



Particulate Pollution in the San Joaquin Valley

Translating Science into Policy

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San Joaquin Valley Air Pollution Control District

1992



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

2010+

June 9 and 10, 2010


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1986 – 2010+

San Joaquin Valleywide Air Pollution Study Agency

Study Agency Governing Board: Project approval

Policy Committee: Local stakeholders, local government, state agencies, federal agencies

Research Technical Committees:

- AgTech
- California Regional PM10/PM2.5 Air Quality Study (CRPAQS)
- Central California Ozone Study (CCOS)



Translating Science into Policy Approach

- Involve stakeholders beginning at concept phase
- Design effective research, require valid protocols
- Involve skilled technical & research staff
- Assess results before and after implementation
- Be alert for unexpected synergisms, investigate
- Build conceptual understanding
- Include **BEST** available science in **POLICY** evaluations

An on-line application...
we would LIKE to see





Prior Research Particulate Issues

- **Conceptual model** (particulate sources, formation, fog, aerosol chemistry, species) - assess inventory for key sources
- **Modeling for State Implementation Plans** (regional & receptor reconciled by weight of evidence, protocols submitted for review) - develop effective control program
- **Wood smoke** (potassium & levoglucosan) - determined influence on PM concentrations
- **Inventory improvement** (surveys, tests) - define, measure & quantify sources



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Prior Research Ag Emission Sources

- **Discing/Field Preparation** – CRPAQS/UC Davis, AgTech with EPA & USDA-ARS
- **Harvesting** – CRPAQS/UC Davis, AgTech with EPA & USDA-ARS
- **Ag IC Engine** – CCOS, ARB, AgTech (survey)
- **Animal Feeding Operations (Dairies & Poultry)** – ARB & AgTech (ammonia, ozone & particulate precursors - VOC)



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Current Research

Ag Emission Sources

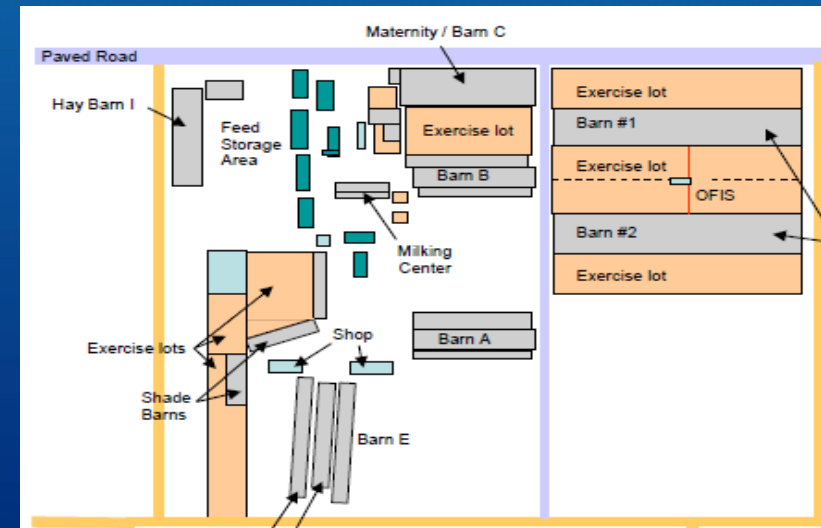
Conservation Management Practice Plans

- Harvest emissions
- Conservation tillage
- Cotton gin particulate study

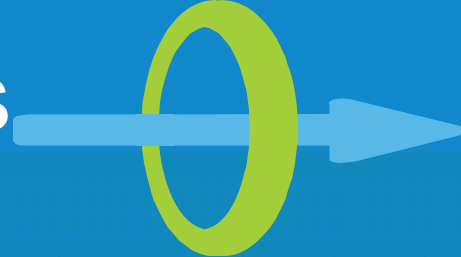


Confined Animal Facilities

- Multiple studies by several researchers
- Participation & tracking of federal study



Planned Research Projects (2010-12)



Projects to Guide Policy and Implementation

CRPAQS	Conceptual model	Health effects monitoring	PM2.5 source testing, speciation
AgTech	CMP evaluations	Dairy PM10	N ₂ O projects
Feasibility Studies	Measures identified in State Implementation Plans		



Thank you for your
attention...

– now your turn...

Questions

