# NOTE

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# Cleaner Water in China? The Implications of the Amendments to China's Law on the Prevention and Control of Water Pollution

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In China, widespread municipal and industrial dumping has contaminated much of the water, leaving sections of many rivers unsafe for any human use.<sup>1</sup> In fact, water pollution is so widespread that regulators say a major incident occurs every other day.<sup>2</sup> This has resulted in an estimated seventy percent of rivers and lakes that are now contaminated<sup>3</sup> and over 320 million rural residents who do not have clean drinking water.<sup>4</sup>

China has had laws and regulations to protect water quality since the early 1980s.<sup>5</sup> Unfortunately, implementation has lagged and there have been few incentives for enforcement. To address many of these problems, China enacted an amended version of its main water pollution control law in June 2008. The revisions included stronger penalties for violators and, for the first time, established a discharge permit program by statute.<sup>6</sup>

<sup>6</sup> Law on Prevention and Control of Water Pollution arts. 20, 83 (P.R.C.); Wang Mingyuan, *China's Pollutant Discharge Permit System Evolves Behind Its Economic Expansion*, 19 VILL. ENVTL. L.J. 95, 103–05 (2008) (explaining the old version of the law and the regulations that implement the permit program); Jingyun Li & Jingjing Liu, China Environment Forum, Quest for Clean Water: China's Newly Amended Water Pollution

<sup>&</sup>lt;sup>1</sup> Jim Yardley, Under China's Booming North, the Future Is Drying Up, N.Y. TIMES, Sept. 28, 2007, at A1.

<sup>2</sup> Id.

<sup>&</sup>lt;sup>3</sup> Zijun Li, *China's Rivers: Frontlines for Chemical Wastes*, CHINA WATCH INST., Feb. 23, 2006, http://www.worldwatch.org/node/3884.

<sup>&</sup>lt;sup>4</sup> Ma Jun, Keynote Address at the University of California Berkeley Conference: China's Environment (Dec. 8, 2007).

<sup>&</sup>lt;sup>5</sup> Law on Prevention and Control of Water Pollution (promulgated by the Standing Comm. Nat'l People's Cong., May 11, 1984, amended May 15, 1996, and Feb. 28, 2008, effective June 1, 2008), http://www.chinaenvironmentallaw.com/wp-content/uploads/2008/03/water-pollution-prevention-and-control-law.pdf (last visited May 5, 2009) (P.R.C.) (translated by Squire, Sanders & Dempsey L.L.P.); *see also* Jolene Lin Shuwen, *Assessing the Dragon's Choice: The Use of Market-Based Instruments in Chinese Environmental Policy*, 16 GEO. INT'L ENVTL. L. REV. 617, 621 (2004). *See generally* Ministry of Environmental Protection of the People's Republic of China, http://english.mep.gov.cn/ (last visited May 5, 2009).

China still has a long way to go in the development of a strong permitting system to reduce the pollution entering its lakes and rivers. This Article will discuss how the Chinese government operates, the current status of Chinese law related to the prevention of water pollution, and the challenges connected to enforcement and public participation. Throughout the discussion, the Article will compare China's Law on Prevention and Control of Water Pollution (LPCWP) to the United States' Clean Water Act, identify areas where China could look to the United States as a possible model for its regulation of water pollution, and highlight areas where the law in China might be more innovative than the law in the United States.

### Ι

### UNDERSTANDING CHINA'S GOVERNMENT

### A. Central vs. Local Control

To understand some of the challenges facing China in the implementation and enforcement of its environmental laws, it is important to first understand the Chinese system of government and the dynamics between its many levels. China's overall governmental structure differs from the United States' structure in many ways. The most important difference is that China operates a unitary system. Unlike the United States, China does not use a model of government that allows both the federal and state governments to exercise sovereignty.<sup>7</sup> Instead, authority at the local level comes from the central government.<sup>8</sup> Under this system, one might expect the local governments to be responsive to the central government. That may have once been the case. However, post-Mao reforms created major changes in China and have made it harder for the central government to assert control over the localities.<sup>9</sup>

Control Law 4–5 (Jan. 2009) (unpublished research brief), *available at* http://www .wilsoncenter.org/topics/docs/water\_pollution\_law\_jan09.pdf; *Tougher Law to Curb Water Pollution*, CHINA DAILY, Feb. 29, 2008, http://www.chinadaily.com.cn/china/ 2008-02/29/content\_6494712.htm.

<sup>7</sup> Yang Tseming, Professor, Vt. Law Sch., Informal Presentation at the U.S. Environmental Protection Agency, Wash., D.C. (June 27, 2008).

<sup>8</sup> Id.

<sup>&</sup>lt;sup>9</sup> Christina Larson, *Beijing Lawyer Fights for Pollution Victims*, CHRISTIAN SCI. MONITOR, July 17, 2008, http://features.csmonitor.com/environment/2008/07/17/beijing -lawyer-fights-for-pollution-victims/ (quoting Bates Gill of the Center for Strategic and International Studies in Washington, D.C.)

Because central control is lacking, China uses a multi-tiered system to regulate and enforce not only its water pollution law but other environmental laws as well.<sup>10</sup> The Ministry for Environmental Protection (MEP) directs national efforts, while subordinate bureaus at the provincial, city, county, district, and town levels implement the national statutes and regulations.<sup>11</sup> Unfortunately, this decentralization of authority has left "policy implementation . . . fragmented and disjointed."<sup>12</sup> Many local governments have been slow to embrace environmental regulations, and as a result enforcement of environmental laws varies widely among the localities.<sup>13</sup>

Thus, a major challenge to China's water policy is enforcement.<sup>14</sup> Much of the problem has stemmed from the limited influence the State Environmental Protection Agency had on local action, limiting mechanisms for oversight.<sup>15</sup> Specifically, "local environmental protection bureaus report to regional governments, which receive tax revenue from nearby factories—so regional governments have a big financial incentive to shield local industry."<sup>16</sup> In addition, because the regulated enterprise is often well connected to the government, industry's influence on local decisions is most likely more powerful than that of the local government.<sup>17</sup> MEP replaced the State Environmental Protection Agency in March 2008. However, it is yet to be determined whether the new ministry will be able to exert additional control.<sup>18</sup>

<sup>&</sup>lt;sup>10</sup> W. Scott Railton, Comment, *The Rhetoric and Reality of Water Quality Protection in China*, 7 PAC. RIM L. & POL'Y J. 859, 869 (1998).

<sup>11</sup> *Id.* at 869–70.
12 *Id.* at 871.

<sup>12</sup> IU. at 6/1.

<sup>&</sup>lt;sup>13</sup> Stefanie Beyer, *Environmental Law and Policy in the People's Republic of China*, 5 CHINESE J. INT'L L. 185, 186 (2006).

<sup>&</sup>lt;sup>14</sup> Railton, *supra* note 10, at 869. *See generally* Wang Mingyuan, *supra* note 6 (discussing the challenges of China's national pollutant discharge permit system); Water Pollution Act Amendments (Penalty Box), http://www.chinaenvironmentallaw.com/2008/03/04/water-pollution-act-amendments-penalty-box/ (Mar. 4, 2008).

<sup>&</sup>lt;sup>15</sup> Li Zhiping, *The Challenges of China's Discharge Permit System and Effective Solutions*, 24 TEMP. J. SCI. TECH. & ENVTL. L. 375, 388 (2005).

<sup>&</sup>lt;sup>16</sup> Larson, *supra* note 9.

<sup>17</sup> Li Zhiping, supra note 15, at 388.

<sup>&</sup>lt;sup>18</sup> Robert V. Percival, *The Challenge of Chinese Environmental Law*, INT'L ENVTL. LAW COMM. NEWSL. (ABA Sec. of Env't, Energy & Res., Chicago, Ill.), Aug. 2008, at 5, *available at* http://www.abanet.org/environ/committees/intenviron/newsletter/aug08/IELC \_Aug08.pdf.

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### **B.** Other Key Differences

There are other key differences between China and the United States. First, China is a parliamentary system, with both a President and Prime Minister.<sup>19</sup> Like most parliamentary structures, the Prime Minister heads the State Council and oversees the ministries, including MEP.<sup>20</sup>

Second, China is a civil law society. Under civil law, the judge plays a different role than under a common law system. In China, judges do not have the authority to make or interpret law, nor are they independent under this system.<sup>21</sup> In addition, judges are generally administrative workers, who may have no formal legal training or may not have attended law school.<sup>22</sup>

Finally, the Communist Party exercises significant authority over government policies. There is essentially a parallel government, where each governmental position has a counterpart in the Communist Party.<sup>23</sup> In addition, regularly appointed officials are often party members. This dual system can lead to nontransparent decision making as it is often unclear who is making the decision.<sup>24</sup> As a result, it may be difficult to fully engage the public in the political process.

Each of these differences, and particularly the issue of control, should be considered when analyzing both the problems China faces in implementing and enforcing its environmental law and the ways China can address these problems.

### Π

### CHINESE LAWS REGULATING WATER POLLUTION

While the Environmental Protection Law broadly addresses environmental problems, the primary law for protection of freshwater in China is the LPCWP.<sup>25</sup> In addition to these laws, the State Council

<sup>&</sup>lt;sup>19</sup> Yang Tseming, *supra* note 7.

<sup>&</sup>lt;sup>20</sup> *Id.*; *see also* US-CHINA BUS. COUNCIL, PRC CENTRAL GOVERNMENT STRUCTURE REPORT, at ch. 1, http://www.uschina.org/public/china/govstructure/govstructure\_part1.html (last visited May 5, 2009).

<sup>&</sup>lt;sup>21</sup> Yang Tseming, *supra* note 7.

<sup>&</sup>lt;sup>22</sup> This is particularly true in rural areas. *Id.* 

<sup>23</sup> Id.

<sup>24</sup> Id.

<sup>&</sup>lt;sup>25</sup> Law on Prevention and Control of Water Pollution (promulgated by the Standing Comm. Nat'l People's Cong., May 11, 1984, amended May 15, 1996, and Feb. 28, 2008,

and local governments have implemented regulations to address water pollution.<sup>26</sup> The State Council will continue to implement new regulations under the amended LPCWP.<sup>27</sup>

### A. The Environmental Protection Law

The Environmental Protection Law is the broad national environmental protection law in China.<sup>28</sup> It was "formulated for the purpose of protecting and improving People's [sic] environment and the ecological environment, preventing and controlling pollution and other public hazards, safeguarding human health and facilitating the development of socialist modernization."<sup>29</sup> The law sets forth broad environmental policy, emphasizing that development should be in harmony with nature and stressing pollution prevention.<sup>30</sup>

The law emphasizes overall planning and layout, establishes a "polluter pays" principle, holds governments accountable, and establishes environmental protection as a right and obligation for all citizens.<sup>31</sup> The law also requires "[t]he competent department of environmental protection administration under the State Council [to] establish . . . national standards for environmental quality" and "national standards for the discharge of pollutants" as well as a monitoring system.<sup>32</sup>

## B. The Law on Prevention and Control of Water Pollution and Regulations

The LPCWP is China's main national law focused on water pollution. As amended in 2008, this law "is enacted for the purposes of preventing and controlling water pollution, protecting and

effective June 1, 2008), art. 22, http://www.chinaenvironmentallaw.com/wp-content/ uploads/2008/03/water-pollution-prevention-and-control-law.pdf (last visited May 5, 2009) (P.R.C.) (translated by Squire, Sanders & Dempsey L.L.P); *see also* Environmental Protection Law (promulgated by the President, Dec. 26, 1989, effective Dec. 26, 1989), http://english.mep.gov.cn/Policies\_Regulations/laws/environmental\_laws/200710/t200710 09\_109928.htm (last visited May 5, 2009) (P.R.C.).

<sup>26</sup> Wang Mingyuan, supra note 6, at 97.

<sup>&</sup>lt;sup>27</sup> See, e.g., Law on Prevention and Control of Water Pollution art. 22 (P.R.C.); Jingyun Li & Jingjing Liu, *supra* note 6, at 4–5.

<sup>&</sup>lt;sup>28</sup> Wang Mingyuan, *supra* note 6, at 97.

<sup>&</sup>lt;sup>29</sup> Environmental Protection Law art. 1 (P.R.C.).

<sup>&</sup>lt;sup>30</sup> Railton, *supra* note 10, at 865–66.

<sup>31</sup> Id. at 866.

<sup>32</sup> Environmental Protection Law arts. 9-11 (P.R.C.).

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improving the environment, maintaining the safety of drinking water, and promoting sustained economic and social development."<sup>33</sup> It "applies to pollution prevention and control for surface and ground water bodies including rivers, lakes, canals, irrigation channels and reservoirs within the territory of the People's Republic of China," but it does not govern marine pollution.<sup>34</sup> Unlike the Clean Water Act, China's law does not define or appear to limit what waters are subject to regulatory protection.<sup>35</sup>

In addition to the LPCWP, polluting industries are subject to a variety of rules and regulations. Nationally, these include the Implementing Rules on the Law on the Prevention and Control of Water Pollution<sup>36</sup> and the Interim Measures on the Management of Water Pollutants Discharge Permit.<sup>37</sup> The State Council also adopted regional regulations.<sup>38</sup> Finally, local governments implement their own local rules and regulations to handle local discharges.<sup>39</sup>

<sup>34</sup> Law on Prevention and Control of Water Pollution art. 2 (2008) (P.R.C.). Marine pollution is controlled by a separate law. Marine Environment Protection Law (adopted by the Standing Comm. Nat'l People's Cong., Aug. 23, 1982, amended Dec. 25, 1999, effective Dec. 25, 1999), art. 1, http://english.mep.gov.cn/Policies\_Regulations/laws/environmental\_laws/200710/t20071009\_109912.htm (last visited May 5, 2009) (P.R.C.).

<sup>35</sup> Compare Clean Water Act § 502(7), 33 U.S.C. § 1362(7) (2006) (defining "navigable waters"), *with* Law on Prevention and Control of Water Pollution art. 2 (P.R.C.).

<sup>36</sup> Implementing Rules on the Law on Prevention and Control of Water Pollution (promulgated by the State Council, Mar. 20, 2000, effective Mar. 20, 2000), http://english.mep.gov.cn/Policies\_Regulations/regulations/Water\_Pollution\_Control/200710/t200710 17\_111495.htm (last visited May 5, 2009) (P.R.C.).

<sup>37</sup> Interim Measures on the Management of Water Pollutants Discharge Permit (promulgated by the Nat'l Envtl. Prot. Agency, Mar. 20, 1988, effective Mar. 20, 1988), http://english.mep.gov.cn/Policies\_Regulations/regulations/Water\_Pollution\_Control/2007 10/t20071017\_111498.htm (last visited May 5, 2009) (P.R.C.).

<sup>38</sup> See, e.g., Interim Regulations on the Prevention of Water Pollution in the Huai River Valley (promulgated by the State Council, Aug. 8, 1995, effective Aug. 8, 1995), http://english.mep.gov.cn/Policies\_Regulations/regulations/Water\_Pollution\_Control/2007

<sup>&</sup>lt;sup>33</sup> Law on Prevention and Control of Water Pollution (promulgated by the Standing Comm. Nat'l People's Cong., May 11, 1984, amended May 15, 1996, and Feb. 28, 2008, effective June 1, 2008), art. 1, http://www.chinaenvironmentallaw.com/wp-content/ uploads/2008/03/water-pollution-prevention-and-control-law.pdf (last visited May 5, 2009) (P.R.C.) (translated by Squire, Sanders & Dempsey L.L.P.). Article 1 was amended in the 2008 version. The original version was "formulated for the purpose of preventing and controlling water pollution, protecting and improving the environment, safeguarding human health, ensuring the effective use of water resources and facilitating the development of socialist modernization." Law on Prevention and Control of Water Pollution (promulgated by the Standing Comm. Nat'l People's Cong., May 11, 1984, effective Nov. 1, 1984), http://english.mep.gov.cn/Policies\_Regulations/laws/environ menta\_laws/200710/t20071009\_109915.htm (last visited May 5, 2009) (P.R.C.).

An amended LPCWP went into effect on June 1, 2008. It incorporates many provisions of the old law with many of the regulations. In fact, sections of the Implementing Rules and the Interim Measures are copied directly into the 2008 LPCWP. As a result, the amended law creates one unified structure,<sup>40</sup> which is hoped to strengthen environmental protection.

### III

# HOW ARE WASTEWATER DISCHARGE PERMITS GRANTED IN CHINA?

# A. Discharge Permitting Before the June 2008 Amendments to the LPCWP

In order to address water pollution effectively, China must further the development of its water pollution permit system. China's original LPCWP did not contain any provisions for the permitting of discharges. As a result, the development of the permit system has been "practice ahead of legislation, local legislation ahead of state legislation."<sup>41</sup> This has led to a permit system that "integrate[d] state laws, regulations, standards, policies, and administrative measures concerning pollution control to promote effective operations, and to harmonize with environmental, economic, and social goals."<sup>42</sup>

In 1988, interim measures were adopted that granted authority for the discharge license system to "local competent departments of environmental protection administration."<sup>43</sup> Pollutant discharging units were to apply for licenses and submit forms to the local agencies. The local agencies had the authority to administer the system in relation to "the total discharge control system."<sup>44</sup> The

<sup>10/</sup>t20071017\_111503.htm (last visited May 5, 2009) (P.R.C.); Wang Mingyuan, *supra* note 6, at 99.

<sup>&</sup>lt;sup>39</sup> Wang Mingyuan, *supra* note 6, at 99.

<sup>&</sup>lt;sup>40</sup> Water Pollution Act Amendments (Chapters I–III), http://www.chinaenvironmental law.com/2008/03/17/water-pollution-act-amendments-chapters-i-iii (Mar. 17, 2008).

<sup>&</sup>lt;sup>41</sup> Wang Mingyuan, *supra* note 6, at 115.

<sup>42</sup> Id. at 101.

<sup>&</sup>lt;sup>43</sup> Interim Measures on the Management of Water Pollutants Discharge Permit (promulgated by the Nat'l Envtl. Prot. Agency, Mar. 20, 1988, effective Mar. 20, 1988), art. 5, http://english.mep.gov.cn/Policies\_Regulations/regulations/Water\_Pollution\_Con trol/200710/t20071017\_111498.htm (last visited May 5, 2009) (P.R.C.).

<sup>&</sup>lt;sup>44</sup> *Id.* at art. 11. The use of total discharge controls in permit development is similar to total maximum daily loads under the Clean Water Act § 303(d)(1)(C), 33 U.S.C. § 1313(d)(1)(C) (2006). This will be discussed in greater detail below.

agency shall grant permits when the pollution will not exceed the total discharge control targets. However, if it will exceed the targets, the department can grant a provisional license and order the reduction of discharges over time.<sup>45</sup> Unfortunately, this additional discharge will contribute to the continued impairment. In addition, only one total discharge control target has been developed for a pollutant, leaving a big hole in this approach to issuing permits.

Another potential problem is that there is no requirement that the local department receive approval from MEP or the State Council before issuing permits.<sup>46</sup> In the United States, the Environmental Protection Agency (EPA) must approve of state programs before permits can be issued.<sup>47</sup> In China, local competent departments under the State Council can verify discharges and decide whether to approve permits.<sup>48</sup> The local authorities have the ability to control the permits without central oversight.

In 2000, the Implementing Rules imposed a requirement on local governments at or above the county level to issue permits.<sup>49</sup> Again there is no provision for federal oversight or approval of local authorities. The local government is responsible for issuing permits.

Regions have also promulgated their own regulations concerning permit discharge systems.<sup>50</sup> For example, the Kunming Province developed Provisional Measures for the Administration of Water Pollutant Discharge Permit Systems.<sup>51</sup>

Under these different systems, permits have been issued in increasing numbers. In 1996, over forty thousand permits were issued in the cities that implemented a system.<sup>52</sup> The number of permits

<sup>50</sup> Wang Mingyuan, *supra* note 6, at 110.

<sup>&</sup>lt;sup>45</sup> Interim Measures on the Management of Water Pollutants Discharge Permit arts. 11, 12 (P.R.C.).

<sup>&</sup>lt;sup>46</sup> Compare id. at arts. 9–15, with Clean Water Act § 402(b), 33 U.S.C. § 1342(b).

<sup>&</sup>lt;sup>47</sup> Clean Water Act § 402(b).

<sup>&</sup>lt;sup>48</sup> Interim Measures on the Management of Water Pollutants Discharge Permit arts. 9–15 (P.R.C.).

<sup>&</sup>lt;sup>49</sup> Implementing Rules on the Law on Prevention and Control of Water Pollution (promulgated by the State Council, Mar. 20, 2000, effective Mar. 20, 2000), art. 10, http://english.mep.gov.cn/Policies\_Regulations/regulations/Water\_Pollution\_Control/2007 10/t20071017\_111495.htm (last visited May 5, 2009) (P.R.C.).

<sup>&</sup>lt;sup>51</sup> Kunming Provisional Measures for the Administration of Water Pollutant Discharge Permit System (promulgated by the Standing Comm. People's Cong. Kunming Mun., Nov. 19, 1999, effective Nov. 19, 1999) (P.R.C.); Wang Mingyuan, *supra* note 6, at 110.

<sup>&</sup>lt;sup>52</sup> Wang Mingyuan, *supra* note 6, at 102.

issued nearly doubled by the year 2000, with over eighty thousand permits issued.<sup>53</sup>

While these numbers may seem promising, the number of permits issued lags behind the number of polluting industries. In some places, only twenty percent of polluting enterprises had permits.<sup>54</sup> In other places, implementation started strong but later failed.<sup>55</sup> For example, one county-level city issued forty temporary permits in 1996 and zero permits over the next four years.<sup>56</sup> Discharges without permits continued. Furthermore, many permits are given after discharge has begun.<sup>57</sup> And in many places, like the western part of China and more remote areas, permit systems have not been implemented.<sup>58</sup> For China to be successful in protecting its waters, dischargers must receive permits before pollution begins.

# B. Discharge Permitting Under the June 2008 Amendments to the LPCWP

In part to address this problem, the State Council amended the LPCWP and included provisions for a permit system in article 20.<sup>59</sup> This is the first time there is legislation in place that applies to all industries equally and not through "varying decisions of the central government or the diverse aims of local governments."<sup>60</sup> Under article 20,

[e]nterprises or institutions or individually-owned businesses shall obtain waste discharge licenses if they directly or indirectly discharge to water bodies industrial or medical wastewater or other wastewater or sewage that may be discharged only after waste discharge licenses have been obtained pursuant to regulations. . . . Any enterprise or institution without waste discharge licenses or in violation of provisions of waste discharge licenses shall be

<sup>53</sup> Id.

<sup>54</sup> Id. at 117.

<sup>55</sup> Id.

<sup>56</sup> Id.

<sup>57</sup> Id.

<sup>58</sup> Li Zhiping, supra note 15, at 379.

<sup>&</sup>lt;sup>59</sup> Law on Prevention and Control of Water Pollution (promulgated by the Standing Comm. Nat'l People's Cong., May 11, 1984, amended May 15, 1996, and Feb. 28, 2008, effective June 1, 2008), art. 20, http://www.chinaenvironmentallaw.com/wp-content/uploads/2008/03/water-pollution-prevention-and-control-law.pdf (last visited May 5, 2009) (P.R.C.) (translated by Squire, Sanders & Dempsey L.L.P.).

<sup>60</sup> See Li Zhiping, supra note 15, at 379.

prohibited from discharge into water bodies the sewage and waste water  $\dots$ 

Thus, under the law, discharging without a permit is illegal.<sup>62</sup>

The State Council must develop regulations before the permit provision will be effective<sup>63</sup> and before permits will be issued, because permits will now consider the total amount of pollutant discharged (instead of just concentration). In July of 2008, MEP sought to delay the release of permits to have more time to "make public the legislative procedures."<sup>64</sup> It is expected that the permit system will be ready in 2009.<sup>65</sup>

The LPCWP allocates authority for many tasks in the permitting process to the local governments. However, it is not clear who has authority to issue permits or what will happen to the authority granted under earlier regulations. Article 21 requires a polluter to "report to and register with the local environmental protection department at or above the county level their existing facilities for discharging and treating pollutants, and the categories, quantities and concentrations of pollutants discharged."<sup>66</sup> A polluter must also provide technical information regarding prevention and control of water pollution to the local department and notify the department without delay of any changes.<sup>67</sup> In addition, the local departments are granted authority to determine which facilities are required to install automatic monitoring facilities.<sup>68</sup> These monitoring facilities shall be networked to the local authority and "ensure the normal operation of monitoring equipment."<sup>69</sup>

The State Council is currently authorized to set regulations for permits. The central government sets the floor for the amount of pollution allowed to enter the waterbody, which will determine levels of permitted discharge and ultimately permit levels (as discussed

<sup>61</sup> Law on Prevention and Control of Water Pollution art. 20 (P.R.C.).

<sup>62</sup> Id.

<sup>&</sup>lt;sup>63</sup> *Id.* ("Specific procedures and implementing regulations for waste discharge licenses shall be specified by the State Council.").

<sup>64</sup> Sun Xiaohua, *Pollution Emission Permits Delayed*, CHINA DAILY, July 4, 2008, http://www.chinadaily.com.cn/bizchina/2008-07/04/content\_6820121.htm.

<sup>65</sup> Jingyun Li & Jingjing Liu, supra note 6, at 5.

<sup>66</sup> Law on Prevention and Control of Water Pollution art. 21 (P.R.C.).

<sup>67</sup> Id.

<sup>68</sup> Id. at art. 23.

<sup>69</sup> Id.

below).<sup>70</sup> However, once the permits are issued, the local government is the main enforcement authority.

In China, there are no provisions for federal oversight of a local government's permit program. This is one noticeable difference between the permitting process in the LPCWP and the Clean Water Act. In the United States under the National Pollutant Discharge Elimination System program, the federal government sets the baseline conditions for permits by regulation.<sup>71</sup> If a state meets the federal baseline and fulfills nine criteria, the EPA will authorize the state to administer its own permitting programs.<sup>72</sup> Under the law, state programs may be more stringent than the federal program. Once the state receives approval, it has primary responsibility for issuing permits.<sup>73</sup> However, the federal government has an oversight role and may review permits to ensure they comply with Clean Water Act requirements.<sup>74</sup> In addition, if the state does not take appropriate enforcement action, the federal government retains authority to enforce the conditions of the permit against polluters who violate federal or approved standards.<sup>75</sup>

When developing new regulations, China should consider, within its governmental framework, how it can create mechanisms for central government oversight over regional and provincial permitting, enforcement, and compliance. If it is feasible within its structure, China should consider granting central government oversight or joint authority to enforce national law and regulations in the absence of local enforcement.<sup>76</sup> This may help address some of the problems with local permitting enforcement that may not be solved by the increased penalties provided under the June 2008 amendments.

### IV

### DEVELOPMENT OF WATER QUALITY AND DISCHARGE STANDARDS

In order to decrease water pollution and protect China's waters, permits must be based on the level of pollution the waterbody can support. Therefore, in addition to looking at how permits will be

<sup>70</sup> Id. at art. 9.

<sup>&</sup>lt;sup>71</sup> Clean Water Act § 402(a)(2), 33 U.S.C. § 1342(a)(2) (2006).

<sup>72</sup> Id. § 402(b).

<sup>73</sup> Id.

<sup>74</sup> Id. § 402(c).

<sup>75</sup> Id. § 309, 33 U.S.C. § 1319.

<sup>76</sup> Li Zhiping, supra note 15, at 388-89.

issued and regulated, it is necessary to consider the standards that will be developed and used to issue permits. Under the pre-2008 LPCWP system, however, permits have not always been coordinated with the standards set for the water.<sup>77</sup> In fact, many times the permits are issued after the fact, more acknowledging the discharge than regulating it.<sup>78</sup> The 2008 LPCWP strives to correct this gap.

The State Council must first create national standards for water environment quality (WEQ) for pollutants.<sup>79</sup> These standards are the acceptable levels of pollution in a given type of water. Local governments may create local standards for items not covered by the WEQ standards and must report their standards to the State Council.<sup>80</sup>

Using the WEQ standards and the country's economic and technological conditions, the State Council shall establish national standards for discharge of water pollution.<sup>81</sup> These concentration standards are somewhat of a "hybrid of technology-based and water quality-based limits."<sup>82</sup> They may be industry specific (for example, the MSG industry) or broad (for example, the Integrated Wastewater Discharge Standard).<sup>83</sup> Localities can set more stringent standards for items not covered.<sup>84</sup> The development of these standards is similar to the standards in the United States. The EPA sets treatment standards by regulation according to industry.<sup>85</sup> In doing this, the

<sup>80</sup> *Id.* The statute uses the word "items." *Id.* Because they are discussing water quality standards, it would likely refer to pollutants.

81 Id. at art. 13.

<sup>82</sup> Water Pollution Act Amendments (Chapters I–III) (Again), http://www.china environmentallaw.com/2008/03/19/water-pollution-act-amendments-chapters-i-iiiagain (Mar. 19, 2008).

<sup>83</sup> *Id.*; *see also* Ministry of Environmental Protection, Discharge Standard, http:// english.mep.gov.cn/standards\_reports/standards/water\_environment/Discharge\_standard/ (last visited May 5, 2009). Only abstracts of the standards are available on the English site.

<sup>84</sup> Law on Prevention and Control of Water Pollution art. 13 (P.R.C.) Again, the LPCWP uses the word "items." In this instance, it is unclear if "items" refers to pollutants, discharges, and/or industries.

85 See 40 C.F.R. §§ 425-471 (2008).

<sup>77</sup> Id. at 379.

<sup>78</sup> Id.

<sup>&</sup>lt;sup>79</sup> Law on Prevention and Control of Water Pollution (promulgated by the Standing Comm. Nat'l People's Cong., May 11, 1984, amended May 15, 1996, and Feb. 28, 2008, effective June 1, 2008), art. 11, http://www.chinaenvironmentallaw.com/wp-content/uploads/2008/03/water-pollution-prevention-and-control-law.pdf (last visited May 5, 2009) (P.R.C.) (translated by Squire, Sanders & Dempsey L.L.P.).

EPA considers what technology is available and may require all polluters in the same industry to achieve what is possible with the best available technology.<sup>86</sup>

For China, simply setting and monitoring the concentration of pollution is only part of the equation. Rapid development since 1992 has led to increased amounts of pollution in the nation's waters.<sup>87</sup> As a result, it became necessary to determine the total amount of pollution being discharged.<sup>88</sup> The LPCWP was amended in 1996 to include "total quantity control."<sup>89</sup> The 2008 LPCWP requires the governments of the provinces, autonomous regions, and municipalities to implement a system of total quantity control of the discharge of key pollutants in their jurisdictions: "[a]ny water pollutant discharge shall not exceed the standards for water pollutant discharge."<sup>90</sup>

Total control targets are similar to total maximum daily loads in the United States.<sup>91</sup> To date, chemical oxygen demand is the only total control target that has been developed nationwide.<sup>92</sup> Regionally, an ammonia-nitrogen control has been developed in the Huai River Basin.<sup>93</sup> It is unclear how the total control program is to be implemented or how responsibility is to be shared. The State Council is supposed to formulate the rules for allocation of the total discharge control targets.<sup>94</sup> However, it is unclear whether any regulations have been developed.

The government delayed the issuance of permits to allow the public a better understanding of how permits will be issued that not

<sup>&</sup>lt;sup>86</sup> E.g., Clean Water Act § 301(b)(2)(A), 33 U.S.C. § 1311(b)(2)(A) (2006).

<sup>87</sup> Wang Mingyuan, supra note 6, at 108.

<sup>88</sup> Id. at 109.

<sup>&</sup>lt;sup>89</sup> Law on Prevention and Control of Water Pollution (promulgated by the Standing Comm. Nat'l People's Cong., May 11, 1984, revised May 15, 1996, effective May 15, 1996), art. 18, http://www.china.org.cn/english/environment/34325.htm (last visited May 5, 2009) (P.R.C.); *see also* Wang Mingyuan, *supra* note 6, at 109.

<sup>&</sup>lt;sup>90</sup> Law on Prevention and Control of Water Pollution arts. 9, 18 (2008) (P.R.C.).

<sup>&</sup>lt;sup>91</sup> Compare id. with Clean Water Act § 303(d), 33 U.S.C. § 1313, and 40 C.F.R. § 130.7 (2008).

<sup>&</sup>lt;sup>92</sup> Water Pollution Act Amendments (Chapters I–III) (Yet Again), http://www.china environmentallaw.com/2008/03/31/water-pollution-act-amendments-chapters-i-iii-yet -again (Mar. 31, 2008).

<sup>93</sup> Id.

<sup>94</sup> Law on Prevention and Control of Water Pollution art. 18 (P.R.C.).

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only meet the WEQ but also satisfy the requirements under the total quantity controls. Only time will tell whether the regulations and permits necessary to protect China's waters will be developed, implemented, and enforced.

## V Other Interesting Provisions

In addition to permits and standards, the amended LPCWP added mechanisms to clean up pollution from industrial sources. Similar to the requirement in the United States that polluters use "best available technology," the LPCWP added requirements that industrial processes "conduct technological renovations and adopt comprehensive preventive measures to . . . reduce the discharge of wastewater and pollutants."<sup>95</sup> In addition, "[t]he State will adopt a system whereby backwards processes and equipment that cause serious pollution to water environment will be eliminated."<sup>96</sup>

China has also prohibited discharging certain groups of pollutants, such as (1) "oil, acid or alkaline solutions, or highly toxic liquid";<sup>97</sup> (2) "radioactive solid wastes or waste water containing any high- or medium-level radioactive substances";<sup>98</sup> (3) "industrial waste residues, urban refuse, or other wastes";<sup>99</sup> and (4) "[a]ny highly toxic soluble waste residue containing such substance as mercury, cadmium arsenic, chromium, lead, cyanide and yellow phosphorus."<sup>100</sup> In addition, the State Council must develop regulations and standards for the discharge of low-level radioactive substances<sup>101</sup> and heated wastewater,<sup>102</sup> as well as standards for how to disinfect pathogencontaminated sewage before discharge.<sup>103</sup> Some of these prohibitions are similar to those in the United States, while others may be stronger.

<sup>95</sup> Id. at art. 40.

<sup>96</sup> Id. at art. 41.

<sup>97</sup> Id. at arts. 29, 30, 33. But c.f. Clean Water Act § 311, 33 U.S.C. § 1321 (2006).

<sup>&</sup>lt;sup>98</sup> Law on Prevention and Control of Water Pollution art. 30 (P.R.C.). *But c.f.* Clean Water Act § 301, 33 U.S.C. § 1311.

 $<sup>^{99}</sup>$  Law on Prevention and Control of Water Pollution art. 33 (P.R.C.).

<sup>100</sup> Id.

<sup>101</sup> Id. at art. 30. But c.f. Clean Water Act § 301(f).

 $<sup>^{102}</sup>$  Law on Prevention and Control of Water Pollution art. 31 (P.R.C.). But c.f. Clean Water Act  $\S$  316, 33 U.S.C.  $\S$  1326.

<sup>103</sup> Law on Prevention and Control of Water Pollution art. 32 (P.R.C.). But c.f. Clean Water Act  $\S$  301(f).

However, it is important to note that the law is missing a defined mechanism for adding other prohibitions.<sup>104</sup>

The law also prohibits new construction of many types of polluting factories. The law bans new construction of facilities for "small-scale papermaking, tanning, printing and dyeing, dye, coke, sulfur, arsenic, and mercury production, oil refinery, electroplating, pesticide, asbestos, cement, glass, steel, thermal power generation and other projects that cause serious pollution to the water environment."<sup>105</sup> Unfortunately, the law does not define "other projects that cause serious pollution."<sup>106</sup> Given China's rapidly growing economy, it will be interesting to see if and how this provision is utilized.

Finally, China has adopted provisions similar to the European Union that require enterprises to adopt clean technical processes to increase their efficiency and decrease the amount of discharge.<sup>107</sup>

Each of these provisions adds to China's ability to protect its waters. Again, the ability to implement and enforce the provisions will be important to China's success.

#### VI

## INCENTIVES TO ENFORCE THE LAW AND INCREASED PENALTIES MAY LEAD TO DECREASED POLLUTION

Another area where the new LPCWP made strides is in the provisions added to increase incentives for enforcement and additional penalties for violators.

### A. Increased Incentives for Enforcement

One way China has increased incentives for enforcement is the addition of penalties for government agents' dereliction of duty.<sup>108</sup> Some provinces have local regulations that impose legal liability if an environmental decision maker, administrator, or implementer fails to execute his duties.<sup>109</sup> Article 5 of the LPCWP adds nationwide systems of accountability and evaluation.<sup>110</sup> As a result, "fulfillment

<sup>104</sup> In the United States, additional pollutants can be prohibited under section 301(g)(4) of the Clean Water Act.

<sup>&</sup>lt;sup>105</sup> Law on Prevention and Control of Water Pollution art. 42 (P.R.C.).

<sup>106</sup> Id.

<sup>107</sup> Id. at art. 43.

<sup>&</sup>lt;sup>108</sup> Id. at art. 5; see also Tougher Law to Curb Water Pollution, supra note 6.

<sup>109</sup> Li Zhiping, supra note 15, at 389.

<sup>110</sup> Law on Prevention and Control of Water Pollution art. 5 (P.R.C.).

of water environmental protection targets constitutes a part of the performance evaluation of local people's governments or their responsible persons."<sup>111</sup> In addition, employees are subject to disciplinary sanctions. For example,

[i]f the environmental protection authority or other departments that exercise supervision and administration rights . . . fail to issue administrative license or other relevant approval documents according to law, or fail to investigate and penalize any illegal behaviors after detecting or receiving reports on the same, or act otherwise in violation of the provisions, . . . any personnel directly responsible and other personnel responsible therefore shall be given disciplinary sanctions.<sup>112</sup>

Because local government officials have most recently been judged on their ability to increase production and grow the local economy at whatever cost, this is a welcome addition to the LPCWP. The implementation of this provision, if effective, may have important impacts on China's progress in addressing pollution.

### **B.** Increased Penalties but Challenges Remain

Under the revised LPCWP, China has also increased the fines for pollution. The government may now impose higher fines to prevent the problem of "low violation cost" (for example, where it may be cheaper to violate the law than to change business practices and comply).<sup>113</sup> Although the government seeks to prevent low violation cost, it may not be successful without the ability to recover based on the overall benefits to the polluting enterprise of illegal discharges.<sup>114</sup>

Under the amended law, "[t]he personnel directly responsible [for causing severe water pollution incidents] and other personnel responsible therefor may be imposed a fine equal to 50% of their incomes from their respective employers for the preceding year."<sup>115</sup> Fining the individual is innovative and may decrease the likelihood of premeditated discharges. However, it is uncertain who may be held accountable. Some news reports are optimistic that this includes the

<sup>&</sup>lt;sup>111</sup> *Id.*; *see also* Water Pollution Act Amendments (Introduction), http://www.china environmentallaw.com/2008/03/15/water-pollution-act-amendments-introduction (Mar. 15, 2008).

<sup>112</sup> Law on Prevention and Control of Water Pollution art. 69 (P.R.C.).

<sup>113</sup> Tougher Law to Curb Water Pollution, supra note 6.

<sup>114</sup> Water Pollution Act Amendments (Penalty Box II), http://www.chinaenvironmental law.com/2008/03/07/water-pollution-act-amendments-penalty-box-part-ii (Mar. 7, 2008).

<sup>115</sup> Law on Prevention and Control of Water Pollution art. 83 (P.R.C.).

head of the enterprise,<sup>116</sup> while others are pessimistic and see it as the actual employee, who may be lower paid and have little control.<sup>117</sup>

Next, "in the event of any serious or exceptionally serious pollution accident, a fine equal to 30% of the direct losses caused . . . shall be imposed."<sup>118</sup> Unfortunately, it is likely this provision only applies to "direct harm," and it is unlikely that the amount of the penalty will prevent funding for generalized harm to the environment.<sup>119</sup> This is because "direct harm" likely excludes what would be considered "natural resource damages" under U.S. Superfund law.<sup>120</sup> Because "fish and birds have no inherent monetizable value in China, . . . the 'value' of wildlife lost as a result of the pollution accident will not be considered part of the 'direct loss' base."<sup>121</sup>

Though the size of the penalties allowed has increased, the law still has some flaws. In some instances, it may be cheaper for a company to violate the law than to install equipment to comply. As written, there is no mechanism to penalize a company for any financial gain they may have received for violating the law—there are no "economic benefit penalties."<sup>122</sup> In order to encourage greater compliance, this type of penalty should be considered.

Finally, conflicts in translation make it difficult to tell whether fines will apply to "incidents" or just "accidents."<sup>123</sup> If only the latter, penalties may not apply when companies routinely exceed applicable water limits, thus weakening the enforcement provision.

Each of these penalty provisions is a welcome addition to the law. But, there are still areas for improvement, particularly in expanding what may be included in direct harms or allowing penalties for

<sup>&</sup>lt;sup>116</sup> See, e.g., Jingyun Li & Jingjing Liu, *supra* note 6, at 4; *Tougher Law to Curb Water Pollution, supra* note 6.

<sup>&</sup>lt;sup>117</sup> See Water Pollution Act Amendments (Penalty Box), *supra* note 14 (comparing his translation to the news reports).

<sup>&</sup>lt;sup>118</sup> Law on Prevention and Control of Water Pollution art. 83 (P.R.C.).

<sup>&</sup>lt;sup>119</sup> Water Pollution Act Amendments (Penalty Box), *supra* note 14.

<sup>120</sup> Id.

<sup>121</sup> *Id*.

<sup>122</sup> Water Pollution Act Amendments (Penalty Box II), supra note 112.

<sup>&</sup>lt;sup>123</sup> The newspapers talk about "incidents." See, e.g., Tougher Law to Curb Water Pollution, supra note 6. However, one commentator has offered a translation that instead uses "accidents." Water Pollution Act Amendments (Penalty Box), supra note 14. The author of Penalty Box, Charlie McEllwee, is an international energy and environmental law attorney at Squire, Sanders & Dempsey L.L.P. This firm was the first to translate the LPCWP, and this Article uses its translation as posted on Mr. McEllwee's blog, China Enironmental Law.

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indirect harms. However, the increased liability for polluters and accountability for employees may spark changes in behavior.

### PUBLIC PARTICIPATION AND CITIZEN ENFORCEMENT

### A. Lack of Public Participation in the Process

In China, one major obstacle to environmental protection has been lack of public participation. Much progress has been made since 2007,<sup>124</sup> but one of the major defects of its water permitting process under the old system of laws and regulations has been the lack of openness and transparency.<sup>125</sup> There has been no opportunity for public participation. Three significant problems arise out of this defect in the water permitting process.

First, the environmental agencies do not publicize information about permit applications or permits issued, which can lead to underthe-table deals with dischargers.<sup>126</sup> Under old regulations and the Administrative Permission Law,<sup>127</sup> the right to participate and object to permits was limited to only interested or related parties, which did not include social organizations (such as environmental or neighborhood organizations).<sup>128</sup> Second, there is no hearing procedure prior to the granting of a permit. Opponents do not have the opportunity to weigh-in and share their opinion. This is very different than the United States, where opportunities for public participation are required by the regulations.<sup>129</sup> Finally, as mentioned above, because the Communist Party plays a role both parallel to the government and as part of the government structure, it may be difficult to know who is making the actual decision.<sup>130</sup>

 <sup>&</sup>lt;sup>124</sup> Mingqing You, Annual Review of Chinese Environmental Law Developments: 2007,
 38 ENVTL. L. REP. NEWS & ANALYSIS 10,718, 10,722 (2008).

<sup>&</sup>lt;sup>125</sup> Pan Yue, *The Environment Needs Public Participation*, CHINA DIALOGUE, Dec. 5, 2006, http://www.chinadialogue.net/article/show/single/en/604-The-environment-needs -public-participation.

<sup>126</sup> Li Zhiping, supra note 15, at 381.

<sup>&</sup>lt;sup>127</sup> Administrative Permission Law (promulgated by the Standing Comm. Nat'l People's Cong., Aug. 27, 2003, effective Aug. 27, 2003), arts. 46–47, http://www .asianlii.org/cn/legis/cen/laws/apl310/ (last visited May 5, 2009) (P.R.C.).

<sup>128</sup> Li Zhiping, supra note 15, at 385.

<sup>129 40</sup> C.F.R. §§ 25.1, 25.4, 122.1(a)(3) (2008).

<sup>130</sup> Yang Tseming, supra note 7.

When the LPCWP was revised, the public had many opportunities to participate in the revisions process. Drafts were available in the news media and the public was invited to submit comments.<sup>131</sup> This was the first time the public had such an opportunity to weigh in on a law.<sup>132</sup>

When promulgating regulations for the permitting process under the 2008 LPCWP, the State Council has the opportunity to continue this trend and make the process more open. The Council should allow additional opportunities for participation and increase the number and types of groups and individuals who can participate. Increased public participation is important because it may lead to an increased awareness and give local citizens a stake in the process. Ultimately, this could lead to better implementation and enforcement at the local level.

### **B.** Potential for Public Participation in Bringing Lawsuits

One area where the 2008 LPCWP increased citizen involvement is the ability for citizens to bring lawsuits against a violator. The new law adds a provision for class action suits,<sup>133</sup> which is a first for China.<sup>134</sup> However, only people who have suffered a direct injury can bring lawsuits against polluters.<sup>135</sup> This is unlike the United States, where persons or environmental groups can demonstrate standing to bring a lawsuit by showing harm to their interests in recreation or biodiversity.<sup>136</sup> To strengthen this legal tool, the scope of who can sue should be expanded in China.

On the other hand, an interesting aspect of China's law is that in a lawsuit, the discharging party has the burden of proving both why it should be exempt from liability under the law and that there is no

<sup>131</sup> Mingqing You, *supra* note 124, at 10,722.

<sup>132</sup> Jingyun Li & Jingjing Liu, supra note 6, at 2.

<sup>&</sup>lt;sup>133</sup> Law on Prevention and Control of Water Pollution (promulgated by the Standing Comm. Nat'l People's Cong., May 11, 1984, amended May 15, 1996, and Feb. 28, 2008, effective June 1, 2008), art. 88, http://www.chinaenvironmentallaw.com/wp-content/ uploads/2008/03/water-pollution-prevention-and-control-law.pdf (last visited May 5, 2009) (P.R.C.) (translated by Squire, Sanders & Dempsey L.L.P.).

<sup>&</sup>lt;sup>134</sup> Zhu Zhe, *Heavy Fines Await Polluters*, CHINA DAILY, Feb. 27, 2008, http://www.chinadaily.com.cn/bizchina/2008-02/27/content\_6487492.htm.

<sup>135</sup> Pan Yue, supra note 125.

<sup>&</sup>lt;sup>136</sup> Lujan v. Defenders of Wildlife, 504 U.S. 555, 563 (1992) (holding that the person or group must demonstrate it has suffered a harm, which was caused by the polluter, and can be redressed by the remedy sought in court).

causal connection between its action and the damage.<sup>137</sup> This is the opposite of the United States, where the party filing a claim must show she suffered an injury and that the defendant's actions caused it.<sup>138</sup> From an environmental protection perspective, this should decrease the burden for citizens bringing lawsuits in China. However, at least one commentator feels citizens may have more success against foreign-owned operations than ones operated by the state.<sup>139</sup>

Increased public participation on many levels is important to successful environmental protection in China and around the world. The LPCWP makes potentially important additions to the tools available to a citizen harmed by a polluter; however, those tools are still limited.

# VIII

### CONCLUSION

China's enactment of the amended LPCWP in June 2008 has increased its ability to protect the country's waters. However, as in the past, China will face challenges in implementation and enforcement. As the State Council develops regulations for implementation of a nationwide water pollutant discharge permitting system, consideration of mechanisms for central governmental oversight of the permit process and enforcement may be critical to the effectiveness of the amended law. Increasing opportunities for public participation and further strengthening of penalties for noncompliance might enhance effectiveness as well. Each of these areas is critically important to successfully protecting China's waters.

<sup>&</sup>lt;sup>137</sup> Law on Prevention and Control of Water Pollution art. 87 (P.R.C.); Charles R. McElwee II, *Who's Cleaning Up This Mess?*, CHINA BUS. REV. ONLINE, Jan.–Feb. 2008, http://www.chinabusinessreview.com/public/0801/mcelwee.html.

<sup>138</sup> See Lujan, 504 U.S. at 563.

<sup>139</sup> McElwee II, supra note 137.