

The Regulation and Reduction of Industrial Water Pollution: Misunderstood Economics of the Earth

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Abstract

Tension often forms in large- and small-scale situations between the importance of the environment and the importance of the economy. When the EPA raises standards for industries, requiring them to be responsible for the management of their waste and emissions in order to prevent damage to nature--especially water--political groups and production firms frequently protest, perceiving these standards as inhibitive blockages to business, factors that will endanger jobs, and disruptions to the rhythm of the manufacturing process. However, examples of industrial cooperation with EPA regulations show that adherence to green policies can create jobs and benefit business. Steps can be taken to alleviate the environment-economy tradeoff myth and to mobilize the industrial sector in a more water-conscious (and ultimately, environmentally-conscious) way.

Industrial Water Pollution Regulation As it Is

The Environmental Protection Agency (EPA) has a litany of water regulations for every state and region. The United States' basis for most federal environmental regulation, the National Environmental Policy Act of 1969 (NEPA), establishes a framework of protection, requiring federal agencies to take the ecological impact of their actions into account before taking these actions (EPA 2013). Environmental Impact Statements (EISs) and Environmental Assessments (ESs) began to be required of federal agencies. However, regulations imposed by the NEPA were scanty in regard to water, and as a result, water was at risk in many places at that time. The city of Pittsburgh, for example, was struggling to clear its rivers of waste, having only stopped dumping raw sewage into the rivers in 1958, forming the Allegheny County Sanitary Authority (Tarr n.d). To combat these issues, the Clean Water Act (CWA) was established in its full form in 1972. It set industrial wastewater standards and general water quality standards (EPA 2013).

Among other initiatives, the CWA (EPA 2013):

- ~ outlines chemical analysis methods that municipalities and industries must use when testing the water they are affecting;
- ~ prohibits expulsion of pollutants into bodies of water without a permit from the EPA;
- ~ establishes guidelines for the treatment and disposal of sewage;
- ~ and runs their permit system by calculations of each body of water's environmental resilience to pollution.

Modern environmental politics often consist of a conflict between these water protection

regulations (and the movement to multiply and strengthen these regulations) and the web of industries which are monitored and inconvenienced by the rules. Representative Bob Gibbs of Ohio opposes the EPA's forward motion with an emphasis on jobs in drilling and mining, and has said that he stands on the side of the economy and of business when he criticizes the cost and difficulty of complying to EPA guidelines (Quinlan 2011). Debate ensues over restricting fracking companies and oil-drilling companies, since both industries have harmed the water supplies of many communities. The two sides appear to focus on different priorities: the environment and the economy. These priorities do not need to conflict.

Perceived Costs vs. Proven Benefits

The negative perspective on regulating industries' pollution of water, land, and air is multifaceted. It is also grounded in real fears and challenges that the United States faces as a society. According to a 2011 study, the oil and gas industries account for 5.5% of the United States' total employment (Bell 2013). The workers and patrons of the energy industry make up a large part of the anti-regulation force, but they are accompanied by other manufacturing and processing industries (like the food industry). When regulations on the actions of these industries advance, new technologies are required, which can be costly; added financial limitations on a company's actions can increase the risk of jobs being cut or employees being laid off; restrictions on the processes which an organization is accustomed to implementing can cause cuts in production, and therefore, profit. It is understandable to follow this train of thought and conclude, along with Representative Gibbs, that initiatives like the CWA are detrimental to business and economic growth.

However, when a holistic view is taken of the relationship between industry, governmental regulation, and technological development, very different conclusions can be drawn. The implementation of new, water-friendly technology can be costly, but requires maintenance, like any other machinery or software. Attention to EPA requirements requires employee leadership. Better treatment of local water sources and other natural resources is "green" and provides new marketing and advertising opportunities. For example: in Winesburg, Ohio, a cheese factory faced closure by the EPA because of their phosphorus pollution in local waterways. However, a local environmental initiatives organization sponsored by Ohio State University cooperated with the factory and neighboring farms to institute compliance to the EPA's standards. Jobs were created within the organization that formed the link between the environmental regulation and industry, and the cheese factory was able to continue its regular functions (Quinlan 2011). The economy does not have to suffer damages in return for water cleanliness and environmental consciousness (Cherry and Rickman 2010, Goodstein 1999).

General Outlook: Solutions

The issues explored here are intertwined. The social problem that must be faced is the public and political method of discourse regarding the relationship between environmental regulation and economic health. The concrete, active problem that must be

faced is the government's cooperative implementation of regulation in attention to individual industrial entities and their business-minded behaviors. Measures to be taken by political leaders include understanding and discussing advancements in environmental regulation and protective technology as potential benefits to the industries they apply to. Measures to be taken by the EPA and other environmental protection organizations include integrating regulative actions with cooperative discussion that treats industries as individual entities with different abilities and restrictions. These goals are reachable. Industries should be incentivized by government to team up with environmental organizations like the one associated with Ohio State University, and these groups should work with local populations to build comprehensive plans for future strength in environmentally sound practices. The mission should be not only a public relations scheme (greenwashing by the industry to make them seem more environmentally friendly), but a concerted effort to improve sustainability in production. Furthermore, the intent must not only be meeting EPA standards, but surpassing them to the best of the company's ability. Meanwhile, political leaders should note the importance of cooperation in this way--between environmentally-conscious forces and industrially supportive entities--and mirror the practice in the making of policy. Parties with different viewpoints can function to complement each other, if they are willing; then, real progress can be made.

Works Cited

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