China’s Water Crisis

China is a country experiencing severe water shortages. It has 22 percent of the world’s population but only 7 percent of all freshwater runoff. This figure is likely to be pushed further to the limit by 2030 as the population climbs above 1.6 billion with an urbanization rate of about 60 percent. Scarce water resources are perniciously aggravated by the pervasive pollution accompanying China’s incredible economic growth for over three decades. More than 70 percent of all rivers and lakes in the country have been polluted, and more than half of urban groundwater is contaminated. According to the Ministry of Environment’s 2007 Official Report on China’s Environment, all seven major rivers in China in general suffer from moderate pollution, and 11 out of the 28 major lakes have a water quality grade V or higher—the lowest national standard for water quality, which means the water is essentially unusable for any purpose.

China’s pervasive water pollution is exacerbated significantly by frequent pollution accidents. According to China’s top environmental authorities, one water pollution accident takes place every two to three days, on average. The Ministry of Environmental Protection reported 1,221 environmental accidents in 2004, most of which were related to water. However, experts believe the figure is vastly underestimated. The 2005 Songhua River benzene spill brought China domestic pressure as well as international embarrassment, and became the catalyst for amending the Water Pollution Prevention and Control Law (WPPCL) again in February 2008.

Evolution of China’s Water Pollution Control Law

The Reform and Opening policy of the 1970s helped China enter a new era of legal construction. In 1979, the Standing Committee of the National People’s Congress (NPC)—China’s top legislature—adopted the Environmental Protection Law (for Trial Implementation), a basic framework law that signified the beginning of environmental legislation in modern China. Between 1979 and 1984, only a few environmental laws were enacted, including the Environmental Protection Law, passed in 1979, and the WPPCL, passed in 1984.

The 1984 WPPCL had altogether 7 chapters and 46 articles. It is China’s first legislation on pollution prevention and control with a focus on industrial pollution. The fact that the WPPCL was able to get passed at such an early stage reflected the level of attention from policymakers to water pollution issues.

Starting from 1992, China’s environmental regulatory framework has expanded rapidly. There has been at least one environmental law enacted or amended every year. Many believe that China has now developed one of the most dynamic environmental law frameworks in Asia, and the WPPCL with its two amendments represents one of the most active pieces of environmental legislation in
China. It was revised for the first time in 1996 with 23 articles being adjusted or added, producing a law with 7 chapters and 62 articles.

There were three major changes in the 1996 WPPCL. First, the 1996 amendments specified that in order to prevent and control water pollution, it is necessary to make unified plans on the basis of river basins instead of administrative regions. The second major change was to institute a system for control of the total discharge of major pollutants for water bodies in which pollutant discharge has conformed to discharge standards, but water quality still does not meet national standards. The third major change was to require urban sewage be centrally treated and local governments construct central treatment facilities.

The law was revised again in 2008 as a result of severe water pollution across China and frequent occurrences of water pollution accidents. These accidents affect public health and threaten social stability, and in turns have become a major obstacle to China’s economic and social development.

On August 26, 2007, the draft amended law was submitted to the Standing Committee of the NPC for the first reading. About 10 days later, the entire draft was publicized for comment. This is the first time that an environmental legislative draft was publicized for comment, and the first time that average Chinese citizens could participate in environmental legislation in such an extensive and in-depth way. Within a month, the Legal Affairs Committee of the Standing Committee of NPC received over 1,400 public comments from all across China, most of which were quite professional and constructive. On February 28, 2008, the Standing Committee of the NPC voted to pass the draft after three readings, and the new law became effective June 1.

**HIGHLIGHTS OF THE 2008 WATER POLLUTION CONTROL LAW**

The 2008 WPPCL has altogether 8 chapters and 92 articles, which is 30 articles more than the previous version. Compared with the 1996 WPPCL, the 2008 version has a richer content, a more complete legislative structure, many innovative mechanisms, and much stricter penalties. The 2008 WPPCL contains many innovative concepts and mechanisms that can be summarized in the following 4 aspects:

1. **Strengthened Environmental Protection Responsibility of Local Governments**
   One of the most significant contributing factors to China’s environmental problems is local protectionism. Traditionally, GDP growth was a key indicator for evaluating the achievement of government officials in their posts, while the indicator related to environmental quality was not considered at all. Although the Environmental Protection Law provides that each level of local government should be responsible for the quality of environment within their area, this is more of a general and vague policy statement without applicability or deterrence mechanisms. As a result, many officials rely upon lowering environmental standards to pursue GDP growth, and sacrificing environmental quality for short-term economic benefits and advancement opportunities.

   The 2008 WPPCL addressed this problem by specifically requiring governments at or above the county level to bring water protection into the national economic and social development planning, to take countermeasures and actions to prevent and treat water pollution, and to be responsible for the quality of the water in their respective region of administration. The new law also requires taking the accomplishment for fulfilling the objectives of protecting water as an indicator to evaluate and assess the performance of local governments and officials in charge of them. To be more specific, provincial governments are required to sign a responsibility pledge with the State Council to commit to fulfilling the environmental protection target set up in the 11th Five-Year Plan, which is to reduce chemical oxygen demand by 10 percent in the period of 2006-2010, and the State Council will see whether the target has been met or not to evaluate local officials’ achievement in their posts.
2. Increased Opportunities for Public Participation in Environmental Protection

The goal of environmental protection cannot be achieved relying only upon government agencies. The ultimate solution to China's devastating environmental problems, including water pollution, will have to come from the public, which has significant interest in the environment. The 2008 WPPCL provides increasing opportunities for public participation.

The first public participation aspect in the new law is the requirement to release information about national water quality in a unified way. Obtaining accurate information related to the environment is a prerequisite for public participation. For a long time, both the Ministries of Water Resources and Environmental Protection have had the authority to release environmental information on China's rivers, lakes, and other water bodies. However, the environmental quality data on the same water body can be somewhat different due to differences in obtaining and analyzing the sample, the method of calculating the data, and the applicable standards of evaluating the water quality. Different data created conflict and confusion. The new law specifies that the Ministry of Environmental Protection is responsible for releasing information about the national water quality in a standardized way so as to avoid confusion and ensure that the public is provided with accurate and reliable information on water quality.

The new law also contains a nascent foundation for environmental public interest litigation. China's civil procedure law requires the plaintiff to have a direct interest in the case, which makes it almost theoretically impossible to bring a lawsuit on behalf of public interest. However, in practice there has been isolated public interest litigation since 1996, including prosecutors bringing environmental public interest lawsuits against polluters for cessation of environmental harm, though such practices have not been supported by procedural laws and the recent trend is that the courts are less willing to take public interest cases.

During the revision process of the law, environmental public interest litigation was suggested for inclusion into the new law. However, it did not make it to the law in a clear way. Therefore, the compromising result lies in Article 88, which states that environmental protection bureaus (EPB) and social groups may legally support the parties whose legitimate rights and interests are damaged in a water pollution incident to file a lawsuit. Though the word “support,” instead of “represent,” sounds like a supplementary role for EPBs and social groups, this provision is probably by far the most specific and clear provision in environmental legislation that says NGOs have an active role to play in environmental litigation.

The new law also has a specified provision related to class action in environmental compensation cases. Article 88 states that if the number of parties whose legitimate rights and interests are damaged in a water pollution incident is relatively large, which in practice means more than 10, these parties may select a representative to file a class action. This is actually the first time that Chinese laws make such explicit stipulations on when and how to use class action and this provision is expected to encourage water pollution victims to file more class actions in court.

3. Much Tougher Fines and Innovative Penalties

Insufficient fines against polluters have long been heavily criticized in China for being ineffective in curbing environmental violations. For example, the implementing regulation of the 1996 WPPCL said the maximum fine for causing serious water pollution incidents should not exceed 1 million Yuan. Compared with the economic benefits of illegal pollutant discharge for most enterprises, such an amount was undoubtedly—pun intended—a drop in the bucket.

In order to deter pollution, the amount of the fines has been raised in the new law. Firstly, the limit on the maximum amount of fines on entities causing water pollution incidents has been lifted.
Secondly, the new law imposes much tougher fines for other activities violating the law. Under the 1996 WPPCL, penalties were quite low. For example, fines with an amount of 100,000 Yuan were considered a strict penalty. In the 2008 version of the law, fines up to 200,000 or 500,000 Yuan are quite common, a two to five times increase.

One interesting innovation in the new law, regarding the penalty, is the so called “Double Penalty” (Shuang Fa Zhi) in Article 83. For entities violating the law and causing a water pollution incident, a fine will be imposed upon polluting entity as mentioned before. If the incident is serious, the person in charge of the business/factory will be directly liable and fined not more than 50 percent of the income earned from the entity in the previous year. This is actually the first time any environmental law in China has imposed fines on individuals of polluting entities, and this provision is expected to encourage those in charge of factories and other polluting entities to manage environmental controls better.

The new law also expands the enforcement measures that can be taken by EPBs. In the past, EPBs felt helpless when facing frequently occurring environmental violations due to a lack of compulsory enforcement tools. The 2008 WPPCL adds several new enforcement measures to better equip EPBs with handling violations, including both direct and indirect compulsory measures. For example, the new law specifies that for entities illegally setting up any outlet or underground pipe, EPBs at or above the county level shall order them to dismantle it within a certain time limit. If they fail to do so within the prescribed time limit, EPBs may order a mandatory dismantling with the necessary expenses being paid by the violator. This is direct enforcement. Indirect enforcement refers to the appointment of another entity by EPBs to take action to treat the pollution. For example, the new law specifies that EPBs shall order any enterprise violating the law and causing a water pollution accident to take measures for treatment within a certain time limit and eliminate pollution; if the enterprise refuses to take measures for treatment or is not capable of doing so, EPBs shall appoint a capable entity to do so on behalf of the polluting enterprise with the necessary expenses being paid by the polluter.

4. Improvement of Several Existing Schemes

Control of the Total Discharge of Major Pollutants

In many rivers and lakes in China, individual emitters may be conforming to discharge standards, but because these standards relatively low and the number of emitters high, the environmental quality of many water bodies do not meet national water quality standards. The system for controlling the total discharge of major pollutants was thus first established in the 1996 WPPCL. These total emission control requirements aimed to bring the whole water body within national quality standards by mandating even factories meeting individual standards to lower their emissions of major pollutants even more.

The 2008 WPPCL specifies that provincial governments shall reduce and control the total discharge of major water pollutants in their administrative regions, and have the municipal or country governments bear the corresponding responsibility to reduce and control the total discharge of major water pollutants. Then the municipal or county government shall apply the total emission control indicators to all entities discharging pollutants within its jurisdiction. For areas where the total discharge of major important water pollutants is over the prescribed level, local EPBs shall suspend the examination and approval of environmental impact assessment documents of the construction projects that increase the total discharge of major water pollutants.

Water Pollutant Discharge Permit System

There was no clear provision in the 1996 WPPCL regarding a water pollutant discharge permit system. The new law formalizes the system by requiring entities directly or indirectly discharging industrial and medical waste and entities operating facilities to treat urban sewage to obtain pollution
discharge permits. All entities are prohibited from discharging wastewater and sewage without the pollutant discharge permit or in violation of the terms of the permit. Currently, the State Council is drafting regulation to implement the pollutant discharge permit system, expected to be ready early next year. Such a permit system notably lays important groundwork for future water pollution trading schemes.

Enhanced Protection of Drinking Water Sources
In response to frequent high-profile water pollution accidents and significant public concern about drinking water safety, provisions on protecting drinking water sources are made much more detailed in the new law, which has improved the management system for a drinking water source protection zone. Drinking water source protection zones are classified into Grade I and Grade II, which allows for officials to specify a certain area at the periphery of a drinking water source protection zone as a quasi-protection zone—creating a larger buffer for protection. The new law mandates that no pollution outlet be set up in a drinking water source protection zone. Moreover, it is prohibited to build, renovate, or enlarge in a Grade I drinking water source protection zone any construction projects irrelevant to water supply facilities and the work of water resource protection. Similarly, the law prohibits the building, renovating, or enlarging of construction projects that discharge pollutants in a Grade II drinking water source protection zone. For the construction that has been completed in such zones, the government at or above the county level is supposed to order their demolition or closure.

LEGISLATIVE COMPROMISES AND REMAINING ENFORCEMENT CHALLENGES
Despite all of the improvements mentioned above, there are legislative compromises throughout the process. One example is that the “penalty per day” for continuing violations did not make it to the new law. Under the U.S. Clean Water Act, administrative penalties allow up to $10,000 per day for each day during which the violation continues, which is a very powerful and effective tool for regulators. When the draft was in the process of revision, scholars and environmental protection officials in China advocated adopting this mechanism, but it was dropped from the draft as a result of compromise with other ministries and the business community. Another disappointment is article 88, which hints at permitting environmental public interest litigation but does not formally expand the standing to sue to NGOs who usually do not have a direct interest in the case. Although the new law is a small, but solid, step forward in expanding NGOs’ role in environmental litigation, much bigger steps need to be taken in future.

Though there is comprehensive improvement in water pollution control law in the books, how these improvements will actually be enforced is still uncertain, considering the poor environmental enforcement record in China. Given the fact that the law has been in effect for only a few months and will not be revised again for at least another eight to ten years, it will be interesting to see what is going to happen in the next few years regarding China’s water pollution and control efforts.

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In November 2005, a petrochemical plant explosion in northeastern China’s Jilin Province released an estimated 100 tons of benzene and other toxic chemicals into the Songhua River, creating a slick that followed all the way to Russia. This tragic spill forced almost four million residents in the city of Harbin, capital of Heilongjiang Province to go without running water for several days. Details see David Lague. (2005, November 25). “China blames oil company for benzene spill in river.” *The New York Times*.


The WPPCL was amended twice, in 1996 and 2008 respectively, since its enactment in 1984. In comparison, most of the other environmental laws have been amended only once.

Art. 4 of 2008 WPPCL.
Art. 5 of 2008 WPPCL.
Art. 25 of 2008 WPPCL.
There were many reasons including no legal foundation in procedure laws, political sensitivity of public interest cases, and resistance from courts to the aggressive expansion of authority of prosecutors who are often times plaintiff in public interest cases.
In the Chinese civil procedure law, there is only joint action, which is similar to class action in the United States despite some procedural differences. For the purpose of this brief, the word “class action” is used here to make understanding easier.
Implementing Regulation (2000), Art. 43.
See Art. 83 of 2008 WPPCL, which says if the water pollution accident is ordinary or relatively serious, the fine shall be calculated on the basis of 20 percent of the direct losses caused by the accident; if the accident is serious or extraordinarily serious, the fine shall be calculated on the basis of 30 percent of the direct losses caused by the accident.
Art. 75 of 2008 WPPCL.
Art. 83 of 2008 WPPCL.
Art. 16 of 1996 WPPCL.
Art. 18 of 2008 WPPCL.
Ibid.
Art. 20 of 2008 WPPCL.
Art. 56 of 2008 WPPCL.
Art. 57 of 2008 WPPCL.
Art. 58 of 2008 WPPCL.
Art. 59 of 2008 WPPCL.
Arts. 58 & 59 of 2008 WPPCL.