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China's Treatment of Crimes Against the Environment: Using Criminal Sanctions to Fight Environmental Degradation in the PRC

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I. INTRODUCTION

Change is coming rapidly to the People's Republic of China (the "PRC" or "China"), especially in three related areas — degradation of its physical environment, transformation of its economic system and modernization of its legal system. This Article examines a development that lies at the intersection of these three areas of change: the use of criminal law in the fight against environmental degradation in the PRC.

China faces environmental challenges of staggering proportions.¹

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^{1.} For a survey of environmental problems in China, see Wang Xi & Robert F. Blomquist, The Developing Environmental Law and Policy of the People's Republic of China: An Introduction and Appraisal, 5 Geo. Int'l Envil. L. Rev. 25, 33-36 (1992); Cao Shuzhen, Environmental Protection and Improvement, in A Course in China's Environmental Protection Law 171, 174-76 (Zhang Kunmin & Jin Ruilin eds., 1992) (describing soil erosion, grasslands degradation,

A recent speech by the chairman of the Environmental Protection Committee of the National People's Congress (the "NPC") included these troubling statistics:

- The levels of smoke and dust emissions have risen recently by more than seven percent a year.²
- Sulfur dioxide emissions, the leading cause of acid rain, will rise to 23 million tons annually by the year 2000, as China's annual coal consumption rises from the present 1.2 billion tons to a projected 1.6 billion tons early next century.³
- Acid rain, which in the 1980s appeared in only four provinces of China, now has appeared in three others and, if not controlled, will harm the agricultural, livestock and fishing industries.⁴
- China now produces 100 million tons of wastewater a day, leaving several rivers in a state of crisis.⁵

deforestation, water shortage and pollution and air pollution); id. at 191-93 (describing agricultural environmental problems); id. at 201-02 (describing marine environment pollution); id. at 212-17 (describing environmental problems in urban and rural areas); Robert J. Saiget, Leader Warns of Threat to China's Environment, Japan Economic Newswire, Feb. 10, 1994, available in LEXIS, Asiape Library, Jen File; Zhu Baoxia, China: Steps Taken to Clean Up Pollution, China Daily, June 4, 1994, available in LEXIS, World Library, Curnws File; Elisabetta Capannelli & Omkar L. Shrestha, Environmental Challenges in the People's Republic of China and Scope for Bank Assistance 2-7 (Asian Development Bank Economics and Development Resource Center Occasional Paper No. 6, Dec. 1993) (reviewing the "state of the environment in the PRC"). See generally Vaclav Smil, China's Environmental Crisis (1993).

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^{2.} Saiget, supra note 1 (reporting on a speech given by Qu Geping, chairman of the NPC's Environmental Protection Committee, in December 1993). According to the National Environmental Protection Agency, soot emission in 1992 totalled 14.14 million tons, and in several cities, more than 30 tons of dust per square kilometer fell each month during 1992. National Environmental Protection Agency, 1992 Report on the State of the Environment in China, appearing in English in China Environment News, June 1993, at 4-7.

^{3.} Saiget, supra note 1. Such an increase in China's annual coal consumption is expected to make China the largest single producer of both carbon dioxide, the leading cause of global warming, and sulfur dioxide. Id.

^{4.} Id.

^{5.} Id.

- Industrial solid wastes will grow from the present 180 million tons a year to 250 million tons annually by the year 2000.⁶
- China is losing 2,100 square kilometers of arable land each year to desertification.⁷
- Water resources are diminishing faster than they can be replaced, with more than 40 of China's large cities seriously lacking water.⁸

Other Chinese government officials, including several in the National Environmental Protection Agency ("NEPA"), have also cited to the country's environmental problems⁹ and have pointed out the enormous costs of environmental degradation — stating, for example, figures of 16 billion yuan (\$2 billion) each year in acid rain damage¹⁰ and over 100 billion yuan (\$12.5 billion) annually in environmental pollution of all types.¹¹ Non-Chinese observers have similarly noted the country's massive environmental challenges, describing them in sometimes alarming terms.¹²

^{6.} Id.

^{7.} Id.

^{8.} Id.

^{9.} See, e.g., New China News Agency, Official Outlines Environmental Protection Plan to Tackle "Worsening" Pollution, BBC Summary of World Broadcasts, Feb. 7, 1994, available in LEXIS, Asiapc Library, Xinhua File [hereinafter Environmental Protection Plan] (reporting that the director of the Planning Department of NEPA identified seven pressing environmental problems — water pollution, air pollution, industrial waste, lack of water resources, soil erosion, low afforestation and grassland degradation, and decrease of species — that "have greatly affected the health of the people, [and] hindered the improvement of their living standard and economic development"); Zhu Baoxia, NEPA Reveals \$1.6M Pollution Fine Scheme, China Daily, April 18, 1994, at 1 [hereinafter Pollution Fine Scheme] (reporting statistics on acid rain, provided by the deputy director of NEPA's supervision and development department).

^{10.} Pollution Fine Scheme, supra note 9.

^{11.} Pollution Remains Serious Despite Environment Cash, China Daily, March 16, 1994, at 1 [hereinafter Pollution Remains Serious].

^{12.} See, e.g., Smil, supra note 1, at 42-49 (decline in water supplies); id. at 52-58 (decline in arable land and qualitative degradation of soils); id. at 61-65 (deforestation and descrification); id. at 117-21 (air pollution); id. at 129-37 (generation of carbon dioxide). For example, Smil notes the environmental pressures exacted merely by feeding a fifth of the world's population "from less than one-fifteenth of the world's farmland...." Id. at 9. He points out that by 1990 China "could rely on less than one-tenth of a hectare per capita for its food," id. at 4, and then observes that this and other strains caused by China's population have resulted in severe degradation of the country's resources — degradation which, unlike various forms of pollution, cannot be reversed or overcome

The magnitude of China's environmental problems reflects in part China's demographics. It is the third largest country in the world in terms of land territory.¹³ China has by far the largest population of all countries, with about 1.2 billion people, which is more than one-fifth of the world's total population.¹⁴ Average per capita income of those people, however, is among the lowest in the world, at about \$360.¹⁵

These extremes of size, population and lack of wealth only partly explain the seriousness of China's environmental challenges. The current strains on the natural environment result in large part from the current economic environment in China. China's economy has doubled in size in the past fifteen years and is expected to continue growing at a rate of ten percent per year.¹⁶

by short-term "technical fixes." Id. at 10. Smil sounds an alarm also in a recent newspaper article. See Vaclav Smil, A Land Stretching to Support Its People, Int'l Herald Trib., May 30, 1994, at 8 (stating that "[t]he environmental challenges facing China are immense, and even a costly and concerted effort could do little but slow down the rate of pollution and ecosystemic deterioration during the next 20 to 30 years"). See also Perry Link, A Harvest of Empty Notes: The Hectic Pace of Modernization in China, Times Literary Supp., Jan. 1994, at 6, 6-8 (reviewing Smil, supra note 1). Link offers these sobering statistics: "[p]esticide contamination of vegetables in China is nearly the highest in the world"; "[t]here is ten to twenty times as much particulate and sulphur dioxide in the air of Chinese cities as there is in the air of U.S. cities"; "[t]opsoil loss in the Yellow River Basin amounts to 34.5 tons per acre per year, which is 2.5 times what the U.S. Soil Conservation Service calls 'severe erosion'"; "China's forests are being cut down at 40 per cent above sustainable rates." Link, supra 6.

- 13. The World Almanac and Book of Facts 1994 828 [hereinafter World Almanac]. The land area claimed by China is about 3.7 million square miles, slightly more than that of the United States. Id. at 752, 822. Two-thirds of China's territory is mountainous or desert, and only one-tenth is cultivated. Id. at 752.
- 14. Id. at 828. This represents a doubling of China's population in forty years. See Smil, supra note 1, at 16 (showing a population of 583 million in 1953). Even in the dozen years following the adoption of the one-child policy in January 1979, as described by Smil, id. at 22, China's population increased by about 164 million, from about 975 million in 1979 to about 1.139 billion in 1990. IMF Statistics Dep't, Vol. XLVI International Financial Statistics Yearbook 1993, at 281 (1993) [hereinafter IFS 1993]. That increase alone represents a population larger than that of Brazil, the world's fifth most populous state (after China, India, the United States and Indonesia). World Almanac, supra note 13, at 745, 828.
- 15. World Almanac, supra note 13, at 752. For a comparison of national per capita incomes, expressed as per capita Gross National Product (GNP), see id. at 736-828. The national per capita GNP of the United States is just under \$22,500, more than sixty times that of China. Id. at 822. Some methods of calculating per capita income yield higher statistics for China, but they are still relatively low mostly in the range of \$1,000 to \$2,000. See Big, Economist, Apr. 30, 1994, at 76; Zhou Dadi, Environmental Considerations in the Economic Development of China, 9 Ariz. J. Int'l & Comp. L. 221, 223 (1992).
- 16. Environmental Protection Plan, supra note 9. China's national income, measured in constant 1985 prices, rose from 410 billion yuan in 1979 to about one trillion yuan in 1990. IFS 1993, supra note 14, at 281. This aggregate increase of about 144 percent in real terms over that

The Chinese government has responded to the environmental challenge with a variety of initiatives.¹⁷ As part of its participation in the 1992 United Nations Conference on Environment and Development ("UNCED"), the government issued a report outlining numerous steps it would take toward environmental protection and development.¹⁸ These steps included, inter alia, requiring environmental assessments of proposed development projects, applying the "polluter pays" principle, preventing smoke and dust pollution, controlling carbon dioxide discharge, quickening reforestation efforts and improving environmental awareness and education.¹⁹ More recently, the government finalized an environmental protection action plan designed to bring environmental pollution in China under control by the year 2000.²⁰

These statements of policy emphasize the need to improve the enforcement of environmental laws.²¹ Consistent with that approach, the government has recently imposed fines and other penalties on polluting

eleven-year period compares with real increases in the same period of about 28 percent for the United States (a rise in Gross Domestic Product from \$3.58 trillion to \$4.60 trillion) and about 56 percent for Japan (a rise in Gross National Product from 257.7 trillion yen to 401.8 trillion yen). Id. at 727, 441. In 1992 alone, China's Gross Domestic Product grew by 12.8 percent, its industrial output grew by 20.7 percent and foreign investment in China nearly tripled. Link, supra note 12, at 6. See also Capannelli & Shrestha, supra note 1, at 23 n.25 (citing nearly 9 per cent average annual growth in GNP from 1980 to 1989).

- 17. For a review of these initiatives taken through about mid-1991, see Wang & Blomquist, supra note 1, at 37-43 (surveying the development of modern Chinese environmental law in the PRC); China Conservation Strategy 155-69 (Xu Dixin et al. eds., 1990) (enumerating technical, economic, legal, educational and other measures). The China Conservation Strategy was written between 1983 and 1986 and approved for dissemination by the Environmental Protection Commission of the State Council. Id. at 174-75.
- 18. Xinhua News Agency, Report on Environmental Protection Measures, BBC Summary of World Broadcasts, Sept. 30, 1992, available in LEXIS, Asiape Library, Xinhua File [hereinafter Environmental Measures].
 - 19. Id.
 - 20. Environmental Protection Plan, supra note 9.
- 21. Id. (reporting that under the new action plan, the government would "enhance environmental legislation and law enforcement and improve existing environmental protection agencies"); Environmental Measures, supra note 18 (noting that "[p]arty and government authorities at all levels must support departments in charge of environmental protection... so that the law is strictly followed and enforced, and offenders punished"). Likewise, the government announced in July 1993 the commencement of a three-year program to "crack down on environmental law violators." Zhu Baoxia, Gov't to Crack Down on Enviro Law Violators, China Daily, July 19, 1993, available in LEXIS, World Library, Curnws File [hereinafter Gov't to Crack Down] (reported by American Political Network, Inc. Greenwire on July 23, 1993).

enterprises,²² and in April 1994, NEPA announced a \$1.6 million effort to improve its system of pollution charges.²³ That improvement effort was financed in part by the World Bank.²⁴ The Asian Development Bank has also supported efforts to improve environmental enforcement in China, most recently through the upgrading of environmental legislation.²⁵

One of the weapons available to any legal system in the battle against environmental degradation is the criminal law. Recent multilateral efforts to make that weapon more effective and to expand its use have employed the notion of "crimes against the environment" as encompassing a range of proscribed activities harmful to the environment, including the unauthorized release of pollutants, disposal of hazardous waste and creation of serious damage to the environment.²⁶

^{22.} China Fines Model Steelmaker for Pollution, Reuter Eur. Bus. Rep., Apr. 9, 1993, available in LEXIS, World Library, Lbyrpt File (reporting imposition of a \$35,000 fine on the Capital Iron and Steel Corporation in Beijing for ignoring environmental regulations); Polluting Firms Closed in Beijing, China Daily, Apr. 11, 1994, at 3 (reporting closure of a filling station and a chemical production workshop for unauthorized location of hazardous operations); Zhu Baoxia, Hebei Plant Fined for Dumping Toxic Waste, China Daily, May 27, 1994, at 3 (reporting a \$10,300 fine assessed on a chemical plant for dumping phosphorus sulfide into a river used for drinking water). In 1993, Chinese enterprises were charged a total of \$310 million in pollution charges. Pollution Fine Scheme, supra note 9. The figure for both 1992 and 1993 together has been reported as \$580 million. Xi Mi, NEPA Struggles to Find Funds for Environment, China Daily, Mar. 30, 1994, at 4 [hereinafter NEPA Struggles].

^{23.} Pollution Fine Scheme, supra note 9.

^{24.} Id.

^{25.} See Asian Development Bank, Annual Report 1993, at 196-97 (1994) (listing grant-financed technical assistance projects approved in 1993, including several for environmental protection); Asian Development Bank, 16 ADB Business Opportunities: Proposed Projects, Procurement Notices and Contract Awards 53 (May 1994) (referring to a technical assistance project financed by the Asian Development Bank for review and formulation of legislation for environmental protection). See also Capannelli & Shrestha, supra note 1, at 25 (noting the need for Asian Development Bank assistance in helping to "establish the legal environment to formulate and enforce environmental standards and regulations"); NEPA Struggles, supra note 22 (noting the government's plans to upgrade environmental laws and reporting remarks by the deputy director of NEPA's pollution treatment department that there are "no clarified legal articles stipulating the kind of punishment for the law violators").

^{26.} See, e.g., Report of the International Meeting of Experts on the Use of Criminal Sanctions in the Protection of the Environment; Internationally, Domestically and Regionally 18-19 [hereinafter International Experts Report] (joint publication of International Centre for Criminal Law Reform and Criminal Justice Policy, Vancouver, and the United Nations Interregional Crime and Justice Research Institute, Rome, 1994). That meeting, attended by 81 experts from 27 countries, id. at 1, adopted a model law of crimes against the environment, which defines such crimes as follows:

This Article examines how the concept of "crimes against the environment" appears now, and might be further developed, in Chinese law. Section II of the Article lays the groundwork for this inquiry by explaining the constitutional and statutory framework available in China for dealing with crimes against the environment. Section III then details the pertinent legal provisions defining the classes of perpetrators the law can reach, the elements of crimes against the environment, defenses that can be raised, and certain jurisdictional matters. Section IV briefly discusses questions of enforcement, suggesting that while formal legal enforcement of environmental laws in China (including those establishing crimes against the environment) might seem weak from a Western perspective, such laws are probably more effective than is generally supposed. Finally, Section V offers some observations about current law and suggestions for dealing more effectively with crimes against the

(a) Generic Crimes

- Every person commits a crime against the environment who:
 - (a) knowingly, recklessly [dolus eventualis], or through negligence, whether or not in violation of a statutory or regulatory duty, causes or contributes to serious injury or damage to the environment, whether local or regional.
 - (b) knowingly, recklessly [dolus eventualis], or through negligence, whether or not in violation of a statutory or regulatory duty, emits, discharges, disposes of, or otherwise releases a pollutant, and thereby causes or contributes to death, serious illness, or severe personal injury to a human being.
 - (c) knowingly, recklessly [dolus eventualis], or through negligence and in violation of a statutory or regulatory duty causes or contributes to a substantial risk of serious injury or damage to the environment, whether local or regional.
 - (d) knowingly, recklessly [dolus eventualis], or through negligence, and in violation of a statutory or regulatory duty emits, discharges, disposes of, or otherwice releases a pollutant, and thereby causes or contributes to a substantial risk of death, serious illness, or severe personal injury to a human being.
- (b) Specific Crimes
- Every person commits a crime against the environment who: (a) knowingly and in
 express disregard of a statutory or regulatory duty, or (b) through recklessness [dolus
 eventualis] or negligence, and in violation of a statutory or regulatory duty,
 - (i) releases or discharges a pollutant into the environment,
 - (ii) operates a hazardous installation,
 - (iii) imports, exports, handles, transports, stores, treats or disposes of a toxic, hazardous, or dangerous article, substance or waste, or in any manner facilitates the import, export, international circulation, handling, transport, storage, treatment, or disposal of such materials,
 - (iv) causes or contributes to serious injury or damage to the environment, whether local or regional, or
 - supplies false material information or omits or conceals material required information, or tampers with monitoring devices.

environment in China — the country that constitutes perhaps the biggest environmental question mark of our time.

II. CONSTITUTIONAL AND STATUTORY FRAMEWORK FOR DEALING WITH CRIMES AGAINST THE ENVIRONMENT

The legal rules bearing on crimes against the environment lie at the intersection of two areas of law: environmental law and criminal law.²⁷ The following discussion summarizes how relevant provisions from both areas overlap to provide rules governing crimes against the environment.

A. Constitutional Provisions

The Constitution of the PRC provides for the protection of the environment in two ways. First, it refers expressly to natural resources and the environment, prescribing the role of the state in preserving the environment and prohibiting environmental degradation by other actors.

Id. at 18-19. The model law defines the term "environment" broadly to mean "both the natural environment and the cultural environment associated with it." Id. at 19. For other references to, and efforts regarding, "crimes against the environment," see Mark W. Janis, An Introduction to International Law 225 (2d ed. 1993) (referring to an initiative to establish a fifth Geneva Convention to prohibit and punish environmental crimes committed during warfare). In addition to those multilateral efforts, the past few years have brought initiatives at the national level to define and prosecute crimes against the environment. See, e.g., Robert W. Adler and Charles Lord, Environmental Crimes: Raising the Stakes, 59 Geo. Wash. L. Rev. 781, 817-27 (1991) (discussing a 1989 proposal in the United States to enact an Environmental Crimes Act); C. Reasons, Crimes Against the Environment: Some Theoretical and Practical Concerns, 34 Crim. L.Q. 86, 89-100 (1991) (discussing a 1985 proposal by the Law Reform Commission of Canada to create provisions in Canada's Criminal Code on environmental crime). Those national-level initiatives, and the use of criminal sanctions generally in the environmental laws of countries other than China, are beyond the scope of this Article. However, for a survey of the use of criminal sanctions in U.S. environmental laws, see articles appearing in 59 Geo. Wash. L. Rev. 775 (1991) (symposium on environmental crime), in 16 Colum. J. Envtl. L. 201 (1991) (symposium on environmental crimes), in 22 Envtl. L. 1315 (1992) (collected articles on criminal enforcement of environmental laws) and in 34 Ariz. L. Rev. 509 (1992) (symposium on environmental criminal law). For a reference to difficulties in accommodating "crimes of damaging [the] environment" in Chinese law, see Jin Ruilin, Legal Liability, in A Course in China's Environmental Protection Law 347-56 (Zhang Kunmin & Jin Ruilin eds., 1992) [hereinafter Jin].

27. For surveys of environmental law in China, see generally Wang & Blomquist, supra note 1; Lester Ross & Mitchell A. Silk, Environmental Law and Policy in the People's Republic of China (1987); A Course in China's Environmental Protection Law (Zhang Kunmin & Jin Ruilin eds., 1992). For an overview of criminal law in China, see Du Xichuan & Zhang Lingyuan, China's Legal System: A General Survey 103-08, 218-20 (1990).

Such references appear in Article 9 and in Article 26, which read as follows:

Article 9. . . . The state ensures the rational use of natural resources and protects rare animals and plants. Appropriation or damaging of natural resources by any organization or individual by whatever means is prohibited.²⁸

Article 26. The state protects and improves the environment in which people live and the ecological environment. It prevents and controls pollution and other public hazards.

The state organizes and encourages afforestation and the protection of forests.²⁹

Second, the Constitution provides for environmental protection indirectly through other provisions. Article 12, for example, provides that "socialist public property is inviolable." Because most real property in China is "socialist public property," this provision supplies a broad constitutional base for the regulation of activities that could damage the

^{28.} Constitution of the People's Republic of China, art. 9, para. 2. (adopted Dec. 4, 1982), translated in Constitution of the People's Republic of China and Amendments to the Constitution of the People's Republic of China 1 (Foreign Languages Press, 2d ed. 1990) [hereinafter PRC Const.].

^{29.} Id. art. 26.

^{30.} Id. art. 12, para. 1.

^{31.} See id. arts. 6, 10. Article 6 reads in pertinent part as follows: "The basis of the socialist economic system of the People's Republic of China is socialist public ownership of the means of production, namely, ownership by the whole people and collective ownership by the working people." Id. art. 6, para. 1. Article 10, as amended in 1988, reads in pertinent part as follows: "Land in the cities is owned by the state. Land in the rural and suburban areas is owned by collectives except for those portions which belong to the state in accordance with the law; house sites and privately farmed plots of cropland and hilly land are also owned by collectives. . . . No organization or individual may appropriate, buy, sell or unlawfully transfer land in other ways. The right to the use of land may be transferred in accordance with the law." Id. art. 10. For the text of the 1988 amendment, which added the last sentence (regarding the right to the use of land) and deleted a reference in the preceding sentence prohibiting the leasing of land, see Amendments to the Constitution of the People's Republic of China (adopted by the Seventh National People's Congress, First Session, Apr. 12, 1988), translated in Constitution of the People's Republic of China and Amendments to the Constitution of the People's Republic of China 81 (Foreign Languages Press, 2d ed. 1990).

environment. Similarly, Article 21 establishes the state's responsibility for the health of citizens.³²

Complementing these constitutional provisions relating directly or indirectly to environmental matters are other constitutional provisions for the safeguarding of the public order and the punishing of criminal activities. According to Article 28, the state "penalizes criminal activities that endanger public security and disrupt the socialist economy as well as other criminal activities; and it punishes and reforms criminals."³³

These constitutional provisions, relating separately to environmental protection and to criminal sanctions, support a variety of statutory rules that provide for the imposition of criminal sanctions for activities harmful to the environment. Such statutory rules appear both in the criminal law and in the environmental laws of China.

B. The Criminal Law of 1979

The Criminal Law of 1979³⁴ (the "Criminal Code" or simply the "Code") has no special chapter or category of crimes entitled "Crimes Against the Environment,"³⁵ nor does it use that term at all. The Criminal Code does, however, contain several provisions prohibiting various types of environmental degradation. These fall into three categories.

First, Chapter II of Part II of the Code — the chapter entitled "Crimes of Endangering Public Security" — includes three pertinent provisions. They are Articles 105, 106 and 115, which read as follows:

Article 105. Whoever endangers public security by setting fires, breaching dikes, causing explosions or using other dangerous means to sabotage factories, mines, oilfields, harbours, rivers, water sources, warehouses, dwellings, forests, farms, threshing grounds, pastures, important pipelines, public

^{32.} PRC Const., supra note 28, art. 21. That article reads in pertinent part as follows: "The state... promotes health and sanitation activities of a mass character, all for the protection of the people's health." Id.

^{33.} PRC Const., supra note 28, art. 28.

^{34.} The Criminal Law of the People's Republic of China (adopted July 1, 1979, effective Jan. 1, 1980), translated in The Criminal Law and the Criminal Procedure Law of the People's Republic of China 5 (Foreign Languages Press, 2d ed. 1990) [hereinafter "Criminal Code"].

^{35.} For an explanation of how the term "crimes against the environment" is used in this Article and has been defined in a model law drafted by a recent meeting of international experts in criminal and environmental law, see supra note 26.

buildings or other public or private property, in cases where serious consequences have not been caused, is to be sentenced to not less than three years and not more than ten years of fixed-term imprisonment.³⁶

Article 106. Whoever sets fires, breaches dikes, causes explosions, spreads poisons, or uses other dangerous means that lead to people's serious injuries or death or cause public or private property to suffer major losses is to be sentenced to not less than ten years of fixed-term imprisonment, life imprisonment or death.

Whoever commits the crimes in the preceding paragraph negligently is to be sentenced to not more than seven years of fixed-term imprisonment or criminal detention.³⁷

Article 115. Whoever violates the regulations on the control of articles of an explosive, combustible, radioactive, poisonous or corrosive nature, giving rise to a major accident in the course of production, storage, transportation or use and causing serious consequences, is to be sentenced to not more than three years of fixed-term imprisonment or criminal detention; when the consequences are especially serious, the sentence is to be not less than three years and not more than seven years of fixed-term imprisonment.³⁸

The second category of crimes involving the environment appears in Chapter III of Part II, which is entitled "Crimes of Undermining the Socialist Economic Order." The three pertinent provisions are Articles 128, 129 and 130. They prescribe punishment for violating laws and

^{36.} Criminal Code, supra note 34, art. 105.

^{37.} Id. art. 106. The term "criminal detention," used in this and other penal provisions, is defined as follows in a translator's note to Article 28(2) in the English translation of the Criminal Code:

Criminal detention . . . is a criminal penalty imposed for relatively minor offences. The criminal on whom this penalty is imposed is deprived of his freedom and confined in a detention house by the local organ of public security rather than being put in prison or sent to a place of reform through labour as are those serving fixed terms or life sentences. He may go home for one or two days each month and be paid for work.

Id. art. 28(2), translator's note. The term of a criminal detention is to be no less than fifteen days nor more than six months. Id. art. 37.

^{38.} Id. art. 115.

regulations on forestry protection, protection of aquatic resources and hunting respectively.³⁹

Lastly, a third category of offense which could apply in a case of environmental damage appears in Chapter VIII of Part II of the Code — the chapter entitled "Crimes of Dereliction of Duty." Article 187 there provides as follows:

Article 187. State personnel who, because of neglect of duty, cause public property or the interests of the state and the people to suffer major losses are to be sentenced to not more than five years of fixed-term imprisonment or criminal detention.⁴⁰

Like some of the other criminal provisions cited above, Article 187 obviously could apply not only in the case of environmental damage but in other circumstances as well.

C. Penal Provisions in Environmental Laws

The attempts by the Chinese government to coordinate economic development with environmental protection date largely from 1979,⁴¹

39. The three provisions read as follows:

Article 128. Whoever violates the laws and regulations on forestry protection, illegally chopping down trees or denuding forests or other woods, when the circumstances are serious, is to be sentenced to not more than three years of fixed-term imprisonment or criminal detention, and may in addition or exclusively be sentenced to a fine.

Article 129. Whoever violates the laws and regulations on the protection of aquatic resources, catching aquatic products in an area where fishing is prohibited or during a period when fishing is prohibited, or using prohibited implements or methods to catch aquatic products, when the circumstances are serious, is to be sentenced to not more than two years of fixed-term imprisonment, criminal detention or a fine.

Article 130. Whoever violates the hunting laws and regulations, hunting in an area where hunting is prohibited or during a period when hunting is prohibited, or using prohibited implements or methods for hunting, damaging rare birds, beasts or other wild animal resources, when the circumstances are serious, is to be sentenced to not more than two years of fixed-term imprisonment, criminal detention or a fine.

Id. arts. 128, 129, 130.

40. Id. art. 187.

41. Wang & Blomquist, supra note 1, at 40. According to Wang and Blomquist, "there was no comprehensive environmental regulation in China until the twentieth century," id. at 37, and until 1979 the attempts at environmental protection were limited in scope and effectiveness. Id. at 37-40. For a reference to how experience under the 1979 version of the Environmental Protection Law influenced the preparation of the 1989 Environmental Protection Law, see infra note 45.

when the first Environmental Protection Law was promulgated for trial implementation.⁴² Shortly thereafter the Constitution was amended to declare, among other things, that the state protects people's living environment and natural resources.⁴³ Since that time there has been a proliferation of environmental legislation in China.⁴⁴

Several of these environmental laws include provisions for criminal sanctions. Typically, however, the provisions do not specify in detail either the elements of the crime or the punishment to be imposed. Instead, they usually provide for certain general types of actions to be punished "in accordance with the criminal law". Some examples follow:

Environmental Protection Law of 1989:45

Article 43. If a violation of this Law causes a serious environmental pollution accident, leading to the grave consequences of heavy losses of public or private property or human injuries or deaths of persons, the persons directly responsible for such an accident shall be investigated for criminal responsibility according to law.⁴⁶

^{42.} Id. at 40.

^{43.} PRC Const., supra note 28, art. 26, quoted supra in text accompanying note 29.

^{44.} Wang & Blomquist, supra note 1, at 41, 42 n.87. For the Chinese text of major environmental laws, see Huanjing Baohu Fagui Huibian (Compilation of Laws and Regulations on Environmental Protection) (Law & Regulations Dep't of the Nat'l Envil. Protection Agency ed., 2d ed. 1993).

^{45.} Environmental Protection Law of the People's Republic of China (adopted at the 11th Meeting of the Standing Committee of the Seventh National People's Congress, Dec. 26, 1989), translated in Environmental Protection Law of the People's Republic of China 1 (Nat'l Envtl. Protection Agency ed. 1992) [hereinafter Environmental Protection Law]. The 1989 Environmental Protection Law replaced the version adopted for trial implementation in 1979. In doing so, it clarified the functions of various government organizations, incorporated some regulatory systems that had developed during the 1980s and tightened enforcement mechanisms. Wang & Blomquist, supra note 1, at 41-42.

^{46.} Environmental Protection Law, supra note 45, art. 43. In addition to this general provision for criminal liability, the Environmental Protection Law also includes several provisions imposing administrative and civil liability. See also id. art. 35 (authorizing fines for failure to cooperate with government environment agencies, including failure to pay pollution fees); id. art. 38 (authorizing fines for causing an environmental pollution accident); id. art. 39 (authorizing fees and fines for failure to control pollution by prescribed deadline); id. art. 41 (imposing civil liability to compensate the unit or individual suffering direct losses from an environmental pollution hazard). Moreover, another provision of the Environmental Protection Law imposes "legal liability" on whomever, "in violation of this Law, causes damage to natural resources like land, forests, grasslands, water, minerals, fish, wild animals and wild plants." Id. art. 44. This "legal liability"

Article 45. Any person conducting supervision and management of environmental protection who abuses his power, neglects his duty or engages in malpractices for personal gains shall be given administrative sanction by the unit to which he belongs or the competent higher authorities; if his act constitutes a crime, he shall be investigated for criminal responsibility according to law.⁴⁷

Water Pollution Protection and Control Law of 1984:48

Article 43. Should any violation of this Law give rise to a serious water pollution accident leading to any grave consequence of heavy public or private property losses or serious personal injury or death, the person responsible for such violation may be investigated for criminal liability by application of Article 115 or 187 of the Criminal Law.⁴⁹

is considered to be administrative responsibility, not criminal or civil liability. See Jin, supra note 26, at 310 (referring to Article 44 as imposing administrative responsibility). For an explanation of the distinction between administrative, civil and criminal responsibility, especially in the context of the Environmental Protection Law, see id. at 305-56. Administrative responsibility applies to a person whose act "violates the environmental law or other administrative regulations and causes . . . harmful consequence[s], but may not constitute a crime." Id. at 305. "[C]ivil liability refers to the civil responsibility that should be borne by a citizen or a legal person who infringes the State's or the collective's property rights or other person's property or personal rights due to pollution and destruction of environment." Id. at 321.

^{47.} Environmental Protection Law, supra note 45, art. 45.

^{48.} Law of the People's Republic of China on the Prevention and Control of Water Pollution (adopted at the Fifth Meeting of the Standing Committee of the Sixth National People's Congress, May 11, 1984, effective Nov. 11, 1984), translated in Law of the People's Republic of China on the Prevention and Control of Water Pollution 1 (Gov't Policy Law & Regulations Dep't of the Nat'l Envtl. Protection Agency ed. 1989) [hereinafter Water Pollution Law]. As with the Environmental Protection Law, the Water Pollution Law imposes administrative responsibility and civil liability as well as the criminal liability referred to in Article 43. See also id. art. 38 (referring to fines and fees); id. art. 41 (referring to civil liability to compensate for damage to others).

^{49.} Id. art. 43. For the texts of Articles 115 and 187 of the Criminal Code, see supra text accompanying notes 38 and 40 respectively.

Marine Environment Protection Law of 1982:50

Article 44. In cases where violations of this Law result in pollution damage to the marine environment and cause heavy losses to public or private property or deaths or injuries to persons, those who are directly responsible may be prosecuted for criminal responsibility by judicial organs in accordance with the law.⁵¹

Atmospheric Pollution Prevention and Control Law of 1987:52

Article 38. Should a serious atmospheric pollution accident occur that leads to any grave consequences of heavy public or private property losses or serious personal injuries or deaths, the criminal liability of the persons responsible for such an accident may be investigated by applying mutatis mutandis the provisions of Article 115 or Article 187 of the Criminal Law.⁵³

^{50.} Marine Environment Protection Law of the People's Republic of China (adopted at the 24th Meeting of the Standing Committee of the Fifth National People's Congress, Aug. 23, 1982, effective Mar. 1, 1983), translated in Marine Environment Protection Law of the People's Republic of China 1 (Gov't Policy Law and Regulations Dep't of the Nat'l Envil. Protection Agency ed. 1989) [hereinafter Marine Environment Protection Law].

^{51.} Id. art. 44.

^{52.} Law of the People's Republic of China on the Prevention and Control Law of Atmospheric Pollution (adopted at the 22nd Meeting of the Standing Committee of the Sixth National People's Congress, Sept. 5, 1987, effective June 1, 1988), translated in The Laws of the People's Republic of China 1987-1989 at 41 (Legislative Affairs Comm'n of the Standing Comm. of the Nat'l People's Congress of the People's Republic of China, ed. 1990) [hereinafter Atmospheric Pollution Law].

^{53.} Id. art. 38. For the texts of Articles 115 and 187 of the Criminal Code, see supra text accompanying notes 38 and 40 respectively.

Forestry Law of 1984:54

Article 34. . . . Whoever illegally cuts down or denudes forest and other woodlands, if the circumstances are serious, shall be investigated for criminal responsibility in accordance with Article 128 of the Criminal Law.

Whoever illegally cuts down and appropriates a huge number of forest trees shall be investigated for criminal responsibility in accordance with Article 152 of the Criminal Law.⁵⁵

Article 35. In cases where forest tree cutting licenses are issued in excess of the approved annual cutting quotas or by overstepping authority in violation of this Law, the personnel directly responsible shall be given administrative sanctions; in cases where serious damage is caused to the forest, the personnel directly responsible shall be

^{54.} Forestry Law of the People's Republic of China, translated in The Laws of the People's Republic of China 1983-1986 at 115-25 (Legislative Affairs Comm'n of the Standing Comm. of the Nat'l People's Congress of the People's Republic of China et al., eds. 1987) [hereinafter Forestry Law] (adopted at the Seventh Meeting of the Standing Committee of the Sixth National People's Congress, Sept. 20, 1984, effective Jan. 1, 1985).

^{55.} Id. art. 34, para. 2-3. The first paragraph of this article authorizes the imposition of administrative sanctions, including the assessment of fines. Id. art. 34, para. 1. Article 152 of the Criminal Code, referred to in the paragraphs quoted above, reads in pertinent part as follows:

Article 152. Whoever habitually steals . . . articles of public or private property of a huge amount is to be sentenced to not less than five years and not more than ten years of fixed-term imprisonment; when the circumstances are especially serious, the sentence is to be not less than ten years of fixed-term imprisonment or life imprisonment, and the offender may in addition be sentenced to confiscation of property.

Criminal Code, supra note 34, art. 152. This provision was amended in 1982 to add the death penalty for individuals and to provide for heavier punishments to be applied to state personnel who take advantage of their office to commit the crimes listed in Article 152. See Decision of the Standing Committee of the National People's Congress Regarding the Severe Punishment of Criminals Who Seriously Undermine the Economy (adopted by the 22nd Session of the Standing Committee of the Fifth National People's Congress, March 8, 1982), translated in The Criminal Law and the Criminal Procedure Law of the People's Republic of China 229 (Foreign Languages Press, 2d ed. 1990). For the text of Article 128 of the Criminal Code, also referred to in the provision of the Forestry Law quoted above, see supra note 39.

investigated for criminal responsibility in accordance with Article 187 of the Criminal Law. 56

Article 36. Whoever counterfeits or resells forest tree cutting licenses shall have his unlawful income confiscated and be fined by the competent forestry department; if the circumstances are serious, criminal responsibility shall be investigated by analogy to Article 120 of the Criminal Law.⁵⁷

Fisheries Law of 1986:58

Article 28. Anyone who uses explosives or poisons in fishing, fishes in violation of the regulations on prohibited fishing areas and closed seasons, uses prohibited fishing gear and methods or catches rare aquatic animals under state protection without permission shall have his catch and unlawful income confiscated and be fined; in addition, his fishing gear may be confiscated and his fishing license revoked. In serious cases, criminal responsibility of the individual or the persons of a unit who are directly responsible shall be investigated in accordance with Article 129 of the Criminal Law.⁵⁹

^{56.} Forestry Law, supra note 54, art. 35. For the text of Article 187 of the Criminal Code, referred to in this provision, see supra text accompanying note 40.

^{57.} Forestry Laws, supra note 54, art. 36. Article 120 of the Criminal Code reads in pertinent part as follows: "Whoever, for the purpose of reaping profits, counterfeits or resells planned supply coupons is, if the circumstances are serious, to be sentenced to not more than three years of fixed-term imprisonment or criminal detention, and may in addition or exclusively be sentenced to a fine or confiscation of property." Criminal Code, supra note 34, art. 120, para. 1. Stiffer penalties are provided in the case of a "ringleader" committing such a crime. Id. para. 2.

^{58.} Fisheries Law of the People's Republic of China (adopted at the 14th Meeting of the Standing Committee of the National People's Congress, Jan. 20, 1986, effective July 1, 1986), translated in The Laws of the People's Republic of China 1983-1986, at 207 (Legislative Affairs Comm'n of the Standing Comm. of the Nat'l People's Congress of the People's Republic of China et al., eds. 1987) [hereinafter Fisheries Law].

^{59.} Id. art. 28. For the text of Article 129 of the Criminal Code, see supra note 39.

Article 29. Anyone who poaches on or seizes others' aquatic products, or damages others' aquaculture water bodies and facilities shall be ordered by the department of fishery administration or its subordinate fishery superintendency agencies to compensate for the damages and shall concurrently be fined. In serious cases or if the damage is great, criminal responsibility of the individual or the persons of a unit who are directly responsible shall be investigated in accordance with Articles 151 and 156 of the Criminal Law.⁶⁰

In addition to these statutory provisions, several ordinances of national application also include references to criminal sanctions for environmental damage. For example, provisions for both administrative sanctions and, in serious cases, criminal liability appear in the Dangerous Chemical Objects Control Ordinance⁶¹ and in ordinances on noise pollution and radioisotope safety. Likewise, numerous environmental protection ordinances issued by legislative and administrative bodies of the various provinces, cities and autonomous regions in China also provide for penal sanctions to be applied to acts that seriously harm the environment. ⁶³

^{60.} Fisheries Law, supra note 58, art. 29. Under Article 151 of the Criminal Code, referred to in this provision, "[w]hoever steals, swindles or forcibly seizes articles of public or private property of a relatively large amount is to be sentenced to not more than five years of fixed-term imprisonment, criminal detention or control." Criminal Code, supra note 34, art. 151. Under Article 156, also referred to in this provision of the Fisheries Law, "[w]hoever intentionally destroys articles of public or private property, when the circumstances are serious, is to be sentenced to not more than three years of fixed-term imprisonment, criminal detention or a fine." Id. art. 156.

^{61.} See Zhonghua Renmin Gongheguo Weixian De Huaxuepin Guanli Tiaoli (Dangerous Chemical Objects Control Ordinance of the People's Republic of China) art. 39 (promulgated by the State Council of the People's Republic of China, Feb. 27, 1987, effective Feb. 27, 1987).

^{62.} See Zhonghua Renmin Gongheguo Huanjing Zaosheng Wuran Baohu He Zhili Tiaoli (Environmental Noise Pollution Protection and Treatment Ordinance of the People's Republic of China) arts. 41, 44 (promulgated by Order No. 40 of the State Council of the People's Republic of China, Sept. 26, 1989, effective Dec. 1, 1989); Zhonghua Renmin Gongheguo Fangshexing Tongweishu He Shexian Zhangzhi Baohu Tiaoli (Radioisotope and Radiant Equipment Radiation Protection Ordinance of the People's Republic of China) art. 33 (promulgated by Order No. 44 of the State Council of the People's Republic of China, Oct. 24, 1989).

^{63.} See, e.g., Chengdushi Chaobiao Paifang Wuranwu Shixing Shoufei Yu Fakuan De Zhanxing Guiding (Chengdu Municipality Provisional Regulation of the Imposition of Fees and Fines on the Emission of Pollutants Beyond Maximum Standards) art. 16 (adopted Sept. 2, 1980, by the municipal government of Chengdu to impose administrative, civil and criminal liability for

III. CRIMINAL RESPONSIBILITY FOR CRIMES AGAINST THE ENVIRONMENT

An understanding of how crimes against the environment are treated in Chinese law requires not only an examination of the types of environmental damage that are made subject to sanctions, as discussed in the preceding section of this Article, but also an examination of other aspects of criminal responsibility: the classes of perpetrators to whom the sanctions can be applied, the elements to be proven before the sanctions can be applied, defenses that can be raised and certain jurisdictional matters. These are addressed below.

A. Classes of Perpetrators

In specifying crimes and punishments, the Criminal Code refers almost exclusively to natural persons.⁶⁴ The Code does, however, recognize some possibility of corporate criminal behavior — that is, acts taken by juridical persons. A step in this direction is taken by including punishments for "state personnel," defined as "all personnel of state organs, enterprises and institutions and other personnel engaged in public service according to law." The penal provisions of some environmental protection laws use a somewhat broader term in defining the scope of criminal liability, to include corporate officers. Beyond that, some amendments and supplementary criminal laws do include corporate entities per se as possible perpetrators.

An examination of the classes of perpetrators of crimes against the environment in China, thus, raises three questions: what rules govern criminal responsibility for natural persons; what rules govern criminal

dealing with hazardous articles without government approval). For the Chinese text of other local environmental protection rules and regulations in Chengdu (capital of Sichuan Province), see 1 Huanjing Baohu Fagui Biaozhun Huipian (Compilation of Environmental Protection Laws and Standards) (Law and Science & Technology Dep'ts of the Chengdu Municipal Environmental Protection Bureau eds. 1990).

^{64.} Most of the provisions on the application of the Code, for example, use the word "citizens," use the pronouns "he" and "him," or refer to punishments that can only be imposed on natural persons (e.g., imprisonment). See, e.g., Criminal Code, supra note 34, arts. 4-7.

^{65.} See, e.g., id. art. 187, quoted supra at text accompanying note 40.

^{66.} Criminal Code, supra note 34, art. 83.

^{67.} See infra notes 81, 82 and accompanying text (referring to provisions imposing criminal liability on "persons directly responsible for the offending unit").

^{68.} See infra note 74.

responsibility for corporate entities per se; and what rules govern criminal responsibility for natural persons in their capacity as "state personnel" or as leaders of work units or other corporate entities?

1. Natural persons in their personal capacity

The Criminal Code establishes different degrees of criminal responsibility and punishment depending on the age of the person committing the crime. A person who has reached the age of 16 years bears full criminal responsibility for all crimes he or she commits.⁶⁹ From the age of 14 to 16 years, a person bears criminal responsibility for crimes of killing or seriously injuring another person, robbery, arson, habitual theft, or other crimes "seriously undermining social order." By implication, the Criminal Code exempts from criminal responsibility any person under the age of 14 years.

Even if a person bears full criminal responsibility (having reached the age of 16 years or having committed one of the more serious crimes referred to above), the Criminal Code provides that he or she shall be given a lesser punishment or a mitigated punishment if the person is between the ages of 14 and 18 years.⁷¹

Similar rules for reducing or exempting criminal responsibility or for reducing or mitigating punishment apply in certain cases of mental illness, deafness, or blindness, although not for intoxication.⁷²

2. Corporate entities (juridical persons)

Consistent with the approach taken in many other legal systems that draw from the civil law tradition, China's Criminal Code does not expressly provide for criminal responsibility of corporations and is generally viewed as not permitting the imposition of such liability.⁷³ A

^{69.} Criminal Code, supra note 34, art. 14, cl. 1.

^{70.} Id. art. 14, para. 2.

^{71.} Id. art. 14, para. 3.

^{72.} Id. arts. 15-16.

^{73.} See Tingmei Fu, Legal Person in China: Essence and Limits, 41 Am. J. Comp. L. 261, 277-281 (1993). Fu describes the debate that has taken place among Chinese lawyers and scholars for the last ten years on the subject of criminal liability for legal entities, id. at 277-79, and explains that because the Criminal Code "has not been amended to acknowledge the notion of legal person crimes," the orthodox view, "which only assumes the criminal accountability of natural persons, still occupies a leading position." Id. at 281. See also supra note 64. The different approaches usually taken by common law and civil law countries toward criminal responsibility

few more recent criminal laws, however, do provide for corporate criminal responsibility.⁷⁴

of corporations was summarized in this way by the meeting of experts referred to above:

The corporate criminal responsibility recommendations [in the model law on crimes against the environment] recognize the basic differences in legal systems on this question. Common law jurisdictions, which recognize the concept of criminal responsibility of corporations, are at one end of the spectrum and civil law countries at the other.

International Experts Report, supra note 26, at 23. See also id. at 13 (noting that "in most civil law countries the absence of corporate liability impedes the use of criminal law against large scale enterprises which are often major polluters"). In explaining the model law on crimes against the environment adopted at that meeting, the experts report went on to point out that "[a] few civil law jurisdictions, including France and Japan, have moved away from the principle that corporations cannot commit offenses. The model law provisions reflect the consensus of the meeting." Id. at 23. The model law defines "person" to mean "individuals and organizations, whether incorporated or not, . . . includ[ing] governments." Id. at 19. The model law contains these provisions on "legal entity liability":

- (a) The crimes set forth above [the generic and specific crimes quoted supra note 26] may lead to criminal liability for either or both individual persons and legal entities, where it is established that the crimes were committed in the exercise of organizational activities.
- (b) This liability of legal entities comes into being if: (i) there has been faulty risk management of the legal entity over time and a generic crime... has been committed; or (ii) there has been a breach of a statutory or regulatory provision by the legal entity.
- (c) The criminal liability of the legal entity applies in addition to the personal liability of managers, officers, agents, employees or servants of that legal entity.
- (d) The criminal liability of the legal entity applies regardless of whether or not the individual through whom the entity acted, or omitted to act, is identified, prosecuted, or convicted.
- (e) All sanctions . . . , with the exception of the prison sanction, may be imposed upon the legal entity that is found criminally liable.
 Id. at 19.

74. See, e.g., Quanguo Renmin Daibiao Dahui Changwu Weiyuanhui Guanyu Chengzhi Zousizui De Buchong Guiding (Supplementary Rules of the Standing Committee of the National People's Congress Regarding the Punishment of Crimes of Smuggling) art. 5 (adopted at the 24th Meeting of the Standing Committee of the Sixth National People's Congress, Jan. 21, 1988) (imposing criminal liability on corporations and their leaders for smuggling); id. art. 9 (imposing criminal liability on corporations for foreign currency violations); Quanguo Renmin Daibiao Dahui Changwu Weiyuanhui Guanyu Chengzhi Tanwuzui Huiluzui De Buchong Guiding (Supplementary Rules of the Standing Committee of the National People's Congress Regarding the Punishment of Crimes of Corruption and Bribery) art. 6, in 1992 Nian Quanguo Lueshi Zige Kaoshi Fuxi Falue Fagui Huipian (1992 Compilation of Laws and Regulations for Use in Preparing for the National Lawyer Certification Examination) 125-26 (1992) (adopted at the 24th Meeting of the Standing Committee of the Sixth National People's Congress, Jan. 21, 1988) (imposing criminal liability on corporate entities for seeking bribes); id. art. 9 (imposing criminal liability on corporate entities for providing kickbacks to state personnel). For a discussion of how these laws establish "that in Chinese law a legal person per se may be made a defendant in criminal prosecutions," see Fu, supra note 73, at 279. Fu suggests, however, that the promulgation of these and other laws "does not automatically resolve the controversy concerning the nature of legal personality." Id.

Could the inclusion of corporate responsibility in those more recent laws provide an argument for applying the Criminal Code provisions to corporations, even though those provisions were not designed to be so applied? It is conceivable but highly unlikely. Such an argument might point out that the main article of the Criminal Code setting forth the Code's applicability merely says that it "is applicable to all who commit crimes within the territory of the People's Republic of China"; it does not say "applicable to all natural persons" who commit crimes there. Moreover, the specific criminal provisions — such as those quoted above relating to environmental damage — usually use the word "whoever," which could conceivably be interpreted broadly to include juridical persons as well as natural persons.

It is highly unlikely that the Criminal Code could be given such a strained interpretation. The Code is generally viewed as applying only to natural persons. This view finds support in the fact that none of the types of "principal punishment" prescribed in the Code can apply to juridical persons. As suggested below, however, there are strong arguments favoring an amendment of the Code, or the enactment of a separate law, that would expressly impose criminal responsibility on corporate entities in cases of environmental degradation. 78

3. Corporate officers

The chapter of the Criminal Code entitled "Crimes of Dereliction of Duty" imposes criminal responsibility on "state personnel." As noted above, Article 187 in that chapter refers to major loss of "public property or the interests of the state and the people" — a reference that could support a charge of crimes against the environment. Beyond that, two of the provisions in the environmental statutes cited above impose criminal liability not only on the natural persons who actually

^{75.} Criminal Code, supra note 34, art. 3, para. 1 (emphasis added).

^{76.} See, e.g., id. arts. 105, 106 and 115, quoted supra in text accompanying notes 36-38.

^{77.} See id. art. 28 (listing as the types of principal punishment "control," criminal detention, fixed-term imprisonment, life imprisonment and death). Explanations of the Criminal Code also imply that the Code applies only to natural persons. See, e.g., Du & Zhang, supra note 27, at 104-07, 219-20 (discussing punishments under the Criminal Code). See also supra note 73 and accompanying text.

^{78.} See infra notes 109-11, 176.

^{79.} Criminal Code, supra note 34, art. 187, quoted supra in text accompanying note 40.

^{80.} Id.

committed the act of environmental damage but also on the persons directly responsible for the offending unit.⁸¹ This would place criminal liability on corporate officers or managers, in their official capacity, for crimes against the environment by the corporation.⁸²

B. Objective Elements

The provisions in the Criminal Code and environmental laws of China imposing criminal sanctions for crimes against the environment typically follow this pattern: if a person engages in conduct of type "X" that causes the consequences "Y," then the person is subject to specified criminal sanctions. Battern reveals three types of elements: those relating to the conduct itself, those relating to the consequences and those relating to the causal link between the conduct and the consequences.

1. Conduct

The provisions quoted above from the Criminal Code and from various environmental protection statutes can be divided into two categories: "tied" or "free-standing." Into the first category ("tied") fall those provisions of the Criminal Code that define the proscribed conduct indirectly, by reference to the substantive duties laid out in the environmental protection statutes. Typical of this category is Article 128 of the Criminal Code, which establishes criminal sanctions for any

^{81.} See Fisheries Law, supra note 58, arts. 28, 29, quoted supra in text accompanying notes 59 and 60 respectively.

^{82.} Such criminal liability for corporate officers and managers would also be imposed under the model law on crimes against the environment referred to above. See International Experts Report, supra note 26, at 20. The relevant provision in the model law reads as follows:

Every director, officer, manager, or other official who was responsible to the corporation, organization or other entity, and who authorized, permitted, directed, consented to, participated in, connived at, acquiesced in or condoned the commission of the crime [against the environment], or through negligence failed to prevent its commission by a person under his supervision, may also be held liable.

Id.

^{83.} See, e.g., Criminal Code, supra note 34, art. 106, para. 1, quoted supra in text accompanying note 37. Under that provision, the person engages in the specified conduct ("X") if he or she "sets fires, breaches dikes, . . . or uses other dangerous means"; the specified consequences ("Y") are those that "lead to people's serious injuries or death or cause public or private property to suffer major losses." Id.

conduct that "violates the laws and regulations on forestry protection" if the consequences of that conduct are "serious." Hence the definition of the criminal conduct is "tied" to other statutory or regulatory provisions, which might change over time. 86

In contrast to these "tied" penal provisions are those that are "free-standing," such as Article 106 of the Criminal Code.⁸⁷ That provision makes no reference to other legislation; instead, it lists several specific types of conduct, including the spreading of "poisons," that will subject the perpetrator to criminal sanctions if the consequences are serious.⁸⁸

The combination of "tied" and "free-standing" provisions creates a comprehensive regime of criminal liability for environmental degradation. ⁸⁹ Read together, the provisions quoted above in Section II of this Article could be used to impose criminal sanctions on any person (at least any natural person on engaging in the following environmentally harmful conduct, if serious consequences result: spreading "poison"; using "other dangerous means" that cause personal injury or property damage; stealing "articles of public or private property"; intentionally destroying such property; or acting

^{84.} Criminal Code, supra note 34, art. 128.

^{85.} Id. For a discussion of how the seriousness of consequences bears on criminal liability, see infra notes 103-07 and accompanying text. The word "serious" is not defined for these purposes either in the Criminal Code or in any of the environmental statutes that include "tied" provisions on criminal liability. The absence of standards for determining what is "serious," and hence what can give rise to criminal liability, has been criticized by Western commentators. See Ross & Silk, supra note 27, at 232. For the Criminal Code's definition of "serious injury," see infra note 104.

^{86.} For other examples of "tied" criminal sanctions, see Criminal Code, supra note 34, arts. 129 and 130, quoted supra note 39 (referring to the violation of laws and regulations on aquatic resources and hunting respectively), and several of the provisions of environmental protection statutes quoted supra at notes 46, 49, 51 and 55 and accompanying text.

^{87.} For the text of Article 106 of the Criminal Code, see supra note 37 and accompanying text.

^{88.} Criminal Code, supra note 34, art. 106.

^{89.} A distinction similar to the one drawn here between "tied" and "free-standing" penal provisions appears in the model law on crimes against the environment referred to above, which distinguishes between "specific crimes" and "generic crimes." See International Experts Report, supra note 26, at 18-19. The relevant text from the model law is quoted supra at note 26.

For a discussion of corporate criminal liability for environmental degradation, see supra notes 73-78 and accompanying text.

^{91.} See Criminal Code, supra note 34, art. 106, quoted supra at text accompanying note 37.

^{92.} Id.

^{93.} Criminal Code, supra note 34, arts. 152, 151, quoted supra at notes 55 and 60 respectively.

^{94.} Criminal Code, supra note 34, art. 156, quoted supra at note 60.

in violation of laws and regulations on hazardous materials,⁹⁵ forestry protection,⁹⁶ protection of aquatic resources,⁹⁷ hunting,⁹⁸ water pollution⁹⁹ or air pollution.¹⁰⁰ In short, nearly any type of environmentally harmful conduct can lead to criminal liability under Chinese law.

Such conduct can take the form of either acts of commission or acts of omission. Acts of omission, for example, can lead to criminal liability where there was a duty to act, as in a case where the perpetrator was required by law to relocate sewage outfalls that endanger drinking water¹⁰¹ or to make toxic waste sites leakproof.¹⁰²

2. Consequences

In most cases, proving the conduct is not enough. For criminal liability to arise, the consequences of the proscribed conduct must reach some minimum level of severity. The penal provisions referred to in Section II of this Article typically use such terms as "serious consequences," "serious injuries," "major losses," or "heavy losses." By implication, conduct having consequences falling below these thresholds of severity will not result in criminal liability. This

^{95.} See Criminal Code, supra note 34, art. 115, quoted supra at note 38 and accompanying text.

^{96.} See Criminal Code, supra note 34, art. 128. See also Forestry Law, supra note 54, art. 34, quoted supra in text accompanying note 55.

^{97.} See Criminal Code, supra note 34, art. 129. See also Fisheries Law, supra note 58, arts. 28, 29, quoted supra in text accompanying notes 59 and 60 respectively.

^{98.} See Criminal Code, supra note 34, art. 130, quoted supra at note 39.

^{99.} See Water Pollution Law, supra note 48, art. 43, quoted supra in text accompanying note 49.

^{100.} See Atmospheric Pollution Law, supra note 52, art. 38, quoted supra in text accompanying note 53.

^{101.} See Water Pollution Law, supra note 48, art. 19 (second paragraph).

^{102.} See id. art. 23 (second paragraph).

^{103.} See, e.g., Criminal Code, supra note 34, arts. 105 and 115, quoted supra in text accompanying notes 36 and 38 respectively.

^{104.} See, e.g., Criminal Code, supra note 34, art. 105, quoted supra in text accompanying note 37. Article 85 of the Criminal Code defines "serious injury" as injury resulting in loss of limbs, disfigurement, loss of "hearing, sight or function of any other organ," or other injuries that "cause grave harm to a person's physical health." Criminal Code, supra note 34, art. 85.

^{105.} Id. See also Criminal Code, supra note 34, art. 187, quoted supra in text accompanying note 40

^{106.} See, e.g., Environmental Protection Law, supra note 45, art. 43, quoted supra in text accompanying note 46. See also Water Pollution Law, supra note 48, art. 43, quoted supra in text accompanying note 49.

approach accords with the general principle of the Criminal Code that "if the circumstances [of acts that infringe upon rights of citizens or the state] are clearly minor and the harm is not great, they are not to be deemed crimes."¹⁰⁷

3. Causality

The Criminal Code includes no express requirements of proving the causal connection between conduct and consequences. Perhaps the notion of causality is implicit in the words "consequences" or "lead to" or "giving rise to" — words that appear in many of the penal provisions quoted in Section II of this Article. 108

In the case of crimes against the environment, however, the element of causality assumes special importance because of the number of people and other species that can be adversely affected by pollution or other forms of environmental degradation. Assume, for example, that a smelting factory discharges wastes, including arsenic and other poisons, into a lake. The arsenic might poison people who draw water directly from the lake for drinking, perhaps killing some of them, and would likely kill fish in the lake and maybe cattle who are watered there. In addition to those direct consequences, the poisonous waste might also enter the food chain through rice and vegetables irrigated with water from the lake, thus injuring the health of people who eat the rice and vegetables. These would be indirect consequences caused by the smelting factory's conduct in discharging the waste. Indirect consequences could be very extensive, especially in the case of some types of environmental crimes such as air pollution.

How far does Chinese law extend criminal liability in the case of crimes against the environment, considering the range of the indirect consequences such crimes are likely to have? Although that question has yet to be squarely addressed, one thing seems clear: most of the penal provisions quoted in Section II of this Article do not permit indirect consequences of the most serious crimes against the environment to be taken fully into account for purposes of setting punishments. Most of

^{107.} Criminal Code, supra note 34, art. 10. Another way in which the severity of the consequences is sometimes relevant to criminal liability is discussed below in connection with the distinction between intention and negligence. See infra notes 115-20 and accompanying text.

^{108.} See, e.g., Criminal Code, supra note 34, art. 105 ("consequences"); id. art. 106 ("lead to"); id. art. 115 ("giving rise to"). These provisions are quoted supra in text accompanying notes 36, 37 and 38 respectively.

those provisions prescribe imprisonment or criminal detention as the form of punishment.¹⁰⁹ Yet the likely perpetrators of the most serious cases of pollution or environmental degradation are large factories or enterprises. Even in the unlikely event that the current penal provisions were interpreted to apply to corporate entities, a point discussed above, ¹¹⁰ imprisonment and criminal detention would obviously be unworkable forms of punishment to apply to such entities. A system of monetary and other sanctions, with a means of matching the punishment to the consequences, might need to be introduced as a feature of criminal liability in order to deal effectively with the indirect consequences of crimes against the environment.¹¹¹

^{109.} See, e.g., Criminal Code, supra note 34, art. 115, quoted supra in text accompanying note 38. For the definition of "criminal detention," see supra note 37.

^{110.} See supra notes 73-78 and accompanying text.

^{111.} The model law on crimes against the environment referred to above has several features that would make it applicable to indirect consequences of such crimes, especially those caused by corporate entities. First, it provides for monetary sanctions as follows:

⁽a) At a minimum, the court shall impose a monetary sanction that (1) fully recoups any economic benefit realized by the convicted person as a result of its crime and (2) fully or in part recovers any costs of investigation and reparation of any harm caused by the convicted person.

⁽b) The court may also impose a fine or other penalty commensurate with the gravity of the crime and the culpability of the convicted person, up to ___ per day for each day the crime continued.

International Experts Report, supra note 26, at 21. Second, it provides for an extensive set of "additional powers" of the court to impose other types of sanctions, such as ordering the closure of a plant or business, the forfeiture of property, the removal of certain business privileges (for example, contracting with the government) and the requirement that the person "take such action as the court considers appropriate to remedy or avoid any harm to the environment that results from or may result from the act or omission that constitutes the crime." Id. Third, the model law uses the phrase "causes or contributes to [specified consequences]," thus widening the scope of liability for environmental effects whose causes are difficult to trace quantitatively to particular sources. Id. at 18-19. As noted above, administrative sanctions established under several Chinese environmental protection statutes include the imposition of fines. See supra notes 46, 48, 55, 57, 59, 60 and accompanying text. The criminal sanctions available under such statutes, however, do not include the imposition of fines, since the provisions of the Criminal Code referred to in those environmental protection statutes do not list fines among the prescribed sanctions. See, e.g., Criminal Code, supra note 34, arts. 105, 106, 115, quoted supra in text accompanying notes 36, 37 and 38 respectively. An exception is Article 120 of the Criminal Code, which authorizes the imposition of a fine as a criminal sentence for counterfeiting or reselling planned supply coupons. See Criminal Code, supra note 34, art. 120, quoted supra at note 57.

C. Culpability

In addition to establishing the objective elements of a crime against the environment — conduct, consequences and causality — the Criminal Code also requires a showing of intention or, in some cases, of negligence. So far, strict liability for crimes against the environment (that is, criminal liability in the absence of either intent or negligence) has not appeared in Chinese law.

1. Intention and negligence

The Criminal Code distinguishes between intentional and negligent acts. Whereas "criminal responsibility shall be borne for intentional crimes," criminal responsibility "is to be borne for negligent crimes only when the law so stipulates." This distinction is illustrated by comparing Articles 105 and 106 of the Criminal Code, quoted above. The second paragraph of Article 106 provides that if any of the acts described in the first paragraph — such as setting fires, spreading poisons, or using "other dangerous means" that cause serious personal injury or death or major property damage — are committed negligently, instead of intentionally, less severe punishment will be imposed. Article 105 includes no such provision on negligence. Hence the negligent commission of the acts described in that article — such as setting fires, breaching dikes and sabotaging facilities in a way that does not cause serious consequences — would not create criminal responsibility.

Although Article 106 of the Criminal Code is the only one of the environmentally related penal provisions referred to in Section II of this

^{112.} Criminal Code, supra note 34, art. 11. The Criminal Code defines an "intentional crime" as "a crime constituted as a result of clear knowledge that one's own act will cause socially dangerous consequences, and of hope for or indifference to the occurrence of those consequences."

^{113.} Id. art. 12. The Criminal Code defines a "negligent crime" as one that "occurs when one should foresee that one's act may cause socially dangerous consequences but fails to do so because of carelessness, or having foreseen the consequences, readily assumes he can prevent them, with the result that these consequences occur." Id.

^{114.} See supra notes 36 and 37 respectively and accompanying text.

^{115.} Criminal Code, supra note 34, art. 106.

^{116.} See id. art. 105.

Article that expressly imposes criminal liability for negligent conduct, 117 two of the other provisions referred to there may be viewed as having a similar effect by implication. Article 115 imposes criminal liability where a violation of regulations on control of hazardous articles leads to "a major accident . . . causing serious consequences." Similarly, Article 187 imposes criminal liability on "[s]tate personnel who, because of neglect of duty, cause public property to suffer major losses." The references in Articles 115 and 187 to "accident" and "neglect" suggest a culpability standard closer to negligence than to intention.

Taken together, these three Criminal Code provisions — Articles 106, 115 and 187 — impose criminal liability for a wide range of negligent behavior, but only where the consequences are especially bad, creating serious personal injury, death, or major losses. Where the consequences are less severe, negligent behavior will not give rise to criminal liability. 120

2. Strict liability

Although rules imposing strict liability for injury or loss — that is, strict civil liability — appear in some provisions of environmental law in China¹²¹ and other countries, ¹²² such rules have not appeared so

^{117.} See id. art. 106. Some other Criminal Code provisions that are unrelated to environmental protection also impose criminal liability for negligent conduct. See, e.g., id. art. 110 (second paragraph) (imposing criminal liability for negligent sabotage of transportation and other equipment causing serious consequences).

^{118.} Id. art. 115, quoted supra in text accompanying note 38.

^{119.} Criminal Code, supra note 34, art. 187, quoted supra in text accompanying note 40.

^{120.} The model law on crimes against the environment referred to above takes a different approach. It defines crimes against the environment to include knowing, reckless, or negligent conduct. International Experts Report, supra note 26, at 18-19. It then provides for forms of punishment — imprisonment, fines and other sanctions — that distinguish between various degrees of culpability on the part of the perpetrator of the crime. International Experts Report, supra note 26, at 20-21. The relevant provisions of the model law defining crimes against the environment are quoted supra at note 26.

^{121.} Jin, supra note 26, at 331 (referring to provisions of the Environmental Protection Law and other statutes imposing strict civil liability for damage caused by environmental pollution). Strict liability in civil actions is also imposed in Chinese public health and product liability laws. See, e.g., Pharmaceutical Administration Law of the People's Republic of China, art. 51 (adopted at the Seventh Meeting of the Standing Committee of the Sixth National People's Congress, Sept. 20, 1984, effective July 1, 1985) translated in The Laws of the People's Republic of China 1983-1986, at 126 (Legislative Affairs Commission of the Standing Committee of the National People's Congress of the People's Republic of China et al., eds. 1987) (imposing strict liability for

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far in the criminal law of China. Article 13 of the Criminal Code, for example, provides that "[a]lthough an act objectively creates harmful consequences, if it does not result from intent or negligence but rather stems from irresistible or unforeseeable causes, it is not to be deemed a crime." ¹²³

The environmental challenges facing China probably require that further consideration be given to the issue of strict (non-fault) liability. In some circumstances, the requirement of a showing of fault, either in the form of intention or in the form of negligence, will probably serve as an impediment to effective environmental protection. On the other hand, imposing strict liability in criminal law might seem inconsistent with the principle that some form of fault should be present in order to justify state sanctions. 124

producing or selling medicine of inferior quality). See also Product Liability Law of the People's Republic of China, arts. 37, 40 (adopted at the 22nd Meeting of the Standing Committee of the Seventh National People's Congress, Feb. 22, 1993, effective Sept. 1, 1993) (imposing strict liability for products not meeting prescribed safety standards and quality standards respectively). For discussions of strict civil liability in Chinese law, see Henry R. Zheng, China's Civil and Commercial Law 39-40 (1988); Basic Principles of Civil Law in China 184-86 (William C. Jones ed. 1989).

122. Jin, supra note 26, at 329-31 (noting "non-fault" civil liability rules in the environmental protection laws of Japan, the former Soviet Union and the former German Democratic Republic). See also Roger W. Findley & Daniel A. Farber, Environmental Law in a Nutshell 243, 246 (3rd ed. 1992) (noting that provisions in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in the United States have been held to impose strict liability). Some countries, unlike China, do impose strict criminal liability — that is, criminal liability without the necessity of proving fault — for certain types of activities. See, e.g., J.C. Smith & Brian Hogan, Criminal Law 99-122 (7th ed. 1992) (explaining strict criminal liability in English law); Wayne R. LaFave & Austin W. Scott, Jr., Handbook on Criminal Law 218-36 (1972) (explaining strict criminal liability in U.S. law and referring also to "vicarious liability" and "enterprise liability").

123. Criminal Code, supra note 34, art. 13. This provision is also discussed below as a ground for the defense of force majeure. See infra note 128 and accompanying text.

124. See infra notes 179-80. For a discussion of the arguments for and against imposing strict criminal liability generally, see Smith & Hogan, supra note 122, at 115-20; LaFave & Scott, supra note 122, at 222-23. The model law on crimes against the environment referred to above does not impose strict liability. It requires a finding that the prohibited conduct occurred "knowingly, recklessly [dolus eventualis], or through negligence." International Experts Report, supra note 26, at 18. See also id. at 9 (expressing the view that strict criminal liability for environmental damage should not be imposed because it "might be regarded as equating criminal proceedings with administrative ones thus 'cheapening the currency'").

D. Defenses

Defenses that can be raised to charges of crimes against the environment fall into three categories: necessity, force majeure (irresistibility) and excuse. The defense of necessity appears in Article 18 of the Criminal Code, 125 which provides in pertinent part as follows:

Criminal responsibility is not to be borne for an act of urgent danger prevention that cannot but be undertaken in order to avert the occurrence of present danger to the public interest or the rights of the person or other rights of the actor or of other people.

Criminal responsibility shall be borne where urgent danger prevention exceeds the necessary limits and causes undue harm. However, consideration shall be given according to the circumstances to imposing a mitigated punishment or to granting exemption from punishment.¹²⁶

Under these provisions, a person who cuts a strip of trees in violation of forest protection laws apparently will not bear criminal liability if he or she does so to prevent the spread of a forest fire that threatened to create great loss of life and property if not stopped.

The defense of force majeure appears in Article 13 of the Criminal Code, ¹²⁷ which provides than an act is not to be deemed a crime if it stems from "irresistible" causes, ¹²⁸ even though it creates harmful consequences. ¹²⁹ This provision apparently would relieve a person from criminal liability for accidents whose proximate cause was an act of God, such as a leak of pollutants caused by an earthquake or a flood.

The defense of excuse can take several forms, all of them designed to yield a lesser punishment than the punishment otherwise prescribed for

^{125.} Criminal Code, supra note 34, art. 18.

^{126.} Id.

^{127.} Id. art. 13.

^{128.} Id. Similarly, the Environmental Protection Law provides for exemption from civil liability for "environmental pollution losses [that] result solely from irresistible [sic] natural disasters." Environmental Protection Law, supra note 45, art. 43 (third paragraph).

^{129.} Criminal Code, supra note 34, art. 13. As noted above, Article 13 also supports the proposition that the Criminal Code does not provide for strict liability. See supra note 122 and accompanying text.

the crime. Article 63 of the Criminal Code,¹³⁰ for example, provides that "[t]hose who voluntarily surrender after committing a crime may be given a lesser punishment."¹³¹ Other more general provisions of the Criminal Code also provide flexibility in determining the punishment to be imposed, based upon "the nature and circumstances of the crime and the degree of harm to society."¹³²

By means of these various types of defenses — especially those of necessity and excuse — the Criminal Code counterbalances the stigma associated with criminality by taking account of other specific circumstances of the crime and the perpetrator.

E. Scope of Jurisdiction

The scope of China's penal jurisdiction, including jurisdiction over crimes against the environment, turns largely on three factors: the place of occurrence or effect, the citizenship of the perpetrator and the type of conduct. The general rule is that the Criminal Code is applicable to all who commit crimes within the territory of the PRC, unless specially stipulated otherwise. ¹³³ A crime is deemed to have been committed within the territory of the PRC when either the act or the consequence of the crime takes place there. ¹³⁴ The Criminal Code also applies to all who commit crimes aboard a ship or airplane of the PRC. ¹³⁵

An exception to this general rule arises in the case of conduct by foreigners with diplomatic privileges and immunities; issues arising from such conduct are "to be resolved through diplomatic channels." Another exception applies to "situations where the autonomous areas inhabited by ethnic groups cannot completely apply" the Criminal

^{130.} Criminal Code, supra note 34, art. 63.

^{131.} Id. Article 63 also permits exemption from punishment if the perpetrator of a crime demonstrates meritorious service. Id. For the mitigation provisions in Article 18 of the Criminal Code, regarding the defense of necessity, see supra note 126 and accompanying text. Mitigation of punishment is also possible for a person who voluntarily discontinues a crime. Id. art. 21.

^{132.} Criminal Code, supra note 34, art. 57. Similarly, Article 59 provides that "[w]here the circumstances of a criminal element are such as to give him a mitigated punishment under the stipulations of this Law, he shall be sentenced to a punishment below the legally prescribed punishment." Id. art. 59.

^{133.} Id. art. 3.

^{134.} Id.

^{135.} Id.

^{136.} Id. art. 8.

Code.¹³⁷ There, alternative or supplementary provisions based on local customs can apply if they meet the basic principles of the Code and are approved by the Standing Committee of the National People's Congress.¹³⁸

In the case of crimes committed outside the territory of the PRC, penal jurisdiction turns largely on the citizenship of the perpetrator and the type of conduct involved. The Code applies to Chinese citizens who commit crimes of counterrevolution, crimes of disclosing state secrets and certain other specified crimes that are serious in their implications for foreign relations. It also applies to Chinese citizens who commit any other crimes for which a punishment of three or more years of imprisonment is stipulated, unless such crimes would not be punishable according to the law of the place where it was committed. It also applies to the law of the place where it was committed.

Non-Chinese citizens who commit crimes outside the territory of the PRC are nevertheless subject to the Criminal Code if the crime (i) is "against the state of the People's Republic of China or against its citizens," (ii) is one for which punishment of three or more years of imprisonment is stipulated and (iii) is punishable according to the law of the place where it was committed. The fact that a person has already been tried in a foreign country does not relieve him or her from criminal liability in China, although that person may receive an exemption from punishment or a mitigated punishment if he or she has already received criminal punishment in the other country. 143

Applied to crimes against the environment, these jurisdictional provisions would seem to give some of the penal provisions referred to in Section II of this Article a wide reach. About half of those penal provisions stipulate a punishment of three or more years of imprisonment.¹⁴⁴ Hence, any Chinese citizen, and most non-Chinese

^{137.} Id. art. 80.

^{138.} Id.

^{139.} Id. art. 4.

^{140.} Id. art. 5.

^{141.} Id. art. 6.

^{142.} Id.

^{143.} Id. art. 7.

^{144.} See Criminal Code, supra note 34, art. 105, quoted supra in text accompanying note 36; id. art. 106 (first paragraph), quoted supra in text accompanying note 37; id. art. 115, quoted supra at note 55. By reference to these provisions of the Criminal Code, several penal provisions in environmental statutes also may be read as stipulating a punishment of three or more years of imprisonment. See, e.g., Water Pollution Law, supra note 48, art. 43, quoted supra in text accompanying note 49; Atmospheric Pollution Law, supra note 52, art. 38, quoted supra in text

citizens, would bear criminal liability not only for acts committed inside China but also for those committed outside China, assuming such acts constitute crimes in the place where they were committed and assuming, in the case of foreigners, they are considered crimes "against the state of the People's Republic of China or its citizens." ¹⁴⁵

IV. EFFECTIVENESS AND ENFORCEMENT OF CRIMES AGAINST THE ENVIRONMENT

As noted above, the aim of this Article is to examine the concept of "crimes against the environment" as it is developing in Chinese law. 146 The article does not attempt a survey of how particular statutory provisions have been applied in practice. However, the following preliminary observations might prove useful as a starting point for further study on the enforcement and effectiveness of "crimes against the environment" in fighting environmental degradation in the PRC.

At first blush, enforcement of the criminal provisions on environmental degradation may seem woefully inadequate, given the obvious discrepancy between the alarming reports of pollution¹⁴⁷ and the seemingly strict statutory prohibitions on such pollution.¹⁴⁸ Indeed, the failure of the Chinese government to enforce fully its environmental laws and regulations is a theme echoing in much current literature, both Chinese¹⁴⁹ and non-Chinese in origin.¹⁵⁰

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accompanying note 53; Forestry Law, supra note 54, art. 34 (fourth paragraph), quoted supra in text accompanying note 55. Other penal provisions referred to in Section II of this Article would not give rise to criminal sanctions for conduct outside China because they do not stipulate a punishment of three or more years of imprisonment. See, e.g., Criminal Code, supra note 34, arts. 128, 129, 130, quoted supra at note 39 (referring to violations of laws on forestry, aquatic resources and hunting).

^{145.} See supra note 141 and accompanying text, quoting from Criminal Code, supra note 34, art. 6.

^{146.} See supra Section I, the final paragraph.

^{147.} See, e.g., supra note 3 and accompanying text, regarding atmospheric pollution.

^{148.} See, e.g., supra note 52 and accompanying text, concerning statutory provisions establishing criminal liability for atmospheric pollution.

^{149.} See, e.g., Zhao Xiuyan, Poor Control Allows Pollution to Run Riot, China Environment News, Apr. 1994, at 3; Jin Ni & Wang Guoning, NPC Backs Stricter Law Enforcement, China Environment News, Apr. 1994, at 6 (quoting the director of the National People's Congress' Environment and Resources Protection Committee as saying that "violations and weak law enforcement are still common").

For several reasons, this first impression might not be accurate in portraying the effectiveness of Chinese environmental norms, including those concerning "crimes against the environment." First, effectiveness can be distinguished from enforcement — at least enforcement by means of formal legal cases familiar to Western lawyers. Ross and Silk, authors of a premier treatise on Chinese environmental law, point out that implementation of legal norms in China can take several forms, including exhortational campaigns, administrative regulations and controls, economic incentives and legal sanctions. The government has historically favored the first two of these. Indeed, the government's traditional emphasis on exhortational campaigns might account in part for official press reports bemoaning the shortcomings in environmental enforcement.

Second, even those instances that do take the form of contentious cases of legal enforcement are often hidden from public view. Ross and Silk explain why:

In keeping with both traditional and communist Chinese culture, violations of law and civil disputes are usually handled outside of court. Environmental protection officials claim that over 90 percent of their actions are accepted by the parties concerned, although they concede that their decisions take account of factors like the ability to pay fines or make restitution and also that political realities temper their independence. Of the remainder, the overwhelming majority

^{150.} See Peter P. Rogers et al., Working Paper No. 5 — Summary Environmental Profiles for Six Asian Countries: The People's Republic of China, Indonesia, the Marshall Islands, Nepal, Pakistan and the Philippines 48 (1994) (stating that "[t]he enforcement of the laws remain [sic] weak") (on file with authors). See also Capannelli & Shrestha, supra note 1, at 15.

^{151.} Ross & Silk, supra note 27, at 207.

^{152.} Id. Ross & Silk explain that it is "by no means clear that criminal prosecution can exert a major role in deterring unwanted behavior that arises in the course of legitimate behavior like factory production. Modification of the basic contours of administrative behavior and the political economy would appear to be a far more potent approach." Id. at 208.

^{153.} See, e.g., Zhao, supra note 149, describing the deficiencies of county-level environmental protection bodies and urging that they "be properly staffed, equipped, and funded." Id. Similarly, public exposure of polluting enterprises is commonly used as a means of imposing informal pressure. See, e.g., Zhu Baoxia, China Lists 3,000 Biggest Industrial Polluters, China Environment News, July 1993, at 3 (noting that certain enterprises had been chosen by the National Environmental Protection Agency "as targets during the first phase of the national anti-pollution drive from 1993 to 1995").

are resolved through semiformal mediation involving the regulator, the polluter(s), and the victim(s).¹⁵⁴

Ross and Silk also note that even where cases do proceed to judicial resolution, information about them is "closely guarded." ¹⁵⁵

Third, despite the reluctance to use formal legal means of enforcement, many references can nevertheless be found, especially in recent years, to the imposition of penalties, including criminal sanctions, for environmental degradation. Beginning in 1979 with a famous trial in Suzhou of a chemical plant worker whose negligence released 28 tons of liquid cyanide into a river, there have been many cases reported in which environmental poisoning has resulted in punishment. Page 158

In sum, the picture of environmental enforcement in China is difficult to bring into focus from a Western perspective. In a culture in which the role of law and lawyers has undergone such radical change in the past 15 years, in which a tradition of "rule by person" is only

^{154.} Ross & Silk, supra note 27, at 243.

^{155.} Id. at 209. See also Capannelli & Shrestha, supra note 1, at 15 ("[t]here is no sufficient data on enforcement").

^{156.} For a discussion of several such cases arising between 1979 and 1985, see Ross & Silk, supra note 27, at 243-81.

^{157.} Opinion No. 26 (1979) of the Suzhou Municipal Intermediate People's Court (Jiangsu Province) in the Trial of Zhang Changlin, translated in Ross & Silk, supra note 27, at 250-51. The defendant was convicted and sentenced to two years imprisonment. Ross & Silk, supra note 27, at 251. Ross and Silk criticize the decision for its legal analysis and for the court's failure to find the factory leadership also guilty. Id at 257. The case was prosecuted under Article 115 of the Criminal Code and Article 32 of the Environmental Protection Law (1979 version). Id.

^{158.} See, e.g., Carlos W. Lo, Environmental Management by Law in China: The Guangzhou Experience, J. Contemp. China, Summer 1994, at 39, 50 (noting that in the city of Guangzhou "more than 200,000 environmental cases involving violations of rules and regulations were handled by all the supervisory agencies [in the city] in the period between 1986-1990, demonstrating to a considerable extent the effective enforcement of law and the punishment of law breakers"); Ross & Silk, supra note 27, at 209 (noting that "hundreds of environmental disputes occurred annually in the early 1980s in Shanghai alone" and referring to the "judgments [that were imposed] against most polluters" in those cases); Lou Yibo, Three Men Arrested for Felling Trees in Yunnan, China Env't News, Feb. 1994, at 3. See also Liu Juying, Crackdown on Illegal Hunting in Xinjiang, China Env't News, July 1993, at 2. See also the accounts of fines and closures cited supra note 22. It is unclear from some of the reports cited above whether the cases they refer to were administrative or criminal in character.

^{159.} For references to this change, see Du & Zhang, supra note 27, at 22-24; Albert H. Chen, An Introduction to the Legal System of the People's Republic of China 33-37 (1992).

slowly yielding to "rule of law," 160 and in which "the government monopolizes all the choices" 161 in environmental management, 162 Western models of legal enforcement do not fit well. Accordingly, while further study is warranted on the question of how many cases involving "crimes against the environment" have been prosecuted and adjudicated, such information alone would not be enough to pass judgment on the role of criminal sanctions in environmental protection in China. Instead, the effectiveness of such sanctions, both now and in the future, might depend in large measure on their role as additional weapons in the government's environmental protection arsenal — more persuasive by their mere presence than by their use, more valuable as additional means of exhortation than as grounds for prosecution. 163

V. CONCLUDING OBSERVATIONS — THE CHALLENGES AHEAD

The foregoing account of how China's current set of criminal and environmental laws treat crimes against the environment prompts two types of questions. First, what should be the relationship between criminal law and other means of ensuring environmental protection in China? Second, what are the most important substantive issues to consider in further developing China's use of criminal sanctions for this

^{160.} For general observations on the rule of law in China, see Chen, supra note 159, at 3-4. For a discussion of "rule of law" versus "rule by person" in the context of Chinese environmental law, see Lo, supra note 158, at 40. An example of how "rule by person" persists in practice appears in Lo's description of the enforcement powers of Guangzhou's Environmental Protection Office: "EPO officials were unable to monitor the industrial waste water discharged by the Guangzhou Paper Manufacturing Factory mostly because the factory's director had a higher administrative rank than that of the EPO director." Id. at 50-51.

^{161.} Lo, supra note 158, at 41.

^{162.} Lo explains that because of China's authoritarian form of government, the choice of policy instruments and the means of restraint are within the control of the government, id. at 41-42, whose task is "to structure an effective approach to countering environmental degradation by active government intervention in the form of a command and control manner." Id. at 41.

^{163.} For an example of how the existence of criminal sanctions can be used in attempts to discourage environmental degradation, see Zhu Baoxia, Polluters Warned of Criminal Penalties, China Daily, June 6, 1994, at 1. Similarly, the potential that criminal sanctions have for use as tools of exhortation or propaganda appears in the conclusion by Ross and Silk that the criminal prosecution in the Suzhou case, referred to supra note 157 and accompanying text, was "clearly more a vehicle for mass education than an effort to determine the guilt or innocence of Zhang Changlin." Ross & Silk, supra note 27, at 258. In support of this conclusion, they point out that the trial court "acted at the behest of the Party Committee in close collaboration with . . . the propaganda department, strongly indicating the unsurprising conclusion that the outcome of the 'trial' had been decided in advance." Id.

purpose? Although this Article is not intended to provide an exhaustive critique or a recipe for change, the following paragraphs offer some suggestions for addressing these questions.

Criminal law can play an important role in environmental protection. Unlike the two other principal legal tools — administrative sanctions and civil liability — criminal law carries a special stigma that is warranted in cases of serious environmental degradation. Accordingly, a comprehensive and effective array of legal sanctions should include all three elements: administrative measures, such as fees, fines, licensing requirements and orders to take or refrain from taking specified actions; civil liability to compensate for damage or injury to others; and criminal liability, to be used sparingly as circumstances require. 167

The current provisions on criminal liability for environmental degradation are scattered and disorganized. Most of the criminal sanctions for violating specific laws and regulations require reliance on two statutes: the statute containing the substantive standard at issue and

^{164.} According to the group of experts that approved the model law on crimes against the environment referred to above:

Several purposes are served by imposition of criminal sanctions for crimes against the environment. First, criminal sanctions educate the public concerning the moral wrongfulness of proscribed conduct. Second, criminal sanctions serve to deter potential offenders from environmentally irresponsible conduct. Finally, criminal sanctions impose just punishment upon those who seriously degrade the environment.

International Experts Report, supra note 26, at 22. See also id. at 4 (stating that "the deterrent effect of exposure to conviction of a criminal offense was seen as greater than exposure to merely civil liability, particularly given the growing range of innovative sanctions which might be imposed").

^{165.} See, e.g., Fisheries Law, supra note 58, art. 28, quoted supra text accompanying note 59. That provision authorizes the imposition of fines, the confiscation of equipment and illegal income and the revocation of licenses. Id. For a survey of the forms of administrative sanctions available in Chinese environmental law, see Jin, supra note 26, at 311-20.

^{166.} See, e.g., Environmental Protection Law, supra note 45, art. 41; Water Pollution Law, supra note 48, art. 41. For a discussion of civil liability in Chinese environmental law, see Jin, supra note 26, at 320-27, 335-45.

^{167.} In addition to these legal sanctions, other forms of social pressure can also be used to punish environmental misconduct and reward environmentally responsible conduct. A recent example of such social pressure is the development of "green labels" for use on products that are certified as causing little pollution. Ma Zhiping, Product Labels Get "Green" Light, China Daily, May 18, 1994, at 3. For suggestions on other non-legal means of encouraging environmental prudence, see Xu, supra note 17, at 165-67.

the relevant general provision of the Criminal Code. 163 Several approaches have been suggested for improving this formulation. 169 These include (i) adopting a special criminal law dedicated to crimes against the environment, 170 (ii) amending environmental statutes to include provisions specifically establishing crimes against the environment and the punishments that would apply to them 171 and (iii) amending the Criminal Code to include a special chapter on crimes against the environment. 172 Although any of these approaches would represent an improvement over the current law, the most promising prospect is the third one. 173 Recently the Law Commission of the National People's Congress began discussions on adding a new chapter to the Criminal Code regarding crimes against the environment. 174

Beyond this structural question, of course, are substantive questions. What additions or modifications should be made to the existing provisions governing criminal responsibility for crimes against the environment? Three areas of concern warrant attention.

First, criminal liability does not currently extend to corporate entities that cause environmental damage. ¹⁷⁵ In view of the likelihood that the most serious environmental degradation will result from the

^{168.} See, e.g., Forestry Law, supra note 54, art. 36, quoted supra text accompanying note 57. That provision refers to Article 120 of the Criminal Code, which does not relate to forestry conservation but instead to the counterfeiting or reselling of planned supply coupons. Criminal Code, supra note 34, art. 120, quoted supra at note 57.

^{169.} See Jin, supra note 26, at 353-56.

^{170.} Id. at 353-54.

^{171.} Id. at 354, 355.

^{172.} Id. at 354, 355-56.

^{173.} This third approach is favored by a leading Chinese environmental law scholar. See id. at 356. The group of experts that approved the model law on crimes against the environment referred to above recommended that the provisions of that model law should be at least partly incorporated in states' "penal codes or other laws in which crimes against the highest individual and societal values are punished." International Experts Report, supra note 26, at 24.

^{174.} Jin, supra note 26, at 356. One of the co-authors of this Article, Professor Yang, recently participated in the work of a group of experts on criminal law in offering suggestions to the Law Commission regarding amendments to the Criminal Code that would identify and punish crimes against the environment. In accordance with usual legislative procedures in the PRC, such suggestions can contribute to the preparation of a draft law that would eventually be submitted to the National People's Congress. For a summary of legislative procedures in the PRC, see Du & Zhang, supra note 27, at 36-40.

^{175.} See supra notes 73-77 and accompanying text.

conduct of corporate entities, the current laws should be amended to subject such entities to criminal liability for that conduct.¹⁷⁶

Second, the current law does not establish forms of punishment to take fully into account the indirect consequences of the most serious crimes against the environment.¹⁷⁷ A system of criminal fines and other criminal sanctions might need to be introduced in order to deal effectively with such indirect consequences.¹⁷⁸

Third, the current law does not impose strict criminal liability for environmental damage — that is, criminal liability where conduct leading to environmental pollution or degradation is neither negligent nor intentional.¹⁷⁹ Because of the enormity of possible environmental damage that can result from certain activities, the current rules requiring fault warrant review.¹⁸⁰

^{176.} As noted above, the group of experts that approved the model law on crimes against the environment agreed that criminal liability should extend to corporations committing crimes against the environment. See supra note 73.

^{177.} See supra notes 109-11 and accompanying text.

^{178.} For a reference to how the issue of indirect consequences is handled in the model law on crimes against the environment referred to above, see supra note 111.

^{179.} See supra notes 121-24 and accompanying text.

^{180.} For a reference to the arguments for and against strict criminal liability and the manner in which the issue is handled in the model law on crimes against the environment referred to above, see supra note 124.