in reality it did, and this proposed policy will keep adding costs and create extra work.