

WHO PAYS?

THE BURDEN OF ENVIRONMENTAL CLEANUP AND POLLUTION CONTROL

Improving the Economic and Environmental Impacts of Environmental Regulations

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Biography

Debra Struhsacker is an independent consultant providing environmental permitting advice to the mining industry. She has 15 years of experience working in the mining industry, first as an exploration geologist, and more recently as a regulatory specialist and an environmental permitting consultant. Ms. Struhsacker has worked on mining projects in many states throughout the western U.S. She has considerable experience with controversial projects in which she has integrated environmental considerations, technical studies, governmental affairs, and public relations efforts into effective permitting strategies.

Ms. Struhsacker has published papers on the geology and resource potential of geothermal and epithermal precious metals systems, the regulatory and environmental permitting requirements for mining projects, the geochemistry of cyanide in the heap leach environment, and cyanide neutralization and reclamation considerations for heap leach projects.

Ms. Struhsacker is a Phi Beta Kappa graduate of Wellesley College where she majored in Geology and French. She also has a Master of Science Degree in Geology from the University of Montana. She is the President elect of the Northern Nevada section of the American Institute of Professional Geologists, and trustee of the Northwest Mining Association, and one of the founders of the Women's Mining Coalition, a grassroots coalition supporting responsible changes to the Mining Law.

Ms. Struhsacker lives in Reno, Nevada with her husband, Eric, an exploration geologist.

WHO PAYS? THE BURDEN OF ENVIRONMENTAL CLEANUP AND POLLUTION CONTROL.

Improving the Economic and Environmental Impacts of Environmental Regulations

INTRODUCTION

Creating a clean environment for ourselves and for future generations is an important and desirable goal. Achieving this goal will involve cleaning up sites which were polluted knowingly or unknowingly by past industrial and waste disposal activities, and ensuring that current and future activities are done in an environmentally responsible manner which minimizes adverse impacts to the environment.

U.S. industry and the American public share the cost of cleaning up polluted sites and making sure that modern manufacturing and waste disposal facilities operate with appropriate environmental controls. Given the importance of a clean environment, most Americans feel that environmental expenditures are justifiable and desirable, although many are not cognizant that they help subsidize these costs. Many people assume that industry and past polluters, and not the general public, pay for most environmental costs.

A simplistic answer to the question, "who pays for cleaning up and protecting the environment," is "U.S. industry pays." But ultimately, American consumers and taxpayers also assume some of the burden of environmental costs. However, the ways in which we pay for environmental cleanup and protection are not always obvious, nor do we always get what we hope we are paying for.

Who Pays?

U.S. Industry.

**But ultimately,
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CONSIDERATIONS WHICH DETERMINE COST

- ◆ This study discusses the economic and environmental impacts of the Superfund environmental cleanup program and the current environmental regulatory climate, and describes how the American public subsidizes the costs associated with these programs.
- ◆ It also explores ways in which the Superfund program has impeded and increased the cost of environmental cleanup of polluted sites, inhibited reuse of existing industrial sites, and promoted development of projects in previously undisturbed areas. Similarly, this paper describes how the current environmental regulatory and permitting process encourages foreign project development in favor of domestic projects, and saps private-sector resources which could be used for environmental research and development.
- ◆ The unpredicted, undesirable and counterproductive results of the current regulatory climate and Superfund environmental cleanup program are reviewed along with a discussion of how these programs are adversely affecting the economy and the environment.
- ◆ Finally, this paper suggests a new approach to environmental regulation and the permitting process in which industry, government, and the environmentalist community would work together to solve environmental problems and to develop improved environmental control and remediation technologies.

The recommended collaborative approach would redirect private sector resources currently being used to participate in the polarized and protracted environmental permitting process to developing improved on-the-ground environmental control measures. This partnership would use the profit motive to stimulate private-sector investment in environmental protection by creating fiscal and regulatory incentives for environmentally progressive projects.

The recommended program would benefit all stakeholders. It would expedite environmental cleanups, promote private-sector environmental research and the development of new marketable environmental products and control technologies, increase industry profits, and reduce the uncertainty associated with the current regulatory climate and the environmental permitting process. A cooperative, less polarized approach would more effectively harness private-sector resources in addressing environmental problems, would lessen the American taxpayer's share of environmental cleanup and regulatory costs, and would encourage re-investment in domestic projects and manufacturing facilities. The ultimate outcome would be improvements to both the U.S. environment and the economy.

ECONOMIC AND ENVIRONMENTAL PROBLEMS ASSOCIATED WITH THE SUPERFUND PROGRAM

The American Public Subsidizes the Superfund

The Superfund is an example of a publicly subsidized environmental cleanup program. Although many people think that the cost of the Superfund program is borne by past polluters, this program is actually paid for by consumers and taxpayers in a variety of direct and indirect ways.

Congress created the Superfund program in 1980 when it passed the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to provide funding and enforcement authority for cleaning up pollution created by past industrial and waste disposal activities. Funding for Superfund cleanups comes from two sources: the Superfund, a federal trust fund created with taxes paid by the petrochemical industry and segments of the manufacturing industry; and the CERCLA liability cost recovery system. As discussed below, American consumers and taxpayers directly and indirectly support both funding mechanisms.

The Superfund tax is levied on domestic and imported crude oil, and on certain organic and inorganic chemical "feedstocks." An environmental tax applied to a broad segment of American manufacturing corporations is another Superfund revenue source (Stoll, 1991, p. 523). This tax is reflected in the consumer price of petroleum and chemical-based products, and numerous manufactured items. As consumers of these goods, the American public thus pays for a portion of the Superfund tax.

The American public also subsidizes the CERCLA cost recovery system which authorizes the Environmental Protection Agency (EPA) to sue parties to recover all or some of the costs of cleaning up polluted sites. This retroactive liability scheme focuses on identifying Potentially Responsible Parties (PRPs) at polluted sites on the National Priority List (NPL), the list of sites eligible for environmental remediation paid for by the Superfund.

The CERCLA liability system allows the EPA to sue parties who had only tangential past involvement with polluted sites, and whose past activities were legal and standard practice at

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the time. These parties can be sued for all or some of the Superfund cleanup costs, regardless of their actual contribution of pollutants or wastes to the site. Potentially Responsible Parties can, in turn sue other private parties in an attempt to reduce their liability costs. To date, the EPA has notified approximately 25,000 PRPs of their potential liability at NPL sites. Many Superfund sites have multiple PRPs who have filed a complex array of third-party or contribution suits against others.

CERCLA's retroactive, strict, joint, and liability cost recovery scheme has slowed cleanup activities at most sites as PRPs seek to minimize their cleanup liability burden, and has added enormously to Superfund transaction costs for legal fees and other non-cleanup expenses. The EPA estimates that the average remediation cost at a Superfund site is \$26 million, and that cleanup at most sites takes an average of 11 years to complete.

The high cost and protracted schedule of many Superfund remediation projects is due in large part to legal and other non-cleanup costs incurred as a result of the CERCLA cost recovery system. According to the National Environmental Trust Fund Project (NETF), a consortia of insurance companies and other business groups evaluating alternative Superfund philosophies and funding mechanisms, transaction costs (i.e., legal fees and other non-cleanup expenses) at multi-party sites range from 35 percent and up of the total Superfund costs. The NETF contends that by focusing on cost recovery, CERCLA has turned the EPA into a fund raising agency rather than an environmental cleanup agency. To support this cost recovery function, the EPA employs nearly 1,500 lawyers and support staff to implement the CERCLA liability and cost recovery program (NETF, 1993). American taxpayers help pay for these staff members as well as other EPA functions.

CERCLA Liability Concerns Adversely Affect the Economy and the Environment

Concern about potential future CERCLA liability has had the unfavorable economic and environmental consequence of chilling potential investment interest in thousands of past industrial sites. Many investors and developers will not invest in sites which might be future candidates for the Superfund. Previously used industrial sites are being rejected for expansion or renewed development in favor of sites with fewer perceived environmental

liability risks. This means that instead of using or "recycling" previously used, disturbed, and potentially polluted sites, some developers are seeking new, undisturbed or less disturbed areas in an attempt to limit their exposure to CERCLA retroactive liability. CERCLA liability concerns are thus severely hampering economic development in some communities, and promoting development and potential pollution of new areas in favor of recycling old industrial sites for new industrial or commercial uses. Both outcomes are counterproductive to the goals of cleaning up the environment and minimizing new surface disturbance and related potential environmental impacts.

Developing industrial and commercial projects at new sites rather than old sites influences employment demographics by limiting new employment opportunities in urban areas while creating new jobs in the suburbs. As a result, new housing is developed near the new businesses, or workers commute from established neighborhoods to jobs in outlying areas. Neither result is beneficial to the environment. The new developments require increased surface disturbance, potentially including destruction of wetlands and farmlands. The increased commuter traffic requires increased fossil fuel consumption with the concomitant release of hydrocarbons, carbon monoxide and other air pollutants emitted by automobiles. There are also potential social implications; preferential industrial and commercial growth outside of established areas contributes to the decline of the country's urban areas.

There are obvious merits in cleaning up sites polluted by past activities, the primary intent of the CERCLA program. In the opinion of many, however, the Superfund is an enormously expensive program which has not accomplished sufficient environmental remediation for the funds which have been expended to date. According to the EPA, a maximum of \$2.5 billion is spent annually on actual cleanup at all Superfund sites. This \$2.5 billion is comprised of \$1.1 billion in direct spending by the EPA, and \$1.4 billion in private sector settlements for cleanup. Legal fees and other non-cleanup transaction costs add enormously to these costs and create a significant drain on the U.S. economy (NETF, 1993). A total of \$90 billion of public and private-sector spending will be required to cleanup the 1,200 sites currently on the Superfund list; another 1,700 sites are anticipated to become Superfund sites.

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The huge transaction costs associated with Superfund litigation are a significant problem with the current program

Congress will be considering re-authorization of CERCLA and the Superfund program during the 1994 session. In a recent critique of the Superfund program, the Clinton Administration cites the huge transaction costs associated with Superfund litigation as a significant problem with the current program. This Administration document recommends that Congress amend and streamline the Superfund program to minimize litigation costs and to increase the amount of money spent on environmental cleanup measures. Re-authorization discussions will likely focus on the inefficiency and enormous cost of the existing program. It remains to be seen whether Congress will enact curative amendments to eliminate the legal, economic and environmental defects which impair the current program.

ADVERSE ECONOMIC AND ENVIRONMENTAL ASPECTS OF TODAY'S REGULATORY CLIMATE AND ENVIRONMENTAL PERMITTING PROCESS

The Technical and Regulatory Components of Environmental Permitting

During the last 20 years, Congress has passed significant environmental protection laws governing air quality, surface water quality, drinking water safety, threatened and endangered species, solid and hazardous waste disposal, and environmental disclosure and reporting requirements. These laws and the corresponding implementing regulations mandate environmental protection criteria and strict environmental controls. Significant environmental improvements have been made in some areas as a result of compliance with these environmental laws and regulations. For example, there are measurable water quality improvements in rivers and streams in some industrialized areas, and solid and hazardous waste disposal practices have changed dramatically.

Environmental regulations establish environmental permitting requirements for most industrial and waste disposal activities. As part of the environmental permitting process, proposed industrial and commercial developments must document compliance with environmental criteria before a proposed facility can be built. Obtaining these permits can be costly, time consuming, and in some cases controversial.

Measuring the costs of the technical component of the permitting process is fairly straightforward. Typically, industry can put a price tag on the costs of meeting the technical requirements for pollution control devices and environmental monitoring equipment. Some industries can pass these environmental costs along to consumers of specific manufactured goods. However, other industries such as base and precious metals mining, whose prices are tied to international markets, cannot easily pass these costs on to the consumer. Environmental costs thus make it difficult for some U.S. industries to remain competitive in the international marketplace because American raw materials and products must compete with comparable materials and products produced in countries with fewer and inferior environmental regulations.

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The Environmental Permitting Process Has Two Major Components.

Number 1:

The first component is a technical evaluation to ensure that facilities comply with environmental protection standards. During this process, a project proponent must prove that the proposed facility can meet all environmental protection requirements. For example, projects involving a discharge of treated waste water must document that the effluent will meet strict water quality criteria. Similarly, projects involving air emissions must document their ability to meet air quality emission limits.

Number 2:

The second component of the environmental permitting process is the legally mandated regulatory process - the steps which must be followed in order to obtain project permits. One of the most significant aspects of this regulatory process is public involvement. This country's environmental laws and regulations include specific legal requirements for involving the public in agency evaluations of permit applications. The results of this public involvement process can sometimes have a profound effect upon agency decisions, and can determine whether a project will be approved, the length of time required to obtain project permits, and the costs involved.

As discussed below, the public involvement aspect of the environmental permitting process is being used very effectively by anti-industry activists to thwart project development at some sites.

Predicting Permitting Costs and Schedules

Costs associated with the public involvement aspect of the environmental permitting process can add significantly to the cost of securing environmental permits. Predicting permitting costs and schedules can be very difficult, adding an element of uncertainty to the environmental permitting process and creating an unfavorable business climate in which to make positive investment decisions. The unpredictable aspects of the environmental permitting process, and the resulting unfavorable business climate, have an adverse effect upon the U.S. economy. This climate produces investment decisions which encourage developing industrial projects abroad rather than building or improving domestic manufacturing facilities.

In many cases, U.S. industry is not moving abroad with the intent of operating under fewer regulatory restrictions or with less stringent environmental controls. In fact, many U.S. industries design and operate foreign facilities with the environmental controls necessary to meet site-specific environmental protection requirements, even though they may be operating in countries with few or inadequate environmental regulations. What these industries are seeking, however, is a more predictable regulatory climate in which business investment decisions are perceived to involve less risk than similar investments in the U.S.

The uncertainty associated with the U.S. environmental regulatory climate and permitting process makes it difficult for project proponents to predict when or even if project permits will be obtained, and at what cost. Business investment decisions in the U.S. thus appear to be risky compared to the regulatory and business climate abroad. This perception of uncertainty and risk is severely impeding investment in U.S. industry. Decisions to invest in foreign projects obviously limit U.S. job growth, and exacerbate the balance of foreign trade payments as more and more manufactured goods and raw materials are imported into the U.S. to satisfy consumer demand. In this manner, the U.S. economy and American taxpayers are burdened by the costs of the environmental regulatory and permitting processes.

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Environmental Implications of an Unfavorable Regulatory Climate

In addition to adverse economic impacts, there are significant adverse global environmental impacts associated with this move of U.S. industry abroad and the concomitant increase in imports. As U.S. industries are moving abroad, U.S. consumer demand for manufactured products continues to rise. To satisfy this demand, raw materials and consumer products must be imported. Transporting imported goods into the U.S. consumes fossil fuels which depletes these nonrenewable resources both in the U.S. and abroad, and also emits hydrocarbons and other air contaminants.

The global environmental impact of forcing U.S. industry abroad in the name of protecting the environment locally, and using fossil fuels to transport foreign manufacture products and raw materials into the U.S. must be evaluated. Viewed broadly, it seems obvious that there is no net global environmental benefit to moving U.S. industry abroad. In fact, this environmental parochialism appears to be counterproductive to the goal of protecting and sustaining environmental resources worldwide.

Economic and Environmental Problems Due To Public Involvement and Project Opposition

Misuse of the Environmental Permitting Process

Environmental permitting requirements for industrial and commercial projects may include numerous federal, state, and local permits and regulatory approvals depending upon the type of project and the land status of the project area (i.e., federal, state, or private land). As discussed previously, the public involvement component of the environmental permitting process can significantly influence the outcome of permitting efforts.

For example, the National Environmental Policy Act of 1969 requires federal agencies to prepare either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) to analyze the potential impacts of proposed projects on federal land. A significant component of this NEPA analysis, particularly for preparing an EIS, is public involvement. During the EIS process, federal agencies solicit public comments regarding key issues to be analyzed, and the public is given the opportunity to review and comment upon the draft and final versions of the EIS document. Finally, the NEPA process includes an appeal procedure which members of the public can implement if they disagree with the findings and decision of the federal agency. Some states (e.g., California, Montana, Wisconsin, Washington) have an equivalent environmental review, document preparation, and public review process.

Project opponents have effectively used the NEPA process to delay, thwart, and even stop many projects. In 1974, 189 NEPA litigation cases were filed in federal courts. Since that time, and promulgation of the Council of Environmental Quality regulations to establish uniform NEPA document format and standards, the number of cases has decreased (Gilbert and others, 1990). However, NEPA continues to be an effective and powerful tool for anti-project activists seeking to delay or stop projects on federal land.

Similarly, federal and state programs for most other environmental permits also include public review and comment. Permits dealing with surface water, ground water, and air quality protection, all include a formal public notification process during

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which the public may review and comment on an agency's draft permit. The public can also request a public hearing to discuss the proposed project.

The public review component of the environmental permitting process can create considerable uncertainty for project proponents about how much project permitting will cost and when the project permits will be obtained. In some cases, this process even casts doubt upon whether the project can be permitted, because anti-project activists have become very skilled in using the public involvement process to delay and even stop project development. These doubts are rarely due to concerns about being able to meet environmental protection standards; rather they are based on the very real potential for third-party intervention and opposition to a proposed development. This uncertainty puts significant capital investment dollars at risk for the entire duration of the project planning and permitting processes.

Having a say in decisions made by governing bodies and regulatory agencies is a right in a democratic society, and public involvement in the environmental permitting process is a manifestation of that right. Unfortunately, the public's role in the environmental permitting process has become distorted. Rather than focusing on optimizing the environmental sensitivity of proposed projects in order to achieve the best balance possible between economic development and environmental protection, the focus has shifted to stopping projects purportedly in the name of environmental protection. This current misuse of the environmental permitting and public involvement process by anti-development activists has co-opted the public into thinking that the best way to protect the environment is to oppose project development. The unfavorable business climate created by this corruption of the environmental permitting process is chilling investment in U.S. industry, and has led some investors to develop manufacturing facilities in foreign countries rather than in the U.S. The end economic result is loss of American jobs and a weakened U.S. economy.

Manipulation of Public Opinion Against Industry

Most Americans who are concerned about the environment are not ideologically opposed to development. Rather, they have a genuine and legitimate desire to protect the environment. However, their understanding of what is required for environmental

protection is strongly influenced by misinformation provided by anti-project ideologues who use effective public and media persuasion tactics. Generally speaking, industry is much less effective at convincing the public of the merits and environmental compatibility of a proposed project than anti-project activists are at alarming the public about the environmental problems that will occur if the project is built. Anti-development activists typically prey upon peoples' fears of impending environmental disaster due to industrial developments. Despite the fact that these individuals typically rely on pseudo-science, distortion, and misinformation, they have successfully and resolutely captured the communications high ground.

One commonly used opposition technique is lobbying for more stringent environmental controls for wastewater treatment requirements, liner designs, air emission control devices, etc. than those proposed by the project proponent, or even required by law. This approach enables project opponents to claim the high ground position that "if clean is good, cleaner is better," or if "two liners are good, then three would be better." Their assertions that more stringent environmental controls are needed are rarely backed up with fact or evaluate the cost versus any measurable incremental benefit to the environment.

This tactic successfully accomplishes two objectives.

- ◆ First, it creates the false impression among the general public that the proposed project does not propose adequate environmental protection, and therefore should not be approved.
- ◆ Second, it increases project costs by requiring more expensive or additional environmental controls and by forcing project proponents into protracted and controversial public debates about the project proposal. In some cases, these increased costs are sufficient to make the proposed project unfeasible. In this manner, environmentally responsible projects are delayed or stopped altogether, as industry, the general public, and the regulatory community are held hostage by anti-development ideologues whose real agenda is stopping projects rather than protecting the environment.

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Industry's Communication Challenge

In absence of a more accurate understanding of environmental issues and increased confidence in industry's ability to protect the environment using science and state-of-the-art technology, the general public becomes co-opted by anti-project misinformation, and an atmosphere of public mistrust and opposition prevails. This atmosphere puts project proponents on the defensive when dealing with the public during project permitting, and makes rational and productive discussion with the public about a proposed project very difficult.

This situation is ironic because modern industry has unprecedented technical abilities to develop environmentally responsible projects, and yet must respond to a disbelieving public whose judgment has been co-opted by distorted anti-development rhetoric, and whose vision is colored by dire predictions of impending environmental calamity due to industrial activities. Industry's science and technical expertise are its great strengths. Unfortunately its greatest weakness is the lack of the necessary communication skills and programs to convince the public of these strengths.

Industry's shortcomings in persuading the public of its capabilities, achievements, and its commitment to environmental stewardship have made it possible for anti-development ideologues to influence and dominate the public's opinion about industry. In order for this situation to improve, industry must restore public faith in the ability of science and technology to predict, minimize, monitor, and control project impacts. This will be no simple feat. Industry's Achilles Heel in the public involvement process is the credibility deficit which anti-development ideologues have so effectively crafted. Ascending to the communications high ground can only be done by positioning industry's science and technology so that they become the facts which the public hears and believes. Industry has long understood that science and technology are the keys to environmentally responsible projects. Industry's challenge, however, is learning how to communicate this to the public.

Changing The Focus Of The Public Involvement Process

One of the most insidious and counterproductive results of project opposition and public involvement in the environmental permitting process is that of thwarting industry investment in environmentally responsible domestic projects and in

environmental research and development. For mainstream Americans, this is an unintentional and undesirable effect. The goal of most Americans to have a clean environment, jobs, and a healthy economy, would be much better served by dispelling the atmosphere of mistrust and anti-project dialogue characteristic of many permitting efforts, and redirecting the resources and energy expended by industry during environmental permitting into on-the-ground environmental protection measures. This would remove some of the risk concerns about the environmental permitting process which are currently chilling industry investment in U.S. projects. Moreover, a less polarized and controversial permitting atmosphere could, with the proper incentives, encourage industry to channel resources previously used to fight project opposition into improved pollution reduction and environmental monitoring.

The current permitting atmosphere needs to be replaced with constructive dialogue and collaboration between industry and the affected public to develop the most cost effective and environmentally sensitive projects possible. It must be stressed that this approach would not eliminate or diminish public involvement in the permitting process, but it would significantly change the goal and focus of the public's role. Rather than the adversarial role which the public now assumes in the permitting process for many projects, the proposed approach would make the public a project partner with a vested community interest in developing environmentally responsible projects.

In addition to providing more balanced decisions about economic development, job creation, and environmental protection goals, a collaborative industry/community approach would help the public evaluate the cost benefits of environmental protection versus project development, and how the public pays directly or indirectly for environmental costs. Discussing the incremental environmental benefits of an environmental control, versus the cost of control, could help the public realize how unrealistically stringent environmental controls can translate into abandoned project development plans, and lost opportunities for economic improvement and jobs in their community. Less polarized discussions of the relative merits and costs of proposed projects and environmental impacts and controls, would significantly improve public policy decisions about the interrelationship between economic development and environmental protection.

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The Public &
Industry
working
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Policy

In order for this approach to work, industry would have to be more forthcoming about project plans and costs than is the current norm. There would also have to be a spirit of cooperation in which industry would express a willingness to incorporate legitimate public concerns about environmental issues into their project plans. For its part, the public would have to be sensitive to industry's concerns about the cost of environmental measures, accepting of industry's need to make a profit, and cognizant of how some environmental measures could jeopardize a project by making it unprofitable.

Harnessing Private Sector resources to Benefit the Environment

Anti-development ideologues have successfully inculcated the public with the notion that economic development and environmental protection are mutually exclusive. This concept has insidiously influenced most discussions about industry and the environment, and colors media coverage of environmental and industry issues, thus perpetuating a spirit of discord and polarization.

For example, the Institute of Economic Affairs in London recently sponsored an essay competition with the theme of "Government or Market: Which Protects the Environment Better?" This theme reflects the current polarized nature of the debate about industry versus the environment, in which industry is typecast as the polluter, and government assumes the adversarial role of environmental standard bearer and enforcer. Debates cast in this light have a predictable outcome as environmentalists and industry spokespersons scramble to their respective, separate high grounds, while the real issues of environmental protection and cost-effective solutions to environmental problems get lost in rhetoric and recrimination.

The cost of this debate places an enormous burden upon the U. S . economy and is slowing the progress of environmental remediation and pollution reduction efforts. These costs and environmental inefficiencies can be measured in resources spent in participating in the regulatory process, increased disturbance of new sites rather than recycling old industrial sites, astronomical transaction costs (i.e., legal fees), and the lost opportunity to redirect some of these resources to environmental clean-up and protection measures.

Perhaps a better question for an essay competition would be "How Can Government and Industry Work Together to Protect the Environment?" An industry-government partnership to address environmental issues and to develop new environmental protection and remediation technologies could benefit the economy, the tax-paying public, and the environment. Such a partnership would harness the human, technical, and financial resources of the private-sector in developing solutions to environmental problems and innovative pollution reduction and control technologies. However, this could only be accomplished in an atmosphere of dramatically reduced invective, and markedly improved cooperation between industry, government, and the environmentalist community. A collaborative atmosphere would require a moratorium on the currently polarized debate about industry versus the environment, and a commitment from all stakeholders to work together towards the common goal of a healthy economy, better and more cost-effective environmental technologies, and expedited environmental remediation at contaminated sites.

Stimulating Private Sector Investment in Environmental Research and Development

A number of economic and environmental benefits could be derived from using private sector resources to address environmental problems. First and foremost, the business community has the most appropriate technical and economic resources for the task. With the proper incentives, the private sector could turn environmental cleanup and technology development into an efficient and profitable endeavor. Judging from the Superfund program experience, government is not likely to develop efficient or profitable environmental remediation programs. Lastly, encouraging industry to take the lead would lessen the public's share of subsidizing environmental cleanup costs.

Stimulating private sector investment in environmental research and development would greatly benefit from regulatory and/or market-based incentives to reward industry for investing in environmental technologies. Potential regulatory incentives could take the form of a streamlined permitting and regulatory approval processes for projects involving state-of-the-art environmental protection technology. Market-based incentives could involve tax deductions or credits for environmental technology research and

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development expenditures, or for voluntary use of better than required environmental protection measures.

Some environmental ideologues will predictably decry regulatory and fiscal incentives as corporate giveaways. However, a strong argument can be made that if the environmentalists' goal is to improve and to expedite environmental protection, then these stimuli achieve that goal at minimal taxpayer expense by using private-sector resources rather than government programs. Opponents of government stimuli to encourage industry investment in environmental research and development are likely to be anti-industry - the "political environmentalists" described by the late Dixy Lee Ray in her book, Trashing the Planet. The primary agenda of these enviro-political activists is stopping industrial progress and development - not protecting the environment. Those who would oppose stimulating private-sector investment in the environment would do so with an anti-industry, anti-progress agenda hidden behind a green facade.

Moderate and progressive environmentalists will recognize the resources which the private sector could contribute to developing cost-effective solutions to today's environmental problems. The fact that these solutions might generate the investor a profit, or reduce their tax liability, in no way diminishes their value to society and the environment. The goal of environmental protection is not tainted or rendered impure when pursued in order to make a profit. Profit motivation is the stimulus needed to spark investment in environmental technologies, and would be an effective way to improve both the economy and the environment.

Using the profit motive to stimulate private sector investment in environmental protection is a win-win for all stakeholders: industry, the American taxpayer, and the environment. Industry wins by creating new marketable products while at the same time reducing pollution, thereby diminishing potential future exposure for environmental liability for today's practices. The American taxpayer benefits from a cleaner environment, from the economic benefits associated with greater industry output and increased job opportunities, and from the reduction in government-funded and taxpayer subsidized programs for environmental cleanups, which translates into lower taxes. Finally the environment benefits from reduced industrial pollution and waste, and more effective environmental remediation technologies.

REFERENCES CITED

Gilbert, A. J., Eddy, R. M., and Durand, F. D., 1990, A Business Perspective on 20 Years of Activity Under the National Environmental Policy Act: University of Wyoming College of Law, Land and Water law Review, Vol. XXV, No. 1, p. 107-118.

National Environmental Trust Fund, 1993, "The NETF - Putting Cleanup First", the National Environmental Trust Fund, Washington, D.C.

Ray, Dixie Lee, 1990, "Environmentalism and the Future" *in* Trashing the Planet, Regnery Gateway, Inc., Washington, D.C.

Stoll, R.G., 1991, "Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) *in* Environmental Law Handbook Eleventh Edition, Government Institutes Inc., Rockville. Md., pp. 471-523.