2018 Dairy Permit Renewal Workshop

ADAM FISCHER
CHIEF, INLAND STORM WATER UNIT
SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD
APRIL 17 AND 19, 2018
Agenda

- Introduction to the Dairy Program Staff
- History and status of the Dairy Permit, Order No. R8-2013-001
- The pollution problem
- Areas that are expected to change
- Areas for potential change
- Break
- Comments
History and Status of the Dairy Permit Order No. R8-2013-0001

- Preceded by individual orders between 1972 and 1994
- General orders: Order No. 94-7, Order No. 99-11, Order No. R8-2007-0001
- Order No. R8-2013-0001 adopted in June 2013
- Due for renewal in June 2018
- If not renewed, administratively extended until renewed
Major features of the Dairy Permit

- Discharges of pollution are prohibited unless the “production area” has been constructed and operated to contain wastewater and runoff from a 24-hour, 25-year storm event (40 CFR 412.31(a)(1)(i)).
- Engineered Waste Management Plan – details the structures and controls a dairy will use to comply
- Relies on salt off-set program for dairy wastewater in Chino Basin (Optimum Basin Management Program)
- Prohibits manure applications to land in Chino Basin
- Allows manure and wastewater applications to land in San Jacinto so long as an off-set program is being developed
- Nutrient Management Plan – details structures and controls to prevent discharges to surface and groundwater from cropland where dairy waste is applied; no cropland – no plan
Considerations for Permit Renewal

- Consistency with federal regulations
- Continuity with current permit
- Consistency with Total Maximum Daily Loads
  - Pathogens in the Middle Santa Ana River
  - Nutrients in Lake Elsinore and Canyon Lake
The Pollution Problem

- Wastestreams
  - Washwater
  - Manure
  - Wasted Feed
- Pollutants
  - Pathogens
  - Nutrients (nitrogen and phosphorous)
  - Salts
General Strategy

- **Wastewater**
  - Retain on site and infiltrate
    - Evaporation does not remove pollutants; pollutants left behind in soil
    - Does not protect groundwater
  - Offset salt loading to groundwater so the water can continue to be used

- **Manure/Feed**
  - Require beneficial use
    - Agricultural/commercial grower fertilizer or soil amendment
    - Consumer fertilizer or soil amendment
  - Most salt content is not beneficial; excess salt in soils at agronomic rates
  - Does not protect groundwater
  - Ultimately salt loading to groundwater will need to be offset
Salt Offset Programs

- **Chino Basin**
  - Well-established in Optimum Basin Management Program
  - Desalters in place
  - Chino Basin Watermaster, SAWPA, dairies, and other stakeholders
  - Offsets salt loading from dairy wastewater NOT manure disposal
  - Offset program has been approved by the Board

- **San Jacinto Basin**
  - Desalters in place
  - Not yet a complete system due to complex groundwater hydrology
  - In meantime, salt loading is ongoing from both wastewater and manure disposal
  - Offset program has NOT been approved by the Board
Expected Changes

- Modify NOI forms to include expressed intent to implement existing site engineered waste management plans and nutrient management plans
- Make certain requirements of 40 CFR 412.37(a) and (b) explicit in permit body
  - Minimum freeboard marker in containment structures
- Add requirements for best management practices for runoff from non-production areas
- Electronic reporting
  - Web-based database project being carried out by staff at the State Water Resources Control Board
  - Needs to be readily understood, fast to use, produces zero data entry errors, with no outside assistance
Expected Changes (cont’d)

- Improve manure manifest system: application site information
  - Written approval from agricultural operator/landowner
  - Parcel numbers
  - Rely on Conditional Waiver of Waste Discharge Requirements for Agricultural Dischargers to provide location information
Possible Changes

- TMDL requirements
  - Eliminate ineffective TMDL requirements
  - Incorporate work plan commitments directly into permit
  - Rely on best management practices for non-production areas
  - Improve enforcement of freeboard indicator marker requirements
    - Add requirements to ensure validity of freeboard marker
    - Placement by a qualified surveyor
    - Certification that placement is accurate
Break

COMMENTS