



THE BASICS

A Clean Water Act Overview

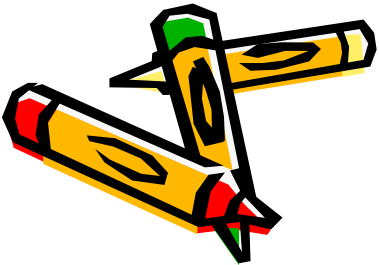
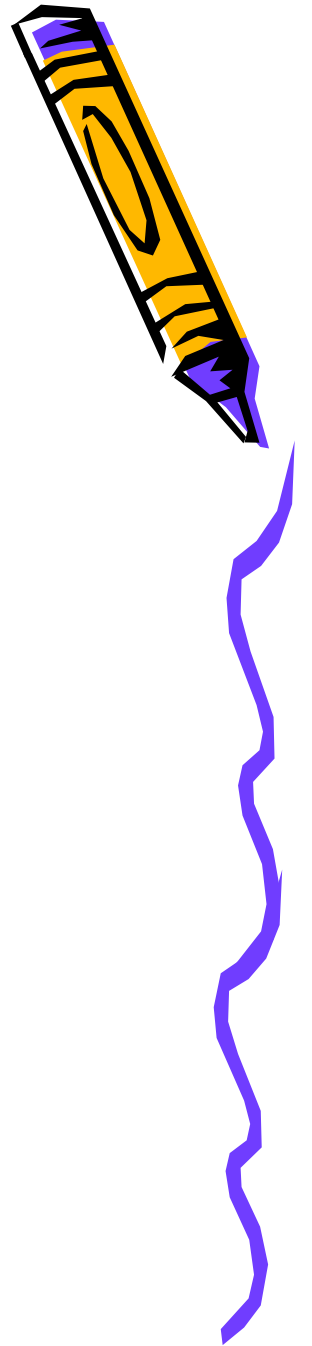
Erika K. Powers
November 7, 2007



NACWA
Developments in Clean Water Law
November 7-9, 2007

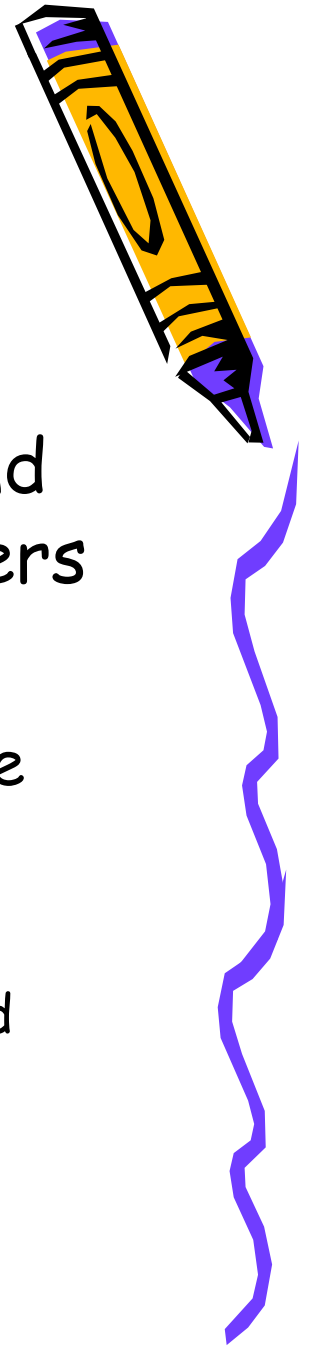
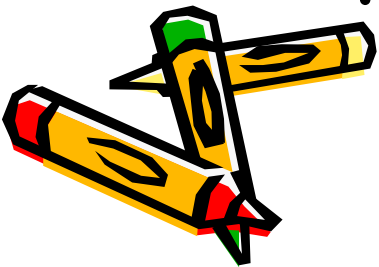
Clean Water Act Basics

- Regulatory Structure
- Limits
- Permitting
- Enforcement
- POTW Issues



Clean Water Act Regulatory Structure

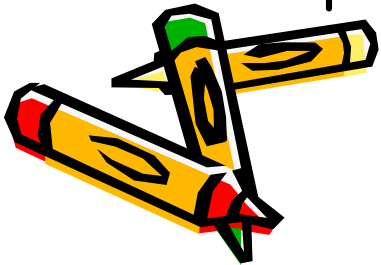
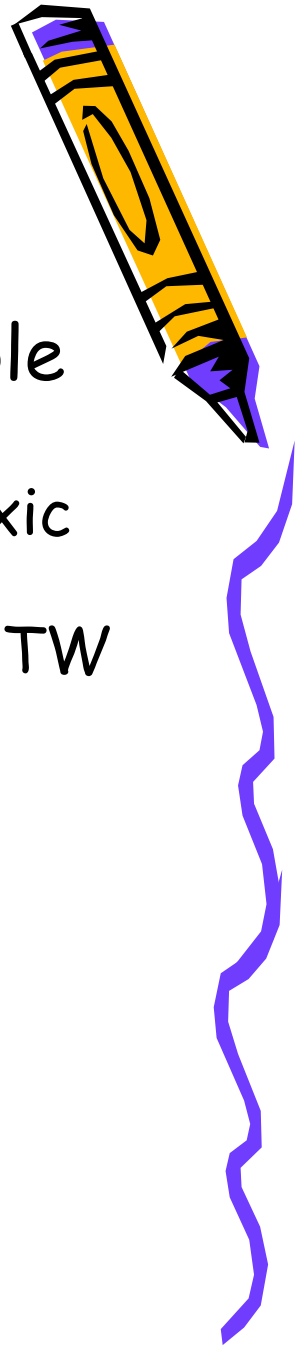
- Purpose: Maintain chemical, physical, and biological integrity of the Nation's waters
- Goals:
 - Eliminate discharge of pollutants to surface waters
 - "Fishable / Swimmable" where attainable
 - Protection and propagation of fish, shellfish, and wildlife
 - Recreation in and on the water



Clean Water Act

Regulatory Structure

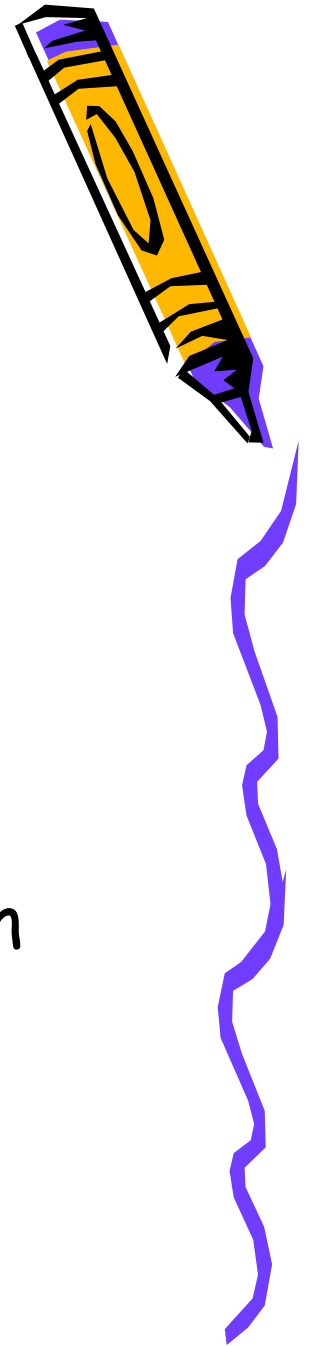
- Policies to implement fishable/swimmable goals:
 1. Prohibit discharge of toxic pollutants in toxic amounts
 2. Provide federal financial assistance for POTW construction
 3. Implement areawide waste treatment management planning
 4. Support research to develop technology to eliminate discharge of pollutants
 5. Develop and implement nonpoint source pollution control programs



CWA Regulatory Structure

Major Elements

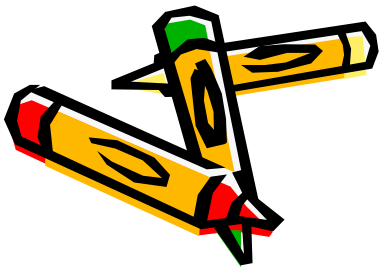
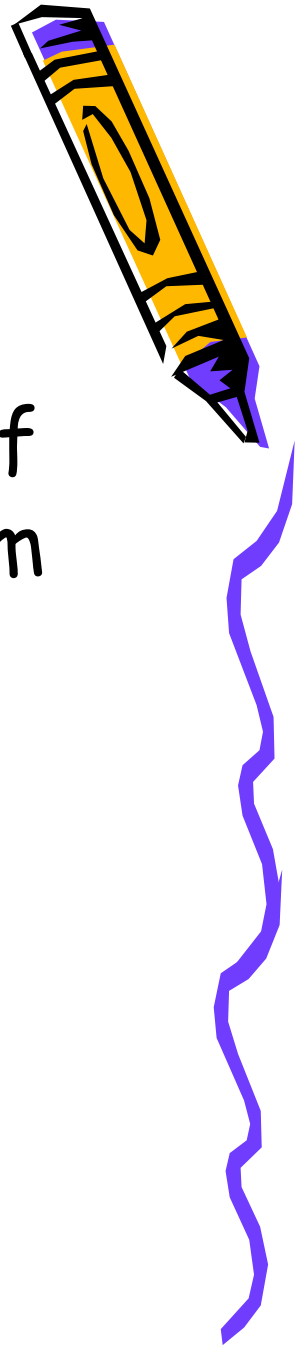
- Jurisdiction
- Discharges prohibited except in accordance with CWA requirements
- Permits authorize certain discharges
- Limits control authorized discharges
- Federal and/or state implementation
- Spill response, reporting, and prevention
- Permits for dredged and fill materials
- Enforcement



CWA Regulatory Structure

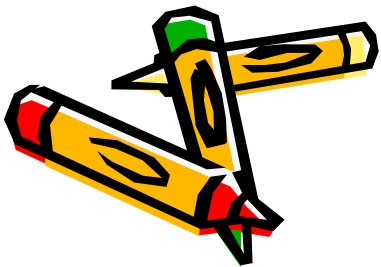
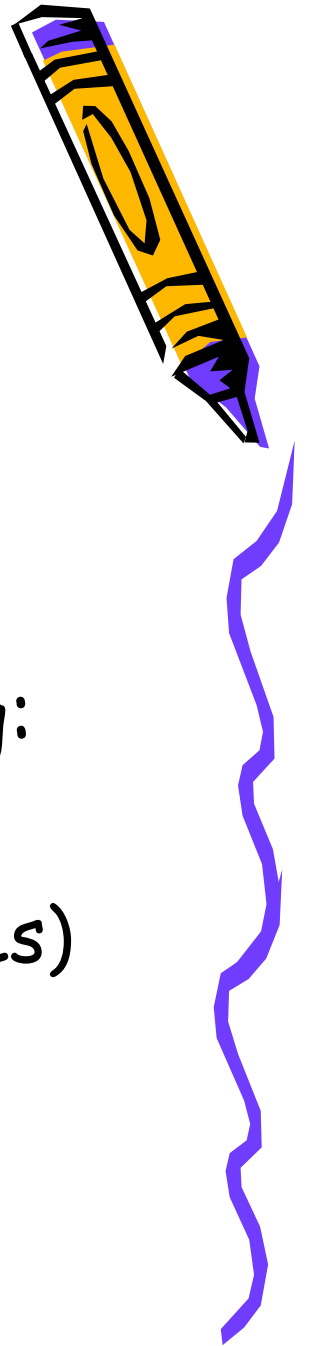
POTW Issues

- Sections 201-219 contain details of POTW construction grants program
- Section 212 defines "treatment works"



Clean Water Act Limits

- Title III of the CWA
- Discharges Prohibited, except in compliance with permits containing:
 - Technology Based Limits (TBELs)
 - Water Quality Based Limits (WQBELs)



CWA Limits

Technology Based Limits

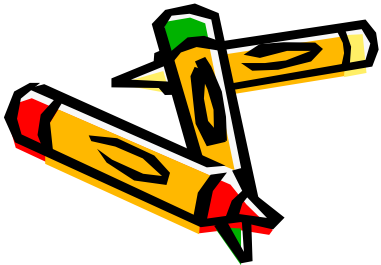
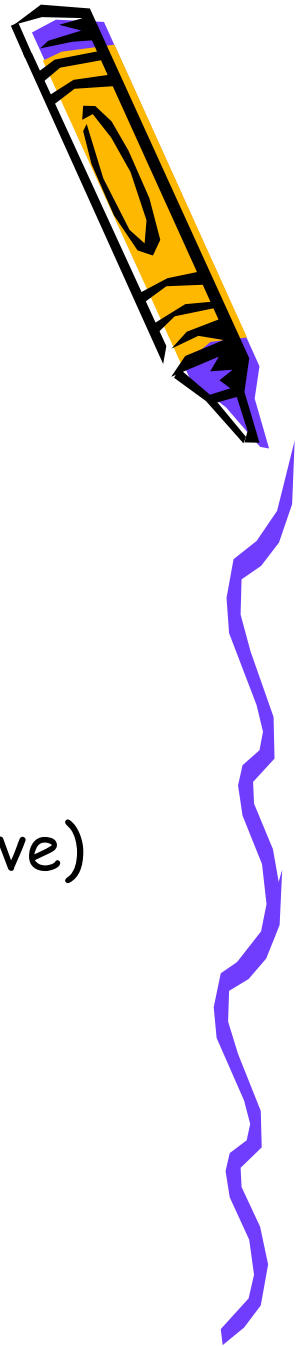
- Effluent Limitation Guidelines (ELGs):
BPT/BCT/BAT/PSES/NSPS requirements
for industry categories and classes
- Secondary treatment standard
 - pH 6-9
 - BOD₅ and SS 45 mg/l and 30 mg/L
 - 85% removal of BOD₅ and SS
- Best Professional Judgment (BPJ)
- Backsliding prohibited



CWA Limits

Water Quality Based Limits

- Applicable when technology based limits not sufficient to maintain
- Water Quality Standards
 - Designated uses
 - Water quality criteria (numeric and narrative)
 - Antidegradation policy



CWA Limits

Water Quality Based Limits

- TMDL Program
 - Evaluating and listing impaired waters
 - Developing and implementing TMDLs in permits
 - Does daily mean daily?



Water Quality Based Limits TMDL Highway

Enter Here
Pay Toll



State WQ Standards
EPA Approval

Listing Methodology

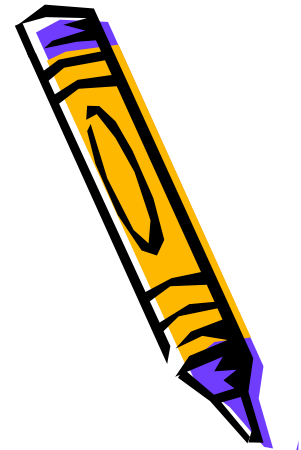
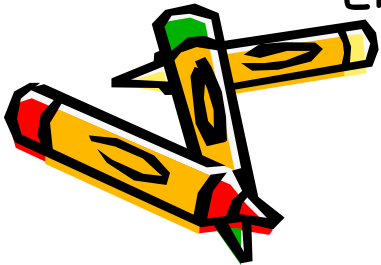
Welcome to Listing

Collect Data

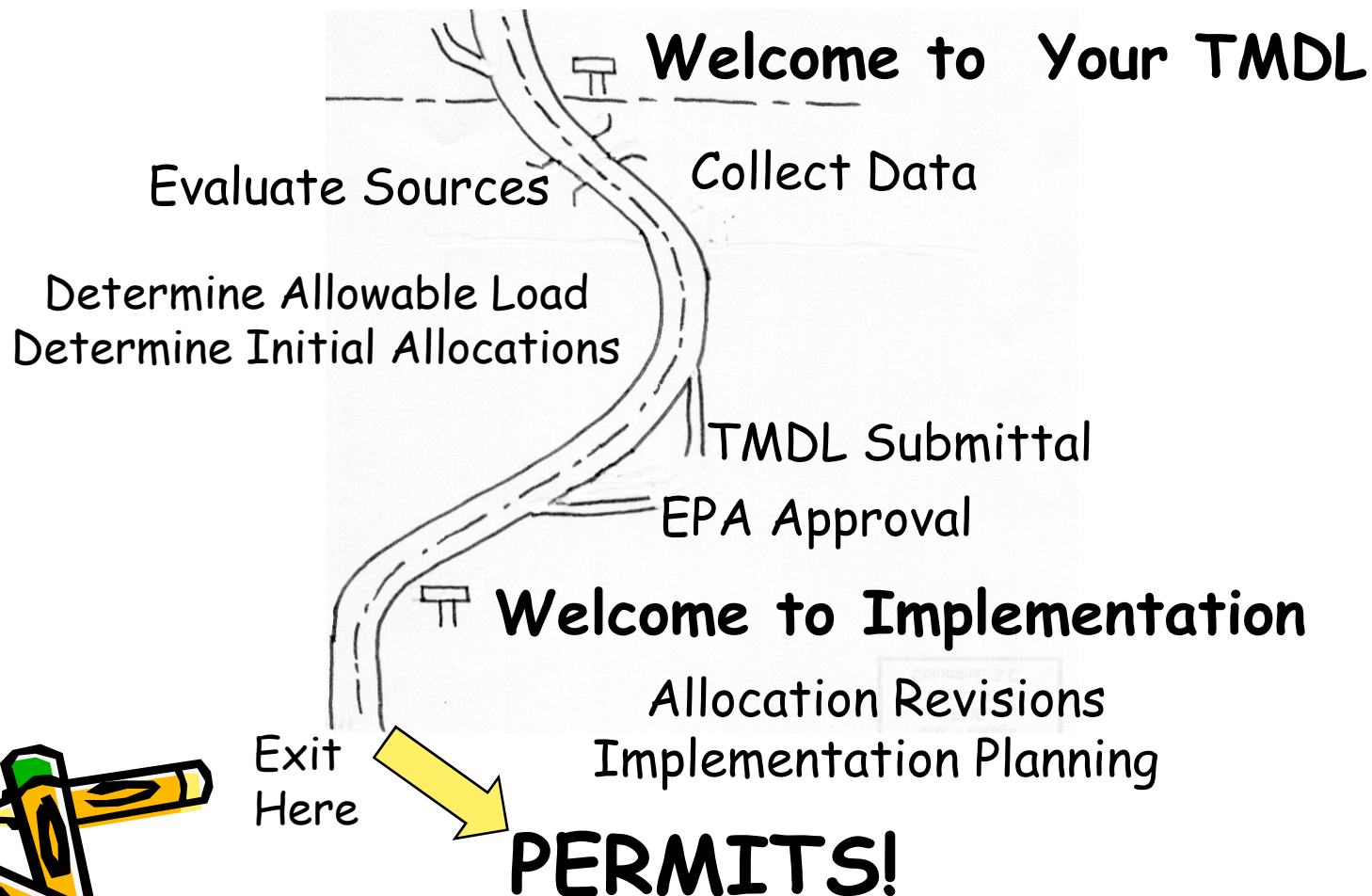
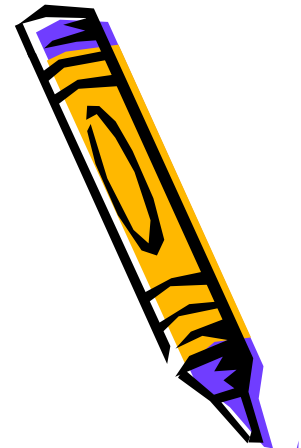
Evaluate waters

State Categorization
of Waters
EPA Approval

Welcome to Impaired Waters



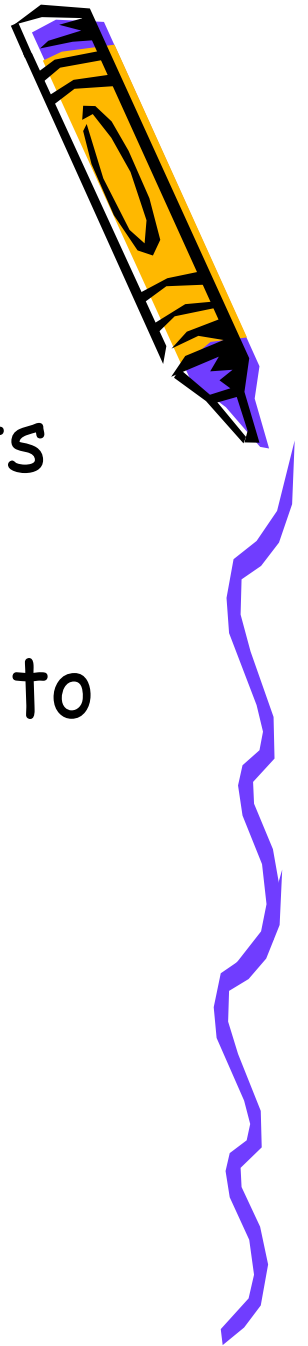
Water Quality Based Limits TMDL Highway



CWA Limits

POTW Issues

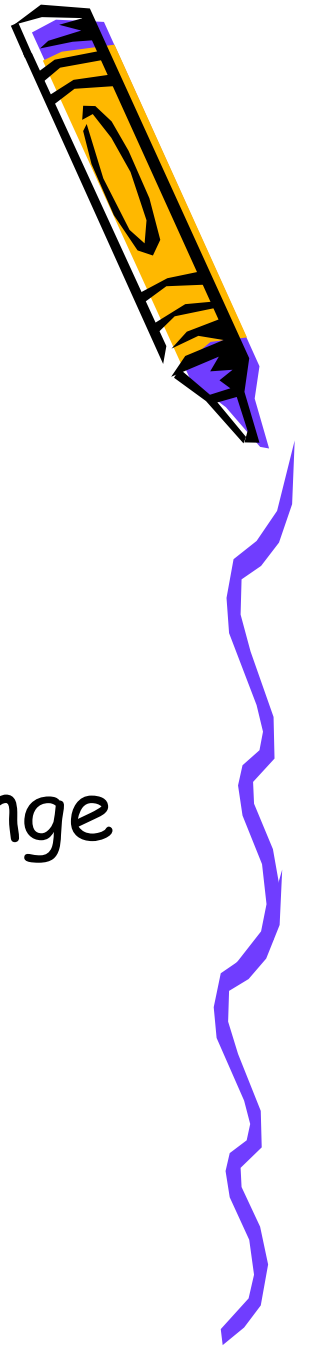
- Pretreatment standards, local limits
- Narrative criteria
- Use Attainability Analyses (UAAs) to revise inappropriate standards
- Wet weather standards
- CSOs/SSOs



CWA Limits

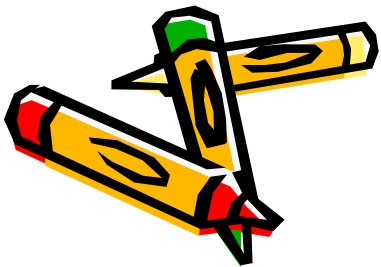
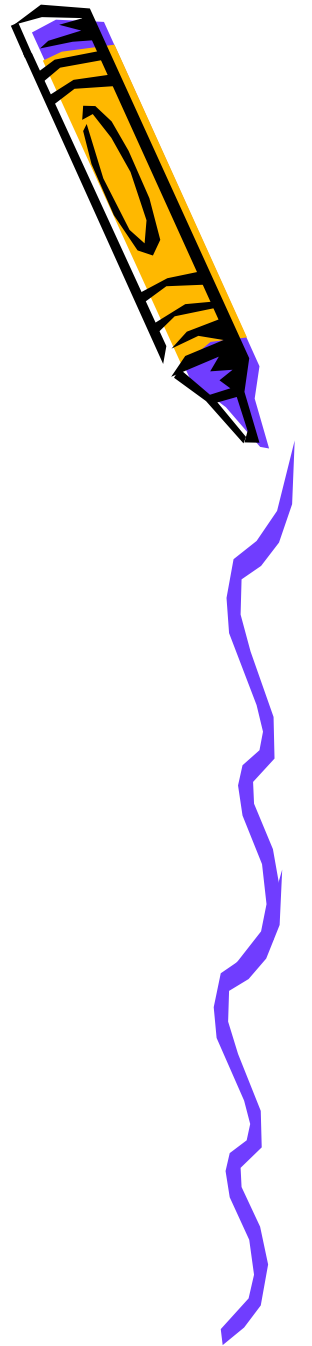
POTW Issues

- MS4s: MEP vs numeric limits
- Bacteria standards
- Mercury
- Implications of CAA / climate change issues



Clean Water Act Permits

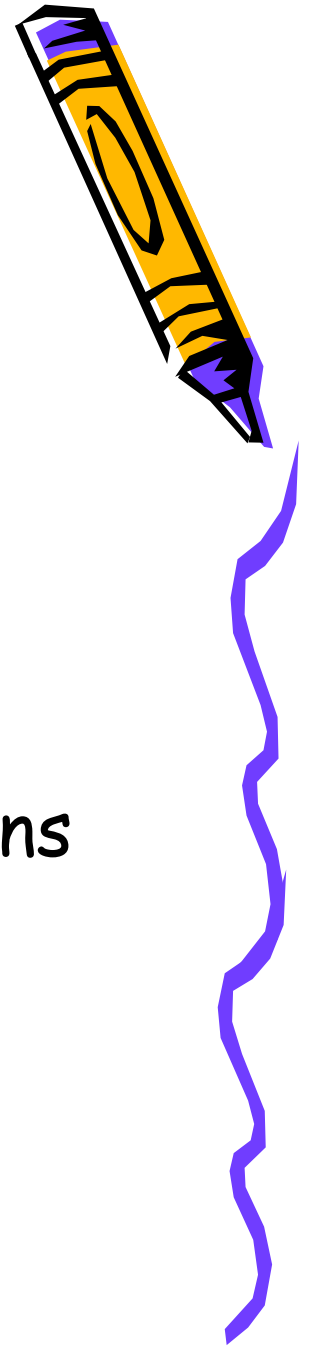
- Permitting Process
- Permit Contents
- Relief Mechanisms



CWA Permits

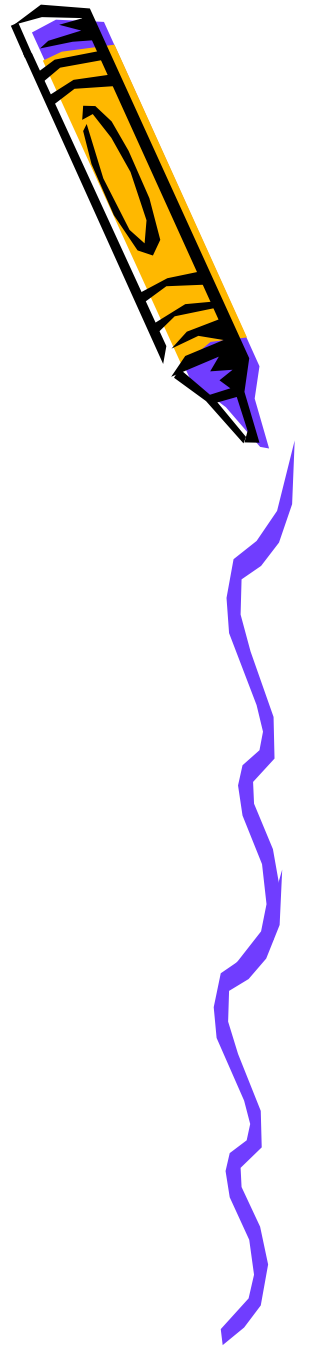
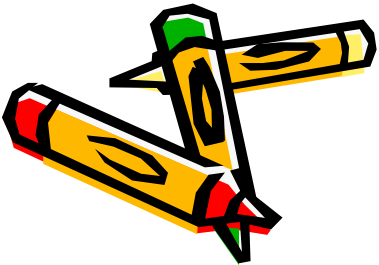
Permitting Process

- Submit application
 - Important for permit shield
- Negotiation period
 - Ask for pre-public notice draft
 - Meet with agency to discuss conditions
- Public notice draft
- Comment period, possible public hearing



CWA Permits Permitting Process

- EPA review and approval
- Final permit
- Appeal period
- Modifications



CWA Permits

Permit Contents

- Facility description
- Effluent limitations and monitoring requirements
- Standard conditions
- Special conditions
- Pretreatment program



CWA Permit Contents Limits and Monitoring

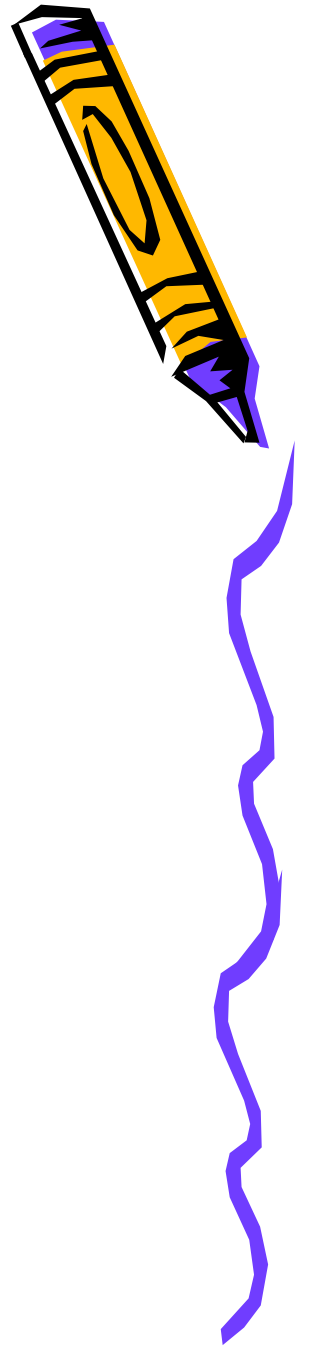
- WQBELs if reasonable potential to exceed (RPE) water quality standards
 - Based on waste load allocation (WLA)
 - Monthly average and daily maximum limits
 - Parameters can include $CBOD_5$, TSS, Ammonia-nitrogen, pH, DO, TRC, Fecal coliform or *E. coli*, metals



CWA Permit Contents

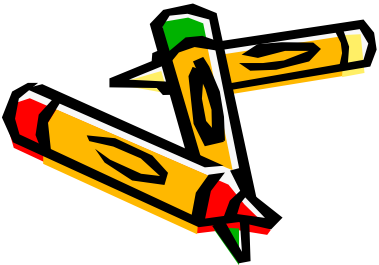
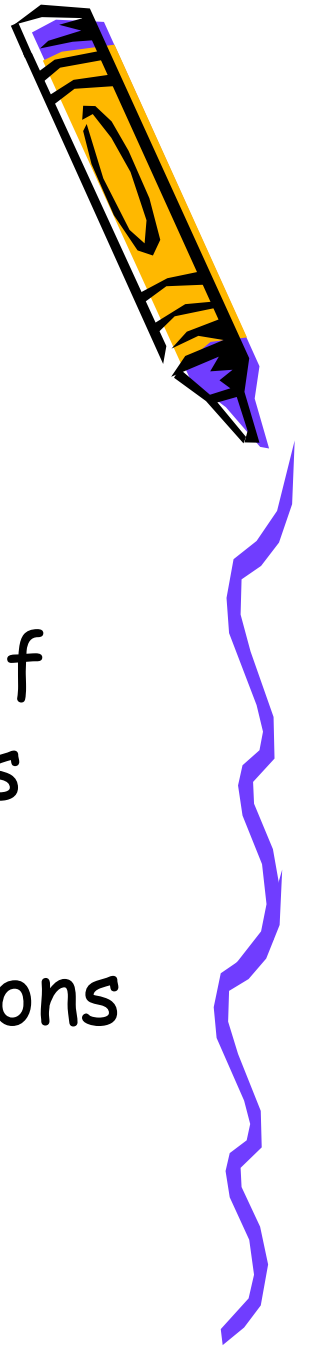
Limits and Monitoring

- WQBELs if required by TMDL
 - Based on WLA or load allocation (LA)
 - Numeric vs BMPs
 - Daily?
- TBELs
 - Secondary treatment
 - More?



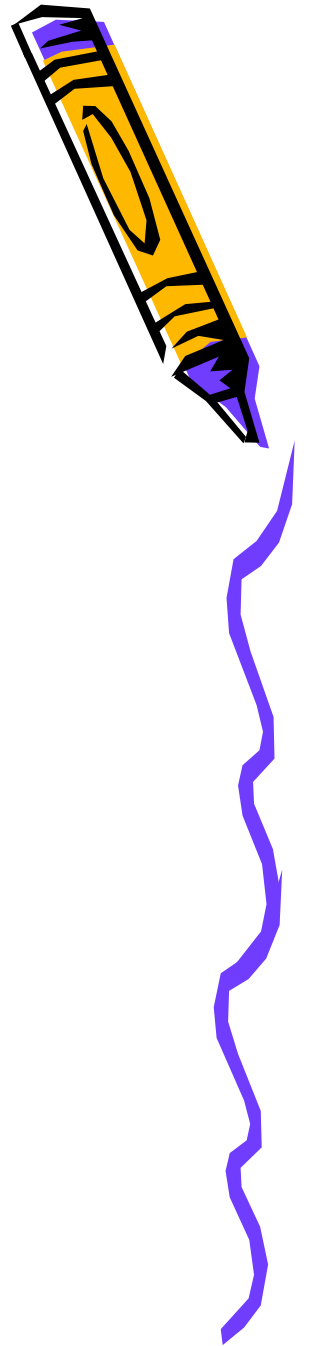
CWA Permit Contents Limits and Monitoring

- Monitoring includes influent and effluent
- May specify test methods, limits of detection and quantification (LODs and LOQs)
- CSO / SSO limitations and conditions



CWA Permit Contents Limits and Monitoring

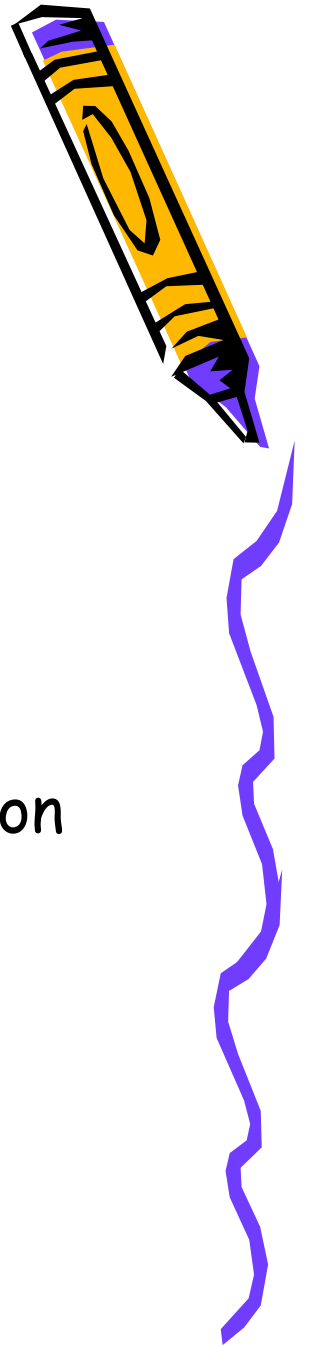
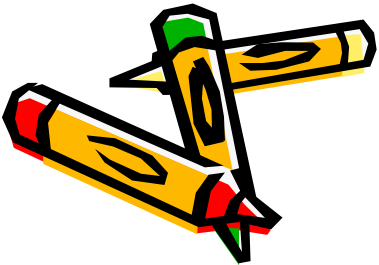
- Narrative limitations
- Monthly reporting requirements
- Reopening clauses
 - Revised WLAs
 - Revised standards
 - Monitoring results



CWA Permit Contents

Standard Conditions

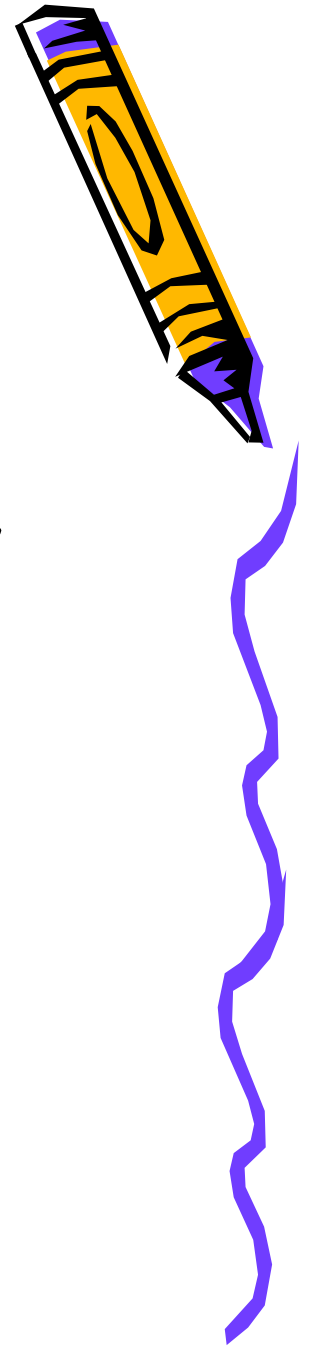
- General conditions:
 - Comply with the permit
 - Mitigate damage from noncompliance
 - Provide information to agency
 - Reapply for renewal permit before expiration
 - Penalties for violation
 - Operator certification
 - Inspections



CWA Permit Contents

Standard Conditions

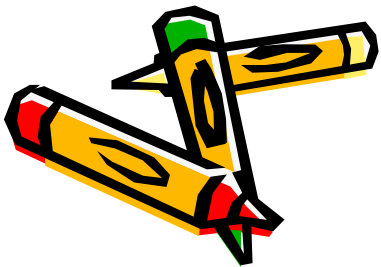
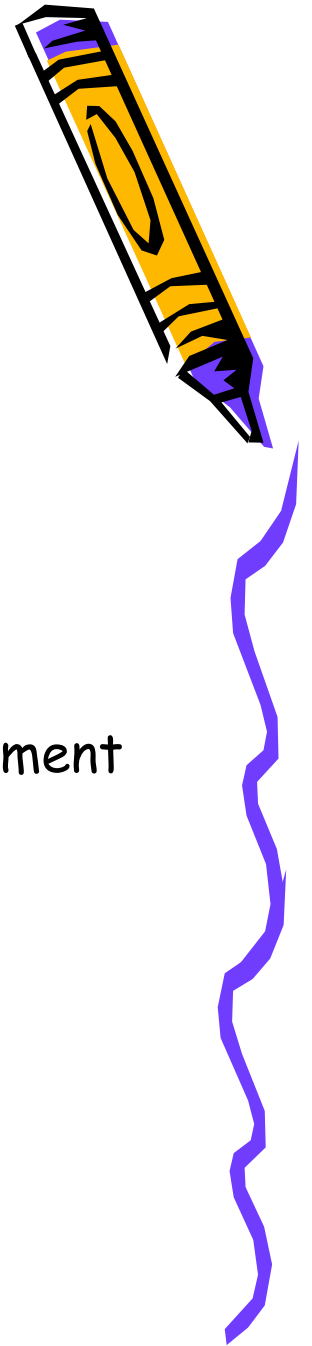
- Management requirements:
 - Good facility operation, maintenance, and quality control
 - Bypass prohibitions, conditions
 - Upset conditions
 - Power failures
- Important to understand for affirmative defenses



CWA Permit Contents

Standard Conditions

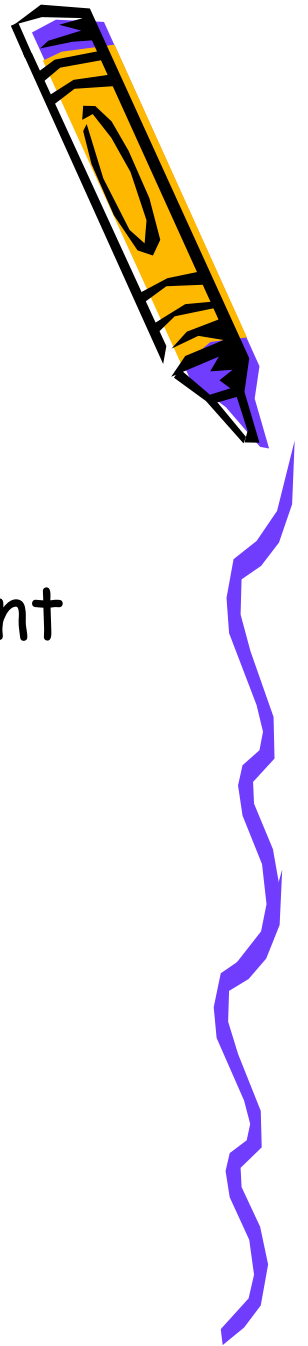
- Reporting requirements:
 - Facility changes
 - 24-hour reporting requirements
 - Unanticipated bypass
 - Significant danger to human health or environment
 - Upset that exceeds technology requirements
 - SSOs
 - Dry weather CSOs
 - Toxics violations



CWA Permit Contents

Standard Conditions

- More reporting requirements:
 - Identify significant indirect dischargers subject to pretreatment standards
 - Notify agency of changes in or new indirect dischargers



CWA Permit Contents

Special Conditions

- Spill reporting and prevention
- Slug discharge prevention
- Pollutant minimization requirements
- Biomonitoring for whole effluent toxicity
- Biosolids
- CSOs / SSOs



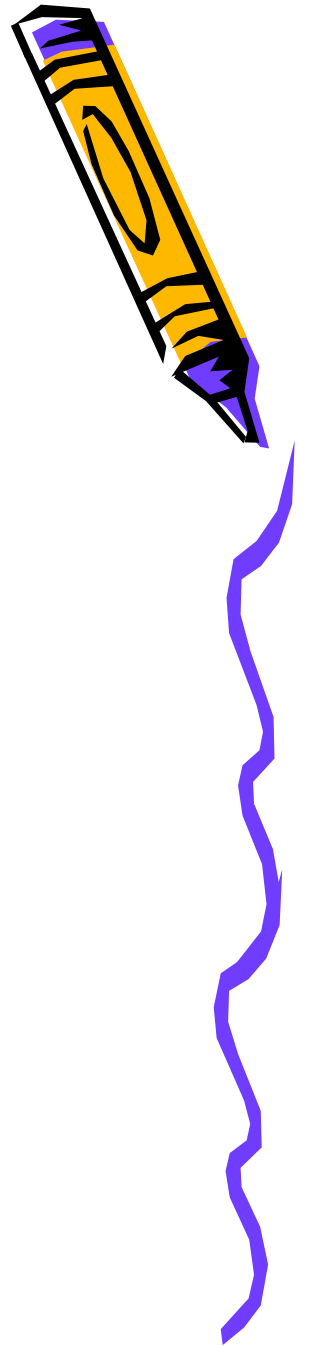
CWA Permit Contents Pretreatment Program

- Sewer use ordinance
- Local limits
- Permit/control indirect dischargers
- Slug control plans
- Industrial user compliance monitoring
- Enforcement



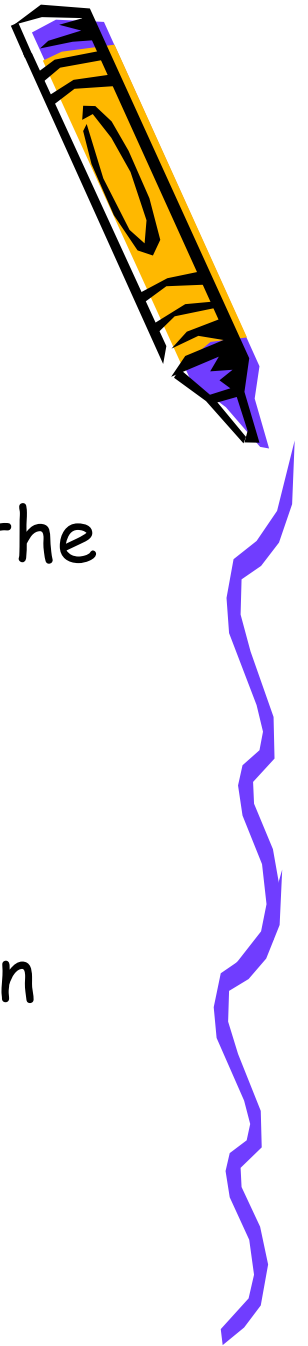
CWA Permitting Relief Mechanisms

- Compliance schedules
- Variances
 - Individual
 - Statewide or multiple-discharger
- Site-specific criteria
 - Bioavailability
 - Unique receiving water characteristics
- UAAs



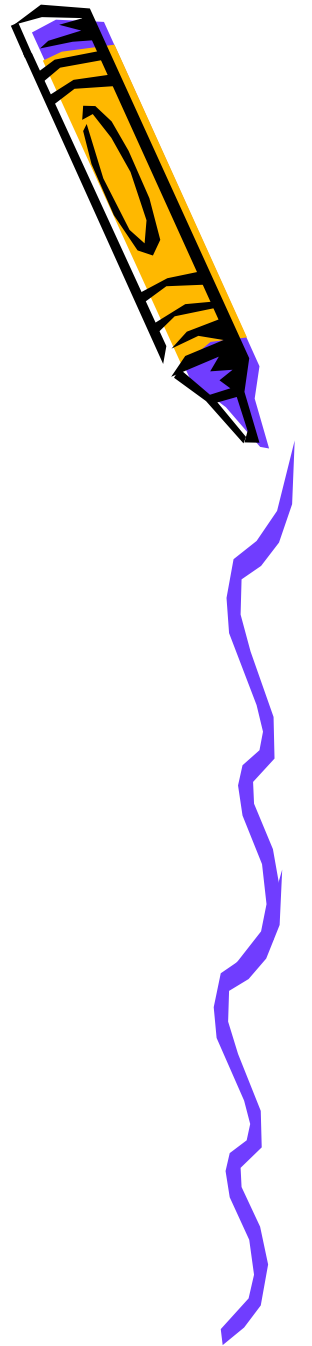
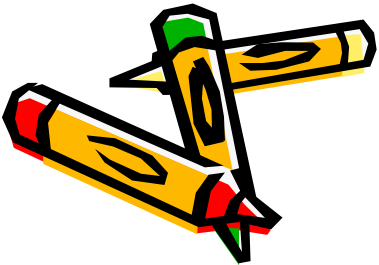
Clean Water Act Enforcement

- Permit as a shield:
 - For pollutants specifically limited in the permit
 - Pollutants identified as present in application
 - Constituents of wastestreams, operations and processes identified in application



Clean Water Act Enforcement

- Penalties for noncompliance
- Significant noncompliance
- Special state or federal enforcement initiative
- EPA overfiling
- Consent decrees / enforcement orders
- Citizen suits



Questions?

ERIKA K. POWERS
Barnes & Thornburg LLP
One North Wacker Drive
Suite 4400
Chicago, IL 60606

Phone (312) 338-5904
Fax (312) 759-5646
E-mail epowers@btlaw.com

