

Keeping People Safe Since 1992

Air Sampling by Settle/Sedimentation plate method

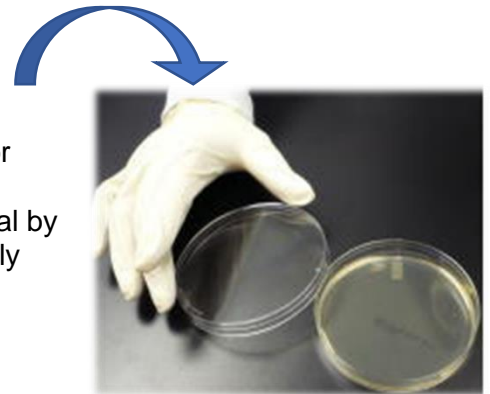
Viable microorganisms can be found in the atmosphere almost anywhere. Therefore, it is essential to monitor the air for microbial and fungal growth. An excessive amount of suspended bacterial and fungal organisms will eventually settle on safe food that is not properly protected or on surfaces that will come in contact with food.

It is highly recommended to monitor the level of contamination that has been released in the atmosphere post construction or movement of equipment that that have been stationary for a long period of time and has collected dust.

This method gives quantitative analysis of airborne microorganisms and does not measure the volume of air sampled.

Air Sampling Procedure

- Wash and sanitize hands before proceeding with any sampling.
- Examine plates for contamination or liquification from condensation.
 - Do not use liquified plates
- Allow refrigerated agar plates to come to room temperature before using.
- Using permanent marker, label the plates with locations and date of sampling or use a pre-printed label.
- Carry plates in a sterile container to area to be tested.
- Sanitize surface before placing petri dishes.
- Aseptically open plates and place covers on the sanitized surface. Do not touch the agar.
- Allow air to settle on plates for 15 minutes using a timer or follow your internal protocol.
- Close plates aseptically without touching the agar and seal by taping lid or parafilm to avoid separating lid, and potentially contaminating it.
- Re-sanitize surfaces where petri dishes were placed.
- Refrigerate after sampling until ready to ship to the lab.
- **Do not freeze agar plates.**



Sample submission/shipping to the lab

- Ensure that all plates have been labeled with location description or any identifier unique to your operation.
- Fill out an AFL microbiology sample submission form with the corresponding sample description.
- Select the test to be performed (Aerobic plate count (APC) , Yeast & Mold and/or coliform)
- Wrap plates in a bubble wrap or a clean protective wrapping to avoid direct contact with ice pack(s).

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- Place an over-night frozen ice pack(s) in an insulated box and place the wrapped plates in the box.
 - This ensures that the sample stays cool enough to protect viable cells that may be present.
 - Too many ice packs will create a cold environment and cause condensation to form on lid and edges of plates.
 - 1 large or 3 small ice packs.
 - Condensate can drip back onto agar and cause liquification and render plates untestable.
- Ship agar plates to lab with accompanying submission form. This can be placed in a Ziploc bag and placed on top of wrapped plates and ship.
- **All plates should be shipped overnight to the lab for bacterial and fungal testing**

Note

- *If shipping samples on Friday, select “Saturday’s delivery” not “next day.*
- *Next day shipping over the weekend will be delivered on Monday.*
- *Acceptable holding/testing window would have expired by the time of delivery, and plates will be untestable.*

When do I get my results (TAT)?

- Testing starts the same day plates are received to the lab.
- Results reporting depends on the test requested.
- Expected completion
 - APC - 48 hours
 - Coliform – Next day
 - Yeast & Mold – 5days

Additional supplies

- Do you need more supplies?
 - Go to afltexas.com
 - Click on client resources and locate supplies request form
 - Fill out a supply request form, and email to supplies@afltexas.com
- Do you want to take the stress/hassle out of ordering supplies?
 - Contact the lab to set up a recurring order and supplies will be delivered on time to meet your testing requirement.