

---

# LEGAL CONTROL OF WATER POLLUTION IN HUI RIVER VALLEY, CHINA: A CASE STUDY

XI, WANG<sup>1</sup> AND ZHENGXIANG, XU<sup>2</sup>

<sup>1</sup> Ph.D, Professor of Environmental Law, School of Law, Shanghai Jiaotong University, Shanghai, China. Email: wangxi@public.wuhan.cngb.com

<sup>2</sup> LLM Candidate in Environmental Law, School of Law, Wuhan University, LuoJia Hill, Wuhan 430072, China

## SUMMARY

The water pollution campaign control in Huai River Valley is the first river valley based, large-scale water pollution control program conducted in China. The water pollution campaign control in Huai River Valley is the first, river valley based, large-scale water pollution control program conducted in China. The first stage of the program has completed by the end of 1999 and provides valuable experiences for other river or lake valleys water pollution control programs(1). This paper studied and reviewed the history and experience of the campaign. Part 1 introduces the background of the water pollution problem in Huai River Valley. Part 2 describes the major provisions of the Interim Regulations on Water Pollution Control in Huai River Valley, which formed the legal framework for water pollution control in the valley. Part 3 examines the implementation of the regulations. The program's implementation experience shows that it is not easy for people, enterprises and governments at local level to abandon backward traditional mode of economic development and change to the new mode of sustainable development. Part 4 points out the major environmental, economic and social impacts of the campaign. Part 5 concludes the paper with some final comments.

## 1 BACK GROUND

Huai River originated from Tongbo Mountain, Hehan Province. It flows eastern-ward and joins Yangzte River in Yangzhou City and into Eastern Sea of China. The river is over 1,000 kilometers long. The river valley has a population of 151,000 and covers an area of 269,000 square kilometers spanning five provinces in Central, Eastern and Central South China: Henan, Anhui, Jiangsu, Shangdong and Hubei. The population density is the highest among all large river valleys in China. There are 36 cities at the prefecture level and 182 cities at the county levels. The Huai River valley a major production

bases for agricultural products, coal and oil energy. 13% of the total grain output of the country is produced in this area, which feeds one seventh of the population of the country, while the area of the Valley is less than 2.8 % of the whole land territory of the State. Therefore, the Huai river valley is very important to China.

The economy of the Valley has grown very fast since the Chinese government shifted its priority from class struggle to economy construction and economic reform in 1978. But unfortunately, the fast growth of industries along side the Huai River brought heavy pressure on the ecological environment of the Valley. Leading the way are rural and township industries,

characterized by small-scale, mostly family run industries, using backward or even primitive production technology, low energy and resource efficiency and high pollution. The wastes produced by those factories are mostly discharged into the environment without any pre-treatment. There are 15 categories of small enterprises, such as paper pulp mill, textile mill, dyeing mill, small chemical plant, small brewery and small currying mill. So they won the name of "15 small" enterprises in China. Those "15 small" enterprises caused heavy pollution to the water bodies of the Huai River Valley. In addition to industrial pollution, household and other wastes are also discharged directly into environment without any pre-treatment. Therefore, the water quality of the main stream of Huai River and its tributaries has deteriorated quickly. For example, the water pollution index of Huai River in 1981 was 2.95. It increased to 7.14% in 1993.(2) The 1993 Report of Environmental Condition of China issued by National Environmental Protection Agency reported that

"pollution in Huai River is serious. The water pollution is more serious in dry season. There are 82% of rivers in the area with water quality lower than the third classes national surface water quality standards. Among the 13 monitored river sections, there is only 18.3 % reach the first and second national surface water quality standards. There is 15.7% reaching the third class national surface water quality standards. There is 66% meeting the fourth and fifth national surface water quality standards."(3)

The actual water pollution situation is more serious in some areas. There are many sections of the rivers where the eco-systems no longer function. In some places water pollution caused problems for the drinking water supply. The frequency of pollution accidents was increasing; about

once every two years in 1980s. There were three serious water pollution accidents in 1993 alone.(4)

Serious water pollution in Huai River valley threatened human health of local residents.(5) and caused heavy economic losses. Water pollution caused many disputes between factories, neighborhood residents, and administrative regions. People and entities in the valley complained about water pollution since mid-1970s. During this period, Deputies to the local People's Congress and members of local Committees of Chinese People's Political Consultative Conference raised the water pollution issue again and again since then. On 5 December 1980, a large-scale accident caused the death of fish in the of Kui River, a major tributary of Huai River. In response, in 1983 the Office of the State Council required the local government to take firm measures to eliminate major water polluting sources of Kui River. But the water pollution problem in Huai River valley was not solved in 1980s. The main causes for the failure includes:

- poverty in the region;
- lack of funding and technology;
- complicated water course system;
- trans-boundary water courses; and
- complicated water disputes.

Water pollution control in Huai River Valley entered a new phase in August 1993 when the National People's Congress organized the news media to report on the water pollution problem. (6) The reports of China Central Television and major newspapers caused strong concern from both the general public and the State's leaders. Mr. Song Jian, the Councilor, led an inspection group of Environmental Protection Committee and visited Huai River Valley in May 1994. During the inspection, the group received a petition, signed by over 10 thousand people of Huai River Valley, highlighting the water pollution problem. In

response, the inspection group convened an "On-site Meeting on Environmental Law Enforcement in Huai River Valley" in Bangfu City, Shandong Province. In this meeting, the Central Government committed ambitious targets for water pollution control with the goal of eliminating pollution problem in Huai River Valley by the year 2000.

## **2 LEGAL FRAMEWORK FOR WATER POLLUTION CONTROL IN HUAI RIVER VALLEY**

The State Council issued interim regulations on Water Pollution Prevention and Control in Huai River Valley (hereinafter referred as "Regulations") on August 8, 1995 and approved the implementation Program and the Ninth "Five-Year Plan for Water Pollution Prevention and Control in Huai River" (hereinafter referred as "Program and Plan") on June 29, 1996. Those two documents established the legal framework for water pollution prevention and control in Huai River Valley.

### **2.1 Objectives**

The Regulations required that all effluent discharges from industrial sources in the valley meet the 1997 standards and that the water quality of the major sections of rivers, lakes and reservoirs meet Program requirements. Based upon the objective, the Program and Plan set forth water quality targets for year 2000 for major river sections. Mainstreams of rivers in the valley must meet the third class of the State Surface Water standard. Water quality of all the tributaries must meet the fourth class of that standard. The Program and Plan required a 40% reduction of pollution load for the entire valley by 1997 and a 30% reduction of pollution load by 2000. The maximum level of COD discharge was set at 890,200 tons by 1997 and 368,000 tons by 2000.

### **2.2 Measures to control**

The Regulations provided the following measures for control of water pollution.

#### **2.2.1 Leading group**

The Regulations required that the Leading Group of Water Resources Protection in Huai River Valley be strengthened. The membership of the Leading Group was enlarged to cover the State Planning Commission, State Economic and Trade Commission, Financial Ministry, Construction Ministry, Chemical Industry Ministry, General Association of Light Industry, Agriculture Ministry, and Development Bank. The leading group is responsible for coordinating water pollution prevention and control in the valley and exercising other powers authorized by the State Council.

#### **2.2.2 New and existing sources control**

The Regulations prohibited the construction of new small scale factories dealing with chemical paper pulp, paper making, currying, chemical products, printing and dyeing, electroplating and brewage in the valley. The construction of large and medium scale factories causing serious pollution was restricted. The regulations set a deadline requiring that sources with effluent discharges exceeding the standards, or causing serious pollution, were to suspend operation by 1 January 1998.

#### **2.2.3 Pollution ceiling and effluent permit**

The regulations required plans for pollutants discharge ceilings approved by the State Council. The contents of the plan include pollutants ceiling control areas, pollutants discharge ceiling, targets of pollutants discharge reduction, pollutants reduction deadlines, priority control areas, and listing of major polluting sources outside of major control areas. The local governments

make their control plans based upon the valley-wide pollutants discharge plan. Their pollutants discharge is then incorporated into their middle and long term social and economic development plans as well as their annual plans. The major polluting sources in and outside the major pollutants discharge control areas must apply for pollutant discharge permit and install measuring devices for wastewater discharge at sewage outlets.

#### 2.2.4 Provincial standards for water quality and water quality control zones

The Regulations require the establishment of provincial boundary water quality standards and authorized the Water Resources Protection Bureau of Huai River Valley to monitor water quality at the four provinces boundaries. The Program and Plan further divided the whole valley into 7 control zones, 34 control units, 100 sub-control-units and 82 water quality control sections based upon the characteristics of watercourse system, administrative regions and the objectives of water quality protection. The Program and Plan also set forth water quality standards for each of the 82 sections, COD discharge ceilings for major cities and towns, COD discharge ceilings for major effluent outlets, the minimum requirements for effluent reduction and time tables for each provinces and cities at county level, and targets for phasing out backward industrial equipment.

#### 2.2.5 Joint control of water pollution in dry season

The Regulations required water quality monitoring and mandated the timely exchange of monitoring information among the environmental protection, water resources, and other relevant departments. The environmental protection departments regulated sources for discharge compliance with the control plan. The water

resources departments control the water gates according to water gate pollution control plans.

#### 2.2.6 Construction of centralized waste water treatment plants

The Program and Plan lead to 303 water pollution control projects; a 16.6 billion yuan of investment. In addition, the Trans-Century Green Projects Plan of China has 77 projects related to water pollution control in Huai River Valley; a 2.8 billion yuan investment.

#### 2.2.7 Other measures

In addition, the Regulations required the provincial governments to delegate some water pollution control tasks to counties and cities. The city and county government made a commitment to undertake these tasks. The regulations provided economic incentives for the water pollution control projects. The Regulations provided sever punishments for those who did not accomplish comply with the Program and Plan.

### **3 IMPLEMENTATION**

The first stage of the campaign can be divided into three phases.

#### 3.1 Phase one: Slow start (May, 1994 - September, 1995)

As mentioned before, the inspection group of the State Environmental Protection Committee held an On-site Meeting on Environmental Law Enforcement of Huai River Valley in Bangfu City, Shandoung Province in May, 1995. They decided that 197 factories in the valley that would either close down, be suspended, merge with other factories, change products and production processes, or reallocated to other places.(7) However, water pollution was still serious in the valley, because the pollution load reduced in 1994

was only 4% of the total effluent discharged. The water quality of the river's mainstreams was still poor. Most of the mainstream water quality was in the fifth class or worse. (8) In addition, two large scale water pollution accidents occurred that year. A significant reason for the slow start was a lack of willingness to control pollution at the local level. Enterprises and even some local government officials believed a principle called "pollution first, control pollution second". They thought the most important thing is to break away from poverty. Environmental protection is secondary to the poverty problem. Local governments and enterprises accused each other on one hand, but also wanted to get pollution compensation from neighbor governments and enterprises on the other hand. None of them were really serious about their own responsibility for pollution problems.

### 3.2 Phase two: Effluents compliance (September, 1995 – December, 1997)

The State Environmental Protection Committee held a second On-site Meeting on Environmental Law Enforcement of Huai River Valley in Lianyungang City, Shandong Province in September 1995. They decided to take firm action against pollution and ordered that all chemical paper pulp production equipment with production capacity lower than 5,000 tons per year be closed by June 30, 1996. 1,111 such paper pulp equipments closed by the deadline. (9) The State Council made a Decision on Several Issues of Environmental Protection on August 15, 1996 that required closing 15 categories of small-scale enterprises by September 30, 1996 all over China. The four provinces of Huai River Valley closed down 3,876 such small enterprises by the deadline, which resulted in a 25% reduction of pollution load to the Huai River Valley and accom-

plished the target set forth by Program and Plan for the period of 1994-1996. (10)

However, closing down the 15 categories of small-scale enterprises that were causing serious pollution is comparatively an easy job, because it basically deals with the interests of a small number of the population. Less easy getting all industrial sources in the valley to meet the effluent standards. According to the Regulations, all enterprises that discharge waste water shall meet the objective by the end of 1997, otherwise they will be ordered to close down, no matter who owns the enterprises, making profit or not, large scale or small scale, and important to the local financial income or not. For achieving this objective, the State Environmental Protection Administration issued a notice to the four provinces of the Huai River Valley in August 1996 that required all enterprises that discharge wastewater to submit an attainment plan. The notice required the provinces to prepare an attainment plan for all enterprises which discharge wastewater over 100 tons per day. The State Environmental Protection Administration left it to the provinces' discretion how to deal with enterprises that discharge wastewater less than 100 tons per day.

The progress in water pollution control was slow even by the middle of 1997. There were still 689 enterprises that discharge wastewater over 100 tons per day that had not started to construct pollution control facilities by June 1997. The construction of urban sewage treatment plants also made little progress. (11) There are two reasons for such a slow this. The first one is that local governments and enterprises did not fully understand the firm determination of the Central Government in eliminating water pollution problem of Huai River Valley. They were still in the mindset of "wait and see". Enterprises were worrying about the problem of unemployment, while local governments were worrying

about the reduction of local governmental revenue. (12) The second reason is the lack of investment and reliable, practical, and economically feasible pollution control technology.

In order to eliminate the fluke mind of local governments and enterprises, Mr. Song Jian, a State Councilor, emphasized in the Eleventh Meeting of the Environmental Protection Committee that there will be no policy change for water pollution control in Huai River Valley. He emphasized that the deadline will not be changed and the standards for checking and accepting the pollution control work of polluting sources will not be lowered. To those enterprises that did not reach the pollution control objectives within the deadline, firm measures, such as closing, will be applied. (13) In early December 1997, the State Environmental Protection Administration emphasized again that there will be no change in the objective and deadline as well as the standards for checking and acceptance. (14) The governors of the provinces in the valley also emphasized the "not change" statement.

The Central Government address the lack of funding by arranging a 300 million yuan state loan aimed at supporting enterprises in state designated "poverty" counties as well as those established by the state to alleviate poverty. (15) The provincial governments also created a fund for pollution control. For example, Jiang Su Province arranged 150 million yuan loan for pollution control. The State Planning Commission, Construction Ministry, State Environmental Protection Administration and Financial Ministry decided to levy a wastewater treatment fee for urban wastewater treatment to make provide supplemental funding for construction, operation and maintenance of wastewater treatment plants. (16)

In order to implement the pollutant discharge ceiling and discharge permit

requirements, the Meeting on Huai River Valley Pollutant Discharge Ceiling and Effluent Permit held on November 11, 1996 decided that:

- the four provinces of the Valley would prepare their own pollutant discharge ceiling plans and implementing plans;
- the four provinces would complete pollutant discharge registration before 30 June, 1997;
- enterprises that discharge waste water over 100 tons per day would be the first to apply the pollutant discharge permit requirements; and
- that permits shall not be issued to those enterprises that the State ordered to close down or suspend operation and those enterprises that do not meet the effluent standards after 1997. (17)

Great progress was made in the second half of 1997 when the objectives for that year were met. In his television speech on January 1, 1998, Mr. Xie Zhenghua, the Administrator of the State Environmental Protection Administration, declared that among the 1,562 enterprises with waste water discharge over 100 tons per day, there were 1,139 enterprises that had completed pollution control projects, 215 enterprises were suspended and undertook construction of pollution control facilities, 18 enterprises were ordered to close down because there was no hope to solve their pollution problems. As the 1,844 enterprises that discharge wastewater less than 100 tons per day, there were 1,504 that completed pollution control projects. There was a total reduction of 40% of the pollution load in the Valley. (18)

There are 14 urban wastewater treatment plants under construction. When they are completed there will be a total treatment capacity of 1.51 million tons per day. A large amount of household wastewater and industrial wastewater will be treated before discharged into Huai River.

### 3.3 Phase three: Follow-up monitoring and other activities (1 January, 1998 – )

From January 1, 1998, the priority of Huai River water pollution control shifted to strengthening daily on-site inspection and supervision of pollutant discharge activities of enterprises and accelerating construction of urban wastewater treatment plants. (19)

The Construction Ministry has decided a timetable for the construction of urban wastewater treatment plants in Huai River Valley. The 52 urban wastewater treatment plant projects in the four valley provinces were put into operation in June 2000. An addition to the projects were finished in 1998. (20)

## 4 IMPLICATIONS

The Water Pollution Campaign of Huai River Valley has significant impacts on the environment, society, and economy of the valley.

### 4.1 Environmental implications

The 1997 Report on the State of Environment reported that water quality of mainstream of Huai River has improved, especially in the high pollution sections of the river. The water quality of the mainstream is mainly in third or fourth class. (21) But pollution in its tributaries is still serious. 52% of the main tributaries have water quality beyond the fifth class, while 71% of the secondary and tertiary tributaries were beyond the fifth class. (22)

The 1998 Report on the State of Environment reported that organic pollution of the main stream decreased some. But the overall quality of the main stream was still not good. Among the monitored river sections, there was 11% reaching the second national surface water quality standard. There was 17% reaching the third

class national surface water quality standard. There was 24% meeting the fourth and fifth national surface water quality standard. There was 48% worse than the fifth national surface water quality standard. (23)

After nearly 5 years, the campaign has succeeded in stopping water quality deterioration in the valley. A monthly report on the water quality of Huai River Valley issued in October 1998 showed that water quality was, in general, better than before. (24) With the improvement of water environment, river ecological system started to recover. In some rivers, fish and other water species come back. The drinking water problem in the valley has been alleviated to some degree. However, it is still too early to tell the substantial environmental improvement brought about by the first stage of the campaign.

### 4.2 Social implications

The water pollution control campaign of Huai River Valley has broad social impacts. The first social impact is the enhanced position and influence of environmental protection departments. Through the campaign, the organization and personnel of environmental protection departments have been strengthened. Many environmental protection departments become independent. Environmental protection departments have been given more enforcement power than before. For example, Huainan City, Anhui Province, authorized environmental protection departments the power to veto new construction projects and the power of closing down or suspending operation of small enterprises that caused serious pollution problem. (25) The campaign resulted in less illegal interference with the work of environmental protection departments from leaders of local governments. Environmental law enforcement for has improved. There is more cooperation between the

environmental protection departments, leaders of local governments and other departments of government. People respect the authority of environmental protection departments more than before. They realized that environmental protection departments are powerful. (26) They also are more supportive of the work of environmental protection departments. The social basis of environmental regulation is enhanced.

The second social impact is that the authority of environmental law and policy has been strengthened. In the past, people and enterprises treated environmental law and policy as something soft and were not serious about them. Even at the beginning when the Central Government decided to close down small paper pulp mills, there were many people and enterprises that did not believe the government was really serious about it. But when many such factories were really closed down by the government, people and enterprises started to realize that environmental law and policy are something that can be real hard. (27) The campaign gave local governmental leaders, local enterprises and local people a lesson about environmental law and policy. Local governmental leaders had a much better understanding of environmental law and the strategy of sustainable development. They realized that there must be coordination between development and environment in their future work. Local business managers were also educated by the campaign. They said that if they realized the importance of environmental protection earlier, there might be less economic and environmental losses caused by the water pollution. (28)

The social impacts of the campaign went beyond the Huai River Valley. Other major river and lake valleys have learned from the experience of water pollution control of Huai River Valley. Local governmental leaders and enterprises no

longer dismiss the water pollution control campaign as a fluke. They are better prepared for the water pollution campaign in their valleys. Based upon the experience of Huai River Valley, the Central Government had declared that the water pollution control campaign in Tai Lake Valley will have objectives higher than that of Huai River and requirements are stricter than that of Huai River Valley. (29) Moreover, the experience of water pollution control in Huai River Valley contributed to the amendment of Water Pollution Prevention and Control Law of China. The revised Water Pollution Prevention and Control Law absorbed many experience of Huai River Valley.

#### 4.3 Economic implications

The closings of thousands small enterprises in Huai River Valley had important economic impacts on local economy. At the present, the negative impacts are remarkable. Firstly, costs of production for local enterprises increased. Local enterprises had to invest more of their fund to control pollution and update their production technology. That resulted in the decrease of competitiveness. Secondly, the large scale closing down campaign resulted in the decrease of local revenue. Thirdly, the risk of bank loan increased because many enterprises had been closed down and lost their ability to pay back the loan. (30) Lastly, the increased investment for pollution control and helping small enterprises increased the financial burden of local governments. The development of local economy was restricted.

#### 4.4 ?????????????

But from the long-term view, the water pollution control campaign in Huai River Valley is positive to the economic development of the valley. As a local official said, "Water pollution control in Huai River Valley provided an opportunity to the development of the valley. If we combine water

pollution control with the transformation of economic growth mode and economic system, and combine it with the reform of state owned enterprises as well as promotion of technology upgrading, the economy of the valley will eventually be benefited.” (31)

## 5 LOOKING FORWARD TO FUTURE

Although the water pollution control campaign of Huai River Valley had made remarkable achievements, there is still a long way to go to realize the objective of clean water of the Huai River Valley. The priorities for the future work of the campaign would be the following.

### 5.1 Strengthening law enforcement and keeping the achievements

Because the water pollution control campaign in Huai River affected local economy and economic income of some local people and is a campaign pressed from Central Government, there is a possibility that local governments and local enterprises reassume the polluting production processes when attentions of Central Government is absent. In fact, there have been many cases that factories discharge wastewater or illegally operate the prohibited pollution facilities secretly. (32) The Environmental Protection Department of Jiangsu Province discovered that there were 12 enterprises among 35 major enterprises that had been approved as reaching the discharge standards had conducted illegal discharge or discharge pollutant in exceeding required limits in 1998. (33) Therefore, keeping the achievements of the campaign is a long-term and difficult task. The environmental protection departments should keep alert and strictly enforce Water Pollution Prevention and Control Law of China and the Regulations. They should continuously supervise the operation of enterprises and punish and prosecute illegal discharging enterprises and

their managers.

### 5.2 Helping The People and Enterprises Effected Disposal and Phased Out Equipment Safely

To those closed enterprises and their workers, government will continue to provide help. The help included money, training opportunities for new careers, and technological assistance for clean production. Government will encourage and assist those enterprises to develop environmentally sound agricultural processing industries and service industries.

The campaign phased out many backward production machines and equipments. The environmental protection departments should supervise the destruction of those machines and equipment and prevent them to be transferred to other places and used there.

### 5.3 Continue To Eliminate Heavy Pollution Sources And Promote Clean Production

At the present, the total capacity of wastewater treatment by the proposed 52 treatment plants is 370,000 tons of COD per year. This capacity is not enough. There are still 230,000 tons of COD from household wastewater and 600,000 tons of COD from legal discharge of enterprises annually need to be treated. (34) Therefore, there is still a need to further adjust the industrial structure and eliminate heavy polluting enterprises. There is a need of promoting clean production also.

### 5.4 Construction of wastewater treatment plants

In order to meet the need of treating wastewater by 2000, the total capacity of treatment should be 10 million tons per day. Therefore, the Central and local government as well as banks shall provide more financial support for construction of treatment plants.

## 6 CONCLUSION

Huai River Valley water pollution Campaign is basically an environmental law enforcement program. The closing of small-sized but serious polluting sources has been one of the major regulatory measures since the first Environmental Protection Law of PRC promulgated in 1979. But the government has never been serious enough about the spread of such pollution sources in Huai River Valley until 1995 when the State Council promulgated the Interim Regulations on Water Pollution Control in Huai River Valley. The Regulations organized a trans-provinces governmental institution for enforcing the related requirements of environmental law. The campaign is a valley-wide law enforcement program combined with other measures, such as funding for construction of wastewater treatment plants. The campaign has positive impacts on the long-term development of the valley. The water quality of the valley has begun to improve. The people, enterprises and local governmental officials have received a vivid environmental law education. The environmental infrastructure of valley has been improved and continuously to be improved. The campaign resulted in an environmental, social and economical basis for sustainable development of the valley. The campaign only completed its first stage. Many difficulties still exist. There is a long way to go for realizing the final objectives of clean environmental and sustainable development of the valley.

The experience of Huai River Valley in water pollution shows that the political will of the government, especially the political at the national level, is critical to the success of water pollution control. In a country like China, with weak economical, technological, social and knowledge capacity to deal with environmental prob-

lems, political will to protect environment in the high level of government is the most important force for pushing forward the progress of pollution control. Financial and even technological solutions to pollution problems will be resolved as soon as the government is politically determined to eliminate pollution.

## REFERENCES

1. China launched water pollution control-campaigns in other major valleys after the Huai River Valley water pollution control. The other such campaigns include the ones in Tai Lake Valley, Cao Lake Valley, both are in the east of China, and Dianchi Lake Valley in southwest of China.
2. Yearbook of China Environment (1995), China Environmental Science Press, 1995, p. 178.
3. Yearbook of China Environment (1994), China Environmental Science Press, 1995, p.10.
4. Yearbook of China Environment (1995), China Environmental Science Press, 1995, p.67
5. "Huai River: How to Enter into New Century", China Environmental News (in Chinese), 14 June, 1994, p. 1.
6. This propoganda campaign is an annual series report called "Century Reports of Environmental Protection in China". It is organized by the Environment and Resources Committee of the National People's Congress, The China Central Television Station, and other major newspaper.
7. Proceedings of the Fourth Meeting of the Leading Group on Water Resources Protection in Huai River Valley, Yearbook of China Environment (1996) (in Chinese), p. 148.

- 
8. Id. Chinese), 4 June, 1998, p. 2.
  9. Water Environment Management Office of State Environmental Protection Administration, Achievements and Suggestions on the Work of Water Pollution Prevention and Control in Huai River Valley, Environmental Work Newsletter (in Chinese), No. 5, 1998, p. 31.
  10. Zang Yuxiang, "Objectives and Practice of Huai River Pollution Control", Environmental Protection (in Chinese), No. 1, 1998, p. 14.
  11. "There is no change in the Objectives of Huai River Valley Water Pollution Control", China Environmental News (in Chinese), 19 June, 1997, p. 1.
  12. "How to face 1997 deadline", China Environmental News (in Chinese), 24 September, 1996, p. 2.
  13. "There is no change in the Objectives of Huai River Valley Water Pollution Control", China Environmental News (in Chinese), 19 June, 1997, p. 1.
  14. China Environmental News (in Chinese), 4 December, 1997, p. 1.
  15. China Environmental News (in Chinese), 21 August, 1997, p. 1.
  16. China Environmental News (in Chinese), 9 October, 1997, p. 3.
  17. Yearbook of China Environment (1997) (in Chinese), p. 108.
  18. China Environmental News (in Chinese), 3 January, 1998, p. 1.
  19. Yearbook of China Environment (1997) (in Chinese), p. 108.
  20. China Environmental Industry Newsletter (in Chinese), No. 4, 1998, p. 3-4.
  21. Report on the State of Environment (1997), China Environmental News (in Chinese), 4 June, 1998, p. 2.
  22. Report on the State of Environment (1997), China Environmental News (in Chinese), 4 June, 1998, p. 2.
  23. Report on the State of Environment (1998), China Environmental News (in Chinese), 17 June, 1998, p. 2.
  24. China Environmental News (in Chinese), 5 January, 1998, p. 1.
  25. "Re-Authorization of Environmental Protection Departments", China Environmental News (in Chinese), 17 February, p. 1
  26. "Huai River looks for good news in 1997", China Environmental News (in Chinese), 24 May, 1997, p. 1.
  27. "The State Policy Is not Paper Only", China Environmental News (in Chinese), 7 September, 1996, p. 2
  28. "From Three Times of Closing Down to Completely Eliminating Pollution", China Environmental News (in Chinese), 23 December, 1997, p. 2.
  29. Yearbook of China Environment (1997) (in Chinese), p. 109.
  30. "Hai Bei: Who will pay back the 160 million loan?", China Environmental News (in Chinese), 1 August, 1996, p. 1.
  31. China Environmental News (in Chinese), 16 December, 1997, p. 1.
  32. "Managers of Two Paper Pulp Factories in Shenqiu were detained", China Environmental News (in Chinese), 13 July, 1996, p. 1; "Guerilla actions' in night", China Environmental News (in Chinese), 13 February, 1996, p. 1; "Small Paper Pulp Mills Were not Killed by 'Three Strikes'", China Environmental News (in Chinese), 27 February, 1996, p.1; "Two Paper Pulp Mills Dared to

Discharge illegally”, China  
Environmental News, 15 January,  
1998, p. 1.

33. “A Shock”, China Environmental News  
(in Chinese), 28 May, 1998, p. 1.
34. Water Environment Management  
Office of State Environmental  
Protection Administration,  
Achievements and Suggestions on the  
Work of Water Pollution Prevention  
and Control in Huai River Valley,  
Environmental Work Newsletter (in  
Chinese), No. 5, 1998, p. 31.