

CDQAP Quality Assurance Update November, 2017 Newsletter

November: fall back...

Deanne Meyer, Ph.D. UCCE Livestock
Waste Management Specialist,
Department of Animal Science, Davis

November marks the annual ritual of changing the clock and waking up to cool mornings... It's also a good time to think about the coming year and preparation for your next Water Board inspection. November and December are the catch-up months to be sure your manure application and crop removal data (Central Valley) are in your record-keeping program for your annual report. Corn and summer crops are done. Your annual report should be half way done!

Some unknown number of dairies will be inspected over the winter by Regional Board staff. Here's a quick list of things you can do to make inspections go smoothly:

- ✓ Review your nutrient budget with your consultant to determine if changes are needed.
- ✓ Keep nutrient application and removal record keeping current.
- ✓ Have signed, current copies for all manure manifests.
- ✓ Divert as much clean rain runoff from lagoons as possible.
- ✓ Evaluate pond storage capacity weekly during the winter (Central Valley dairies).
- ✓ Observe (and document) your production area during and after storm events to be sure no manure escapes in rain water.

Three Things to Know About Mud, Mastitis and Your Money

Dr. Michael Payne, UC Davis, School of Veterinary Medicine and Director, CDQAP

With the start of winter rains invariably comes advice on mud management and mastitis prevention strategies for the wet season. Often focused on dry-lot facilities, such expert advice typically includes warnings about udder health and animal care. Producers may wonder however, what the real impact is. Here are three things to consider...

Rain doesn't inevitably mean increased clinical mastitis – It seems counter-intuitive given our concerns about udder hygiene, but throughout North America and Europe the most commonly observed seasonal trend is an increase in Somatic Cell Counts and mastitis during the summer, typically June through September. California studies have found that somatic cell counts were either weakly or not associated with average monthly temperature and precipitation. With a little reflection, this actually makes sense. At the individual herd-level, any seasonal trends are influenced by many factors including geographic location, local weather, housing, udder hygiene and even the predominant pathogens on the dairy. Management can go a long way to mitigate the adverse effects of weather.

Milking dirty cows absolutely increases mastitis – Numerous studies have observed that the dirtier the cow's udder, the more likely she is to develop mastitis. Using a 4-point scoring system for udder cleanliness, cows with udder hygiene scores of 3 and 4 are one and a half times more likely to have positive milk samples. With an average case of mastitis costing some \$100 to \$200, losses can mount quickly. In order to determine if your facility's udder hygiene is dialed-in or, if rain and mud are robbing you of milk production and quality, the simplest place to start may be to review the last several years of milk quality data looking for a seasonal effect. Your processor milk quality representative or DHIA Herd test results can be good sources of information as a starting point.

Mud decreases DMI and production – The other potential challenge brought about by rain and mud is decreased Dry Matter Intake (DMI). Some studies in beef cattle have demonstrated that for every inch of mud, DMI is reduced by 2.5%, explaining UC observations of the relationship between rainfall and reduced test day milk, particularly for dairies where cows were housed outside. Mud in dairy corrals can depress feed intake as well as reduce feed efficiency, lead to slug-feeding and acidosis and contribute to displaced abomasums and lameness. Limiting muddy conditions is important. Many mud problems can be managed simply by creating adequate slope and drainage and regular manure removal.

CDQAP has a [mud management webpage](#) with specific recommendations to deal with impacted corrals. Similarly, CDQAP's [cost effective mastitis treatment](#) webpage provides highlights and links to many useful mastitis programs and videos.