

Online Investigation of Environmental Law

by Russ Colson

This is going to be mainly a self-learning exercise in which you look things up online about the different environmental laws. However, I'm going to start with a few comments and notes to help focus your investigations of environmental law so that it is more than just looking up meaningless factoids and trivia.

Making an Environmental Law

We can think of several “players” in environmental law, each of which fulfills a different role. The list below provides a few starting thoughts on these different roles.

Congress: The federal legislature and president are often responsible for creating a law by passing an act in congress which gets signed by the president. This law provides the overarching philosophical objectives and general methodologies of implementation and enforcement tools available in the law.

States and local governments: The federal law may either explicitly or implicitly require states or local governments to pass laws of their own in order to meet the federal law objectives. For example, The original Clean Air Act required states to create a State Implementation Plan (SIP) for how it would bring its air quality into line with standards over some set number of years. States might provide economic incentives, require relocation of plants, or create a system of monitoring, reporting, and permitting. Different states used different approaches or methodologies to meet the overarching objectives.

Environmental Protection Agency (EPA): Determines what criteria meet the objectives of the law—for example, what is acceptable pollutant concentrations for different types of waters under variation circumstances. Ideally, this would be the ‘science’ contribution to the environmental law, although politics sometimes gets involved. [humorous aside: when you mix science and politics, you get politics—sort of like dominant and recessive genes—politics is always dominant!]

Court System: The courts are responsible for interpreting and deciding what the original intent of the law was, or how that intent plays out in special situations. For example, if the Clean Water Act refers to waterways involved in interstate commerce, the courts may decide what that means—for example, if ducks migrate between states and use waterways, does that make those waterways ‘interstate commerce’ waterways?) Courts may also decide whether a previous owner of a contaminated property is responsible for cleaning it up, even if they were not responsible for contaminating it—this is an issue especially with the CERCLA laws.

Watch dogs: Members of the public can sue if things are not done ‘correctly.’ They might initiate rule-making by petition or litigation. Some of the environmental laws don’t

have any 'teeth' of their own, but require that information be made available to the public, making the watch dogs the main enforcers of those laws.

Examples of Different Roles

The original Clean Air Act had a primary objective and a secondary objective. We'll look briefly at each

The primary objective was to "Protect Public Health...with adequate safety margin." This is the philosophical guideline for the law provided by Congress. What do you think 'adequate' means? If a recipe calls for 'adequate' cayenne pepper, the amount specified depends on the person and the situation. Likewise, 'adequate' safety margin is subject to interpretation and to the situation.

The Environmental Protection Agency (EPA) plays a key role in deciding what counts as 'adequate' safety margin in different possible situations. The EPA is responsible for using scientific methods to decide safety margins for a variety of pollutants in a variety of situations and for a variety of time-durations.

Sometimes the courts may decide whether those safety margins were met.

The courts also play a role in deciding the intent of the law. For example, the courts decided that, because the objective is public health, and not simply public welfare, cost is NOT a valid consideration in limiting the application of the law.

In contrast, the second objective set out by Congress in the Clean Air Act is "To protect public welfare from any known or anticipated adverse effect."

Public welfare is much broader than public health. Welfare is impacted by all aspects of our environment, climate, and economy. Because public welfare is impacted by costs consideration as well as by air quality, the courts ruled that cost IS a consideration for this part of the law. The courts also may have to decide whether a particular impact *should have been anticipated*, since this part of the law requires implementation of foresight, and does not allow a polluting entity to get off the hook because they 'didn't know it would cause a problem.'

The EPA is also involved in deciding what limits on pollutants are needed to 'protect public welfare.'

Notes on a Few Key Laws for You to Check Out Online:

National Environmental Policy Act (NEPA) 1969. One of the first environmental laws as national concerns rose in the 1960s and 70s. Its main goal was to slow the implementation of development projects (at least those with federal dollars involved) by requiring consideration of environmental issues. There were three levels defined 1) no response needed 2) Environmental Assessment (EA) needed, a short document, or 3) an Environmental Impact Statement (EIS)

needed, a much longer document. Although this law engaged lots of geologists in writing EISs, the law had no teeth beyond requiring a project to investigate possible environmental impacts, and then file a public document.

Clean Air Act (CAA). 1970 Established goals for reduction of Primary and Secondary Pollutants (Defined pollutants like lead (primary) and ozone (secondary), with the primary goal of protecting public health and the secondary goal of protecting public welfare. Be aware that the primary and secondary pollutants and the primary and secondary goals are different things. An interesting political football you might choose to check out—Does CO₂ meet the criteria for being a Primary Pollutant? The EPA has switched back and forth on this, depending on who is in the White House, and the Supreme Courts has also gotten engaged.

Clean Water Act (CWA) 1972 Defined two types of discharge: direct discharge (to navigable waterway) and indirect discharge (through public treatment facility). As an example of the implications of the difference: you need a permit to make a direct discharge, but not to make an indirect discharge (thus a personal household, discharging through a public treatment facility, doesn't need a permit).

Safe Drinking Water Act (SDWA) 1974. Requires action to protect the *source* of drinking water (lakes, reservoirs, spring, rivers etc). Does not regulate private wells, or bottled water (which is regulated by the FDA). The EPA sets maximum contaminant levels allowed and also sets health goals (although the health goals are unenforceable through this law).

Toxic Substance Control Act (TSCA) 1976 This law addresses the handling of toxic materials in commerce (not waste materials). It originally addressed mainly PCBs. It gives the EPA broad powers for inspection and enforcement and provides authority for severe civil and criminal penalties. It addresses newly manufactured chemical substances by providing a basis for *predetermining* potential adverse effects on both health and the environment. Notice that it is not always possible to predetermine adverse effects, so this is as much a legal expectation for predetermination as a scientific one. This law brings into clear attention the problem of balancing risk with potential innovation.

Resource Conservation and Recovery Act (RCRA) 1976 This law governs the management of solid waste, both hazardous (ignitable, corrosive, reactive, or toxic) and non-hazardous, and even some radioactive materials. This act is mainly a permitting and reporting act, with severe penalties for non-compliance (in the form of hefty fines). Its philosophy is “cradle to grave” that is, permits and reports must follow a waste from its origin to its final disposal.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 1980. This was the so-called ‘superfund’ act, an effort at cleaning up truly horrible contamination sites from the past, including abandoned sites and sites

where the entities that produced the problem no longer exist. It was considered by many folks to be rather Draconian in its approach, finding a 'liable' party to pay for either short term removal or long term remediation. Sometimes entities have been found liable who had no connection to the contamination itself, but are the only financially-solvent company that ever owned a particular property.

Nuclear Waste Policy Act (NWPA) 1982 Provides guidance for handling of nuclear waste and defines different types of radioactive waste including high level (mostly spent nuclear plant fuel and waste from nuclear weapon production), Intermediate level (generated in reactors but not exposed to the reactor core), low level (wastes from hospitals or industry that were exposed to radioactive materials, like clothing or paper) and trans-uranic (these emit alpha radiation). As of this writing, no area in the United States has been approved for disposal of high level nuclear waste, and so these waste are being stored (ostensibly temporarily) across the country.

You can't possibly learn all there is to know about even one of these laws. Pick one or two and see what you can learn. Follow interesting ideas or unexpected outcomes of the law. Another approach you might take is to look at inequities that arise related to environmental problems or laws. For example, low-income, native American, and African-American communities have often suffered disproportionately due to contamination at the so-called "superfund" sites. You might investigate this. (e.g., there is some text about this, as of this writing, on Wikipedia, [Superfund](#)).

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