

Bibliography

NON-REGULATORY APPROACHES TO ENVIRONMENTAL MANAGEMENT

September, 1977

NON-REGULATORY APPROACHES

ANDERSON, Fred, et. al. Environmental Charges; Economic, Technical, Legal and Political Aspects. [Washington, National Academy of Engineering, Committee on Public Engineering Policy], September 1977. 241 p. (Draft report).

"This book gives an integrated evaluation of the charges approach, beginning with the theoretical underpinning already supplied by economic analysis, but then moves on to consider technical feasibility, legal foundations and pitfalls, and the political factors affecting programs which legislatures could enact."

Council on Law-Related Studies. Effluent Charges on Air and Water Pollution: A Conference Report. Washington, Oct. 15-16, 1971. Washington, Environmental Law Institute, 1973. 102 p. (ELI Monograph Series 1).

"The conference examined such questions as (1) can effluent charges usefully supplement, or must they replace, direct regulation? (2) on what and on whom should charges be levied, how will their levels be determined, and should they be uniform or variable? (3) what institutions are needed to administer them and what costs, especially of information-gathering and monitoring, would they entail? The participants examined such issues by reference to a dozen concrete plans or proposals for charges. There were five sessions, devoted, respectively, to State-wide charges as supplements to existing water quality regulations, basin-wide effluent charges and alternative low-cost strategies, Federal excise taxes on lead in gasoline and on automobiles emitting pollutants."

FISHER, A.C., and F.M. Peterson. The Environment in Economics: A Survey. Journal of Economic Literature, 1(1): 1-33, March 1976.

"The authors have reviewed several theories/policies concerning the importance of extractive resources vs. the importance of those amenity services derived from the environment. One compromise suggested would be a combined effluent tax and standard that would be as efficient as a pure tax solution and also more politically palatable."

IRWIN, W.A., and R.A. Liroff [Environmental Law Institute]. Economic Disincentives for Pollution Control: Legal, Political and Administrative Dimensions. U.S. Environmental Protection Agency, July 1974. 257 p. (Distributed by National Technical Information Service, Springfield, Va. as PB-239 340).

"This report defines an economic disincentive as a monetary charge levied by government on conduct which is not illegal but which does impose social costs, for the principal purpose of discouraging the conduct. Disincentives are distinguished from other legal mechanisms which may have incidental economic effects, e.g., fines, user charges, and license fees. The constitutionality of federal or state imposition of disincentives is examined and the authority of the U.S. Environmental Protection Agency

and the states to utilize disincentives under selected federal environmental statutes is analyzed. The legality of some disincentives adopted by states is discussed. The charges imposed by several European countries are described and distinguished from disincentives. The history of some previous proposals for federal disincentives is reviewed and suggestions for additional disincentives which might be feasible are offered."

KNEESE, A.V., and C.L. Schultze. Pollution, Prices and Public Policy. Washington, Brookings Institution, 1975. 125 p.

LUMB, H.C. Fallacies of a Pollution Tax. Industrial Water Engineering, 8(4):15, April 1971.

MCCLOSKEY, M. and J. Hillis. Economic Deterrents, Penalizing Polluters - Part I. Sierra Club Bulletin, 56(9):9-12. November 1, 1971.

MOSS, L.I. The Emission Tax, Penalizing Polluters - Part II. Sierra Club Bulletin, 56(9):12-13. November 1971.

Organization for Economic Cooperation and Development. Pollution Charges: An Assessment. Paris, 1976.

"The object of this study is to see whether the regulatory and tax approaches can be made to complement each other rather than conflict. The present study, based mainly on the analysis of concrete cases, aims at being at the same time analytical and prescriptive by presenting a detailed assessment of already implemented charge systems and a number of proposals for the extension of the use of charges."

U.S. Congress. Pollution Taxes, Effluent Charges, and Other Alternatives for Pollution Control. Prepared for Senator Ed Muskie by the Committee on Environment and Public Works. May 1977.

BACKGROUND LITERATURE

ALEXANDER, Tom. If We Persist on the Present Regulatory Paths, Costs Will Outweigh Benefits and, Oddly Enough, the Environment May Get Dirtier. Fortune, November 1976, pp. 129-131, 230-234.

"Far from attaining a state of ultimate grace, society is having trouble even achieving the short-range goals established by existing laws. At least half the nation's designated air-quality regions are violating the minimum standards they were to have met in 1975, and it now appears that some major cities may never be in compliance... And as for the harassed Environmental Protection Agency that is supposed to be enforcing the law, there's little it can do about many of these violations except to pretend they're not happening... It's hard to escape the conclusion that there's

got to be a better way. Many economists have been proposing that we harness market forces to serve environmental ends... The regulatory approach provides no incentive to reduce pollution beyond the mandated standards. In theory at least, effluent charges would provide incentive all the way to zero."

"Rigid standards and timetables for pollution abatement that off time cannot be met by industries and could eventually lead to greater amounts of pollution. Since it appears that overtime the benefits of pollution abatement may not exceed the costs, the author favors the imposition of a tax or effluent charge on every polluter according to the amount and relative harmfulness of the discharges. This method could also direct greater attention to conserving, reusing, and recycling resources to reduce reliance on energy-consuming, pollution-producing methods of control".

BAUMOL, E., and J. Oates. The Instruments For Environmental Policy. Presented at Conference of Environment, November 1972. (Unpublished Draft).

"With the objective, the realization of a set of specified standards of environmental quality, Baumol and Oates have shown elsewhere that, assuming cost-minimizing (not necessarily profit-maximizing) behavior by producers, effluent charges are the least-cost method of attaining the target: the proper effluent fee will generate through private decisions to set off activity levels which imposes the lowest costs on society. One problem with an effluent charge scheme is the high monitoring or metering costs. It is also pointed out that under oligopoly or monopoly, taxes on pollutive activities may fail to do their job with full effectiveness."

"The article cites a few cases of the use of effluent fees for environmental protection (refers to other authors). Also cited are two studies of industrial responsiveness to sewerage fees."

BAUMOL, W.J., and W.E. Oates. Economics, Environmental Policy, and the Quality of Life. June 1977.

BINIEK, J.B. Pollution Taxes, Effluent Charges, and Other Alternatives for Pollution Control. Issue Brief No. IB77009. Washington, Library of Congress, Congressional Research Service, February 1977. 9 p.

BOWER, B.T., C.N. Ehler, and A.V. Kneese. A Context for Choosing Implementation Incentives for Environmental Quality Management. Environmental Comment. January 1977. Pp. 5-10.

"This article is intended to address some of the basic issues of identifying and selecting incentives, both positive and negative, for the implementation of environmental quality management plans."

Committee for Economic Development, Research and Policy Committee. More Effective Programs for a Cleaner Environment; A Statement on National Policy. New York, April 1974. 85 p.

DORFMAN, N.S., AND A. SNOW. Who Will Pay for Pollution Control? - The Distribution by Income of the Burden of the National Environmental Protection Program, 1972-1980. National Tax Journal, 28(1):101-115, March 1975.

DOWNING, P.B., and W.D. Watson, Jr. The Economics of Enforcing Air Pollution Controls. Journal of Environmental Economics 1, Pp. 219-236. 1974.

"The goal of this paper is to determine the likely effect on a firm's control actions of alternative implementation and enforcement policies available to the control agency. Three alternatives are studied, legal enforcement through the new source performance standards set forth by EPA, and two effluent fee enforcement alternatives. First, a generalized model of the effects of implementation and enforcement policies on the firm's control actions is developed. The model is then applied to the case of particulate matter discharges from coal-fired power plants in order to estimate empirically the effects of policy alternatives on the firm's control efforts.

EHLER and Bower. Implementation Incentives for Environmental Quality Management. Preliminary Outline for Background Paper on Concepts and Issues.

FREEMAN III., A.M. and R.H. Haveman. Residuals Charges for Pollution Control: A Policy Evaluation. Science, 177(4045):322-329. July 28, 1972.

"Freeman and Haveman attempt to clarify some of the misconceptions concerning the efficiency, feasibility, and effectiveness of residuals charges. The residuals charge strategy is compared to the regulation-enforcement strategy in discussing the rationale for the residuals

charge approach to environmental management (describing its economic logic and explaining how it would work in practice) and in addressing misconceptions regarding residuals charges; i.e., the belief that charges can be implemented only if the magnitudes of the damages are known in terms of dollars, the belief that residuals charges are licenses to pollute, that charges hinder industrial abatement, that charges are similar to user charges. Other topics touched upon are pollution control costs, regulation and inflation, and market power. An environmental strategy which minimizes its reliance on regulation-enforcement and which emphasizes the use of economic incentives should be further probed as an alternative to the problem-laden regulation approach now being used for environmental regulation. The strategy of residuals charges is the alternative preferred by the authors."

GRESSER, J. The 1973 Japanese Law for the Compensation of Pollution-Related Health Damage: An Introductory Assessment. Environmental Law Reporter, 5:50229-50251, December 1975.

"Some major provisions of the Act include (1) examination of pollution victims by a special Health Damage Certification Council; (2) polluters pay the entire costs of victim assistance; and (3) establishes an administrative structure to oversee compensation payments."

GRESSER, J., A. Morishima, and K. Fujikura. The Law for the Compensation of Pollution Related Disease; An Assessment of the First Two Years of Implementation; Interim Report. Cambridge, Harvard Law School. 1976. 40 p. (Unpublished Report).

MIEDEMA, A.K., and T.H. Bingham. On Taxation and the Control of Externalities: Comment and Counter-Proposal. Research Triangle Park, N.C., Research Triangle Institute. 19 p. (Draft).

"Emission taxes would have to be adjusted not only for locational differences among emitters, but also for temporal differences in the production of emissions. In a world of zero transactions costs, however, emission taxes could be an optimal policy—from an allocative efficiency perspective. Inclusion of transactions costs in considering total resource costs, however, indicates that optimal emission charges would be expensive to administer... The presence of transactions costs makes an emission charge less cost-effective than an alternative specification of an emission rights system that retains the welfare optima developed...for emission charges but avoids the substantial transactions costs associated with emission charges."

"Although both author's generally agree with the proposal that emission tax rates should vary spatially, they argue that the time distribution of emissions and the transaction costs involved should be considered at least as important."

Organization for Economic Cooperation and Development. Paying to Pollute.
Environment, 18(5):16-20. June 1976.

"France, Norway, Germany, and the Netherlands are experimenting with one of the most effective policy instruments in the fight against pollution Pollution Charges."

Organization for Economic Cooperation and Development. The Polluter Pays Principle: Definition, Analysis, Implementation. Paris 1975. 20 p.

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REED, P.D. The Use of Economic Disincentives in Environmental Quality Management. July 1, 1976.

"This paper discusses the economic causes of pollution, a variety of economics-based responses, and some ways in which EPA could implement economics-based approaches."

RENSHAW, E.F. Pollution Taxes: Political Realities May Require Rebates.
Tax Notes, 4(42):3-4, Pp. 10-14. October 18, 1976.

"A possible solution to gaining Congressional approval of pollution taxes would be to insure that no pollution should be costless to the polluter, e.g., a recycling of the taxes in the form of rebates to the polluter."

RUFF, L.E. The Economic Common Sense of Pollution. The Public Interest, 19:69-85, Spring 1970.

"Although there are noneconomic aspects of pollution, pollution is an economic problem which must be understood and dealt with in economic terms."

SCHULTZE, C.L. The Public Use of Private Interest. Harper's Magazine. Volume 254, No. 1524. May 1977. Pp. 43-62.

"The rash of new regulatory mechanisms established in recent years - for pollution control . . . - have begun to generate resentment against excessive red tape. Conservatives argue that recently adopted social interventions have been a mistake while the liberal wrong in the recent trend of interventionism.

Tax Foundation, Inc. Pollution Control: Perspectives on the Government Role. New York. 1971. 46 p.

"The study discusses the pros and cons of various fiscal proposals to deal with the pollution problem, as well as technical, political, and economic difficulties faced in setting optimum control standards... The study brings together a number of cost estimates to provide a general view of the magnitude of dollar amounts involved in making specified improvements."

TULLOCK, G. Excess Benefit. *Water Resources Research*, 3(2):643-644, 2d Quarter 1967.

"After reviewing various literature on the economic basis for effluent charges, Mr. Tullock discovered that one important aspect of that economic base has been virtually ignored - that governments need money and the return from charges on externalities is a passible source of such funds."

TYBOUT, R.A. Pricing of Pollution. *The Bell Journal of Economics and Management Science*, 3(1):252-66. Spring 1972.

U.S. Congress. House. Committee on Government Operations. Views of the Governors on Tax Incentives and Effluent Charges. H. Rept. No. 1330. Union Calendar No. 567. March 15, 1966, 89th Congress, 2d Session. Washington, U.W. Government Printing Office, 1966.

WEIDMAN, J. An Introduction to the Effluent Charge Approach. March 30, 1977.

"There is no turning back the clock for those peoples tied to the finer pleasures of a higher standard living. It would be nonsensical to expect factories to shut down, candles to replace lightbulbs, and people to stop driving just so we could all breath easier. Therefore, to combat the problem our country has set up a system of regulation-enforcement, which dispite its intentions, has to the greater extent failed. In the paper, a workable alternative to regulation is explored. One which will effectively cope with the complexities and problems of pollution control."

WHITAKER, J.C. Striking a Balance; Environment and Natural Resources Policy in the Nixon-Ford Years. Washington, American Enterprise Institute for Public Policy Research, 1976. 344p (AEI-Hoover Policy Studies; 21) (Hoover Institution Studies; 57).

"The evolution of environmental policy from Gifford Pinchot (sometimes known as the father of the conservation movement) to the Nixon-Ford era."

WHITE, L.J. Effluent Charges as a Faster Means of Achieving Pollution Abatement. *Public Policy*, v. 24. Winter 1976. Pp. 111-125.

"Argues that economics should be supporting pricing schemes as such schemes will bring about abatement faster (in addition to being more efficient than existing policies)."

LAW-RELATED LITERATURE

HOCK, J. Constitutional Considerations Associated With Pollution Taxes.
Natural Resources Lawyer, 7(1):97-135. Winter 1974.

LEE, R.A. A History of Regulatory Taxation. Chapter 1, Police Power and the Taxing Power. The University Press of Kentucky, Lexington, 1973.

"Discusses the shift of the Federal Government from laissez-faire policy to interventionist, regulatory policy in the early 20th century, and the subsequent increased taxing power of Congress. Lee shows the flexibility with which the Supreme Court has interpreted the Constitution, allowing for these changes."

LYMAN, S.R. The Constitutionality of Effluent Charges. University of Wisconsin, Water Resources Center, May 1969.

"A detailed analysis of the constitutionality of both State and Federal effluent charge systems. The author has completed an exhaustive study of cases having a potential bearing on the issue of the legality of effluent charges. He concludes that if the enabling legislation clearly specifies that the action is being taken under Congress's power to regulate commerce, or a States right to protect the health, safety and welfare of its citizens, it should be constitutional."

MARSHALL, D. Environmental Protection and the Role of the Civil Money Penalty: Some Practical and Legal Considerations. Environmental Affairs, Spring 1975.

"This is a review of legal and administrative literature aimed at making a case for civil penalties."

"The article begins with a discussion of the strengths and weaknesses of various enforcement tools: private damage suits, emission charges, injunctions, criminal sanctions and civil penalties. Emission charges are attacked on technical grounds (inability to measure environmental damage; don't know what it takes to neutralize pollution's effect). In the discussion of civil penalties he distinguishes them from "emission deterrence charges" (which seem to be like the Connecticut abatement charges). He admits that one can be used as effectively as the other. However, he sees his conception of a civil penalty as being superior because it (1) considers more factors (firms ability to pay, actual damage to the environment), and (2) is more direct."

"He then makes the argument for the administrative imposition of such sanctions (relying heavily on Goldschmidt). He discusses the constitutional issues surrounding civil penalties: separation of powers and the civil/criminal debate."

NAGEL, Stuart, S. Incentives for Compliance with Environmental Law.
American Behavioral Scientist, v. 17, May-June 1974. Pp. 690-710.

"The compliance incentives discussed in this paper include: (1) discharge taxes or fees, (2) contingent injunctions, (3) tax rewards and subsidies, (4) objective civil penalties, (5) publicizing wrongdoers, (6) selective government buying power, (7) fines and jail sentences, and (8) conference persuasion."

RIORDAN, C. - The policy and Legal Aspects of Pollution Taxes. Term paper.
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ABT Associates, Inc. Economic Analysis of Industrial Incentives for Pollution Control; Implications for Water Quality. Washington, Federal Water Pollution Control Administration, December 1967.

ACKERMAN, B.A., S.R. Ackerman, and D.W. Henderson. The Uncertain Search For Environmental Policy: the Costs and Benefits of Controlling Pollution Along the Delaware River. University of Pennsylvania Law Review, 121(6): 1226-1308, June 1973.

"A substantive critique of water pollution policy with consideration given to the inherent limitations of the economist's analysis of the issue of environmental degradation. This is the second in a series of articles by the author examining the scientific and economic foundations of water pollution policy as it is presently evolving in the United States."

ACKERMAN, B.A., et. al. The Uncertain Search for Environmental Quality. New York, The Free Press, 1974.

"The authors take a look at a model regional agency, the Delaware River Basin Commission, and its attempt to adopt a massive pollution control program for the Delaware River."

ACKERMAN, S.R., Effluent Charges: A Critique. Canadian Journal of Economics, 6(4):512-528, November 1973.

ARMSTRONG, J.M. Regional Economic Optimization and Effluent Charge Theory in Water Resources Utilization. Ph.D. Dissertation, Univ. of Michigan, 1969.

BROWN, G.M., Jr. Effluent Charges; A Discussion Paper. Prepared for the National Commission on Water Quality. Seattle, University of Washington, Institute for Economic Research, August 1975. 27p. (unpublished Report)

BURKE, H. A Single Rate For Water: Can a Rate Structure Effectively Aid Conservation? Public Interest Economics West (1), May 1977. San Francisco.

COMINS, J.A., C.R. Marshall, and A. Stapler. Financial Alternatives to Reduce the Economic Impact of Industrial Water Pollution Control. Washington, U.S. Environmental Protection Agency, Office of Research and Development, July 10, 1975. 94p. (unpublished Report).

"To help industry bear the financial burden imposed by the FWPCA, this report investigates various financial assistance methods (alternatives and subsidies) the Federal government now uses or might use in the

MARSHALL, H.E., and R.T. Ruegg [National Bureau of Standards]. Analysis of Cost-Sharing Programs For Pollution Abatement of Municipal Wastewater; final report. U.S. Environmental Protection Agency, Office of Research and Development, November 1974. 147 p. (Distributed by National Technical Information Service, Springfield, Va., as PB 239 420.)

"This study evaluates existing cost-sharing programs for wastewater pollution abatement and emphasizes an alternative approach. The alternative stresses that more efficient abatement will result if (1) the same percentage cost share applies to all plant and non-plant techniques of abatement; (2) the same percentage applies to all categories of cost; (3) the same percentage applies to large and small communities; and (4) provision for Federal cost sharing of every abatement technique that is technically viable."

Maryland. General Assembly. An Act to Establish Resource Utilization Charges On Water Withdrawals in the State of Maryland. 2d Draft. Annapolis, September 20, 1974. 9 p.

MILLER, W.L. and J.H. Gill. Equity Considerations In Controlling Non-Point Pollution From Agricultural Sources. Water Resources Bulletin, 12(2):253-261, April 1976.

PESKIN, H.M., and E.P. Seskin. Cost Benefit Analysis and Water Pollution Policy. The Urban Institute, Washington, D.C. 1975. 370 p.

"As cost-benefit analysis is a formal procedure for comparing the costs and benefits of alternative policies, the 19 contributing authors of this book have banded together to seek (1) the theoretical and applied issues relating to the measurement of benefits; (2) similar material pertaining to the assessment of costs; (3) aspects of uncertainty which are relevant to cost-benefit analysis; and (4) how the specific technique of cost-benefit analysis relates to the broader area of public policy."

ROSE-ACKERMAN, S. Market Models for Pollution Control; Their Strengths and Weaknesses. Paper prepared for the National Commission on Water Quality. New Haven, Yale University Department of Economics, September 1975. 24 p., app. (Unpublished Report).

"Given the high cost of pollution control this paper advocates not an effluent charge scheme but proposes a pollution rights scheme under which dischargers would bid for the right to emit wastes to the extent permitted under the 1972 Amendments to the FWPCA."

future. To analyze the operation and effects of these alternatives should lead to better ways to achieve financial goals."

DECKER, C.T. Rate Surcharges: Friend or Foe? Water and Wastes Engineering, 8(11):F2-F4. November 1971.

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DELUCIA, R.J. AN EVALUATION OF Marketable Effluent Permit Systems. (Meta Systems, Inc.). Final report. U.S. EPA, Office of Research and Development, Sept. 1974. 363p. (Distributed by National Technical Information Service, Springfield, Va. as PB 239 428).

"This report is a study of the practical problems and prospects of using marketable effluent permits as one method of implementing the 1972 Amendments (to the Federal Pollution Control Act). Perhaps the strongest argument in favor of the use of a market in discharge rights is that the economist's allegations concerning the working of the marketplace remain untested in pollution control in the United States, while many other ideas have been tried and found wanting."

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"Mr. Ward feels that in light of current transportation problems more planning attention need be given to three strong disincentives - fuel rationing, fuel surcharges, and metered smog and congestion charges."

KNEESE, A.V. The Case for Effluent Charges As Part of a National Environmental Program. Prepared for the National Commission on Water Quality. August 1975.

KNEESE, A.V., and B.T. Bower. Environmental Quality Analysis: Theory and Method in the Social Sciences. Baltimore, The Johns Hopkins Press, for Resources for the Future, Inc., 1972.

MAR, B.W. A System of Waste Discharge Rights for the Management of Water Quality. Water Resources Research, 7(5):1079-1086, October 1971.

"As indicated in this paper a system of marketable rights can (1) simplify the problems in existing management systems of new discharger entry into a region, (2) incorporate the effluent charge system and the management approach, and (3) provide a mechanism for government or the private sector to adjust the quality of water without creating serious economic penalties for other parties discharging wastes."

SEAGRAVES, J.A. Puzzled by Surcharges? Here's How Durham Operates. Waste Water Engineering, 9(3): March 1972.

"Seagraves proffers the view that surcharges represent a step in the direction of efficient pricing and greater equity but notes that there are problems in defining equity. Using data from Durham, N.C. for 1969, the year before their surcharge went into effect, three alternative measures of equity are illustrated. He also discusses problems inherent to these measures of equity."

"Seagraves introduces the question as to why cities have adopted surcharges instead of simply billing industries separately for the various components in the monitored wastes. He contends that separate billing would be more equitable considering the variety of industries encountered in most cities and would eliminate the incentive to use extra water so as to reduce the surcharge."

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TIHANSKY, D. A Survey of Empirical Benefit Studies. In H.M. Peskin and E.P. Seskin, eds. Cost Benefit Analysis and Water Pollution Policy. Washington, The Urban Institute, 1975.

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U.S. Congress. House. Committee on Government Operations. Subcommittee on Natural Resources and Power. Water Pollution Control and Abatement. Hearings, 88th Congress, 1st and 2d sessions. Washington, U.S. Government Printing Office, 1966.

AIR RELATED

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An Explanation of the Proposed Regulations Providing Civil Assessments for Air Pollution Violations. Hartford, State of Connecticut Department of Environmental Protection, October 21, 1974. 6 p.

An Introduction to Connecticut's Economic Approach to Environmental Law Enforcement. Hartford, Department of Environmental Protection. 42 p. (Draft Report).

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BARRET, L.B., and T.E. Waddell. Cost of Air Pollution Damage: Status Report. Research Triangle Park, N.C., U.S. Environmental Protection Agency, National Environmental Research Center, February 1973. 80 p. (Distributed by National Technical Information Service), as PB 222 040.

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BINGHAM, T.H., et. al. Transactions Costs of Implementing Alternative Least-Cost Air Quality Attainment Policies. Draft Final Report. (Research Triangle Institute). March 1976.

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Sacramento, California Air Resources Board. [n.d.] 22 p. (Draft Report).

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CHAPMAN, D. A Sulfur Emission Tax and the Electric Utility Industry.
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Charles River Associates Incorporated. Regional Management of Automotive Emissions: The Effectiveness of Alternative Policies for Los Angeles. Washington, U.S. Environmental Protection Agency, January 1977. 285 p. (In preparation).

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Duke Law Journal. The Effluent Fee Approach for Controlling Air Pollution. Pp. 943-990, October 1970.

"Pollution control programs, present control efforts - effluent standards, which limit the emittance of specific forms of pollutants, absolute prohibition of certain polluting activities and controls on certain polluting activities - and possible alternative policies - tax credits, subsidies, private action, and effluent fees - are briefly discussed in terms of their practical and economic advantages and disadvantages."

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"Kovel is generally supportive of a system of administratively imposed penalties. He argues that such a proceeding is more flexible and can bring better expertise to bear on a problem. However, he does not seem to see this as the immediately best response. The position

"Kovel is generally supportive of a system of administratively imposed penalties. He argues that such a proceeding is more flexible and can bring better expertise to bear on a problem. However, he does not seem to see this as the immediately best response. The position he is pushing involves use of civil remedies by courts for pollution cases."

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