Environmental Law – Primer*

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What is Environmental Law?

• Legal system of statutes, regulations, guidelines, requirements, policies, and case specific judicial and administrative interpretations that address a wide-ranging set of environmental issues and concerns

• Organized way to minimize, prevent, punish, or remedy the consequences of actions which damage or threaten the environment, public health, and safety
Sources of Environmental Law

- Legislation (federal, state, local)
- Regulations (federal, state, local)
- Court decisions (interpreting statutes and regulations)
- Common law
- Constitutions (United States, state)
- International treaties
- Foreign regulations

The Importance of State Laws

- Some state laws implement federal programs
  - Clean Water Act programs
  - Clean Air Act programs
- Some state laws are independent from federal programs
  - Massachusetts: Toxic Waste Minimization Law
  - California: Proposition 65
  - New Jersey: Property Transfer Environmental Law
Targets of Environmental Laws: who/what gets regulated?

- Products
- Pollutants
- Industrial Facilities
- Government Agencies
- Individuals
- Land uses

Regulatory Objectives: What is the desirable level of protection?

- Health or Environmental Based Standards
  - E.g., under the Clean Air Act, ambient air quality standards must protect human health

- Technology or Feasibility Based Standards
  - E.g., under the Clean Air Act, emission limits for new sources is determined by the limits achievable using the best control technology demonstrated by that industry

- Balancing Standards
  - E.g., the Toxic Substances Control Act requires the EPA to balance the environmental and health effects of chemicals with the economic consequences of regulation
Regulatory Obligations
How will regulations achieve their objectives?

- Design Standards
- Performance Standards
- Ambient or Harm Based Standards
- Product Bans or Use Limitations
- Planning or Analysis Requirements
- Information Disclosure Requirements

Translating Statutes into Regulations

Federal Environmental Statutes:
Enacted through the legislative process.
Provide the regulatory framework.
Authorize the agencies to adopt regulations.
Reported in the United States Code.

Federal Environmental Regulations:
Adopted by federal agencies.
Set forth implementation details, such as emission standards or procedures for submitting permit applications.
Reported in the Code of Federal Regulations (CFR)
Environmental Laws

- Federal Statutes
- International Treaties
- Common Law

History of EPA

- Created July of 1970, by President Nixon - Reorganization Plan
- Independent agency, not under another department
- FY08 budget requested $7.2 Billion and 17,324 full-time employees
- Consolidated number of activities into 1 agency
- EPA’s official birthday is December 2, 1970
  - Modern environmental movement was inspired by publication of “Silent Spring” in 1962
  - April 22, 1970: First Earth Day Celebration
**History of EPA – Merging of Agencies**

- Dept. of Health, Education, and Welfare
- Department of Interior
- Department of Agriculture
- Department of Agriculture
- Atomic Energy Commission
- Air, Solid Waste, Drinking Water
- Water, Pesticides Research
- Pesticides Registration
- Pesticides In Food
- Radiation Programs

**Environmental Protection Agency**

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**Common Law v. Statutory Law**

**Common Law**
- Rules are created by judges through court decisions.
- Because common law is continuously shaped by court decisions, common law can vary between different jurisdictions.
- Liabilities stem from personal injuries or property damage caused by environmental conditions.

**Statutory Law**
- Rules are created through legislative procedures.
- Statutes provide uniform, national frameworks for pollution control, e.g. Clean Water Act.
- Liabilities stem from national pollution control policies.
Environmental Laws and Regulations

• Laws often do not include all details
• Statutes empower administrative agency to promulgate regulations
• President may also give agency authority to promulgate regulations through executive order

Making of Regulation

• Proposed regulation is listed in Federal Register
• Public can send comments to Agency; Agency considers all comments, revises regulation accordingly, issues final rule, again published in Federal Register
• Rule is "codified" in Code of Federal Regulations (CFR)
• CFR is published annually, divided into 50 volumes, called Titles
• Almost all environmental regulations appear in Title 40
  – http://www.epa.gov/lawsregs/search/40cfr.html
EPA Administers These Statutes:

- Asbestos Information Act -- 42 U.S.C. 7401, 7412, 7414, 7416 [Nov. 1, 1988]
- Asbestos School Hazard Abatement Act (ASHAA) -- PL 98-377, Title II of TSCA [May 24, 1982]
- Chemical Safety Information, Site Security and Fuels Regulatory Relief Act -- PL 106-40; 42 U.S.C. 7412(r)--amends Section 112(r) of Clean Air Act [Jan. 6, 1999]
- Clean Air Act (CAA) -- 42 U.S.C. § 7401 et seq. [Dec. 31, 1970]
- Clean Air Act Amendments of 1990 -- 42 U.S.C. § 7401 et seq. [Nov. 15, 1990]
- Pollution Prevention Act (PPA) -- 42 U.S.C. § 13101 and 13102, § et seq. [Nov. 5, 1990]
- Federal Water Pollution Control Act Amendments of 1972 (FWPCA) PL 92-500; [Oct. 18, 1972]
- Ocean Dumping Ban Act (ODBA) -- PL 100-551, Title IV of TSCA [Oct. 28, 1988]
- Safe Drinking Water Act (SDWA) -- 43 U.S.C. § 300f et seq. [Dec. 16, 1974]
- Indoor Radon Abatement Act (IRAA) -- PL 100-551, Title III of TSCA [Oct. 28, 1988]
National Environmental Policy Act

• What is the purpose?
  – Section 2 of NEPA declares that the purpose of the Act is to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; and to enrich the understanding of the ecological systems and natural resources important to the Nation.

• What is the scope?
  – NEPA applies to all major federal actions -- therefore it affects all federal agencies.

• Who implements the Act?
  – The Council on Environmental Quality, established under Title II, as an Executive Office of the President to implement NEPA
  – States do not implement NEPA

Substantive NEPA (Section 101): Pronounces national environmental policy goals.

Procedural NEPA (Section 102):
  – Purpose to guarantee that no federal agency will undertake projects without first considering the adverse environmental consequences of its action
  – Requires an environmental impact statement (EIS) to be prepared for all major Federal actions that significantly impact the environment.
  – Once the first version of the EIS (the Draft EIS) is available on the Federal Register, there is a public comment period; the agency will respond to the public comments in the Final EIS.
Toxic Substances Control Act

• What is the purpose?
  – To regulate toxic chemicals and mixtures that present an “unreasonable risk of injury to health or the environment”

• What is the scope?
  – TSCA places the burden on manufacturers to supply the EPA with information on environmental and health effects of chemical substances and mixtures. The EPA then has broad power to regulate the manufacture, use, distribution, and disposal of chemical substances and mixtures. However, the EPA must balance the economic and social benefits of a chemical against the risks when setting forth regulations.

• Who implements the program?
  – the EPA
  – Unlike other programs, states do not implement TSCA

TSCA...

• What are the major provisions?
  – Premanufacture Notice (Section 5): Any person who manufactures or processes new chemicals for commercial purposes must submit a premanufacture notice (PMN) to the EPA at least 90 days before they begin manufacturing or processing. The PMN lists the intended uses of the substance, the information required to develop test data, and the nature of the test data that was developed.

  – Existing Chemicals (Section 4): TSCA requires manufacturers, importers, and processors of TSCA-related chemical substances to submit data to the EPA on existing chemicals when they may present an unreasonable risk to health and environment or when they are produced in such quantities that there is a potential for a substantial release into the environment or human exposure.
Federal Insecticide, Fungicide, and Rodenticide Act

• What is the purpose?
  – To protect the public health and environment against the misuse of pesticides.

• What is the scope?
  – All pesticide manufacturers must submit data regarding the safety and efficacy of their pesticides.

• Who implements the program?
  – The EPA
  – Where a state has a federally approved pesticide program, the state is the primary enforcement authority.

FIFRA...

• What are the major provisions?
  – Registration requirements (Section 3): Based on the data submitted by the manufacturer on its registration application, the EPA decides whether the pesticide poses unreasonable adverse effects to the environment. The EPA takes into account the economic, social, and environmental costs and benefits of the pesticide’s use.

  – Suspension or cancellation of pesticides (Section 6): The EPA may suspend, cancel, or restrict the use of a pesticide that poses unreasonable adverse effects or imminent hazards to the environment.

  – Labeling requirements: All registered pesticides must be properly labeled for lawful sale. The label must specify the pesticide’s active ingredients, how to use the pesticide on particular crops, and limitations on how or when it may be used.
Emergency Planning and Community Right-to-Know Act

• What is the purpose?
  – To create emergency response plans to prepare for accidental chemical releases.
  – To create an information database so that the public can know what types of chemical are being released by manufacturing facilities in their communities.

• What is the scope?
  – Any facility that produces, uses, or stores any of the substances listed on the EPA’s List of Extremely Hazardous Substances.

• Who implements the Act?
  – The State Emergency Response Commission, which are created in each state under the Act, implement the emergency planning requirements.
  – The EPA receives submissions of the Toxic Release Inventory (TRI) reports with the authority to inspect and verify the reports.

EPCRA

• What are the major provisions?
  – Planning Provisions (Section 301, 302, 303):
    • Require states to create local emergency units that must establish plans for responding to chemical release emergencies
    • Requires facilities to report any release of a chemical substance that exceeds the reportable quantity established for that substance to the state and local emergency planning commissions
  – Community Right to Know Provisions (Sections 311, 312, 313):
    • Toxic Release Inventory – requires the facilities producing more than a threshold amount of listed chemicals to report the maximum amount of the chemicals at the facility and released from the facility to the EPA
    • Toxic Release Inventory – data submitted to the EPA is compiled in a computerized database that is available to the people to view chemical releases from facilities in their communities
Clean Air Act

• What is the purpose?
  – To control air pollution by instituting point source controls and establishing maximum pollutant levels for the ambient air.

• What is the scope?
  – The main focus is stationary sources of air pollution but the Act also provides some regulation for mobile sources.

• Who implements the program?
  – The EPA must establish national ambient air quality standards (NAAQS) for criteria pollutants: total suspended particulates, sulfur dioxide, nitrogen oxides, carbon monoxide, ozone, and lead.
  – Each state is required to determine how to attain and maintain NAAQS by developing a State Implementation Plan (SIP).
  – For state areas that exceed the NAAQS, the states must implement a program to prevent the significant deterioration of air quality in those areas that exceed the NAAQS.

Pollution Prevention Act

• What is the purpose?
  – Establishes Pollution Prevention as the nation’s preferred pollution control strategy, as opposed to end of pipe pollution control.
  – Pollution Prevention is the attempt to reduce the amount of generated waste through more efficient use of resources at the input and production levels.

• What is the scope of the Act?
  – Moves facilities beyond compliance on a voluntary basis

• Who implements the Act?
  – The EPA
Pollution Prevention Act

• What are the major provisions?
  – Amendment to the TRI reporting requirement under EPCRA:
    • Facilities subject to EPCRA’s reporting requirements must also report
      information on the pollution prevention and recycling activities at the
      facility for each chemical
  – Voluntary Programs to Implement Pollution Prevention Strategies:
    • Environmental Leadership Program: Participating companies develop
      and implement pollution prevention management practices and set
      environmental goals beyond regulatory compliance.
    • Common Sense Initiative: The EPA takes an industry-by-industry
      approach to environmental protection by giving facilities more
      opportunity to reduce waste streams generally instead of targeting
      particular pollutants
    • Excellence in Leadership (XL) Program: Participating companies have
      the flexibility to meet regulatory requirements in exchange for an
      enforceable commitment to moving beyond compliance.

Clean Water Act

• What is the purpose?
  – The stated objective of the Clean Water Act is to restore and
    maintain the chemical, physical, and biological integrity of the
    Nation’s waters.
• What is the scope?
  – All point sources that discharge any pollutants into the waters of
    the United States must first obtain a permit under the Act.
• Who implements the program?
  – the EPA
    – With EPA approval, states can issue NPDES permits within the
      state. The EPA can revoke a state's permitting authority if the
      program is not as stringent as the federal program.
CWA

• What are the major provisions?
  – National Pollution Discharge Elimination System Permit: End-of-pipe pollution from point source dischargers is controlled through permits that specify effluent limitations for each discharger.
  – Water Quality Standards: Each water body of every state must meet certain ambient water quality standards consisting of numerical and narrative criteria. Water quality standards vary depending on the state’s designated use of the water body.
  – TMDLs: When point source effluent limitations are not stringent enough to meet water quality standards, states must develop total maximum daily load (TMDL) calculations for that water body to help identify and reduce pollution inputs from both point and nonpoint sources.

CAA...

• What are the major provisions?
  – Stationary source permits (Title V): Different standards are imposed on existing verses new or modified facilities. New or modified sources are subject to new source performance standards (NSPSs) and must obtain preconstruction permits. If the new or modified source is located in a nonattainment area, the source must obtain a non-attainment area permit and offset emissions so that the nonattainment can further its progress toward becoming an attainment area.
  – Hazardous air pollutants: The 1990 amendments list 189 hazardous air pollutants for which the EPA requires the installation of technology that will result in the maximum achievable reductions.
  – Title VI Phase-outs: With the enactment of the 1990 Amendments, Title VI implements the Montreal Protocol by phasing out substances like CFCs, halons, carbon tetrachloride, methyl chloroform.
Resource Conservation and Recovery Act

• What is the purpose?
  – to provide a “cradle to grave” framework for managing solid and hazardous waste from generation to final disposal

• Who must comply?
  – Any party that generates, transports, stores or disposes of solid and hazardous waste.

• Who implements the program?
  – the EPA
  – States: with EPA approval, some states implement and manage solid and hazardous waste management programs in lieu of the federal RCRA program

RCRA...

• What are the Major Provisions?
  – Permits (Subtitle C): Requires generators, transporters, and treatment/storage/disposal facilities to obtain permits before handling solid or hazardous waste.
  – Uniform Hazardous Waste Manifest (Subtitle C): Requires preparation and maintenance of Waste Manifest to track origin of waste, who is transporting the waste, and destination of waste.
  – Sanitary Landfills (Subtitle D): Addresses the management of nonhazardous waste and exempt hazardous solid waste. This title mainly pertains to the design and monitoring of wastes that are disposed of in sanitary landfills.
  – Leaking Underground Storage Tanks (Subtitle I): Addresses problems associated with regulated substances entering the soil and groundwater due to leaking underground storage tanks.
Comprehensive Environmental Response, Compensation, and Liability Act

• What is the purpose?
  – To provide a mechanism to clean up contaminated sites and hold potentially responsible parties accountable for clean up costs.

• What is the scope?
  – Parties may be liable for cleanup costs if they contributed any amount of hazardous substance to a contaminated site, e.g. anyone who disposed of hazardous substances found at the site.

• How is the Act enforced?
  – The EPA can conduct a short-term removal action at any site requiring emergency action or conduct a long-term remedial action at any site on the National Priorities List.
  – The EPA can compel private parties to cleanup a site when release or threatened release of hazardous substances present an imminent endangerment to the public health or welfare of the environment.

CERCLA...

• What are the major provisions?
  – Contaminated Site Cleanup: CERCLA authorizes the EPA to force parties that were responsible for the release of hazardous substances to finance cleanups on the contaminated site.
  – Superfund: Where the responsible party cannot be identified or has gone bankrupt, CERCLA established a $1.6 billion Trust Fund, known as Superfund. The Superfund Amendments and Reauthorization Act of 1986 (SARA) appropriated another $8.5 billion.
  – National Priorities List: The EPA can only conduct long term remediation actions at sites that are on the National Priorities List, which ranks the sites eligible for Superfund clean up.
Occupational Safety and Health Act

• What is the purpose?
  – To ensure that “no employee will suffer material impairment of health or functional capacity” from a lifetime of occupational exposure.

• What is the scope of the Act?
  – The Act extends to all employers and their employees in all fifty states, except workplaces with fewer than ten workers and federal or state employees.

• Who implements the Act?
  – The Occupational Safety and Health Administration (OSHA)

OSHA

• What are the major provisions?
  – General Duty Clause
    • Imposes a generic duty on employers to keep their workplaces safe. Even where specific standards do exist, the general duty clause is triggered if those standards are outdated or otherwise not sufficient to ensure worker safety.
  – Refusal to Work/Whistle blowing Provisions
    • If a worker refuses to work because of unsafe working conditions, the OSHA regulations protect workers from discrimination
    • If a worker reports an OSHA violation, the Act also protects the employee from being fired because of the whistle blowing
  – Hazard Communication Regulations
    • Requires employers to provide employees with information concerning hazardous chemicals through labels, material safety data sheets, training and education, and lists of hazardous chemicals in each work area.
Common Law: Trespass

- **Definition**: unauthorized invasion of a person’s land

- **Application in environmental law**: a defendant was held liable for trespass when defendant’s sludge seeped on to plaintiff’s land and yet defendant did nothing to stop it.
Common Law: Strict Liability for Ultra Hazardous Activities

- **Definition of Strict Liability**: the defendant can be liable if he was engaged in the activity that caused injury, without proof that defendant actually did anything wrong.
- **Application in environmental law**: the owners of a toxic waste dump were held strictly liable for harm caused to others even though the situation looked like a CERCLA issue.

Common Law: Nuisance

- **Definition**: An action brought against somebody for interfering with one’s use and enjoyment of property
- **Application in environmental law**: In Florida, a court ruled that an oil company unreasonably interfered with the ability of neighboring land owners to peacefully occupy their land because of noise, vibrations, and emissions from the plant.
Common Law:
Toxic Torts

• **Definition**: A claim for damages arising from exposure to a harmful chemical or substance.

• **Application in environmental law**: Environmental torts are increasingly related to injuries caused by exposure to pesticides, PCBs, benzene, heavy metals, and other contaminants.

International Treaties
International Treaties: Great Lakes Water Quality Agreement of 1978

- Agreement between the U.S. and Canada
- Created an international joint commission to draft regulations and make recommendations on all actions affecting the Great Lakes, their tributaries, and adjacent riparian areas

International Treaties: The Kyoto Protocol

- Addresses greenhouse gas emissions
- Signed by the former President Clinton in 1998, but not ratified by the Senate
- If the U.S. would have ratified the treaty:
  - Reduce greenhouse gas emissions (CO₂, NOₓ, and CH₄) 7% below 1990 levels
  - Reduce HCFC, CFC, and HFC 7% below 1995 levels over the period from 2008 to 2012
- The Protocol also contains provisions whereby credits for greenhouse gas emissions can be earned by carbon reducing activities (CDM, JI)
International Treaties: The Montreal Protocol

- Addresses ozone depletion
- 1987 Protocol Requirements:
  - 50% reduction in the 1986 CFC productions levels by 1999
  - Freeze on the 1986 halon production and consumption levels
- London Amendment of 1990:
  - Phase out CFCs entirely by 2000
- Amendments of 1992:
  - Accelerated timetable for reducing ozone depleting substances
- Implementation in the U.S. through Title VI of the Clean Air Act Amendments of 1990:
  - Production of all Class I substances (CFCs, halons, carbon tetrachloride, and methyl chloroform) phased out by 2000
  - Production of Class II substances (HCFCs) phased out by 2030

International Organization for Standards

- International Organization for Standards (ISO) is a private sector non-governmental organization founded in Switzerland in 1947.
- Promotes international harmonization and development of manufacturing, product, and communications standards.
- ISO 14000 series – environmental management standards:
  - Voluntary
  - Standards and guidance documents on environmental management, eco-labeling, auditing, life-cycle assessment, and environmental performance evaluation.
  - Calls for environmental policies that represent a commitment to environmental compliance and pollution prevention
Questions

• Why have environmental issues been debated so contentiously?
• Are statutes/regulation reactive or proactive?
• What do you think about being criminally liable?
• How have environmental issues addressed social dimensions (development, racial equality, justice, etc.)
• How might this history impact strategic management?