

Example of permits, regulations and enforcements research paper

[Environment](#), [Pollution](#)



\n[toc title="Table of Contents"]\n

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1. [Organization](#) \n \t
2. [Background](#) \n \t
3. [Conclusion](#) \n \t
4. [Works Cited](#) \n

\n[/toc]\n \n

Organization

Introduction

In America, one of the most important matter of national concern is clean water. Almost half the Americans believe that clean water is one the fundamental rights of every citizen. Thousands of Americans take part in the local and state water protection group. The Clean Water Act or the Federal Water Pollution Control Act is the principal law that governs the pollution of the surface water of United States of America. The act was originally enacted in 1948 but it underwent certain amendments in 1972 to come to its present form. The 1972 act laid out ambitious plans for improvement of water quality that have been undergoing expansion and are being implemented by municipalities, industries, others (Copeland, 2010). There was certain adjustments made in the act in 1977, certain revisions in 1981, and amendments in 1987 by the Congress. This paper details the overview of the law while providing a description of the essence of the act.

Background

The first detailed statement of government's interest in programs for clean water came in the form of Federal Water pollution Control Act of 1948. The act of 1948 made provisions of funds for technical assistance to state governments as well as local authorities for addressing the menace of water pollution. The assistance also included research expenditure. Since the problem of water pollution is mainly seen as a local problem, there were no federal laws, limits, objectives, goals, or guidelines for the same (Hamilton et al, 2004). On the side of enforcements, the involvement of federal government was merely concerned with interstate water matters which also needed consent of the pollution originating states.

The programs for control of water pollution, during late 1950s and early 1960s, were given shape by four laws that amended the statute of 1948. These laws were mainly concerned with federal assistance provisions for municipal dischargers and enforcement programs by federal agencies for all dischargers (Copeland, 2010). The period also saw the gradual expansion of the federal jurisdiction and federal role with inclusion of navigable waters. For determination of actual degree of water pollution, standards of water quality were introduced in 1965.

The new feature of the law necessitated states to set up standards for interstate rivers. Towards the end of the 1960s, it was felt that the enforcement of law was being hindered by time consuming procedures and also that the approach of using water quality standards was not paying dividends as it was difficult to attach responsibility to a discharger for the water quality of the stream (Hamilton et al, 2004). Moreover, there was

growing frustration regarding slow paced efforts for pollution cleanup along with rising suspicion that the new technologies for the control of pollution were not being deployed on the ground. These frustrations and perceptions along with rising environment consciousness laid the ground work for the amendments in 1972.

The amendments in 1972 came up with a lot of new components which replaced the earlier ones (Hamilton et al, 2004). It set ambitious and optimistic goals like requirement of treatments of all industrial and municipal wastewater before discharge into waterways, increased release of federal funds for construction of water treatment plants for municipalities, streamlined and strengthened enforcement, and expansion of federal role along with retention of states' responsibility for routine implementation of the statute.

The legislation of 1972 declared that its objective was maintenance and restoration of biological, physical, and chemical integrity of the water of the nation. It also established two goals: bringing down the discharge of pollutants to zero till 1985 and providing such quality of water, where possible, which can be deemed swimmable and fishable by 1983.

There are two most important components of the Clean Water Act. First is the Title VI and Title II provisions that providing authorization for provision of federal assistance to the municipalities for the construction of sewage treatment plants. Second is the provision for regulation of municipal and industrial dischargers.

According to some, the Clean Water Act had been perceived as a technology forcing statute as it places high demands on the institutions that fall under

its regulatory regime for achievement of higher level of pollution control. A deadline of July 1, 1977 was given to the industries for installation of best practicable control technology also known as BPT for cleaning the water being discharged into the stream (Copeland, 2010). This deadline also applied to municipal treatment plants for wastewater for achieving an equivalent goal known by the name: secondary treatment. There was a provision of waiver of the secondary treatment for cities that discharged water in marine waters provided it was shown that significant reduction of traditional pollutants was achieved by natural factors and that water quality standards along with balanced population of wildlife, shellfish, and fish would be protected (Hamilton et al, 2004).

The major focus of the BPT is to control the discharges of particularly conventional pollutants including biochemical oxygen demanding substances, suspended solids, pH and fecal bacteria and coliform. These pollutants are essentially those materials which are biodegradable and which exist naturally in the aquatic environment, depleting the dissolved oxygen concentration in water, which is essential for aquatic life.

The CWA made BOT or any other greater pollutant cleanup mandatory on or before March 31, 1989. It required the industries to use BAT or the best available technology which is achievable in economic terms. The BAT level controls primarily focus upon the toxic substances (Copeland, 2010). The industrial discharges which utilize alternate or innovative technology are provided compliance extensions for as long as two years. The failure to meet the CWA's statutory deadlines can lead to the enforcement action.

For the protection of water quality, CWA uses both technology-bases effluent

limitations and water quality standard. The effluent limitations that are based on technology are essentially numerical limitations which were established by the EPA. These effluent limitations are applied to municipal and industrial sources through discharge permits. The water quality standards are used for maintain the overall quality of water (Hamilton et al, 2004). They consist of narrative or numerical statement along with designated beneficial use of a water body for identifying the maximum concentrations of various pollutants.

The act makes it mandatory for all the States that have water bodies to establish water quality standards and ensure that they are met. These water quality standards serve as the backup for the federal set-technology based effluent limitations because they indicate where additional pollutant controls are required for achieving the goals of the act (Copeland, 2010). In the water bodies where the municipal and industrial sources have attained technology-based effluent limitations, and yet the water quality standards are not met, the sources are expected to meet additional pollution control necessities. For each water body, the CWA requires the states to develop a TMDL or a total maximum daily load of pollutants at a certain level which ensures that the required water quality standards can be maintained and attained (Christine & Sandra, 2007). The total maximum daily load is a quantitative valuation of pollution sources, problems, and pollutant reductions needed for restoring and protecting a stream, river, or lake. In addition, the TMDL is also a planning process for achieving the required water quality standards. The recent reports suggest that the EPA has estimated almost 44, 000 US waters

that are impaired and immediately require the preparation of the total maximum daily load.

The Clean Water Act, in order to achieve all its set objectives, embodies the basic concept that any form of discharge into the country waters are unlawful, unless it has been authorized by a permit beforehand. Thus, under this condition, approximately sixty-five thousand municipal and industrial discharges should compulsorily obtain authorization permits from the EPA under the C. W. A's National Pollutant Discharge Elimination System programme. The NPDES program was authorized in Section 402 of the Act. According this program, the discharger or the source is required to get effluent limits that are based on technology. BAT or BPT limits are allowed for secondary, industry treatment for municipalities and more stringent effluent limits are allowed for water quality protection (Christine & Sandra, 2007).

The permits given by NPDES specifies the control technology which is applicable to each of the pollutants along with effluent limits a source or discharge should meet. It also specifies the deadline for submission (Lavelle, 2007). The dischargers are expected to maintain the records along with carrying out activities for monitoring the effluent limit. The NPDES issues the permits are valid only for 5 years and the dischargers are expected to renew the permits for allowing continued discharge of wasted in the water.

The National Pollutant Discharge Elimination System Permit also incorporated the numerical effluent limits which are issued by the EPA. The most initial BPT limitations were focusing upon the regulation of discharges

of conventional pollutants, such as oxygen-consuming substances and bacteria (Lavelle, 2007). The more strict BAT limitations later emphasized upon the control of toxic pollutants such as pesticides, heavy metals and also organic chemicals.

Furthermore, apart from the above mentioned limitations that are applicable for the categories of industries, EPA also issued various water quality criterion for above 115 pollutants, which includes sixty-five names categories or classes of priority pollutants. These criterion specified by the EPA specify ambient, concentration levels for the pollutants and also the provision of the guidance for stating for establishing water quality standards, which were framed for the achieving the goals of the Act.

In addition to the above limits, a distinct type of permit is required for disposing off the fill or dredged material country's water, which includes the wetlands. The section 402 of the CWA authorizes the permit program, which is being administered by the U. S. Army Corps of Engineers, which is subject to and using the EPA environment guidance. (Christine & Sandra, 2007).

However, there are some specific activities which are exempted from the above mentioned permit requirements, which includes ranching, farming and forestry practices which do not character or alter the land; any maintenance and construction; and all activities which have been regulated by the States under the provision of the CWA (Copeland, 2010).

In addition, under some specific conditions, the EPA also allows the delegation of some Section 404 permitting responsibilities to the qualified states, for example New Jersey and Michigan. Since the past few years, the CWA's wetlands permit program had been the center for drawing many

controversies (Lavelle, 2007). In fact, it has been the most controversial part of the law. On one hand, people who wish to carry on with the developing the wetlands, maintain that the federal regulation impedes and intrudes on the private land-use decisions (Hamilton et al, 2004). However, on the other hand, environmentalists protest and demand for greater protection for the remaining wetlands and want to limit the activities which are still taking place in the wetlands.

Additionally, CWA permits or other regulatory conditions set by the federal law are not applicable on the non -point sources of pollution, which as stated by the EPA and States are primarily responsible for the water quality impairments in the country (Lavelle, 2007). These nonpoint sources of pollution are covered by the State programs for managing the runoff, under the Section 319 of CWA. Other regulations of the EPA under the Clean Water Act includes the guidelines for usage and disposition of the sewage sludge and guidelines for discharging the pollutants from land-based sources into the water of ocean. The Ocean Dumping Act, 33 U. S. C. 1401-45, was formed for regulating the intentional disposal of wastes in the oceans. Furthermore, EPA also gives provision for the guidance on technologies which would achieve BAT, BOT and the other effluent limitations (Hamilton et al, 2004).

The NPDES permit which contains the effluent limitations on what can or cannot be discharged into the water is the principal enforcement tool of the Act. EPA might issue a compliance ordering a civil suit in the US district court against the people who violate the terms of the permit (Lavelle, 2007). The penalty for violating any clause of the permit can be around \$25, 000 every

day. More strict and stringent penalties were authorized for any criminal violations of the CWA, for knowing or negligent violations, and the punishment for these is almost \$50, 000 every day for 3 years, or imprisonment, or both.

For the violations that are committed consciously to place another individual in imminent danger of serious bodily harm or death, a fine of \$250, 000 for fifteen years is imposed. Lastly, the EPA also has authorizes the sources to assess civil penalties for specific well-documented violations of the federal law. The Section 309 of the CWA contains all the criminal and civil enforcement provisions (Copeland, 2010). The EPA works with Army Corps of the Engineers and is responsible for enforcement against entities that fail to comply with the Section 404 permit.

Although the federal enforcements were addressed by the CWA, all actions of for enforcing the law are primarily undertaken by the States. This is so because it is the State which issue the major part of permits to the sources and also because the federal government is lacking in the resources for every day enforcement and monitoring (Stoner, 2007). Similar to the various other federal environment protection laws, CWA enforcement is being shared by the States and the EPA, in which the states have primary responsibility. However, it is important to note that the EPA have the oversight of State enforcement along with retaining the right of bringing direct action where it believes that the State has not taken an appropriate and timely action (Lavelle, 2007). The EPA also brings in direct action when the local agency or the State requests its involvement. Finally, the federal government acts in for enforcing against the criminal violations of the CWA.

Additionally, the individuals can also bring a citizen suit any US district court against the people who violate a prescribed effluent limitation or standard. Such individuals can also bring citizen suits against the Administrator EPA for the failure of carrying out a duty under the CWA.

Conclusion

The Clean Water Act is amongst the most valuable and extraordinary piece of legislation. Although it has served its purpose ever since its inception, it has started to crack up and show evidences of gaps. Its implementation and design has not been as perfect as believed to be. In order to be able to reach the objective of maintaining and restoring the physical, chemical and biological integrity of country's waters, and in order to deal with issues caused by climatic changes, various reforms in the Act are needed. Firstly, the point-source controls are required to be strengthened. In the global era of cutting edge technology, the Act does not justify its use of outdated technology. Thus, newer technological innovations are required to be the basis of environmental protection in the present times. For enhancing the protection of wetlands, the Act is needed to be extended to isolated and intermittent waters. The complete responsibility of enforcement on EPA is very crucial along with increasing the funding for wastewater infrastructure.

Works Cited

Copeland, Claudia. " Clean Water Act: A Summary of the Law." Report No. RL30030. Congressional Research Service, 2010. Washington, DC.

Christine A Klein & Sandra B. Zellmer, Mississippi River Stories: Lessons from a Century of Unnatural Disasters, 60 SMU L. REV. 1471, 1535 (2007).

Hamilton, Pixie, Timothy Miller, and Donna Myers. “ Water Quality in the Nation’s Streams and Aquifers—Overview of Selected Findings, 1991-2001.”

U. S. Geological Survey Circular 1265. 2004.

Lavelle, Marianne. “ Water Woes.” U. S. News & World Report. 2007. pp. 37-53.

Stoner, Nancy. Natural Resources Defense Council, Restoring Federal Investment in Clean Water for All Americans. 2007. available at [www. epa. gov/owm/cwfinance/cwsrf/cwsrf. pdf](http://www.epa.gov/owm/cwfinance/cwsrf/cwsrf.pdf)