

Understanding the Changes in Bulk Tank Somatic Cell Count Monitoring

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US Milk Quality Regulation

Around the world, Somatic Cell Count (SCC) and Standard Plate count (SPC) are the two primary indicators that are used to regulate bulk tank milk quality. Standard plate count measures bacterial quality and is influenced by hygiene and milk cooling. Bacterial quality of most US milk is very high. United States regulations for SPC (<100,000 cfu/ml for Grade A dairy farms and <300,000 cfu/ml for Grade B farms) are consistent or exceed standards of comparable countries. Almost all dairy farms easily achieve the US limit for bacterial count. However, the US SCC limit is not consistent with other dairy producing countries. For example, the European Union, New Zealand and Canada all enforce SCC thresholds of < 400,000 cells/ml. In contrast, the official US limit for SCC is 750,000 cells/ml.

The US Pasteurized Milk Ordinance mandates that milk samples from all farms are officially tested at least 4 times in each 6 month period. Under the current system, if 2 of 4 monthly tests exceed the 750,000 cells/ml the producer is notified by the state regulators and if 3 of 5 tests exceed the limit then milk permit is revoked. While there have been several initiatives to lower the US SCC limit, it is unlikely that the regulatory threshold will be changed in the next few years. Thus, the official regulatory limit that is enforced by the Department of Agriculture Trade and Consumer Protection is not changing. However, many processors will begin enforcing a much stricter SCC limit in order to comply with newly enforced requirements for export of dairy products to the European Union.

Export Requirements for Milk products

The value of exported dairy products has risen from \$1 billion in 2002 to \$3.4 in 2010. While only about 4% of cheese is exported, more than half of all skim milk powder, dry whey and lactose are typically sold on export markets. The ability to maintain these important markets is based on complying with import regulations and harmonization of quality standards has been a contentious issue. After about 2 years of discussion and negotiation, the USDA, Agricultural Marketing Service has finalized requirements for processors who export milk to EU countries. The program is called the "European Health Certification Program" and the transition to complying with the program requirements began on January 1, 2012. After March 31, 2012 all shipments of dairy products to the EU must comply with the new rules. Because the export market is so large, it is likely that most processors will need to comply. So, farmers that supply milk to processors who plan to export to the EU may be affected by these changes.

Rules for Maintaining Compliance with the Export Certification program

1. The European Union SCC and SPC requirement will apply to each farm that supplies milk that may reach the export market. The milk supplier and dairy processors will be responsible for maintaining records that demonstrate that all exported milk products were produced on farms that meet the EU standards for SCC and SPC.
2. Testing of bulk tank milk will be necessary to document compliance. The milk suppliers are responsible for providing the compliance certificates to processors. To be compliant, the minimum testing for SCC is once per month and minimum testing for SPC is twice monthly.
3. Violation of the 400,000 cell/ml SCC limit is based on calculation of a rolling 3 month average value. If a farm's rolling 3 month SCC value exceeds the limit, then the AMS dairy program must be notified and measures taken to bring the farm into compliance. However, the farm can continue to ship milk during this period.
4. When a farm's 3 month rolling SCC exceeds the EU requirement for 3 consecutive months, then the milk supplier has 4 options in dealing with that farm:
 - a. Stop picking milk up from that farm
 - b. Segregate the products from that farm so that they are not included in any product lots that will be exported to the EU
 - c. Stop exporting milk to the EU
 - d. Ask for a deviation under special circumstances. In this instance, the milk supplier will pay a fee to AMS and institute corrective actions on the farm.
5. At the request of a farm, milk suppliers can ask for a "seasonal derogation" (deviation). The rules state that seasonal derogations will be granted to farms that can demonstrate that they are in compliance with the EU requirements for SCC for at least 9 months of the year and SCC violations occur only based on seasonal factors.

For More Information about these changes:

<http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRD3636640>

For Information about Solving Milk Quality Problems:

<http://milkquality.wisc.edu> or www.nmconline.org

To view a webinar about maintaining low bulk tank SCC:

http://www.youtube.com/watch?v=mzEIYOr_Zo8&feature=player_embedded