3M™ Petrifilm™ Environmental Listeria Plates Allows Cheese Manufacturer to Expand Monitoring Program

A Customer Testimonial
Sartori Foods in Plymouth, Wisconsin has more than 66 years of experience providing aged specialty cheeses, cheese flavor systems and custom solutions for foodservice and industrial customers. In this interview, Tom Louko, Quality Assurance Manager of the corporate safety laboratory, discusses the benefits of monitoring for Listeria using 3M™ Petrifilm™ Environmental Listeria (EL) Plates.

Please describe your environmental monitoring program.
We want to be aware of any microbial hazards so we can address them efficiently. Therefore, we use an aggressive monitoring program. It’s designed to detect Listeria as well as other indicator organisms, such as E. coli and Staphylococcus.

We use a zone approach in our monitoring program. The first zone is closest to the food manufacturing equipment. The second is in the hallways through which ingredients are brought to the manufacturing line. Our third zone, which is farthest away, includes our warehouse areas and locations in which people walk or trucks arrive. High traffic areas are monitored weekly. We also vary our testing patterns by adding different, miscellaneous sample locations every week.

We have extensive experience testing in-house Listeria using standard methods, as well as sending samples to a commercial laboratory for evaluation. When we wanted a new in-house method that would provide faster turn around and was affordable, we chose Petrifilm EL Plates. The fact that it is an easier test due to the elimination of an enrichment step was also a plus.

What were the top three reasons you selected Petrifilm EL Plates?
First, we wanted an efficient, cost effective means for monitoring pathogens such as Listeria. Petrifilm EL Plates are very cost effective compared to using standard culture methods in-house. Second, we were familiar with 3M™ Petrifilm™ Plate products since we use 3M™ Petrifilm™ E. coli/Coliform Count Plates and 3M™ Petrifilm™ Aerobic Count Plates. The protocols and interpretation methods are similar so our technicians and microbiologists felt comfortable making the transition to Petrifilm EL Plates. That significantly reduced our training time. Third, we routinely process large volumes of samples so we appreciated the relatively small space that Petrifilm Plates occupy versus traditional petri dishes.

What benefits have you found using Petrifilm EL Plates?
Petrifilm EL Plates do not require an enrichment step. Therefore, we’re only working with small samples and don’t have to contend with large amounts of potential pathogens associated with enrichment methods. That reduces the possibility of cross contamination within our laboratory and consequently within the manufacturing facility. I think that’s a huge benefit.

How has obtaining results, in 26 to 30 hours, been beneficial?
Petrifilm EL Plates allow us to react faster to potential issues and protect ourselves and our customers. Large quantities of food could be produced during the three to five days we would be waiting for a standard test to indicate whether there were Listeria concerns.

How have quantitative results, instead of typical presence/absence test results, changed your response procedures?
Determining the number of bacterial colonies helps us focus on potential problem areas where counts may be high, instead of areas where there are few, if any, counts. This allows us to manage causes and effects better than presence/absence results would. The quantitative results also let us examine trends in our data.

What other benefits have you received as a result of converting to Petrifilm EL Plates?
The time savings gained by using Petrifilm EL Plate has allowed the lab to be more efficient and increase our testing volume. Other laboratories within the company are now sending their samples to us. Testing their samples in-house with Petrifilm Environmental Listeria Plates is definitely reducing our company’s costs.

In addition, the cost savings enabled us to monitor more sites. In turn, that improves the statistical validity of our monitoring program and our confidence in the results.

I’m convinced that we do indeed have a better understanding of what is going on in the manufacturing environment from a Listeria monitoring standpoint. With all the other food safety and quality issues to worry about on a daily basis, it’s nice to feel confident about our environmental monitoring program.