

Fluid Fertilizer Conference

Emerging Nutrient Issues

Presented by,

Renee Pinel

Western Plant Health Association

December 10, 2008

Global Warming Initiative

- ***Objective is to reduce agricultures contribution of Green House Gases.***
- ***Areas of cited concern include; manure management, enteric fermentation, fertilizer management, Ag residue burning, energy use, rice cultivation.***
- ***Primary areas of interest for fast-track consideration is fertilizer management, and manure management.***

Global Warming Initiative

- ***ARB estimates agricultural emissions responsible for 6% of total emissions.***
- ***ARB estimates fertilizer usage contributes to about 1/3 of this total.***
- ***Goal was by fall 2008 to provide ARB board with recommendations on "voluntary" guidelines for reduction strategy.***

Global Warming Initiative

➤ ***Potential fertilizer management strategies include:***

- ***Crop Management***
- ***Water Management***
- ***Fertilizer Application Techniques***
- ***Fertilizer Selection***

Global Warming Initiative

Industry Efforts

- ***Since fall of 2007 WPHA has been meeting with ARB staff to determine foundation for their estimates.***
 - ***Because of these meetings, ARB now acknowledges that the data they were basing contributions on was flawed.***
- ***Meeting with university researchers who conducted fertilizer research on fertilizer VOC emissions.***
 - ***Industry is funding \$175,000 in research on N emissions over the next two years.***
 - ***Industry has also agreed to fund a staff position with CDFA solely focused on fertilizers and climate change.***
 - ***WPHA has helped coordinate approximately another \$500,000 in research from ARB & the CA Energy Commission.***
- ***Air Resources Board has tentatively agreed to postpone any discussions on regulations related to fertilizers and this issue until fall 2010.***
- ***A final vote is expected tomorrow in Sacramento.***

Drinking Water Policy

- ***Ag Subgroup is coordinated by the Central Valley Water Board. Of interest to WPHA is potential BMPs for nitrates and phosphates in surface water.***
- ***Water Board is concerned about the following:***
 - ***Contribution to algae blooms***
 - ***Currently no numeric target or water quality objective set except in some TMDLs***
 - ***Need for setting secondary maximum concentration levels for odor.***
- ***Water Board has announced they have hired consultants to develop analytical modeling to establish guidelines and objectives.***
- ***WPHA is a member of the Ag Subgroup that will validate work and recommendations done by consultants.***

Irrigated Lands Regulatory Program

- ***Groundwater concerns (nitrates) have been elevated to the Water Board over the past few years. This has been a focus of EJ groups who want outside funding for water infra-structure efforts.***
- ***State & Regional Water Boards have all indicated they now feel they have jurisdiction (until recently they have restricted their authority to surface water issues) over groundwater issues and will promulgate regulations.***
- ***Irrigated agriculture and dairies have been identified as primary areas of concern.***
- ***WPHA has been named to represent both the fertilizer and pesticide industries on an Advisory Committee reviewing the issue.***
- ***Committee will work with Water Board staff over the next two years to develop long-term "alternatives" program.***

Additional Issues That May Impact Nutrients

- ***OEHHA has convened an Advisory Committee looking at cumulative impacts & environmental justice.***
 - ***OEHHA has identified doing a case study in a rural Central Valley community as a priority study.***
- ***The On-Road Diesel Engine Rule will impact the cost of transporting nutrients. ARB is to vote on inclusion of retailers in an Ag Provision tomorrow.***
- ***WPHA will begin negotiations on the Off-Road Diesel rule for farm tractors and application equipment in January with ARB. This rule will impact availability and cost of nutrient applications.***