

Overview of the Clean Water Act and the NPDES Program



NPDES Permit Writers' Course
Online Training Curriculum



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Clean Water Program Development – Selected Legislation and Events

- 1899 Rivers and Harbors Act
- 1948 Federal Water Pollution Control Act
- 1965 Water Quality Act
- 1970 Executive Order - EPA established
- 1970 Refuse Act Permit Program
- 1972 FWPCA Amendments
- 1977 Clean Water Act
- 1987 Water Quality Act



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Early Legislation

- 1899 Rivers and Harbors Act
 - navigation
- 1948 Federal Water Pollution Control Act (FWPCA)
 - navigation
 - human health concerns
- 1965 Water Quality Act
 - required standards for interstate waters



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EPA and RAPP – 1970



- EPA established by Executive Order in 1970
- Refuse Act Permit Program (RAPP) established in 1970
 - Used authority in section 13 of the Rivers and Harbors Act of 1899 (known as the Refuse Act)
 - EPA and Corps of Engineers began preparing program requirements
 - program based on both effluent quality and receiving water quality standards
 - EPA would prepare effluent guidelines for 22 different categories
- RAPP struck down in a federal court and Congress began to fashion a program of its own

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Federal Water Pollution Control Act Amendments – 1972

- Section 101(a)
- Objective: restore and maintain the chemical, physical, and biological integrity of the Nation's waters
- National Goals and Policies include:
 - eliminate the discharge of pollutants to navigable waters by 1985
 - achieve by July 1, 1983, as an interim goal, wherever attainable, a level of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water
 - prohibit the discharge of toxic pollutants in toxic amounts

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Pollutant Source Control Programs Established by FWPCA Amendments



- Section 311 – Oil and Hazardous Substance Liability
- Section 312 – Marine Sanitation Devices
- Section 404 – Permits for Dredged or Fill Material
- Section 402 – National Pollutant Discharge Elimination System

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Federal Water Pollution Control Act Amendments – 1972

- NPDES, pretreatment, and construction grants programs [section 402]
- Maximum permit term of 5 years
- Technology-based and water quality-based requirements
- Compliance deadlines
- Authorization of state NPDES permitting programs
- Permit compliance is a shield
- Significant penalties for permit violations

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Natural Resources Defense Council Consent Decree – 1976

- Included a list of toxic priority pollutants
 - 65 categories, 129 pollutants
- Included a list of primary industries for technology-based controls
 - 21 industries
- Required technology-based effluent standards for these substances and industrial categories



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Clean Water Act – 1977

- Section 307(a) adopted provisions of NRDC Consent Decree
- Clarified that federal facilities are subject to state programs
- Pretreatment program authorization
 - authorized EPA to approve local pretreatment program
 - required NPDES states to modify programs to include pretreatment oversight



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Water Quality Act – 1987

- Stormwater permitting requirements [section 402(p)]
- Indian tribes may be considered as “states”
- Federal sludge management program
- Increased penalties for noncompliance
- Renewed emphasis of surface water toxics control



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NPDES Statutory and Regulatory Framework CWA sections 301(a) and 402 and 40 CFR 122.1(b)

- All *point sources*
- Discharging *pollutants*
- Into *waters of the United States*



Must obtain an
NPDES *permit*
from EPA or an
authorized state,
territory, or tribe

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What is a Permit?

- A permit is a license that is
 - issued by the government
 - granting permission to do something that would be illegal in the absence of the permit (e.g., driver's license)
- There is no right to a permit and it is revocable for cause (e.g., reckless driving)
- An **NPDES permit** is a license to discharge and can be revoked for cause



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Point Source – 40 CFR 122.2



- Any discernible, confined, and discrete conveyance, including but not limited to:
 - any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged
- **Does not include return flows from irrigated agriculture or agricultural storm water runoff**

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Pollutant – 40 CFR 122.2

- Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water
- ***Does not include sewage from vessels or injected wastes***



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CWA Classes of Pollutants

- Conventional pollutants
 - BOD, TSS, pH, fecal coliform, and oil and grease
- Toxic pollutants – 126 priority pollutants
 - heavy metals (e.g., Cu, Pb, Hg)
 - organic compounds (e.g., PCBs, dioxin)
- Non-conventional pollutants
 - everything else...
 - e.g., chlorine, ammonia, nitrogen, phosphorus

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Waters of the U.S. – 40 CFR 122.2

- All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters subject to the ebb and flow of the tide
- All interstate waters
- All other waters the use, degradation, or destruction of which could affect interstate or foreign commerce
- All impoundments of waters of the United States
- Tributaries of the above four categories
- The territorial sea
- Wetlands adjacent to waters identified above



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Waters of the U.S. (continued)

- Regulatory definition identifies examples of surface waters that could be waters of the U.S., including:
 - rivers and streams
 - lakes and ponds
 - wetlands
 - sloughs
 - prairie potholes
 - intermittent streams
 - territorial seas
 - etc.
- Supreme Court rulings have affected decisions regarding scope of “waters of the U.S.”



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Waters of the U.S. – What is a Permit Writer to Do?



- When in doubt, talk with state or EPA Regional experts to better understand the effect of these cases on your situation
- More information:
 - www.epa.gov/wetlands/guidance/CWAwaters.html
- Recognize that state, territory, or tribal law may have more inclusive definition of waters of the state/territory/tribe

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Waters of the U.S. – What is a Permit Writer to Do? (continued)

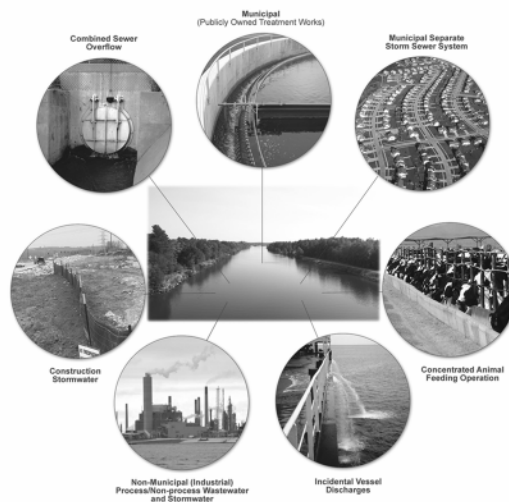


- What about ground water?
 - generally not itself considered “waters of the United States”
 - discharges to ground water could be regulated as NPDES discharges where connection to surface water is shown (not common)
 - might be waters of the state/territory/tribe
 - if in doubt, check with State or EPA experts

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Point Source Dischargers



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Questions or comments?

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