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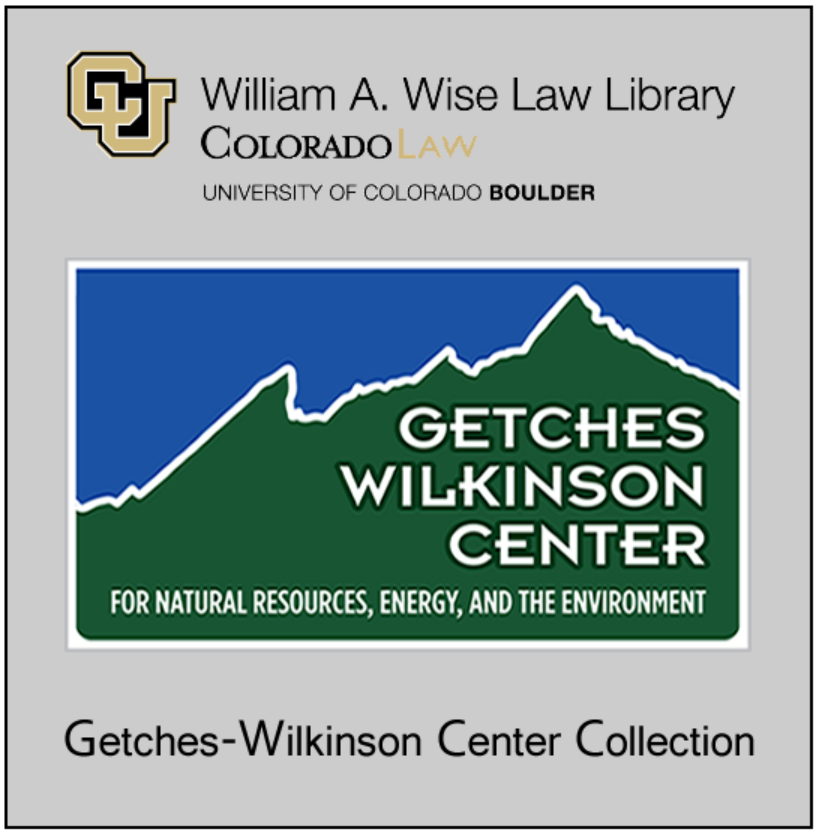


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# THE EFFLUENT CHARGE APPROACH TO WATER QUALITY CONTROL

Ralph W. Johnson

University of Washington

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Water Quality Control:
Integrating Beneficial Use
and
Environmental Protection

Fleming Law Building
Boulder, Colorado

I. **IN 1972 THE UNITED STATES ADOPTED A REGULATORY/STANDARDS APPROACH TO POLLUTION CONTROL IN THE CLEAN WATER ACT, AND REJECTED THE EFFLUENT CHARGE APPROACH.**

A. Several European nations have adopted effluent charge systems, always in tandem with standards/regulatory systems. This includes the Federal Republic of Germany, France, Netherlands, Hungary, Czechoslavakia, and Poland. England and Sweden have so far rejected effluent charge systems.

II. **THE ULTIMATE GOAL OF THE 1972 CLEAN WATER ACT WAS TO ACHIEVE "NATURAL WATER BY 1985". THIS HAS NOT BEEN ACHIEVED, AND IS NOT ACHIEVABLE AT ACCEPTABLE COST.**

A. The CWA has improved water quality in some places, but in many others it has only slowed the process of deterioration of quality.

B. Population, industrial, and technological growth is moving so rapidly that the CWA cannot keep up with, much less stay ahead of the pollution problem.

C. The CWA system is based on a "legalistic" approach, and minimizes economic incentives.

1. The CWA is legalistic in that its goal is to totally ban discharges of waste into public waters, instead of applying cost/benefit principles to reduce or eliminate discharges which are not cost-justified for a particular body of water.

2. The CWA is legalistic in relying heavily on threat of punishment, rather than economic incentives, for implementation.

## III. IN REALITY THE CWA SYSTEM RELIES ON ASSIMILATIVE CAPACITY OF RECEIVING WATERS

A. The 1977 Amendments to the CWA altered emphasis toward receiving water standards and away from the no-waste-discharge approach.

B. In practice this means a government official decides which waste discharger gets this opportunity.

C. This is consistent with an effluent charge approach to controlling water quality, except that under an effluent charge system, the allocation of use opportunity is partly controlled by price.

## IV. AN EFFLUENT CHARGE SYSTEM COULD BE ADDED ON TO THE EXISTING REGULATORY/STANDARDS SYSTEM IN THE UNITED STATES.

A. A "pure" effluent charge system is not at present practicable. But it would be practicable to add-on an effluent charge system on top of the existing regulatory/standards system.

B. West Germany (the Federal Republic of Germany) in 1976 adopted an effluent charge system as an add-on to a regulatory standards system. This system has been implemented in the 1980s.

## V. CONGRESS HAS POWER TO ENACT AN EFFLUENT CHARGE LAW UNDER THE "COMMERCE CLAUSE" OF THE CONSTITUTION.

A. History of water pollution control in the United States

1. Historically under state control.

2. Failure of State Control
   Interstate rivers and lakes
   Mobility of Industries
   Lack of state expertise, and financing
   Problems with cities

3. Gradual intervention of federal control

1948 Federal Water Pollution Control Act

1965 Water Quality Act

1969 Rediscovery of Rivers & Harbors act of 1899

1972 Federal Water Pollution Control Act Amendments

1977 Amendments. New Name, Clean Water Act.

B. Goals and Process of Federal Clean Water Act.

C. Constitutionality of CWA.

1. Commerce Clause authority "affecting" interstate commerce. Wickard v. Filburn, 317 U.S. 111 (1942)

2. Cases uphold the constitutionality of the federal CWA. U.S. v. Ashland Oil & Trans. Co. , 504 F.2d 1317 (6th Cir. 1971).

3. Bottom line: There is no legal (constitutional) property right to cause pollution, either by depositing wastes into public waters, withdrawing water, heating water, etc. Federal and state laws controlling pollution, if applied fairly, are constitutional.

## VI. STATE AUTHORITY TO ENACT EFFLUENT CHARGE LAWS

A. The states have legal power to enact effluent charge laws of they choose to do so. They could do so under their "police power" authority.

B. Such laws should not violate the dormant commerce clause that guarantees unhampered interstate commerce if the laws apply equally to instate and out-of-state waste dischargers.

C. State effluent charge laws are probably not preempted by the federal Clean Water Act. Under the CWA, state pollution control programs can be more strict than the federal program. Assuming that a state effluent charge system is "added on" to the regulatory\standards system, it would be more "strict".

However, questions might be raised that waste dischargers meeting federal standards cannot be "charged" fees under state programs. This uncertainty would be removed if Congress enacted a law making it clear that the federal act does not preempt state effluent charge laws.

New federal legislation could either:

1) Provide states with authority to enact any type of effluent charge system they chose.

2) Or, set federal standards for state effluent charge system laws. Thus any state adopting this system would have to comply with federal standards.

D. ONE DISADVANTAGE OF A STATE EFFLUENT CHARGE SYSTEM IS THAT INDUSTRIES MIGHT BE DISCOURAGED TO OPERATE IN SUCH A STATE.

1. Under the CWA a state can adopt more stringent standards than the federal standards. This is similar to adopting effluent charges.

## VII. COULD AN EFFLUENT CHARGE SYSTEM BE GRAFTED ONTO THE PRESENT TECHNOLOGY BASED STANDARDS SYSTEM?

A. No insurmountable problems should exist.

B. A charge system could rely on the same type of data used in the existing technology-based system in the U.S.

1) The existing data for NPDES permits includes

chemical parameters, metal content, physical and biological parameters, and radioactive parameters, covering nearly 70 different items.

2) The principal decisions would concern the choice of the wastes to be the basis of the charges, and the amount of the charges.

## VIII. ADVANTAGES OF ADDING A CHARGE SYSTEM TO THE EXISTING STANDARDS SYSTEM.

A. An effluent charge system is not a license to pollute. The standards system remains in place. In theory the charge system, if it works, could partially replace the standards system over time.

B. An effluent charge system can develop a pool of revenues which can be used to pay for administration of the pollution control system, for research, for construction, and for agglomeration.

C. Effluent charges are assessed against those who cause the pollution. Thus the polluters, instead of the general taxpayer, pay for the system.

D. Effluent charges provide incentives to polluters to

save money by developing less-polluting ways of manufacturing, disposing of wastes, or whatever. The charges are reduced as waste discharges are reduced.

E. Effluent charges tend to improve monitoring and data gathering.

F. Adding an effluent charge system would increase the flexibility of the overall pollution control system, allowing it to contend with a wider range of changing circumstances.

SELECTED REFERENCES on effluent charge systems. Johnson & Brown, Pollution Control by Effluent Charges: It Works in the Federal Republic of Germany, Why Not in the U.S., 24, Natural Resources Journal 929 (1984); R. W. Johnson & G. Brown, Jr., Cleaning Up Europe's Waters; Economics, Management, Policies (Praeger Pub. 1976); A. V. Kneese & B. T. Bower, Managing Water Quality: Economics, Technology, Institutions; Pub. for RFF by Johns Hopkins Press (1968); F. Anderson, A. Kneese, P. Reed, R. Stevenson & S. Taylor, Environmental Improvement Through Economic Incentives (1977). Effluent Charges on Air and Water Pollution: A Conference Report. (Pub. by Environmental Law Institute, 1973)

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