

# *Origins of United States Environmental Law*



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## INTRODUCTION

The natural environment does not conform to human conditions. It does not have boundaries. Things placed in the environment are dynamic and will mobilize, making one person's relief another person's burden. Time and technology will change our perspective on what is adequate. For example, we now realize that rivers make poor boundaries; there are more carcinogens today versus ten years ago; and dilution is really not the solution to pollution. But a discharge limit of 40 parts per million total suspended solids for storm water seems insignificant when compared to the effects caused by natural geologic forces such as hurricanes, wildfires, earthquakes, tsunamis, and tornadoes. Other factors that influence the environmental debate are society's standard of living, education, and opportunity for public participation. This paper will attempt to examine how environmental law has evolved in the United States and accelerated in the last thirty five years.

## ENVIRONMENT DEFINED

According to Merriam-Webster's on-line dictionary, environment is defined in part as **a**) the complex of physical, chemical, and biotic factors (as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival **b**) the aggregate of social and cultural conditions that influence the life of an individual or humanity and its surroundings (Merriam-Webster, 2005).

Of course the myriad of environmental laws, regulations, and processes have as their main objective the control of the "environment" as defined in part **a** of this definition. But it seems that part **b** of the definition has become the focus of those in the environmental debate. Most people would likely agree that clean water, clean air, land free of waste, and a safe place to live and work are fundamentally good things. However, with any subject matter that involves choices and decisions, you will have debate on what is or is not the right course of action. This ultimately leads to some type of systematic impact assessment.

## PROPERTY RIGHTS AND THE RULE OF LAW

### Our Paradigm

"My home is my castle!" Most of us have this paradigm instilled very early. Most of us have a natural tendency to feel that the property we own, including our home and land should be controlled by only one person- the owner. What about your neighbor? What if his idea of the castle involves a body shop, horses, or a kennel? What if he does not think it is necessary to cut the grass or believes he can dump all his trash on the back side of the farm? And the backside of his farm is against your property line. And during a hard rain, all his junk washes down the creek which flows through your land. Gets complicated does it not?

Property rights are a fundamental part of our nation's constitutional fabric. "The Jeffersonian view was that property rights are an inseparable part of the natural right to liberty. Both Thomas Jefferson and James Madison, the principal authors of the Declaration of Independence and the Constitution, wrote at length about property guarantees" (TIP, 2005). James Madison said: "Government's first object is to protect people's freedom to work, to acquire property, and to keep that property, without interference from others" (TIP, 2005). Our founding fathers would likely agree with David Schoenbrod's view of the modern administrative state as "an ugly thing despite the well intentioned dreams and sense of superiority of those of us who spawned it" (Shoenbrod, 1999). But property rights had limits then just as they do now.

## **Common Law**

Most of our well known environmental statutes had their beginnings in the 1960's and 1970's. However, environmental law is deeply rooted in much earlier common law such as the doctrine of nuisance. It is one of the oldest causes of action in common law, with cases going back almost to the beginning of recorded case decisions. Under the common law, persons in possession of real property (either land owners or tenants) are entitled to the quiet enjoyment of their lands. If a neighbor interferes with that quiet enjoyment, either by creating smells, sounds, pollution or any other hazard that extends past the boundaries of the property, the affected party may make a claim in nuisance. Under the common law, the only remedy for a nuisance was the payment of damages. However, with the development of the courts of equity, the remedy of an injunction became available to prevent a defendant from repeating the activity that caused the nuisance, and specifying punishment for contempt if the defendant is in breach of such an injunction (Wikipedia, 2005).

Common law is non-statutory and its authority rests not on legislation passed by Parliament then codified or development by an agency (as in rulemaking), but rather tradition, custom, and especially precedent. It is recognized within the United States Constitution as being essentially inviolable; however, as customs and traditions change and evolve, the common, non-statutory law must change and evolve with them, and occasionally be amended by statute (Wikipedia, 2005).

Common law is a straight forward manner of dealing with problems that cross media (i.e., air, water, or land) lines, but as Shoenbrod points out, "it would encounter overwhelming problems both in judging liability and in providing remedies if used solely to enforce environmental issues." As Shoenbrod's example illustrates, in 1611, the court in *William Aldred's Case* held that the defendant committed a nuisance by maintaining a pigsty near the plaintiff's parlor. The court reasoned that it is a nuisance to use one's property in a way that injures that of another. But that reason, standing alone, begs the question. There has to be a place for pigsties as well as parlors. Just how is a judge to know which is in the wrong place? In the early English cases, that understanding was based on custom. But custom provides no such understanding today when living in a world where change has become customary and land use patterns shift (Shoenbrod, 1999).

## **Development of Zoning**

At the turn of the nineteenth century, the law of nuisance became difficult to administer as competing property uses often posed a nuisance to each other and the cost of litigation to settle the issue grew prohibitive. Most jurisdictions in the US now have a system of zoning that describe what activities are acceptable in a given location. The local zoning rules specify what activities must be permitted through “conditional use” or “special use” permits. Zoning generally overrules nuisance. For example, if a factory is operating in an industrial zone, neighbors in the nearby residential zone cannot make a claim in nuisance simply because they do not like them there. However, some jurisdictions still do not have zoning laws, which essentially leaves land use to be determined by the laws concerning nuisance (Wikipedia, 2005).

In many cases local zoning can prove to be the most challenging part of the regulatory process for aggregate mining companies operating close to urban centers. For example, in Shelby County, Tennessee, it is not uncommon for the permitting process to take one year to eighteen months to obtain a conditional use permit for sand and gravel mining. Legally, the local agency may not be able to stop the operation, but the permit may come with very restrictive conditions such as limited operating hours that can severely affect profitability of mining projects.

## **Takings**

Amendment Five of the US Constitution states in part the following “...nor shall private property be taken for public use, without just compensation.” The strict constitutionalist view of the takings law was to give the government the right to acquire land for purposes of the common good, but fair and equitable compensation would be in order. An example would be to take land for a road. The road may be necessary for interstate travel and the preferred route by the government would be the most cost effective solution for the financier (i.e., tax payer). What is arguable is how regulation enters into the concept of takings. Advocates of the modern takings agenda go beyond the original understanding of the taking clause to suggest that regulations by their very nature restrict the use of land or may negatively affect property value. They often cite examples of zoning jurisdiction, wetlands regulation, preservation activity, and the protection of endangered species. Others disagree suggesting that severe regulatory restriction of land use should be considered a taking as defined by the constitution. Generally speaking the US Supreme Court has ruled that regulation can go “too far” and takings result when all or substantially all the property’s value has been eliminated (GELPI, 2006).

Environmental control, particularly post 1970 has relied heavily on rule making to enforce public laws relating to the environment. “The regulations issued under these laws numbered into many thousands. In its early years, the US Environmental Protection Agency alone placed about 1500 rulemaking notices in the Federal Register annually” (Wisman, 1985). Let us now take a look at some of the events which has led to the development of, as David Schoenbrod identifies, “America’s Modern Administrative State”, (Shoenbrod, 1999).

## EVOLUTION OF ENVIRONMENTAL CONTROL

Many often equate environmental control with the US Environmental Protection Agency (EPA). The year 1970, when President Nixon created the Environmental Protection Agency by executive order, is referenced by many to be the beginning of the environmental revolution. But prior to 1970 many significant events, laws, and citizen actions made substantive contributions to environmental protection and public awareness about environmental concerns.

### Basics of Environmental Control

From the beginnings of civilization, people have been concerned about the quality and safety of foods, water, and medicines. In 1202, King John of England proclaimed the first English food law, the Assize of Bread, which prohibited adulteration of bread with such ingredients as ground peas or beans. Regulation of food in the United States dates from early colonial times. At first, regulation concentrated on the truthful marketing of the ingredients in food, but quickly turned to the overall safety of food and the public welfare (FDA, 1999). Sewage Management, which is now generally considered to be in the realm of environmental control, was a basic health problem prior to the mid nineteenth century. Early motivation was just getting sewage (human wastes) away from the sources of water (private wells). Most of these systems were designed and built by common sense, with little or no guidance from trained "professionals," for there were few such trained people in existence in those times (colonial days through the 1840-50s). It was evident that towns (not individuals) had to play an ever-increasing role in the design and construction of sewers instead of leaving that role up to individuals. Thus, the need for civil or sanitary engineers became evident (Sewerhistory.org).

### Ben Franklin Argues for “Public Rights”

One of our country’s greatest statesmen, scientist, and inventor, Ben Franklin is also important in environmental history because he argued for "public rights" and against industrial pollution in his early years in Philadelphia. One early controversy was in 1739 involving the disposal of rotting animal parts from slaughterhouses and tanneries which at the time were located on Dock Creek, in the heart of Philadelphia a few blocks from what is now Independence Hall and Market Street. The creek was literally “choked with hair, horns, guts and other byproducts of those industries” (Kovarik, 2001).

At this time disease was a misunderstood phenomenon, but industrial pollution of this type seemed to be a likely cause during the era. By 1739 local merchants and people living in the affected district were petitioning the Pennsylvania General Assembly to move the tanneries and slaughterhouses, which they said were creating epidemics of disease in the city. The tanners responded with proposals for self-regulation, but for the majority of citizens in Philadelphia it was not enough. As political tensions began to mount against the industry, the tanners complained that the petitioners had made "an attempt" (attack) on their liberty. Franklin argued, in a front page article in his *Gazette*, for what he called "public rights." Rather than an attack on tanneries, Franklin saw "only a modest attempt to deliver a great Number of Tradesmen from being poisoned by a few, and restore to them the Liberty of Breathing freely in their own

Houses." Although the petitioners did not win an outright victory, dumping was curtailed (Kovarik, 2001).

### **Interstate Waters**

Often cited as the first major federal law relative to environmental control, the Rivers and Harbors Act of 1899 intended to protect navigation in interstate waters. Under the Rivers and Harbors Act, the U.S. Army Corps of Engineers (USACE) is authorized to regulate the construction of any structure or work within navigable waters under sections 9 and 10 of the Rivers and Harbors Act. The Rivers and Harbors Act of 1899 prohibits the construction of any bridge, dam, dike or causeway over or in navigable waterways of the U.S. without Congressional approval. The act also authorizes the USACE to regulate the excavation or fill within navigable waters (NOAA, 2006). One may ask why the US Army was made responsible for maintaining our nation's stream navigation. The reason is expertise. In 1824 Congress passed a law that gave the USACE the authority to improve navigation on the Ohio and Mississippi rivers by removing sandbars, snags, and other obstacles. Subsequently, the act was amended to include other rivers such as the Missouri. This work, too, was given to the Corps of Engineers—the only formally trained body of engineers in the new republic and, as part of the nation's small army, available to serve the wishes of Congress and the executive branch (USACE, 2006). At the time West Point was the leading engineering school in the country. Today hardly a development project of any size can go without the USACE's involvement or delegation with regard to wetland or stream regulation.

### **Teddy Roosevelt on Conservation**

Other early attempts at regulating the natural environment included the Lacey Act of 1900 which prohibited interstate commerce of wildlife products (Lion, 1998). And no documentary on the evolution of environmental control at the turn of the nineteenth century would be complete without recognizing President's Theodore Roosevelt's contributions. Roosevelt had a deep appreciation for the outdoors and believed that the conservation and utilization of our nation's resources was one of the most important issues during his presidency. From the creation of the National Forest Service to the passage of the National Monuments Act, Roosevelt played a critical role in the conservation of the nation's resources. According to the *National Geographic*, the area of the United States placed under public protection by Theodore Roosevelt, as National Parks, National Forests, game and bird preserves, and other federal reservations, comes to a total of approximately 230,000,000 acres or about 84,000 acres per day! (Theodore Roosevelt Association, 2005). However, it should be noted that Roosevelt was not a fundamentalist about preservation, rather he believed in the wise use of natural resources. Every step of the progress of mankind is marked by the discovery and use of resources previously unused," the president said. "Without such progressive knowledge and utilization of natural resources, population could not grow, nor industries multiply, nor the hidden wealth of the earth be developed for the benefit of mankind" (New York, 1998).

## **The Birth of a “Disposable Society”**

Phil Wisman, writing on the impetus for the creation of EPA and the state of the environment during the early part of the twentieth century, states that “for decades into the twentieth century, Americans assumed that air and water were free and plentiful and the industrial community gave little thought to pollution” (Wisman, 1985). For years, raw sewage, industrial and feedlot wastes had been discharged into rivers and lakes with little regard for the cumulative effect that made waters unfit for drinking, swimming, and boating. Smokestack emissions and automobile exhausts began to compound air pollution. The land itself was being polluted by indiscriminate dumping of municipal and industrial wastes. This dumping of hazardous chemicals would later be the cause for notorious cases as Love Canal when steel drum containers would rust and leak hazardous materials into soil and aquifers. Wisman suggests that a change in our culture about environmental issues began after World War II, when “the U.S. experienced a vast increase in throw-away packaging: cans, bottles, plastics, and paper products and thousands of new organic chemicals were entered into the marketplace” (Wisman, 1985). Many of these products would not degrade. As post World War II industrialization and population accelerated so did the public’s view for environmental matters.

## **The Environment: A National Problem**

In 1955, after many state and local governments had passed legislation dealing with air pollution, the federal government decided that this problem needed to be dealt with on a national level. This was the year Congress passed the Air Pollution Control Act of 1955, the nation's first piece of federal legislation on this issue. The language of the bill identified air pollution as a *national* problem and announced that research and additional steps to improve the situation needed to be taken. It was an act to make the nation more aware of the environmental hazard associated with poor air quality. The act did little to prevent air pollution, but it made the government aware that the problem did exist on the national level. It recognized “the dangers facing public health and welfare, agriculture, livestock, and deterioration of property, and reserved for Congress the right to control this growing problem” (AMS, 2006). Ten years later Congress passed the Solid Waste Control Act of 1965. The first federal solid waste management law, this act authorized research and provided for state solid waste grants. These included site inventory programs, resource recovery systems, and constructing new or improved solid waste disposal facilities (EPA, 2005).

## **The Public Becomes Engaged**

Many credit the work of Rachel Carson’s book *Silent Spring* in 1962 with beginning the “environmental movement”. In the book Ms. Carson, a biologist and respected member of academia, would stimulate thinking, especially among the general public, about the effects of pesticides in the environment. In particular was her concern about the widespread use of persistent insecticides of that time such as DDT. Miss Carson's position, as a biologist, was “simply that she was a natural scientist in search of truth and that the indiscriminate use of poisonous chemical sprays called for public awareness of what was going on.” Ms. Carson would say in her book that “biocide” was a more appropriate label than pesticide. Of course there was another side of the debate and the chemical industry certainly made clear their side of the

issue- the use of chemicals had systematically improved our environment. Dr. Robert White-Stevens, a spokesman for the industry, said: "The real threat, then, to the survival of man is not chemical but biological, in the shape of hordes of insects that can denude our forests, sweep over our crop lands, ravage our food supply and leave in their wake a train of destitution and hunger, conveying to an undernourished population the major diseases scourges of mankind." Ms. Carson would emphasize that she was not opposed to the use of poisonous chemical sprays--only their "indiscriminate use," and, at a time when their potential was not truly known. "It is the public that is being asked to assume the risks that the insect controllers calculate. The public must decide whether it wishes to continue on the present road, and it can do so only when in full possession of the facts." As the pesticide controversy grew into a national quarrel, support was quick in going to the side of Miss Carson (*The New York Times*, 1964).

During the 1960s it became obvious to many that decisive steps had to be taken to correct environmental problems and to prevent future reoccurrences. During this time the environmental movement gained solidarity. Books like Carson's *Silent Spring* became best sellers. Foundations, institutes, clubs, college curricula and corporate departments were formed to understand the problem and to arrive at solutions. Environmental agencies were created or given added responsibilities in most State governments (Wisman, 1985). At the end of the 1960's all that was needed was the proverbial "straw to break the camel's back." When the Cuyahoga River, depicted in figure 1, near Cleveland burst into flames in June of 1969, the politicians got their straw and then got busy. On January 1, 1970, the National Environmental Policy Act of 1969 was signed into law. It was the federal government's idea of "taking care of its house first." The National Environmental Policy Act (NEPA) requires federal agencies to integrate environmental values into their decision making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. It was this atmosphere that spawned the creation of the US Environmental Protection Agency.



**Figure 2: The Cuyahoga River, the river that "oozes rather than flows" and in which a person "does not drown but decays", *Time*, June 22, 1969.**

## THE MODERN ENVIRONMENTAL ADMINISTRATIVE STATE

### EPA

President Nixon created the Environmental Protection Agency (EPA) to gain public and congressional support, meet demands from environmental interest groups, and to consolidate a number of environmental programs under one roof. The agency's stated purpose is to protect human health and the environment from human activities (Lion, 1998). President Nixon "reorganized" the Executive Branch by transferring 15 units from existing organizations into a now independent agency, EPA. Four major Government agencies were involved (Wisman, 1985). And as Wisman points out, it was not an easy birth. Air, Solid Waste, Radiological Health, Water Hygiene, and Pesticide Tolerance functions and personnel had been transferred from the Department of Health, Education, and Welfare; Water Quality and Pesticide Label Review came from the Interior Department; Radiation Protection Standards came from the Atomic Energy Commission and the Federal Radiation Council; Pesticide Registration came from the Department of Agriculture. During this period a great many new environmental laws were passed and some old ones resurrected and refurbished as well as energy legislation that impacted on the environment (Wisman, 1985).

### Themes of Environmental Regulatory Control

Beginning in 1970, the administration of regulatory control by EPA would develop over the next thirty-five years. This development involved several "themes." Early environmental laws of the 1960s and early 1970s were focused on "end of pipe control". Laws such as the 1970 Clean Air Act and the Clean Water Act of 1972 were created to set standards of what could be released into the environment. The early theme was regulating the release through a permitting process. The *permit* would allow one to discharge provided adequate monitoring and controls were in place. The presumption would be you are not permitted to release without the stated conditions of a permit (Lion, 1998).

As release laws began to take hold, a number of "loopholes" became evident. Issues not envisioned in these initial laws included:

- Some substances pose hazards in their use, even before they become wastes.
- Industries typically pay others to manage wastes. In the 1970s there were many serious cases of waste mismanagement.
- Not all releases to the environment are planned. Past disposal practices had created numerous sites that needed to be cleaned up. There were also new releases creating new contaminated sites, sometimes beyond the means of the owners' ability to clean up properly.
- EPA did not have knowledge of much of the hazardous materials being produced or used by industry and did not always know what should or should not be regulated.

The second theme would be management and control of products produced and used by industry and the resulting byproducts and wastes generated by those processes. It would set in motion a system for notification and registration of environmental information. From the mid 1970s

through the 1980s, environmental regulation began to move “up the pipe” to address these loopholes with a series of laws and regulations (Lion, 1998). In 1976, the Resource Conservation and Recovery Act (RCRA) became law. It required the proper management of wastes prior to disposal, particularly hazardous waste. It required the registration of hazardous waste generators. It led to the philosophy that owners were responsible from “cradle to grave” for their wastes. This included the generation, storage, transportation, and disposal of hazardous waste. The law was significantly amended in 1984 to significantly broaden the original act including the regulation of underground storage tanks and banning land disposal of untreated wastes. The EPA developed comprehensive regulations to deal with specific chemicals with unique environmental hazards such as pesticides under the Federal Insecticide, Fungicide, Rodenticide Act (FIFRA) and Polychlorinated Biphenyls (PCBs) under the Toxic Substance Control Act (TSCA). TSCA would lead to the inventory of all existing chemicals and their hazards (Lion, 1998).

The third theme focused on responding to past releases and identifying responsible parties to share in the liability of these releases. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) also known as “Superfund” requires the reporting of accidental releases and inventory and cleanup of old hazardous waste sites.

The current theme began as a systematic way to make companies more accountable to the public. Starting in 1986 with the Superfund Amendments and Authorization Act and the Emergency Planning and Community Right to Know Act, environmental management has been moving into the heart of industrial operations. Today environmental and chemical hazard regulation affects every single operation and decision in the typical industrial or commercial operation (Lion, 1998). Issues such as “environmental justice” were born from this theme. The trend is looking at long term “possible” impacts that we may or may not fully understand or appreciate. Debates that involve issues such as “global warming” and groundwater protection on a regional level are certainly indicative of this trend.

### **Cooperative Federalism**

EPA does not have exclusive oversight for all activity that may impact the environment. States have the ability to regulate the environment as they deem necessary, but must be at least as stringent as any applicable federal law. This cooperative federalism exists for most environmental regulation and is commonly referenced as “primacy” or “state authorization.” Many of the laws administered by the EPA have exclusions which defer to other laws administered by other agencies. For example the Safe Drinking Water Act which is administered by EPA does not regulate bottled water; rather it is regulated by the Food and Drug Administration. The Department of Transportation regulates the transportation of hazardous waste. The fact that something is excluded from one law is proof that it is regulated by another! (Lion, 1998)

## **ENVIRONMENTAL LAW AS APPLIED TO THE MINING INDUSTRY: A TENNESSEE PERSPECTIVE**

### **Tennessee's Mining Heritage**

I will focus now on environmental law as it applies to the mining industry, with particular emphasis on Tennessee mining. Tennessee has an extensive and diverse mining heritage. There have been more different types of minerals mined in Tennessee than any other state except North Carolina east of the Mississippi River. Among some of the more notable points about Tennessee mining include: In 2003, Tennessee ranked nineteenth in the US in coal mining; extensive copper mining occurred in the state at the Duck Town Basin; Tennessee is home to the world's highest grade zinc mines, The state has abundant clay resources and is the nation's largest producer of ball clay, tremendous limestone deposits exist in the central part of Tennessee (TN Division of Geology, 2006).

### **Coal Mining Regulation**

Following World War II, surface mining of coal became much more prevalent. A few states had regulatory programs to monitor mining activity, but many coal producing states did not. During the war years little regard was given to reclaiming mined land. During the 1950s and 1960s demand for coal continued to escalate and many states created regulatory programs to regulate coal mining activity. States were inconsistent with requirements and it became an economic advantage to operate in a state with less stringent requirements. The Surface Mining Control and Reclamation Act of 1977 (SMCRA) was created to regulate coal mining activity. A primary objective of the law was to bring consistency to the way states regulate the coal mining industry (OSM, 2003).

The legislative history of SMCRA included a lengthy debate over a period of approximately twelve years starting about 1965. A section that was included in the Appalachian Regional Development Act of 1965 that required the Interior Department to study the effects of strip mining in the United States triggered the debate. It was during this time that Tennessee passed its mining law (1972). The first bill to control surface mining was introduced in 1966. Substantial debate would follow, for example in the 93<sup>rd</sup> Congress alone (1973-1974) over eighteen bills were introduced in the House of Representatives. Two bills passing both the House and the Senate were vetoed by the president during this same period. Many argued that proposed surface mining law would be an economic disaster for the coal industry. Another bill was passed in 1975 but was again vetoed by the president (National Research Council, 1990). The law was passed in 1977. SMCRA requires a permit and inspections for active mines and establishes a process for reclaiming old abandoned mines. The law interacts very closely with other federal rules governing discharges to air, water, or ground. SMCRA encourages states to implement the federal law, a process known as "primacy." However, if a state chooses not to develop its own program the federal Office of Surface Mining Reclamation and Enforcement (OSM) is required to regulate all surface and underground coal mining (OSM, 2003).

## **Minerals Mining**

Tennessee repealed the coal mining aspects from its mining law in 1984. Other minerals are regulated by Tennessee's Mineral Surface Mining Law of 1972. Tennessee has a peculiar definition for mineral, which can be attributed to geography more than geology. Tennessee's mining law defines mineral as follows:

(A) "Mineral" means, in any county having a population of more than six hundred thousand (600,000) according to the 1970 federal census or any subsequent federal census, clay, stone, gravel, sand, phosphate rock, metallic ore and any other solid material or substance of commercial value found in natural deposits on or in the earth, but does not include limestone, coal, marble, chert or dimension stone;

(B) "Mineral" means, in any county having a population of six hundred thousand (600,000) or less according to the 1970 federal census or any subsequent federal census, clay, stone, phosphate rock, metallic ore, and any other solid material or substance of commercial value found in natural deposits on or in the earth, but does not include limestone, coal, marble, chert, gravel, sand or dimension stone;

Those who wish to engage in surface mining in Tennessee must obtain a mining permit from the Division of Water Pollution Control. Additionally, the applicant must obtain any other discharge permits (e.g., NPDES, air permit, etc.). Generally, the applicant must submit an application with a mining and reclamation plan, revegetation plan, and a performance bond. A public notice describing the proposed activity is required. Each year the permit holder must submit a reclamation report describing the progress of mining and reclamation (TDEC, 2006).

## **CONCLUSION**

In my view, controlling environmental aspects in industry through a formal and federal process is necessary for a capitalistic society. It is necessary in part because it helps keep a "level" playing field in an arena that crosses state boundaries. Most practitioners would agree with the concept of clean air, water, and land. But as pointed out previously, choices on the outcome will always involve debate. Over the last ten years it appears that EPA and states alike have accepted the fact that they must encourage self regulation over command and control policies. The emphasis in state and federal environmental control is shifting from the "permit" to "compliance" as many agencies are allowing industry to be "permitted by rule." This gives industry the ability to focus on better operating practices and less on bureaucratic processes. The trade-off in theory is a more streamlined process for industry to become operational with the understanding that a lower threshold to trigger enforcement will develop. This trend is not the case for local control, which is becoming more and more the key factor for the "permit" to operate. Increased public pressure on industry to be a "good neighbor" has a tremendous effect. It can often have more influence than the regulatory hammer. Companies can typically afford fines, but they cannot afford a downturn in consumer loyalty which may be caused by a negative news story. In general the bar for industry continues to be lowered as the environment is perceived to be a fundamental quality of life factor.

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