

## **Dairy farms reaching a sustainable state**

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Dairy farms have been dramatically changed in the last decades. High efficiency of milk production in terms of milk quantity and quality has been achieved. This is currently an evolution process which is not finished yet, new challenges related to the environmental stewardship needs to be resolved. The Dean of the College of Agriculture and Environmental Sciences at UC Davis recently stated, "...humans are dependent upon mining non-renewable resources to maintain our culture until we reach a sustainable state". Sustainable agriculture integrates three main goals--environmental health, economic profitability, and social and economic equity. In the next few years, dairy farms are going to reach the sustainable state. But, a lot of work needs to be done in the Central Valley to reach this goal.

Nowadays, dairy farmers are working on air quality. Recently, dairies in the San Joaquin Valley submitted documents to the San Joaquin Valley Air Pollution Control District as required by new laws. Also, dairy producers are already adopted special Conservation Management Practices to reduce dust. Many different management practices are going to be controlled to avoid air emissions. The District reports indicate that dairies contribute 10% of the total amount of the air precursors in the Valley. However, some precursors related to air quality have never been measured on dairy farms. Clearly, more research is needed to evaluate the contribution of the different factors affecting air quality. A survey carried out in Merced County, indicates that dairy producers are doing an excellent job by maintaining facilities, flushing freestalls and scraping drylot pens, and doing more than what the ordinances and regulations recommend to control dust, odors and air emissions.

According to the Central Valley Region Water Quality Control Board, any "person," may include individuals, corporations, cities, and special districts, who release wastes that might affect the quality of the waters of the state is a "discharger" and must apply for a Waiver or a Permit. Moreover, to control water accumulation and water runoff, a Federal law entitled the National Pollution Discharge Elimination System (NPDES) will be applying in December 2006. At the same time, a second Federal law on nutrient balance (Comprehensive Nutrient Management Plan, CNMP) will be applied to totally control manure applications. A strict control of the nutrients coming in and going out will be carried out in each farm, trying to minimize the losses of nutrients to the environment.

Dairy producers in California are very efficient and highly productive. In Merced County, dairy industry is the top agriculture commodity. It is very important for our county economy that dairies can produce the coming changes. This is a slow learning process, highly time and money demanding. Those dairies which succeed in complying county ordinances, state regulation, and Federal laws, will reach a sustainable state. (*Note Merced Sun-Star, Agriculture, California, Monday September 13, 2004*)