

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

**ORDER NO. R5-2007-0035**

**WASTE DISCHARGE REQUIREMENTS GENERAL ORDER  
FOR  
EXISTING MILK COW DAIRIES**

# Life Is Gonna Change Down On the Farm

- A quantum leap
- Paperwork - monitoring, reporting, recording
- Infrastructure
- Formal groundwater rules
- Expect to lose dairies – not cows
- Consolidation

# What Are We Telling Our Members?

- Four years in the making
- Industry worked together
- Tried to propose “better ways”
- Regional Board has responsibilities
- CEQA

# Use Nike Rules

- You don't have to agree with the Order
- You don't have to like the Order
- If you want to be a successful dairy farmer...

**Just do it!**

# Who and What

- All valley dairies of any size existing as of October 17, 2005
- Prohibits any discharge to any water
- Time schedule to comply - with waypoints
- A “Staged” and “Progressive” process
- CDQAP will be the outreach provider
- Professional consultants will be necessary

# Waste Discharge Requirements

- A general WDR (Existing Oct 17, 2005)
- Waste Management Plans
- Nutrient Management Plans
- Monitoring & Reporting of Activities
- Monitoring Well Program
- Pond Construction Requirements

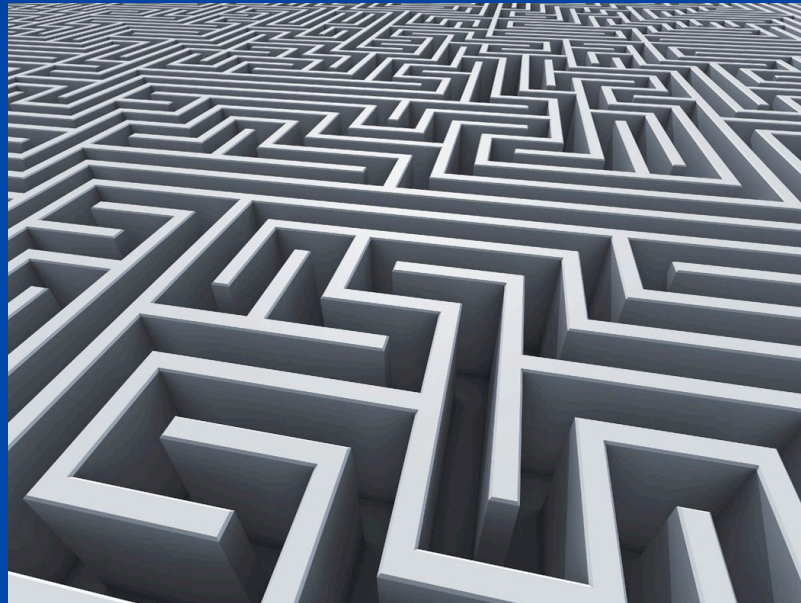
# Who is eligible for the General WDR?

- Discharge manure & manure water only
- Have not increased cow numbers greater than 15% of the number reported in October 2005.
- Have not increased storage capacity or added land “*in order to accommodate an expansion of herd size.*”
- Contact RB for Individual WDR

# How about if I did County CEQA?

- Not covered if more than 15% expansion from October of 2005
- Need to submit CEQA documentation
- New ROWD
- Individual WDR
- WHY?
- To protect the “existing dairy” definition from legal challenge

# What are the basics?



# Reporting requirements

- Material change due 140 days prior to change
- Facility change in ownership/closure
- Unauthorized discharge
- Mid year reporting '07, '08
- Annual reporting

# Annual Report

- Annual Facility Assessment update
- Number & type of animals
- Amount of total manure – calcs for N.P K, salt
- Amount applied field by field
- Total acres and APN #s
- Manure app acres and #s
- Summary of all violations
- Summary of all prod. area stormwater discharges
- Summary of all land applic. area stormwater discharges
- Statement of NMP status & certified planner
- Copies of manure manifests
- Copies of all 3<sup>rd</sup> party written agreements
- Copies of all lab analyses, water and manure
- Results of record-keeping requirements

# Discharge Summaries (Legal or Not)

- Date
- Time
- Volume
- Location
- Source
- Map
  - Discharge locations
  - Sampling locations
- Rationale for location
- Method of measuring flow

# Lab Work

- Manure
- Wastewater
- Irrigation water
- Soil
- Plant tissue
- Tailwater
- Discharges
- Stormwater
- Surface water
- Tile drains
- Groundwater
- \*Any additional tests done voluntarily for own use must be submitted to RB

# Lab analyses

- Tabulated data
  - Date
  - Constituents
  - Concentrations
  - Detection limits
- Chain of custody forms
- Lab QA/QC results
- Approved lab methods
- Certified labs depending on the test required
- Strict protocols and procedures

# Records (\*submitted)

- NMP documentation
- Production area
  - Inspections proof
  - \*Corrective actions
  - \*D, T, V. if overflow
  - Mortalities handling
  - Monitoring & lab work
- Application area
  - \*Expected and actual crop yields
  - \*Crops, acreage, dates of planting and dates of harvest for each field
- \*Dates, location, weight and moisture % of manure applied to each field
- \*Dates, location, and volume w/w to each field
- \*Weather conditions 24 hrs pre and post application
- Inspection documentation
- Dates, locations, test methods – soil, manure, w/w, irrig. water, plant tissue
- Results, plus tailwater and stormwater

# Additional Records – Land App.

- Explanation of basis for application rates
- Calculations of total N, P, K to be applied – all sources (atms.)
- \*Documentation of actual amt. applied and of calculations used
- Method of applic.
- Dates of manure equip inspections
- \*Records of corrective actions
- Monitoring and lab analyses

# Waste Management Plan (WMP)

- Facility description
- Engineering report to demonstrate adequate containment capacity
- Engineering report to demonstrate adequate flood protection
- Report identifying animal area designed and constructed properly
- Operation and maintenance plan
- Documentation no cross-connections
- Certification that information is true

# Nutrient Management Plan (NMP) Dairy Facility Assessment

- Land application area
- Sampling and analysis
- Nutrient budget
- Setbacks, buffers, protection of surface water
- Field risk assessment
- Record keeping
- Nutrient management plan review

# Nutrient Management Plan (NMP) Technical Standards

- Sampling and Analyses
- Crop Requirements
- Available Nutrients
- Nutrient Balance – produced v. used
- Nutrient Budget – applic. rates, timing, methods, w/w mgt, setbacks, buffers, risk
- Plan review – who approved it

# Eating an Elephant – Getting Started

- Install freeboard marker in pond
- Visual inspections of production area
  - Daily, Weekly or Monthly
  - Follow chart on page B-3 – Record it
- Monthly photo of freeboard – File it
- Visual inspection of land application area when irrigating – Record it

# (Getting Started cont'd)

- No vector problem (flies, rodents)
- Keep Order on site
- Have a designated place for reports etc
- Manure Tracking Manifest (copy from attachment D of G.O.) - File them
- Report Non-compliance – Record it
- Mortality management – Record it

# Beginning soon

- October 1: (Start) monitoring any discharges info on page MRP-4
- November 3 (Deadline): Sample all wells and tile drain systems
- December 31 (Deadline): Written agreements for wastewater going to other persons & ECR with PDFA due
- Notify RB if building or rebuilding a pond or if any change - expansion, ownership, or shutdown

# Preliminary Dairy Facility Assessment (PDFA)

- Due Dec 31
- CDQAP workshops
- Initial analysis of Nutrient Balance
- Red, Yellow or Green Light
- Intended to start planning process – make changes, carry on, exit the business
- Producers worried will be used for enforcement

# Some Final Points

- Regulatory costs are externalities to production economics
- Regulatory costs are local – prices (received or paid) are international
- Marketplace fails to reward environmental performance
- Bureaucratic process punishes those who are doing the right thing
- Little credit for industry stewardship efforts

# Three primary factors in compliance

- Address a valid and recognized need with a well-defined purpose and we'll respond
- Reasonable expectations
  - Financial and physical
  - Seasonal and geographic factors
- Partnerships build confidence

# RB Staff Cost Estimate 1000 cow dairy

- Upfront:
  - \$41,700
  - Range \$12,000 to \$56,000
  
- Annual:
  - \$33,300
  - Range \$30,000 to \$36,000

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# More to Come

- Step by step process
- CDQAP will provide outreach
- Lots of details yet to be ironed out
- Forms and software to be created
- Western United Environmental Services
- Green Cow