

ENVIRONMENTAL CONSEQUENCES FROM  
LARGE FACILITIES  
A LOCAL HEALTH DEPARTMENT'S RESPONSE

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WHAT KIND OF FACILITIES ?

- Manufacturing
  - Ethanol, Foundry, Scrap/Recycling
- Large Animal Population Operations
  - Dairy, Swine, Beef

Why are these Issues Challenging?

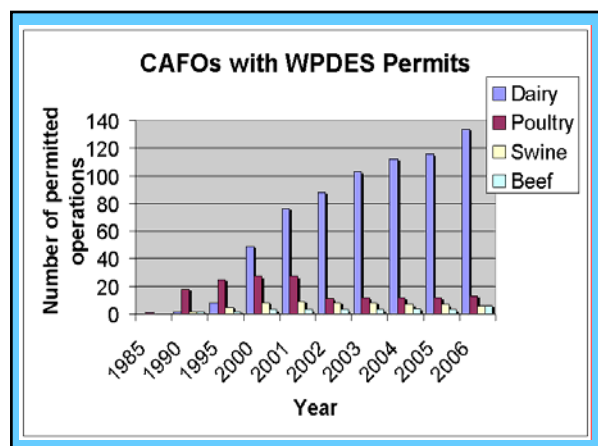
- Technical Expertise
- Large Corporation or Organization
- Cause of Complaint is Transient or Not Measurable
- Facility Permitted by State Agency
- Limited Local Resources

Community Concerns

- Odors
- Ground Water /Well Water
- Health Impacts
- Health Symptoms
- Enjoyment of Property

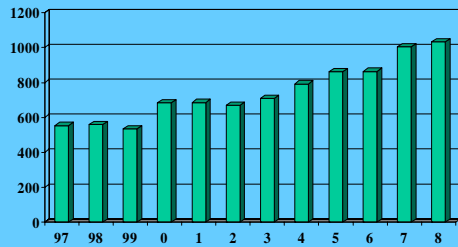
State Agency Role

- State Agency has Authority & Responsibility
- State Authority has Standing Over Local Involvement
- State Agency has Technical Staff
- State Agency Issues Permit



## Demands on Local Health Departments

### Public Facility Permits by Year Rock County, Wisconsin



## Ask Questions

- What is the Concern
- Who is Impacted
- Who is Concerned
- Why are They Concerned
- How did Problem Evolve

## Get Input & Support

- Local Department Administration
- Board of Health
- County Administration

## CAFOs



## Rock County CAFO Concerns

- Groundwater Contamination
- Surface Water Pollution
- Nutrient Run Off
- Odors

## CAFO Regulatory Control State level

- NR 243 Animal Feeding Operation
- ATCP 50 Soil & Resource Mgt Prgm
- NRCS Standards

## Our Role in the CAFO Issue

- Health Ordinance Sec. 13(12)(6)  
Coordination with State Agencies
- WDNR & DATCP have Technical Staff & Authority
- WDNR –Exercising Regulatory Authority
- Assist Citizens Where State Could Not –  
Assessing Individual Well Water Supplies

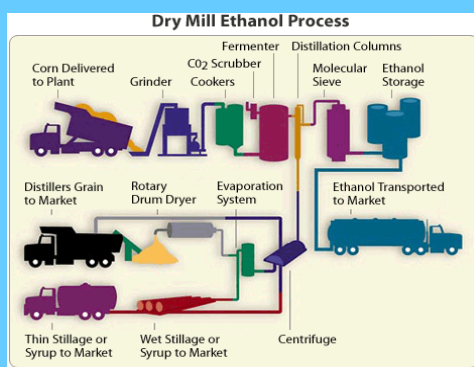
## Our Action Steps in CAFO Issue

- Help Citizens Find Safe Drinking Water
- Provide Well Water Test Kits
- Advise Citizens on Test Results
- Develop/ Maintain Ground Water Data  
Base of Area wells
- Coordinate with WDNR & DATCP
- Attend Town Meetings

## CAFO Plant Update

- Our Department Continues to Advise  
Citizens on Groundwater Concerns
- The Groundwater Data Base is Maintained
- The Citizens in the Area Remain Concerned

## Ethanol Plants



## Complaints

- Head Ache/ Induced Migraines
- Sore Throat
- Burning Eyes
- Bronchitis
- Yeast Smell
- Sour/Spoiled Grain Smell
- Pungent Odor
- White Powder

### Ethanol Production Emissions

- Acetaldehyde
- Acetic Acid
- Acrolein
- Formaldehyde
- Methanol
- Furfural

### WDNR AUTHORITY

- NR 429 Malodorous Emissions & Open Burning
- Odor Prevention & Abatement Plan
- Air Permit
- Expiration of Permit & Review after 18 Months
- Authority to Require Additional Controls

### Ethanol Plant Timeline

- Went Operational April 2007
- Initial Complaints Fall of 2007
- WDNR Investigation began October 2007
- Enforcement Action Initiated June 2008
- Additional Air Pollution Control (RTO) Installed December 2008

### Our Role in Ethanol Issue

- Health Ordinance Sec. 13(12)(6)  
Coordination with State Agencies
- Complaints referred to WDNR
- WDNR has Technical Staff & Authority
- WDNR Implementing Enforcement Action

### Our Action Steps in Ethanol Issue

- Direct Complaints to WDNR & Facility
- Instruct Citizens to Keep Log
- Remain Current with WDNR Enforcement
- Through DHS & DNR - Determine health Impacts

### Ethanol Plant Update

- A Regenerative Thermal Oxidizer (RTO) was Installed
- After Three Months the Complaints Continue
- There may be Releases From Other Areas of the Plant