



*Iowa Association of  
Business and Industry*

SMALL CITY CLEAN  
WATER STANDARDS  
COMPLIANCE STUDY  
COMMITTEE

# TODAY'S TOPICS

- Brief intro to ABI
- Cities and Industry--Intersection
- Nutrient Reduction Strategy
- Water legislation
- Water rules

# IOWA ASSOCIATION OF BUSINESS AND INDUSTRY

- Established in 1903 as the Iowa Manufacturers Association before expanding to represent companies in all industries across the state.
- The largest statewide business organization with 1,500 member companies representing 330,000 employees in all 99 counties.
- ABI's mission is to nurture a favorable business, economic, governmental and social climate within the state of Iowa so our citizens can have the opportunity to enjoy the highest possible quality of life.

# ABI ENVIRONMENTAL ENGAGEMENT

ABI expends time and energy on environmental issues:

- ABI's Environment Committee is its largest and most active.
- Work with wide range of other stakeholders who engage on environmental issues, from Farm Bureau to the Iowa Environmental Council.
- Work to maintain relationships and engage with the Iowa Department of Natural Resources frequently to participate in any water quality issues that might affect businesses.
- ABI attends Environmental Protection Commission meetings, stakeholder groups, and watershed groups.
- Engages in rulemaking on environmental issues affecting business.

# CITIES/INDUSTRY

- Shared resource
- Shared infrastructure
- Work together very closely in many communities
- Affected by regulations = point sources
- Restricted in available solutions
- Can be capital intensive-growth restricting

# INDUSTRY / SMALL CITY PERSPECTIVE

- ABI relies on expert members to participate in regional and statewide policy groups
- Tyler Marshall P.E. has represented ABI on several DINR policy workgroups
  - Principal Environmental Engineer for Stanley Consultants, assisting Iowa industries with regulatory compliance since 1998.
  - Resident and City Council for Williamsburg, a community in the midst of major changes to their water and wastewater systems.

# INDUSTRY / SMALL CITY PERSPECTIVE

- Industry is one of the keys to many small cities' economic vitality.
- In order to attract business and industry growth, a community needs to be able to provide high quality water and wastewater infrastructure and in sufficient quantity.
- Many communities are struggling to deal with aging water and wastewater systems, within the framework of existing regulatory requirements.
- Providing improved quality or quantity beyond bare minimum is not economically feasible given the budget constraints that many communities face.

# INDUSTRY / SMALL CITY PERSPECTIVE

- Cities, industries and DNR technical staff have to navigate a path that strikes a delicate balance between minimizing costs, promoting economic growth, and being good stewards of our natural resources.
- Several recent initiatives have been oriented to making this balance easier to achieve.
- Today's presentation will focus on changes that utilize better science and a collaborative approach to ease the burden on cities and industries, while maintaining (if not improving) the quality of Iowa's waters.

# SPECIFIC WATER ISSUES

- Nutrient Reduction Strategy and Nutrient Reduction Exchange
- Water legislation/rules
- Metals Workgroup
- Antidegradation

# NUTRIENT REDUCTION STRATEGY

## Iowa Nutrient Reduction Strategy

- Established 2013 as response to 2008 Gulf Hypoxia Action Plan
  - Neither legislation nor rule = strategy
  - Show progress, collaboration, innovation & be alternative to stringent numeric nutrient criteria
  - ABI has listed industrial members directly affected by the Nutrient Reduction strategy and some indirectly affected through municipalities
  - Goal to reduce nutrients from point sources by establishing requirement to reach 66 percent removal of N and 75 percent removal of P
  - Non-point compliance is voluntary

# NUTRIENT REDUCTION STRATEGY

## Requirements—technology based strategy

- Upon NPDES permit renewal, the permit will require a 2-year study to document current nutrient discharge levels, establish baselines and evaluate the feasibility and reasonableness of installing nutrient removal.
- Study must also include a schedule for construction and implementation of new technology. Once the schedule is approved by the DNR, becomes a requirement of the facility's permit.
- Schedules for implementation of practices or completing construction can vary from months to many years depending on the extent of needed changes and financial considerations.

# NUTRIENT REDUCTION STRATEGY

## Significant Point Source Investment

- According to 2016-17 Report--Estimated to have a total present worth cost (includes capital costs and operation and maintenance cost over a 20-year period) of approximately \$1.5 billion for point sources, if fully implemented.
- The annual cost of this approach for point sources is approximately \$114 million.



# NUTRIENT REDUCTION EXCHANGE

- Strategy contemplates nutrient credit trading as a way to bolster the strategy and encourage collaboration between point and non-point sources.
  - Strategy specifies that IDNR and IDALS should work with partners to “establish and implement voluntary market-based approaches or incentives”.
- Iowa League of Cities received a USDA-NRCS Conservation Innovation Grant in fall of 2015.
  - Working over 3 years with stakeholders to develop and establish the Nutrient Reduction Exchange or “NRE”.
  - Collaboration--framework developed with input from over 30 stakeholders and agencies

# NUTRIENT REDUCTION EXCHANGE

- NRE will be a way to register and reliably track and account for nutrient reductions and other benefits like flood control or habitat creation
  - Encourages multi-benefit projects
  - Utilizes science assessment from Nutrient Reduction Strategy and will allow for approved modeling to track reductions
  - Could recognize valuable incentives for point sources
- Working with federal RIBITS system for wetlands as tracking mechanism/platform
- Ready for DNR to take over—possible grant extension
- Next Steps: Rulemaking and possibly statutory changes will need to occur

# NEW PETITION FOR RULEMAKING

- Iowa Environmental Council along with Environment Law and Policy Center filed new petition for rulemaking with DNR on 11/1/18
- Petition asks DNR to implement numeric criteria for nitrogen, phosphorous, chlorophyll-A and secchi disk depth for recreational lakes
- Past petitions have been dismissed, but DNR must respond—petitioners proposed 6 month timeline (with potential additional 3 month extension)
- Could have significant effect on nutrient approach in Iowa and effects on point sources and non-point sources

# SF512-WATER QUALITY

- SF512 Passed in 2018—first bill signed by Governor Reynolds
- Will direct \$282 Million to water quality point and non-point sources over 12 years
- HF2440 --ABI worked to include industry as an “eligible entity” in the legislation, so can be part of revolving fund created in the bill
- ABI will monitor/participate in rulemaking to implement
- Big step toward statewide investment in water quality improvement including cities, industry, ag community

# METALS WORKGROUP

- DNR looking to revise its metals criteria. Existing WQS are based on a “total recoverable” measurement, based on out of date EPA methodology
- Instead expressed in dissolved metal criteria
- More flexible standard that still meets EPA requirements
- Developing rulemaking to update the existing water quality standards in IAC Chapter 61
- Started work in 2017
- Initial stakeholder group September 2018

# METALS WORKGROUP

- For most metals, the changes would be straightforward – the existing WQS would have a “conversion factor” applied to convert it from total recoverable metal to dissolved metal. The conversion factors range from 0.85 to 1.0
- The net effect is that WQS would go down. New converted WQS would then only apply to the dissolved fraction of the discharged effluent, making criteria easier to meet, while still protecting the environment.
- This should help most facilities where there is a permit limit for metals.
- Metals with a simple conversion factor:
  - Arsenic,
  - Chromium (VI),
  - Mercury,
  - Nickel,
  - Silver,
  - Zinc, and
  - Iron

# METALS WORKGROUP

- Special cases
  - Aluminum
  - Cadmium
  - Copper
  - Lead
  - Selenium
- Intended Timeline -- changes would be ready for EPC approval early in 2019, and then go through rulemaking, with final adoption towards the end of 2019.

# ANTIDEGRADATION

## Antidegradation

- Rule and implementation procedure required under CWA put in place to prevent additional degradation of water quality
- Applies to new or expanded discharges—states have flexibility
- Tier 2 maintains and protects "high quality" waters -- water bodies where existing conditions are better than necessary to support fishable/swimmable uses. Water quality can be lowered in such waters. However, Tier 2 reviews identify procedures that must be followed and questions that must be answered before a reduction in water quality can be allowed.
  - Analysis would include looking at less degrading or no degrading alternatives that are technically and economically feasible and what the social and economic impact of this activity would have on the local community.
  - In no case may water quality be lowered to a level which would interfere with existing uses.

# ANTIDEGRADATION

## **Problem = alternatives analysis challenged:**

In 2016, Iowa Environmental Council sued DNR Claiming City of Clarion's permit for the construction of its new wastewater treatment plant violated Iowa and Federal Law because of inadequate antidegradation analysis—specifically **cost benefit analysis**.

ABI, Iowa Association of Municipal Utilities and League of Cities joined in petition for rulemaking to clarify after court case confused existing procedure—asking for regulatory certainty for what is required for an adequate alternatives analysis.

Asked that a **bright line** rule be established that alternatives costing less than **115 percent** of the base cost of pollution control are considered economically efficient and that alternatives above the 115 percent of the base costs are not considered economically efficient.

# ANTIDEGRADATION

- In response to rulemaking petition, DNR moved rule forward.
  - EPC and then ARRC approved
- Approved by Iowa, but rejected by EPA
- Status: DNR still attempting to work through this with EPA
  - Right now can't rely on 115 percent cost guideline—unclear what is adequate alternatives analysis
  - DNR looking at some type of rebuttable presumption instead of bright line rule

# QUESTIONS?

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