

Wood County Ad Hoc Committee On Spray Irrigation of Wastes
Outline of Remarks Prepared by Gordon Stevenson
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I. Citizens Have Been Severely Injured by Pathogens in Manure

- A. Human disease-causing organisms
- B. Manure contains 160 known human pathogens
- C. Serious public health crises have already occurred
 - 1. Walkerton, Ontario - 2000
 - a) *campylobacter* contamination of municipal water supply
 - b) 2,300 people with severe GI distress
 - c) 7 deaths
 - 2. Kewaunee County - 2004
 - a) *e coli* contamination of private water supply well
 - b) All family members stricken
 - c) child stricken critically
 - 3. Town of Morrison - 2006
 - a) 50-100 water supply wells contaminated by manure
 - b) GI distress and other illnesses reported
 - 4. Kewaunee County - 2014
 - a) second highest concentration of CAFO's in the state
 - b) 31% of water supply wells county-wide have tested unsafe
 - c) 50% of water supply wells unsafe in the Town of Lincoln
 - (1) bacteria
 - (2) nitrates
 - (3) risks
 - (a) exposure to 160 different pathogens

- (b) exposure to nitrates
 - i) blue baby syndrome
 - ii) associated with certain types of cancer
 - iii) associated with diabetes

II. Manure and Air Quality

- A. Significantly less is known about airborne pathogens in manure than waterborne pathogens in manure
- B. Same contaminants are present in measurable concentrations in airborne manure emanating from spray irrigation systems
- C. Citizens are at risk from manure spray irrigation activities just as they have been from conventional landspreading activities
- D. *No meaningful air quality regulations apply to Wisconsin's livestock agriculture*
 - 1. State government response to aerial manure spraying problem
 - a) Convened Manure Irrigation Workgroup
 - (1) members are well-qualified people representing environment, public health, government and industry
 - (2) anticipate well-documented and objective report(s)
 - (3) possibility of two reports
- E. The two gears of state government: slow and stop
 - 1. The Slow Gear
 - a) The Manure Irrigation Workgroup is a year and a half behind schedule
 - b) Future Timetable: 5-8 more years for state rule-making/program development
 - (1) passing authorizing legislation
 - (2) convening yet another work group to develop an administrative code
 - (3) conducting multiple public hearings, developing responses and negotiating compromises

2. The Stop Gear

- a) The livestock industry will likely object to the findings of the Manure Irrigation Workgroup
- b) Its report could be shelved, just like happened with the Northeast Wisconsin Karst Task Force Report
- c) The livestock industry is determined to prevent passage of any additional environmental regulations, particularly air quality
- d) The current legislature and Governor are equally determined to prevent such occurrences
 - (1) Wisconsin is "Open for Business"
 - (2) Global markets for dairy products are at an all-time high
 - (3) State government encourages and promotes CAFO development
 - (a) "Dairy 30 by 20"
 - (b) Closure of DNR Office of Enforcement
 - (c) DNR staff fully engaged in issuing permits to CAFO's, little time for enforcement
 - i) 5 CAFO's in 1985
 - ii) 250 CAFO's in 2015
 - iii) 20-50 more applications for CAFO's pending

III. Manure Myths

A. Myth: Manure biogas digesters will solve all the problems

- 1. Fact: Manure biogas digesters are designed to produce methane gas, not reduce pathogens
- 2. Fact: biogas digesters do not remove phosphorus or nitrogen, the two chemical water pollutants of concern in manure
- 3. Fact: a WDATCP study found that biogas digester do not effectively remove odors

4. Fact: Although biogas digesters have been shown to reduce the concentration of pathogens in manure, that does not necessarily reduce the human health risks from aerial spraying of aerobically digested manure
- B. Myth: The CAFO rules provides protection of the environment and public health
1. Fact: fishkills have occurred from landspreading activities of CAFO's
 2. Fact: groundwater contaminations have occurred from landspreading activities of CAFO's
 3. Fact: water supply well contaminations have occurred from landspreading activities of CAFO's
 4. Fact: citizens have become infected with pathogens and sickened from landspreading activities of CAFO's
- C. Myth: local units of government cannot regulate livestock operatons
1. Fact: NR 243 and Livestock Siting are silent on the issue of aerial spraying of manure, just as they are silent on road weight limits, lighting, noise, etc.
 2. Fact: At least 14 local units of government have passed or are considering regulating aerial spraying of manure

IV. Emerging legal issues

- A. Concern with lawsuits from the livestock industry
- B. Other legal cases you many not know about
1. Wisconsin Mtual Insurance Company versus Falk
 - a) The Wisconsin Supreme Court Court found a Wisconsin dairy farmer who allegedly caused groundwater contamination by spreading manure on his fields was not covered by his farm liability insurance policy.
 - b) Based on "pollution exclusion" clause, stating that coverage was excluded for damages resulting from the "actual, alleged, or threatened discharge, dispersal, seepage, migration, release, or escape of pollutants into or upon land, water or air."
 - c) The Wisconsin Supreme Court further found that manure is a pollutant

- d) The decision reverses lower court decisions that manure was a fertilizer, not a pollutant.
 - e) The Falks and their agronomist had developed a nutrient management plan to govern their use of manure as fertilizer
 - f) The plan was approved by the county conservation office.
 - g) If the insurance does not pay, who will?
2. Des Moines, Iowa, Public Water Works intends to sue neighboring counties for allowing agriculturally polluted runoff to contaminate its water supply

V. Manure and Environmental Risks

- 1. Air
 - a) pathogens
 - b) hydrogen sulfide
 - c) ammonia
 - d) others
- 2. Water
 - a) groundwater
 - (1) pathogens
 - (2) nitrates
 - (3) pharmaceuticals/anti-biotics
 - (4) others
 - b) surface water
 - (1) fishkills
 - (2) phosphorus and eutrophication
 - (3) pathogens
 - (4) aesthetic degradation
 - (5) others

VI. Scale of the Manure Problem

- A. A CAFO houses 1,000 animal units (750 dairy cattle)
- B. 1 animal unit = 18 people in terms of organic pollution potential
- C. Wisconsin Rapids = 18,000 people
- D. The smallest CAFO = Wisconsin Rapids
- E. Wisconsin Rapids has sewage treatment, CAFO's don't
- F. Wisconsin's human population = 6 million people
- G. Wisconsin's cattle population = 60 million people = Tokyo + Mexico City
- H. "Dairy 30 by 20" = 200,000 more cattle = human population of Los Angeles, CA
- I. NE Wisconsin is overcrowded with CAFO's
- J. The Central Sands have become the new destination for CAFO development.

VII. Golden Sands Dairy = 6000 Animal Units

- A. annual manure production could fill Lambeau Field to the 5th story bleachers...4 times per year
- B. Human Population of Wood County = 75,000 people
- C. Green Bay, WI = 104,000 people
- D. Golden Sands Dairy = 108,000 people

VIII. The Punchline: State government is unlikely to take any meaningful action regarding spray irrigation of manure, despite the findings and quality of the Manure Irrigation Workgroup Report or any other factors. Even if the state did decide to take such action, years will go by before anything happens. In the meantime, the industry will continue to promote and adopt spray irrigation of manure because it is a cheap way to dispose of manure. The public will be exposed to even greater health risks than already exist. If local units of government don't step up, no one will.