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10-12-1989

Legislative Control of Air Pollution & Water Pollution of the P.R. China

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Citation Information

Xiao, Longan, "Legislative Control of Air Pollution & Water Pollution of the P.R. China" (1989). *New Challenges for Environmental Protection: Second Sino-American Conference on Environmental Law (October 12-13)*.

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Longan Xiao, *Legislative Control of Air Pollution & Water Pollution of the P.R. China*, in *NEW CHALLENGES FOR ENVIRONMENTAL PROTECTION* (Natural Res. Law Ctr., Univ. of Colo. Sch. of Law 1989).

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第二届中美环境法学术讨论会

1989年9月18日至19日

September 18 and 19, 1989

**Legislative Control of Air Pollution &
Water Pollution of the P.R.China**

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中国大气污染和水污染的法律控制

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**The Second Sino-American
Conference on
Environmental Law**

Boulder, Colorado



Legislative Control of Air Pollution & Water Pollution of the People's Republic of China

Xiao Longan

China is a developing country and its national economy has rapidly developed, especially in the past decade, but the level of the economic development of China is still low. So the economic development is one of the basic tasks ahead in China.

The Chinese government, while developing its economics, has paid much attention to the environmental protection for a long time. At the beginning of the 70s, the first national conference of the environmental protection was held in Beijing. Since then, the national conservation strategies have been put on the national agenda. At the second national conference of the environmental protection in 1984, the State Council clearly announced that the environmental protection should be part of the national basic policy. From then on, the environmental protection has been treated as one of the important strategic task throughout the country.

However, things do not seem optimistic yet, because most people, including lower and middle managers, planners and officers, lack environmental awareness, education and training so that the Chinese economy and environmental protection develop out of proportion. And the environmental problems have become more and more serious in industrial areas and big cities.

In this article, I will be dealing with situations of the protection of the environment, management and legislation in China, and some typical cases of air pollution and water contamination will be described as well as my personal opinions on these problems.

I. The Present Situation & the Hazard of Air Pollution & Water Contamination of the People's Republic of China

Air pollution mainly comes from cities, including industry and residence. A typical air pollution presents particulate coal dust and SO₂ smoke. There are about twenty million ton coal dust smoking and eighteen million ton SO₂ escaped into the atmosphere of China every year which amount to 80% and 90% of the annual rate respectively. Of the two, the coal dust pollution is the most serious one. In the northern cities of China, suspended particles of dust averages 930 $\mu\text{g}/\text{m}^3$ each day, which is 2.1 times higher than national control standard, the descent of dust averages 50 ton / km² each month, which is four times higher than national standard; SO₂ gas averages 120 $\mu\text{g}/\text{m}^3$ every day in the northern cities; 30%

cities have higher pollution than the environmental standards; In the south, SO_2 gas averages $110 \mu\text{g} / \text{m}^3$ every day, 19% cities have higher pollution than the standards. On the other hand acid rain, which is much related to SO_2 gas, also becomes prominent environmental problem in the broad southern areas that are bread baskets of China.

The Water contamination problem is also ringing an urgent alarm. The first source of the pollution is industrial waste water; the second is waste water in daily life in big and middle sized cities. Because of lower industrial developing level, older technical devices, and generally ignored the effective utilization ratio of the resources and waste water precessing, the water pollution is seriously endangering most rivers and lakes of China. According to experts' estimation, waste water amounts thirth—one billion ton, among which 77% is industrial waste water and 23% daily life waste water in cities. There are 130 thousand tons of toxic and hazardous material which are dumped into rivers, lakes and the oceans every year. Among them, 4.6 thousand tons of heavy metals—mercury, cadmium, chromium, lead and arsenic; more than 2 thousand tons of phenolic compounds and cyanide and more than 100 thousand tons of petroleum wastes, with lots of inorganic matters. All these together threaten our less and less water resources which we rely on for daily life. At present, 12.7% of the important rivers in China are polluted; most of the middle sized and small lakes around cities are generally contaminated. even under-ground water in big and middle-sized cities also are no exceptions. In rural areas, due to recent rapidly developing industry in small towns, water resources there are increasingly contaminated. since most people who work there are completely in lack of environmental awareness and knowledge.

Air pollution and water contamination have resulted in damage to the environment and the people's health. First, let me illustrate damages done by air pollution. Because of air pollution, the air in the northern cities in winter and early spring when household heating is needed, is always mixed with some overhanging the cities. There are fewer and fewer days when you can see the sky clearly.

People in one of the important industrial cities in Northern China, had once been polluted by worsening air pollution. Every winter time, there was less and less fine weather, but more and more smoke and dust as well as smog in the air. It caused the descent of visibility, negatively influenced transportation and did harm to daily life, especially brought about several diseases like bronchitis, asthma, and pulmonary emphysema; and lung cancer cases increase every year. In one winter, only within five days, about 2,000 people had acute symptom due to the inversion pheno—menon cause by dust smoke, most of them had difficulty in breathing. According to the eight hospitals' statistics, 608 patients were taken to hospital for emergency treatment, and forty-five of them died.

Secondly, let's examine the water contamination. Since water resource is one of our precious natural resources. Once it is damaged, it would bring about domino effect. It not only influences agriculture, industry, and also fishery resources, particularly people's

daily usage. For instance, in one of counties of Southern China, local farmers in three villages used underground water, which had been seriously polluted by such toxins as sulphocyanic acid, for drinking and daily life. Many people had skin itch problems, some had serious skin ulcer; they also had erythema and eczema on eyes, mouth, armpits and perineum. Within four months, several thousand people go to see doctors, more than one thousand persons were hospitalized. Besides, domestic animals and crops are also damaged badly.

As mentioned above, air pollution and contamination bring a lot of grave consequences. They can no longer be ignored. Environmental control and protection become absolutely necessary in our economic development.

II. Legal Control of Air Water Pollution

A. Introduction

An integrated environmental protection can be successful by educational, administrative, technological and economic means. All these methods in a coordinated and complementary way, and it could open up new prospects. I will emphasize one aspect here-----legislative and legal measures in environmental control. In fact, legal ways are most practical and efficient, also can give everybody a sense of obligation and strengthen environmental awareness generally.

In China, there was not too much legislation about the environment before 1970s. Following economic development in recent years, the pollution has begun to tell its toll on us, so the state government has realized the importance of the environmental protection which should be insured by legislation.

At first, the Chinese government enacted the Constitution of the People's Republic of China, in which the environmental management and protection are established as one of the basic functions of the nation. The Constitution clearly defined that "the government protects the environment, prevents and controls various pollutions" in 1978 and 1982 when the Constitution was issued.

Secondly, the government took the following actions: In 1979, an integrative environmental protection decree was formulated and enacted, i.e. "Law on the Environmental Conservation of the People's Republic of China (On Trial)". Based on the Law, two specific enactments were promulgated in 1984 and 1987: "Act on the Prevention of Water Pollution of the People's Republic of China", and "Act on the Prevention of Air Pollution of the People's Republic of China", and "Act on the Prevention of the Peoples' Republic of China", there are systematic and comprehensive detailed stipulations about the prevention of water and air pollution.

Thirdly, in order to implement them efficiently, the above-mentioned laws and ordinances, the central and local governments put forth a series of administrative

regulations, local statutes and standards, such as " Detailed Regulations on the Prevention of Water Pollution of the People's Republic of China " , " Provisions on the Control of the Industrial Pollution by Means of Technology " , " Provisions on Strengthening Environmental Management of the Enterprises of the Rural and Township Areas " , " Provisional Regulations on the Levy of the Charge of the Discharging Pollutants " , " Provisional Regulations on Repay Use of the Specified Funds of the Prevention of the Sources of the Pollution " , " Provisional Regulations on the Environmental Management in the Special Economic Zones " , " Rules on the Environmental Management of the Projects " , " Regulations on Safing, Monitoring and Controlling Nuclear Installations for Civil Use of the People's Republic of China " , and 49 standards on the discharge of the pollutants etc. For the time being, local environmental legislators have issued about 10 general environmental statutes, 23 air pollution regulations, 28 water pollution provisions, 22 methods of environmental management in projects, 14 regulations on the environmental management of the rural enterprises, 15 standards of the environmental monitoring and 37 methods of the levy of the discharge of the pollutants. In a word, the environmental legislation system in China is generally improved now, especially in the two sub-systems: the system of the prevention and control of air pollution, and the system of the prevention and control of water pollution.

Since then, two major pollutions have been under control to a certain extent, for instance, water sources have been better protected than before; non-smoke dust areas appear in some of the industrial cities.

B. The Principles & Systems of the Environmental Legislation in Air & Water Pollution

1. Basic Principle of the Legislation

a. Principle of Coordinating Development of Economic Construction & Environmental Protection

One of the basic tasks of the legislation is the environmental protection. But the key problem is the pollution caused by imbalance of economic development and environmental protection, so how to coordinate these two aspects naturally remains the most important principle of the legislation.

b. The principle of putting prevention first, Combining Treatment with Prevention & Administering in a Comprehensive Way

One of the important characteristics of the environmental pollution, is that it does harm to the health of the people and destroys the ecological system, some of which are difficult to be treated and supplemented (e.g. The Event of the Public Pollution of Chrome Poisoning and Mercurial Poisoning in Japan). At the same time, we should spend more on the prevention than the treatment within all the expenses. According to the relevant information, the cost of the post-comprehensive-administration is about 20 times higher than that of the

prevention at the beginning. Therefore the legislation of the environmental pollution must put the regulations of the prevention on the significant place, as the guiding principle of the legislation.

c. The Principle of Drawing the External Beneficial Experience from the Chinese National Condition

Our country is a developing country and its economic strength is still weak. So whatever measure we take should not be divorced from this actual condition in the legislation. Similarly, based on the Chinese condition, some of the effective law systems of the foreign countries should be studied and applied. It is a very good example that the legal system of the evaluation of the environmental impact of U.S.A. has been introduced into China.

2. The Administration System

In the light of "Act on the Prevention of Air Pollution of China" and "Act on the Prevention of Wind Pollution of China", the departments of the environmental protection of the People's governments at all levels are executive agencies of monitoring and managing unitedly air pollution and water pollution. Based on the regulations, the other departments perform their own responsibilities to help the environmental protection departments to monitor and manage. Agencies to assist in the monitoring and management of the air pollution are some relevant administrative departments as Public Security, Communications, Railways, Fisheries and so on; those to assist in the monitoring and management of the water pollution are some relevant administrative departments as Water Conservancy, Public Health, Geological Minerals, Communications and Administrations, Municipal Administrations etc.

3. The Legal System of the Prevention & Management of the Air Pollution & Water Pollution

The functions of the laws and regulations on the basis of their nature fall into the following categories:

1) The Legal System for the Prevention

a. The Regulations for the Prevention of the Air Pollution & Water Pollution

This is the legal system for the framework and adjustment of the prevention of the pollution. It is regulated clearly in "Law on the Environmental Conservation (On Trial)": While the programmes of the economic and social development are designed, overall arrangements for the environmental conservation and improvement must be taken and put into force conscientiously; the environmental pollution and other effects of pollution that have been selected must be programmed to be resolved step by step in a planned way. The same regulations have been made in Article II of "Act on the Prevention of Air Pollution" and Article

III of "Act on the Prevention of Water Pollution".

b. The System of the Evaluation of the Environmental Impact.

The system of the evaluation of the environmental impact is the important provision of the National Environmental Policy Act of U.S.A., which is the pioneer of the world. Like many of the other countries of the world, China has adopted the new legal system of the prevention of the pollution and the realization of the rational distribution. It is also regulated very clearly in Article VI of "Law on the Environmental Conservation (On Trial)", Article IV of "Act on the Prevention of the Air Pollution" and Article VIII of "Act on the Prevention of the Water Pollution". Besides this, in order to carry out this legal system in real earnest, our country also designed specifically and promulgated "Methods of the Environmental Management on Projects", which has been made the comprehensive systematical and concrete regulations for the evaluation of the environmental impact. It satisfies the real condition of the implementation of the legal system. Basically, the projects of China have been taken the evaluation of the environmental impact in the light of this legal system. It has played a significant role in the control of new air pollution and water pollution in China. From now on, we must continue to summarize our experience to perfect this legal system and have it better implemented.

c. "Three-Concurrence" System

The "Three-Concurrence" System is that the implementation for the prevention of the pollution must be designed, constructed and put into production simultaneously with the principal part of the project. This system is the important part of the system of the evaluation of the environmental impact which intends to resolve the rational distribution. "Three-Concurrence" System is to intend to prevent conscientiously new air pollution and new water pollution, that is to say, it is intended to put the requirements on the prevention of the pollution in the system of the evaluation of the environmental impact into every concrete methods. It is regulated clearly in Article II of "Law on Environmental Conservation (On Trial)", Article IV of "Act on the Prevention of Air Pollution", and Article VIII of "Act on the Prevention of Water Pollution".

From the situation after the implementation, the result is satisfactory. This will be further put into practice and made the most of its functions.

2) The Administrative System on the Prevention & Control of Pollution

a. The System of the Licence of the Discharge of the Pollutants

Any development, construction, and productive activity, which discharge the pollutants and affect the environment, must be applied for the Licence of the Discharge of the Pollutants from the local departments of the environmental protection by the managers

before they are ratified to begin.

The process of making grant towards the Licence of the Discharge of the Pollutants is that: First, the project unit of the discharge of the pollutants goes through the formalities of the application in the definite time, fill accurately in the Register Form of the Application of the Discharge of the Pollutants on the basis of its displacement; Then, the local departments of the environmental protection examine and approve this Register Form and set requirements on the placement of the spillway, the direction and pattern of the spillage and the limit of the maximum of its density; the Licence of the Discharge of the Pollutants can be issued only to those that are within the control index and the limited conditions of the displacements, while the Temporary Licence of the Discharge of the Pollutants is issued to those that are beyond the index and conditions, and the requirements on the prevention and control of the pollution and the reduction of the displacement must be attained within the specified time.

Now there are about 50 cities in China where in the field of the administration of water environment the experiments on the application, register and grant of the Licence of the Discharge of the Pollutants have been launched. The practice has proved this point that, it is beneficial to the control of water pollution as well as air pollution on a whole that the system of the control of the displacement has been implemented in some major sources of the pollution on the basis of the implementation of the control of the density of the spillage.

b. The System of the Levy of the Discharge of the Pollutants

This is the law system that the state levies the discharge of the pollutants from the owners of the sources of the pollution according to the principle of "It is the polluters' responsibility to prevent and control the pollution".

"Law on Environmental Conservation of CPC (On Trial), which was promulgated by the Standing Committee of the National People's Congress of CPC, stipulates that the projects which discharge the pollutants beyond the index set by the state must be levied the charge of the discharging pollutants according to the regulations on the basis of the amount and density of the discharging pollutants. After that, "Act on the Prevention of Water Pollution" stipulates further that the charge of the discharging pollutants must be levied besides the "Levy-beyond-the-index".

In 1982, the State Council of CPC promulgated "Provisional Regulations on the Levy of the Charge of Discharge Pollutants", which makes the systematic and concrete stipulations on the purpose and targets of the charge of the discharging pollutants, the basis for the index of the charge of the discharging pollutants and the operative principle.

In order to use the fees of the discharge of the pollutants rationally, the State Council of CPC promulgated in 1988 "Provisional Regulations on the Repay Use of the Specified Funds of the prevention of the Sources of the Pollution". The Regulations turn the method that 80% of the charge of the discharge of the pollutants returns gratuitously to the former unit of the spillage into the repayable loans, i.e. "Allocation-Turn-Into-Loan".

This legal system plays an active role in encouraging the enterprises and institutions to prevent and control air pollution and water pollution, and has made great achievements. Since the end of 1979, all the Chinese provinces, autonomous regions and municipalities under the central authority except Taiwan and Tibet have carried out the work of the Levy of the charge of the discharge pollutants, by the end of 1988, about 18 enterprises and institutions whose spillways of the pollution were beyond the set index have been levied 7.65 billion Renminbi Yuan of the discharging pollutants early or late. This fund is mainly used to assist enterprises and institutions in the prevention of the sources of air pollution and water pollution.

c. The System of the Prevention & Control of pollution by the Prescribed Time

This is the legal system that certain tasks of the prevention and control of the sources of the pollution as well as the regional pollution must be fulfilled by the prescribed time. It is an active and available legal system of the control of air pollution and water pollution.

As early as 1978, the state issued 277 projects of the prevention of the pollution by the prescribed time to 167 key units of pollution. Then all parts of the country have arranged 120 thousand local projects of the prevention of pollution by the prescribed time early or late. At present, these tasks have been fulfilled basically according to the requirements. Through the prevention of the pollution by the prescribed time, it has promoted the work of the prevention and control of pollution, and furthermore improved the quality of air and water environment.

3) The System of Holding the Liability for the Breach of the Laws & Regulations of the Prevention & Control of Air & Water Pollution

This is mainly the legal system on the administrative responsibility, civil liability, responsibility for crimes and the environmental lawsuits. This is an important safeguard of the other legal systems. The regulations on this field, which used to be more in principle and in very general terms, have now substantiated and enhanced.

In one word, since the founding of CPC, China needs to perfect further the legal systems of air and water environment and there are a lot of tasks for us to do and strive, though we have made great achievements on the legislation of the prevention and control of air and water pollution. Meanwhile, we also wish to get the support from the environmental scientific circle of foreign countries, especially the environmental law circle of U.S.A., so as to promote the cause of the environmental protection of China as well as the whole human beings into a new stage.