

Regulating Wastewater Discharges in Wisconsin

**Wisconsin Wastewater
Operators Association
Conference**

by

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October 12, 2016

OVERVIEW

➤ 1860s to 1960s

- Statutory-driven requirements

➤ 1960s

- Laws authorize setting of general stds.
- 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(NR206)**
- **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)**
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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**
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