Regulating Wastewater Discharges in Wisconsin

Wisconsin Wastewater Operators Association Conference

by

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OVERVIEW

1860s to 1960s
- Statutory-driven requirements

1960s
- Laws authorize setting of general standards.
- Agency policies established

1970s
- Laws authorize & agencies set specific standards and regulations
- Courts mandate that regulations be established before req’mts placed in permits
OVERVIEW

1970s (cont.)
- Courts mandate that regulations be established before req’mts placed in permits

1980s- 1990s
- States/U.S. EPA create regs.

Now
- State law requires specific authorization to establish regulations
STATUTORY DRIVEN REQ’MTS

- Slaughterhouse Act of 1862
- Authorize agencies to issue orders to abate nuisances & protect public health
- No discharge of deleterious substances
- Plan review for sewerage systems – 1905
  - Negotiation, arm twisting, coercion?
STATUTORY DRIVEN REQ’MTS

- 1915 – Expanded definition of deleterious substances
- 1919 – Board of Health given authority over “waters of the state”
- 1927 – Comm. on Water Pollution created; add’l. authority to issue orders
- 1930s – WPA build sewers & WWTPs
1960s

Water Resources Act of 1965

- Auth. setting of water quality standards (interstate in 1967; intrastate in 1968)
- No biodegradable detergents
- More general auth. to issue orders
- Financial assistance
- Require permits for POWTS
- Operator certification required
- Requires plan approval before construction
1960s

- Federal Enforcement Conferences for interstate waters
  - Mississippi River
  - Great Lakes
    - Origination of phosphorus requirements

- Natural Resources Board “policies”
  - Phosphorus/eutrophication – April 1969
  - Nonproliferation of WWTPs – May 1969
  - WWTP outfalls – January 1970
  - Sewer extensions – c1970
LATE 1960s TO 1970s

- 1899 Corps of Engrs. Refuse Act
- Orders issued for:
  - phosphorus removal
  - “adequate” treatment (secondary?)
  - disinfection of treated sewage discharges
  - wasteload allocation to paper mills
  - mercury rule (NR 100)
1972 – 1973

- **Clean Water Act**
  - Water quality standards
  - NPDES
  - Categorical limits
  - Federal grant programs

- **Chapter 147, Statutes created**
  - WPDES authorized (incl. land disposal)
    - U.S. EPA delegation in February 1974
1970s

- Tech.-based limits set by U.S. EPA/states adopt as NR 200 series (e.g., secondary trtmt. defined)
- WQS revisions in 1973
  - Ammonia limits & disinfection
- Small stream “variances” in 1976
  - Established specific limits for specific stream types
- Lab certification rule in 1976
1970s

- NR 101 program
  - Industrial only, expanded to municipalities later
- Grant program regulations
- NR 110 updates to correspond to U.S. EPA grant requirements (e.g., I/I, SSES, etc.)
- Phosphorus in detergents limited
1980s

- 1981 – WLA for specific rivers (NR 212)
- 1983 – Groundwater Law; first pretreatment regulations (NR 211)
- 1985 – Land disposal for sewage (NR 206)
- 1987 – Compliance maintenance (NR 208)
- 1989 – Antideg. implementation (NR 207)
- 1989 – Toxics criteria & impl. (NR 205 & 206)
- Disinfection (multiple times)
- Septage disposal (NR 113)
1990s

- 1990 – Land disposal for industrial wastewater (NR 214)
- 1991 – Wetland standards (NR 103)
- 1992 – Statewide phosphorus (NR 217)
- 1995 – U.S. EPA GLI regulation
- 1996 – Biosolids (NR 204)
Post 2000

- 2000 – Chlorides
- 2002 – Mercury
- 2004 – Ammonia
- 2010 – Thermal
- 2010 – Phosphorus standards & impl.
- 2013 – SSOs
- 2014 – Operator certification
- 2014 – Pretreatment update
- Ongoing – Toxic rules updates