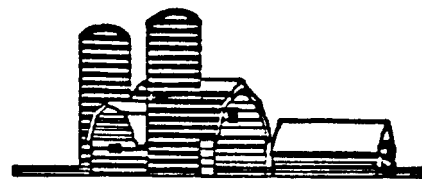


21st Century Dairying



A dairy newsletter for Fresno and Madera Counties

November 2006

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New Dairy Extension Veterinarian

Dr. Ricardo Chebel has recently been hired to fill the position of Dairy Extension Veterinarian located at the VMTRC in Tulare. This position was formerly held by Dr. John Kirk before his retirement last year. Dr. Chebel graduated from Veterinary School in Brazil. After graduating from Veterinary School, Dr. Chebel spent time working at a dairy here in the central valley. He completed a residency at the VMTRC in 2004 and was awarded a Master's in Preventive Veterinary Medicine in 2006. Dr. Chebel's interests are herd health, epidemiology, reproductive management of lactating cows and heifers, and factors that affect reproductive efficiency. Dr. Chebel is expected to be starting his position around mid-December, 2006.

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Dairies and Air Quality – An Update

The following was prepared by a group of UC Cooperative Extension, academic, regulatory and dairy industry leaders to inform the dairy community and public about very important activities related to dairies and air quality. Dairy producers, especially those within the San Joaquin Valley, should pay close attention to upcoming deadlines for ensuring compliance with new regulations.

- California is leading the way in continuing to improve the science surrounding dairy air emissions. Determining emissions from dairies is complex due to variability among dairy operations that can impact emissions, as well as the need to evaluate the direct emissions from cows, feed, manure and various dairy processes.
- Research efforts are focusing on developing and validating research methods, as well as better understanding the emission sources at California dairies, so effective emission reduction approaches can be developed. Interim emission factors are being used while actions to continually improve and focus the science are undertaken.
- Preliminary findings from new, ground-breaking research on emissions from California dairies are reinforcing the need for sound science based regulation. Through cooperation of California regulatory agencies, research institutions and the dairy industry, understanding of these emissions has increased dramatically over the past two years so that informed decisions about best management practices and appropriate control technologies can be made with more confidence.
- The Air Resources Board (ARB), the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the dairy industry's environmental coalition, Dairy CARES, collaborated on and co-funded two critical projects that are now providing important insight for use in determining Best Available Control Technologies (BACT) and Best Available Retrofit Control Technologies (BARCT) requirements. These projects include:
 - A study at UC Davis, led by Dr. Frank Mitloehner, which focused on emissions from cows housed in environmental chambers
 - A study at two operating dairies in the San Joaquin Valley, led by Dr. Chuck Schmidt, in which measurements were made at many locations on and around the dairy facilities.
- These studies have been finalized but it is too early to estimate overall emissions and additional research may be necessary. However, preliminary reports suggest new considerations:

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- Fermented cattle feed (silage) appears to be one of the largest, and perhaps largest, source of dairy-related volatile organic compound (VOC) emissions.
 - Manure in drylot corrals appears to be another important source of VOC emissions on some dairies.
 - Emissions from manure storage ponds, also known as lagoons, and direct emissions from the cows themselves, appear to be far less significant than previously thought.
- ARB and SJVAPCD are taking immediate steps to begin addressing the implications of this important new knowledge. Means of including this new information in the ongoing development of regulations for dairies are being sought. The information will be used to develop cost-effective control measures that will ensure reduced emissions and cleaner air, while minimizing unnecessary economic impact to the state, regional and local economy.
 - Longer-term research is also being undertaken. At the January 2006 hearing of the ARB, the Board approved a project with UC Davis to begin development of a process-based dairy emissions model which is designed to model emissions at individual dairies and to further improve understanding of biological processes that result in dairy emissions. Additional research focusing on appropriate methods for storing and managing feed, best management practices for corrals and other innovative control methods is already underway.
 - The SJVAPCD is taking all appropriate steps to be in full compliance with Senate Bill 700 (Florez). All new and modifying dairies are currently required to implement the most effective control strategies (BACT). A new regulation, Rule 4570 was enacted by SJVAPCD in August 2006. This rule requires that existing dairies within the district that have more than 1000 cows must apply for air quality permits and submit plans for management practices to reduce air emissions by **December 15, 2006**. Many producers already have air permits from the district. Under Rule 4570, additional steps must now be taken to submit Emissions Mitigation plans to be in compliance with the air permit.
 - Workshops will be held in November throughout the San Joaquin Valley for dairy producers to learn more about necessary forms to meet the December 15 deadline. See the following announcement for dates and times.

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Dairy Farm Advisor

Fresno/Madera Counties



For special assistance regarding our programs, please contact us.

GOT HELP?

Workshops to assist San Joaquin Valley dairy producers with new air quality rules

Free sessions offer friendly, “one-stop” help in completing necessary forms to meet December 15 deadline

What deadlines do producers face?

Under a new San Joaquin Valley Unified Air Pollution Control District regulation known as Rule 4570, large dairies (with 1,000 or more milking cows) must apply for air quality permits and submit plans for management practices to reduce air emissions by December 15, 2006.

Does it apply to me?

If you have more than 1,000 milking cows and your dairy is within the district (any of the counties listed to the right), you are subject to Rule 4570.

Do I need to attend this if I’ve already been to a CDQAP air workshop on air quality?

Yes. These workshops cover new requirements, enacted just this summer and with a December 15 deadline.

I already have a permit. Do I need to do anything else?

Yes. Rule 4570 requires that you take additional steps, even if you already have a permit from the district. Emissions Mitigation plans must be submitted to remain in compliance with your permit.

How does this workshop help me?

The workshops are designed to provide one-stop education and assistance related to the rule. Experts in air quality and dairy management will assist with explaining the rule and what is needed to comply, and offer hands-on assistance in completing your forms. Dairy trade association field representatives and other dairy industry staff, CDQAP, University of California Cooperative Extension, NRCS and air district staff will all be on hand to assist.

What is the fee? Must I bring it with me?

The workshops are FREE to dairy producers and their employees. The workshops are open to dairy consultants and other related professionals in the dairy industry. There is a fee schedule for the permit, but dairy producers will be invoiced later. No permit fees will be collected at the workshops.

Do I need to bring any thing else with me?

Yes. See the reverse side of this flyer for more information.

What if I can’t attend the workshop?

If you can’t attend the workshop in your county, you may attend a workshop in a neighboring county. Attendance is highly encouraged as it is anticipated many dairy producers will be asking for assistance as the deadlines approach. The best way to guarantee timely help is to attend the workshops.

WORKSHOP SCHEDULE

Kern County

10 am-12 noon Wednesday, November 8
UC Cooperative Extension office, 1031 S. Mount Vernon Avenue, Bakersfield

Fresno County

10 am-12 noon Thursday, November 9
Veterans Memorial Hall, 3085 W. Mount Whitney Avenue, Riverdale

Stanislaus County (two workshops)

10 am-12 noon and 2 pm-4 pm Tuesday, November 14
Harvest Hall, 3800 Cornucopia Way, Modesto

Tulare County (two workshops)

10 am-12 noon and 2 pm-4 pm Wednesday, November 15
UC Cooperative Extension office, 4437 Laspina Street, Tulare

Madera County

10a m-12 noon Thursday, November 16
Madera County Fairgrounds, Chuckwagon Room, 1000 South 3rd Street, Chowchilla

Kings County (two workshops)

10 am-12 noon and 2 pm-4 pm Tuesday, November 28
UC Cooperative Extension office, 310 Campus Drive, Hanford

Merced County (two workshops)

10 am-12 noon and 2 pm-4 pm Wednesday, November 29
Stevinson Hall, 2962 Lander Avenue, Stevinson

San Joaquin County

10 am-12 noon Thursday, November 30
UC Cooperative Extension office, 420 S. Wilson Way, Stockton

IMPORTANT: Properly completing the forms requires specific knowledge of the dairy facility

- ◆ Attendee must own the dairy cows or have signing authority as the responsible person for the dairy
- ◆ Attendee(s) must have hands-on knowledge of both the dairy and farming operation, including manure management system used, road and corral dust-control measures used, etc.

If you do not already have a permit to operate (PTO) you may also be required to apply for a permit and will need the following additional information:

- ◆ If you operate a **backup generator**, boiler, or silo you may need to provide information such as size, rating, fuel type used, make, model, etc.
- ◆ A list of all **crops** you grow and how much **acreage** devoted to each
- ◆ How much solid manure is applied to crops (tons per year)
- ◆ If manure is hauled off site, location(s) where it is hauled
- ◆ If manure is composted, method used (windrow, etc.)
- ◆ Size of each retention pond/lagoon (depth, width, length)
- ◆ Total number of separation/settling basins
- ◆ Total number of animals on the dairy and a breakdown by categories: mature cows (dry and milking), calves under 3 months, heifers 4 to 6 months, heifers 7 to 14 months, heifers 15 to 24 months
- ◆ Fuel tanks (**gasoline only**): size in gallons, amount in gallons dispensed monthly and annually, whether tank is above or below ground
- ◆ Internal combustion engines: make, model, horsepower, fuel and annual hours used for all stationary internal combustion engines over 50 horsepower
- ◆ Irrigation pumps: depth (to water) for each pump. This information not needed for electric pumps.

**WORKING CLOSELY WITH REGULATORY AGENCIES AND THE DAIRY INDUSTRY,
THE UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION DEVELOPED THE
CURRICULUM FOR THESE WORKSHOPS.**

The California Dairy Quality Assurance Program (CDQAP) is a partnership of government, educators and the dairy industry, working together toward a single, shared goal: helping California dairy producers understand and comply with federal, state and local laws and regulations. CDQAP partners include:

*California Environmental Protection Agency - California Department of Food and Agriculture
The California Resources Agency - U.S. Environmental Protection Agency
State Water Resources Control Board - California Department of Fish and Game
U.S. Department of Agriculture - University of California Cooperative Extension
California Farm Bureau Federation - Western United Dairymen - Milk Producers Council*

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