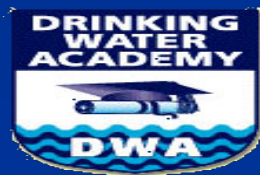


UIC Enforcement

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U.S. EPA Region 3

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Identifying UIC Violations

- How Do We Assess Compliance (Identify Violations)?

Deep Wells (Class I, II, III & VI)

vs.

Shallow Wells (Class IV & V)

Deep Wells (I, II, III & VI)

- Known Universe of Facilities. Operators Required to Apply for Permit
- Routine Inspections for new construction, mechanical integrity, plugging, reworks, etc.
- Annual & Quarterly Reports submitted by operators
- Compliance Reviews
- Self-reporting of violations by operators
- Notifications from State Oil & Gas inspectors
- Complaint from a citizen or employee

Deep Well Violations

High Priority (SNC)

Unauthorized Injection (no permit, injection of unauthorized fluid)

MI Failure – Endangering USDW

Continued Operation without Mechanical Integrity

Operating at Excessive Pressure (over MIP)

Improper Plugging and Abandonment

Failure to Report a Violation

Extremely Negligent Operation

Deep Well Violations (cont.)

Lower Priority (non SNC)

MI Failure – no USDW endangerment, well immediately shut in and operator reports violation in timely manner

Overdue routine MIT (short term delay)

Late or incomplete report

Financial Responsibility – short term delay or insufficient funds.

Shallow Wells (IV & V)

- Universe of facilities not completely established. Few facilities inventory wells (less than 25%).
- Random inspections of targeted industrial sectors known to generate wastewater of concern. Focus on unsewered areas where on-site wastewater treatment and disposal are typically used.
- Search for and inspect facilities, identify violations, address violations, confirm compliance and move on. (once and done)
- State or citizen complaints

Shallow Well Violations

High Priority (SNC)

- Injection of RCRA hazardous waste (Class IV injection well.)
- Operation of “endangering” Class V injection well.
- Confirmed environmental impact.
- Extremely negligent operation.

Shallow Well Violations

Low Priority (non SNC)

- Operation of “potentially endangering” injection well (a judgment call).
- Discharge of “marginally endangering” wastewater (gray water).
- Failure to inventory

Informal Enforcement Actions and Related Activities

- Not specified in SDWA
- No penalty authorities
- Used for less serious violations

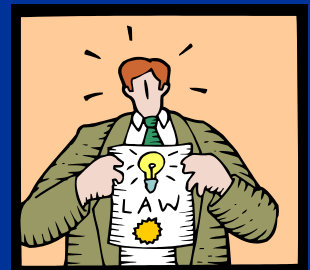


Types of Informal Enforcement Actions & Activities

- Notice of violation (NOV)
 - Letter to operator *citing violation(s)*, specifying *measures needed for compliance* with *time frame* (mail certified return)
 - *Efficient and effective* way to address low and medium priority violations which can be resolved quickly (90-95% compliance rate)



Telephone call - document with telephone log for file



Informal Enforcement Activities (continued)

- Meeting with operator
 - Can be used alone or in conjunction with other enforcement actions taken
 - Encouraged whenever operator expresses interest to meet with regulators
 - Promotes cooperative spirit and communication
- Field inspection of facility
 - Often conducted in follow-up to initial inspection for additional information or to document compliance



Informal Enforcement Actions (continued)

- Letter of Commitment (LOC)
Operator of facility commits in writing to adhere to specific conditions and restrictions in order to reduce or eliminate risk of endangerment. A best management practices (BMP) approach. *Rule authorization with conditions.*

Formal Enforcement Actions (EPA)

- Specified in Section 1423 of SDWA
- Penalty authorities

Types of Formal Enforcement Actions

- Administrative Order
- Civil Referral to DOJ
- Criminal Referral

Administrative Order

- **Administrative Order (AO)** - EPA's own administrative judicial enforcement action
 - AOs for *injunctive relief* and/or *penalty*
 - Violations after 11/2/15
 - \$11,181 / day / well / violation - Class II
 - \$22,363 / day / well / violation - Other wells
 - \$279,536 maximum / Order
 - 30-day *public notice* for proposed Order on EPA website and/or in local newspaper

Administrative Order

- Operator has opportunity for a *hearing*
- AOs used by EPA Regions for violations warranting *penalty assessments* and/or when long *compliance schedules* are used (> 90 days)
- *More resource intensive* than informal actions

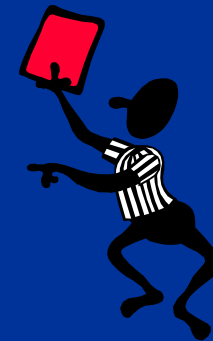
Civil Referral



- **Civil Referral** - referral to Department of Justice for civil litigation through the U.S. court system
 - Penalties up to \$55,907/day/well/violation - all well classes
 - No limit on maximum penalty assessment
 - Much more resource intensive than Administrative Order
 - Reserved for most serious violations, often involving environmental harm or a long history of violations usually at large facilities, or multiple facilities operated by the single corporation.

UIC Penalty Policy (EPA)

- Method for calculating *bottom-line* penalties for UIC violations (AOs and referrals)
 - *Economic Benefit* resulting from violation (use BEN model if appropriate). Penalty should *never* be less than the economic benefit.
 - *Gravity of Violation* (violation type, environmental impact, length of violation, number wells in violation).
 - *Gravity Adjustment Factors*
 - History of Violations*
 - Good-faith efforts to comply*
 - Economic Impact on violator*



$$\text{Penalty} = \text{Economic Benefit} + (\text{Gravity}) (\text{Adjustment})$$

(20 to +150 %)



Criminal Referral

- **Criminal Referral** - cases investigated and pursued by EPA through the Department of Justice
 - Violation determined to be ***willful*** or ***extremely negligent***.
 - Violations resulting in ***endangerment*** to human health and / or environment
 - Documentation of ***fraudulent activity*** or statement
 - EPA programs work with Criminal Investigation Division (CID)

Improving Enforcement Efficiency

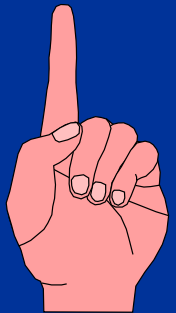
- Use of *model documents* for addressing various violations
- Address multiple facilities under same operator with single action (Class V)
 - Oil companies
 - Auto repair chains
 - State DOT facilities
 - Trucking companies
 - Transportation companies



Summary

- Identify universe of regulated facilities.
- Implement protocol for assessing compliance.
- Prioritize violations based on severity.
- Develop both formal and informal enforcement tools to address violations.
- Enforcement action should be both **appropriate** and **consistent**

“Action should fit the violation”



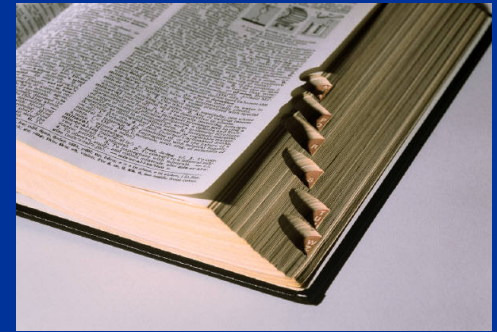
Emergency Authority Under Section 1431 of SDWA

1. A contaminant is *present in or likely to enter* a PWS or USDW, **and**
2. the contaminant may present an “*imminent and substantial endangerment*” to human health, **and**
3. The appropriate *State and Local authorities have not acted to protect public health*

Emergency Authority Under Section 1431 of SDWA

- **If all three conditions are met, the (EPA) Administrator may take such actions as deemed necessary to protect the health of persons**

Definitions



- **Contaminant** - Section 1401(6) defines contaminant very broadly
 - Includes “any physical, chemical, biological, or radiological substance or matter in water”
- **Likely to Enter** - Not limited to existing contamination of PWS or USDW
 - Section 1431 *used for prevention* of the potential hazard

Definitions (continued)

- **Underground Sources of Drinking Water -**
Not limited to protection of PWSs
 - Includes USDWs that are used for private water supplies.
- **Not Specific to UIC Activities -** Authority can be used against any activity meeting above criteria. Confirmation of a violation not needed.



1431 Cases in Region 3

- Class IIR facility contaminating private water supplies with oil and brine.
- SW runoff from salt pile contaminating private water supplies.
- Teflon manufacturing discharges of PFOA to air, surface water and GW contaminating public and private water supplies.

1431 Cases (continued)

- Poultry Farms contributing to high nitrates in USDW serving nearby private water supplies.
- LUST & SF sites contaminating nearby private water supplies.
- Failing septic systems endangering public and private water supplies – trailer parks.
- NPDES discharge endangering PWS intake.
- DoD sites that had used AFFF (PFOS and PFOA).

Region III UIC Enforcement Program Average Annual Outputs Pennsylvania & Virginia

- Conduct approximately 1,200 inspections (600 Class V, 600 Class II) in PA and VA
- 8 – 12% require follow-up of some kind
- 40 information requests issued
- 50 - 75 NOVs
- 10 - 25 letters of commitment for best management practices
- 4 - 10 AOs (Section 1423)
- 1 - 4 Emergency Orders (Section 1431)

