

C234: Green Chemistry: An Interdisciplinary Approach to Sustainability – Sustainable Biofuels Development

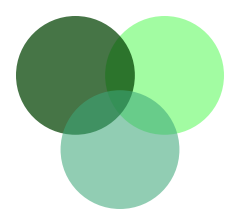
Class 5: Introduction To Policy and Law

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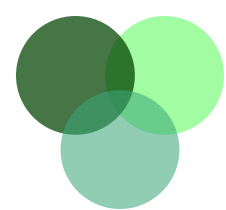
Introduction To Policy And Law



Questions about the relationship between the economy and environmental health that can't be answered from the perspective of economic actors competing to create wealth

- What is the proper scope of the right of a private property owner to use his/her own land for private gain (i.e. clear forest to build factory)?
- What is responsibility of private persons for damage externalized onto community (i.e., pollution emanating from factory)?
- What is proper role of government in regulating private behavior?
- Is government best steward of environment or are private landowners?

What are some other issues?



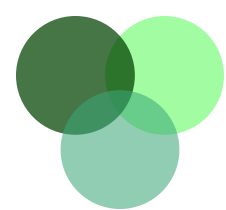
Introduction To Policy And Law



Questions about the relationship between the economy and environmental health that can't be answered from the perspective of private economic actors trying to create wealth

- What is our responsibility to future generations?
- How should the burdens of pollution be distributed among populations?
- What is our responsibility to other living species?
- What is our responsibility to parts of nature outside the United States?
- What is our responsibility to people who live outside the United States?
- Who is responsible for the cumulative impact on the environment of the actions of millions or billions of people acting independently?

Who is responsible for answering these questions?



Introduction To Policy And Law



Environmental Problems Under Classical Environmental Economics

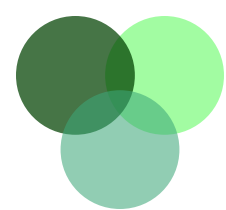
“The true demand for public goods will not be satisfied in pure market economies.”

What are public goods?

What is a negative externality?

What does it mean to internalize an externalized cost?

For public goods, what is the free-access problem (the “Tragedy of the Commons”)?

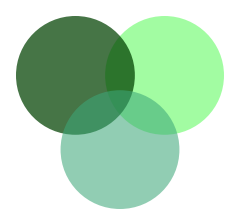


The American Legal System

Constitutions (Federal and State)

Common Law (State judges, some federal)

Public law (Legislation) (federal, state, local)



The Common Law

Sic utere tuo ut alienum non laedas

“use your own so as not to harm another”

Ancient common law rule, derived from Roman law

Modern doctrines of nuisance and negligence

Invented to permit industrial revolution

Structure: (a) burden of proof on plaintiff

(b) Plaintiff must show defendant’s act was “unreasonable”

This structure informed structure of federal laws, including TSCA

Current relevance

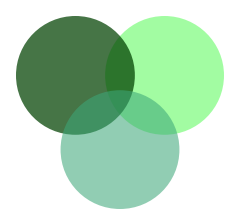
Forms law governing “free-market” economy

Interstitial law (safety net)

Background principles for constitutional takings doctrine

Important cases still brought: PFC Cases; Connecticut vs. AEP (US Supreme Ct)

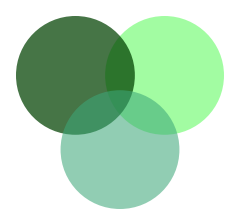
Future evolution: nuisance, public trust doctrine



Public Law (Legislative)

What is a statute?

What's a regulation?



Evolution of Federal Environmental Statutes

Arose incrementally after World War II, especially in 1960's and 1970's

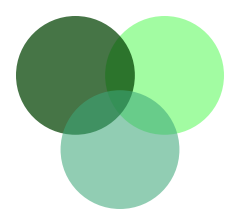
Enormous increase in industrial economy, environmental damage

Increased scientific understanding of health and environmental impacts of damage, including from chemicals

Perception of problems as national in scope, so that states can't solve on their own, and instead engage in "race to the bottom"

Broad shift in power from states to federal government

Growing administrative state, in which Congress could delegate difficult problems to administrative agencies



Introduction To Policy And Law

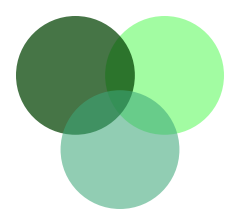


Federal Environmental Statutes

- 1970 National Environmental Policy Act
- 1970 Clean Air Act
- 1972 Clean Water Act
- 1972 FIFRA (pesticides)
- 1972 Ocean Dumping Act
- 1973 Endangered Species Act
- 1974 Safe Drinking Water Act
- 1976 Toxic Substances Control Act (industrial chemicals)**
- 1976 Resources Conservation and Recovery Act (hazardous. waste)
- 1980 Superfund
- 1986 EPCRA (Right-to-Know Act)

Other laws as well:

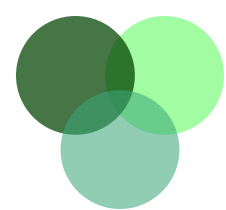
- OSHA (occupational health)
- FFDCA (food, drugs, cosmetics)
- CPSC (consumer products)
- HMTA (hazardous materials transportation)
- PPPA (poison prevention packaging)
- MSHA (mine safety and health)



Issues in Federal regulation

Are statutes always clear about authority delegated to agencies? Why not?

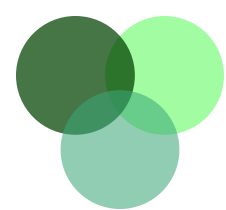
How does an agency decide how to exercise its discretion under a statute?



Class Exercise

Read TSCA §§ 6(a), 6(c)(1)

- (1) Who bears the burden of proof?
- (2) What legal test must be met before a chemical can be regulated?
- (3) What factors must be considered by the Administrator before promulgating a rule under §6(a)?
- (4) What constitutes an “unreasonable risk” and who decides?
- (5) If there is no information available about the risks of a chemical, can it be regulated under TSCA?



Class Exercise

Read E.O. 12,866 §§ 1(a), 1(b)(6)

Under the decision-making structure imposed by E.O. 12,866:

- (1) Who bears the burden of proof?
- (2) What legal test must be met before, for example, a chemical can be regulated under TSCA?
- (3) Under E.O. 12,866, what does the TSCA “unreasonable risk” standard mean?