EPA's Construction ELG and Indiana's Antidegradation Rulemaking

Regulatory Perspective

Central Indiana Stormwater Quality Workshop

January 2009

WARNING!! THIS PRESENTATION MAY CAUSE DROWSINESS!!

EPA'S

- **PROPOSED EFFLUENT LIMITATIONS GUIDELINES**

Indiana Association for Floodplain & Stormwater Management

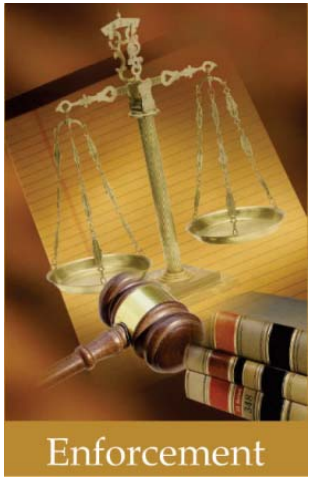
- Comment Letter Template
- www.inafsm.net
- Comments due to EPA on February 26, 2009

Overall Concepts

- Agree it is very important for protecting water quality
- Need to recognize and fix what's broken
- ELGs should comprehensively cover active construction and post-construction
- Need to consider MS4 programs

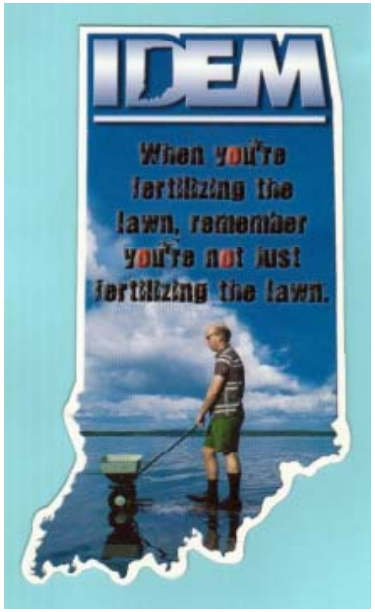
Fixing What's Broken

- Require NOI Submittal
- Require SWPPP Submittal and Review
- Require Adequate Program Staffing
- Require Milestone Inspections
- Enhance Enforcement Efforts
- Need for Nationwide CONSISTANCY



Effective Date

- IDEM and MS4s would have to incorporate these ELGs no later than 2014
- Could be earlier if Rule 5 is opened up



Sediment Basins

- Design Standards need clarification
- Could lead to larger area of land used
- How would the basin convert to a PC BMP?

Turbidity

- Turbidity is a measure of the degree to which the water looses its transparency due to the presence of suspended particulates.
- The more total suspended solids in the water, the murkier it seems and the higher the turbidity.

What causes turbidity?

- There are various parameters influencing the cloudiness of the water. Some of these are:
  - Phytoplankton
  - Sediments from erosion
  - Resuspended sediments from the bottom (frequently stirred up by bottom feeders like carp)
  - Waste discharge
  - Algae growth
  - Urban runoff

Turbidity Monitoring

- Portable Turbidimeter $800
- Cuvettes – 3 for $40
- Calibration Set $200

What does 13 NTUs look like?

Drinking Water

Proposed ELGs

1 13 25 100 500 1K 2,000

How to achieve 13 NTUs?

- Use of flocculants & coagulants plus filtration
- Possible toxic effects
- Limited # of vendors; expense

Where Would Turbidity Be Monitored?

- Outfalls; pre and post storm conveyance installation
- Fissures, sheet flow
- Ponds

INDIANA'S

- ANTIDEGRADATION RULEMAKING


Clean Water Act Requirements for Water Quality Standards

- **Designated Uses**
  - states must identify and designate how each waterbody in the state is used.
- **Water quality criteria**
  - states must set specific numeric and/or narrative criteria necessary to protect each designated use.
- **Antidegradation policy**
  - states required to develop rules & implementation procedures
    - to protect existing uses
    - to prevent clean waters from being degraded, unless the action responsible for the deterioration provides a social or economic benefit

What is Antidegradation?

- A regulatory policy designed to prevent deterioration of existing levels of good water quality unless the action responsible for the deterioration provides a social or economic benefit.
- A part of federal water quality requirements.
  - Federal antidegradation policy is found at 40 CFR §131.12.
  - The Clean Water Act's (CWA) antidegradation policy is found in section 303(d) (and further detailed in federal regulations)
- Not a "no growth" rule.
- A policy that allows public input on decisions to be made on important environmental actions.

Antidegradation Terms

- ONRW + OSRW + EUW = HQW
- Proposed new or increased discharge/loading
- Antideg Demonstration Application
- Exemptions from the Antideg Demonstration Application
- De minimis (DTBELs & DWQBELs)
- Short Term, Temporary Lowering of WQ (12 months or less)

Oregon Small MS4 ANTIDEGRADATION REVIEW

1. **“The Department believes that existing water quality will not be degraded by the issuance of this permit.”**
2. **“The stormwater discharges authorized by this permit have been on-going since the federal regulations requiring an NPDES permit were adopted.”**
3. **“This permit will reduce the current level of pollution discharged from small MS4s.”**

Oregon Small MS4 ANTIDEGRADATION REVIEW

4. **“The Department also expects the pollution reduction measures implemented by permitted small MS4s to offset any expansion of stormwater conveyances systems and outfalls (post-construction).”**
5. **“The goal of the permit is a net reduction in pollutant loadings over the five-year permit term.”**
6. **“Therefore, the issuance of this permit will protect and improve existing water quality and is consistent with the Department’s antidegradation policy.”**

State of New Hampshire – Pollutant Loading Limits (OSRW & 303(d))

- Effective Impervious Cover (≤10%)
  - **Minimize Impervious Cover** (reduce roadway widths, driveway lengths, porous pavement
  - **Disconnect Impervious Cover** (rain barrels, gardens, downspouts)
  - **Maintain Natural Hydrology** (amount, location, & timing of runoff & infiltration)

- Undisturbed Cover (≥65%)
  - **Protect Critical Areas** (natural features, wildlife habitat)
  - **Minimize Disturbed Areas** (limit clearing & grading)
  - **Decentralize Stormwater Treatment** (smaller, separate raingardens & bioretention areas)

Little Darby Creek – West Jefferson, OH

- New Target Store Distribution Center adjacent to OSRW
- Darby Creek Association Recommendations:
  - Determine current pollutant loading levels in Creek
  - Determine Creek assimilative capacity
  - Limit total discharges of pollutants from post-construction BMPs to 30% or less o its assimilative capacity

Iowa Draft Rules – September 2008

- Antideg never fully implemented in Iowa; parts missing (tiers); parts inconsistent w/ the CWA
- Petition filed by Sierra Club, Iowa Hawkeye Fly Fishing Association, & the Iowa Environmental Council
- Antideg review triggered by applications for construction stormwater permits and permits from USACE for the filling or alteration of wetlands

Current Activity on Present IN Antidegradation Rulemaking

- IDEM has developed draft rule language
- Governor's Stakeholder meetings
- IDEM Antideg Workgroup:
  - 4 Industry Reps
  - 4 Municipal Reps
  - 4 Environmental Group Reps
- Next meeting – January 26th; 10am to 3pm at the IDEM Shadeland Office

Current Activity on Present IN Antidegradation Rulemaking

- IDEM Antideg Workgroup:
  - 4 Industry Reps (Doug Bley, Arcelor Mittal; Neil Parke, Eli Lilly; Kari Evans, Barnes & Thornburg; and Denny Wene, Alcoa)
  - 4 Municipal Reps (Brett Barber, Greeley & Hansen; Dan Olsen, Michigan City; Dave Bates, Goshen; and Lori Gates, CBBEL/IACT/IWEA GAC)
  - 4 Environmental Group Reps (Albert Ettinger, ELPC; Jeff Hyman, Conservation Law Center; Bowden Quinn, Sierra Club; and Rae Schnapp, Hoosier Environmental Council & Wabash Riverkeepers)

The Environmental Law & Policy Center (ELPC)

- In Indiana, on the workgroup.
- In Illinois, ELPC persuaded the Illinois Pollution Control Board to adopt antidegradation rules that are among the strongest in the nation.
- In Kentucky, ELPC is counsel in a lawsuit in federal court against U.S. EPA for failing to establish legally sufficient antidegradation standards.
- In Iowa, ELPC involved in draft rulemaking.

Proposed Workgroup Process

- The number of workgroup meetings will be limited and each meeting will target discussion on a key concept.
- Key Concepts to discuss:
  - de minimis – April 2008
  - default antidegradation limits – May 2008
  - public notification process – June 2008

Left to discuss: Antideg Demo Examples, Public Process, General Permits/Stormwater, & ?

Proposed Rulemaking Timeline
(best case scenario)

- Second Notice publication: Goal – July 2008
- Comment period – minimum 30 days so would end by: Goal - August 2008
- Respond to comments – dependant on the number and nature of comments received -complete by: Goal – September 2008
- Preliminary Adoption: Goal – October 2008
- Third Notice – may require 21 day comment period - publication: Goal – November 2008
- Final Adoption – Goal – December 2008

What Can You Do?

- Ask IDEM to add you to their Antideg e-mail list to receive meeting notices, meeting summaries, etc.
- Give feedback to workgroup reps
- Write to IDEM to state your position on how the state should handle applying their Antideg policy to general permits and 401 WQ certifications

Questions?

Storm Water

Management