

Indiana's
Ground Water
Quality Standards
(GWQS)
327 IAC 2-11
Adopted August 8, 2001

Ground Water Protection in
Indiana Prior to the GWQS

- NO national ground water quality standards
- NO single approach used by other states to provide ground water protection
- Various, perhaps inconsistent, approaches used within Indiana - 5+ agencies involved:
 - IDEM - Offices of Water and Land Quality
 - Office of the Indiana State Chemist
 - Department of Natural Resources
 - State and Local Departments of Health
 - Office of the State Fire Marshall

Impetus for the GWQS

- In 1989, the Legislature passed the Ground Water Protection Act (GWPA)
- This statute (IC 13-18-17) establishes:
 - Interagency Ground Water Task Force
 - Directives for IDEM concerning ground water
 - Directives for Water Pollution Control Board to adopt rules, including GWQS

The GWPA

- Water Pollution Control Board shall adopt rules establishing standards, IC 13-18-17-5
- Standards must include:
 - Numeric and Narrative criteria
 - Classification Plan
 - Method for determining where standards apply
- **Agencies shall adopt rules to apply the standards to activities they regulate**

The GWPA

- Agencies shall use the standards for the following purposes:
 - to Establish minimum compliance levels for ground water quality monitoring at regulated facilities
 - to Ban the discharge of effluent to potable ground water
 - to Establish health protective goals for untreated water in water supply wells
 - to Establish concentration limits for contaminants in ambient ground water

Key Elements of the GWQS

- Applicability (Sec 2)
- Classification Plan (Sec 4)
- Narrative and Numeric Criteria (Sec 5-8)
- Ground Water Management Zones (Sec 9)

GWQS Applicability

- Some numeric and narrative criteria apply to public and private wells immediately (2e)
- Except for criteria that apply to wells, standards are not enforceable until adopted in rules through subsequent rulemakings
- When adopting rules to apply the GWQS, agencies shall, to the extent feasible, minimize or eliminate potential adverse impacts to ground water quality (2b)

GWQS Classification Plan

- Three Classes of Ground Water
 - Drinking Water
 - Limited
 - Impaired Drinking Water
- Drinking Water is the default classification
- Rule allows for classification of some ground water influenced by oil and gas wells, agriculture, or coal mining as limited
- Commissioner of IDEM may designate as Limited or Impaired based on a request

GWQS Criteria

- Narrative - protects use
- Numeric - depends on class:
 - generally MCLs for Drinking Water Class
 - Existing concentration for Limited Class, for contaminants attributable to coal mining or agricultural activity, other contaminants MCLs
 - 10 times the MCLs for ground water “designated” as Limited Class
 - Existing concentration for Impaired Class for those contaminants which “impaired” the water, other contaminants MCLs

GWQS Ground Water Management Zones

- One method for determining where standards apply
- Defined as a three dimensional region around a source
- Criteria to be met at and beyond region
- Appropriate zone should be established by regulatory program in rule
- Default zone applies if regulatory program does not establish a zone in rule

Ground Water Protection in Indiana with the GWQS

- Enforceable numeric and narrative criteria for public and private drinking water wells and other beneficial use wells
- Uniform direction for agencies to provide a consistent approach to ground water protection as they adopt rules to apply the GWQS to regulated activities
- Adverse impacts to ground water will be eliminated or minimized as agencies apply the GWQS

For More Information on GWQS

- Visit IDEM's website at:
 - <http://www.IN.gov/idem/water/dwb/groundindex.html>
- Contact Martha E. Clark at:
 - mclark@dem.state.in.us
 - 1-800-451-6027 or 317-308-3388